

A Study on The Semantics of Opposite Compounds in Modern Chinese

| Huo Xingyu |

*International School of
Chinese Culture, East China
Normal University,
Shanghai, China*

2919023774@qq.com

ABSTRACT

In modern Chinese, many words are composed of a pair of morphemes with opposite meanings, such as "左右(left and right)", "褒贬(commendatory and derogatory)", which constitutes an important phenomenon in the field of lexicology. Although the number of opposite compounds is limited, the study of their lexicalization process and cognitive mechanism is of great significance for expanding the research results of modern Chinese lexicology. In addition, the application of opposite compounds in teaching, especially in teaching Chinese as a foreign language, poses challenges and needs to be further studied. In this study, the opposite compounds in the Modern Chinese Dictionary (7th edition) were investigated. According to the relationship between word meaning and morpheme meaning, 260 opposite compounds were divided into three categories: "word meaning = morpheme meaning", "word meaning > morpheme meaning" and "word meaning ≠ morpheme meaning". By analyzing word frequency in a corpus, this study explored the correlation between semantic integration and frequency of opposite compounds. The significance of this work lies in enriching the corpus resources for studying antonymic compounds, solving issues related to meaning and morpheme classification, which enhances existing research and deepens its content. Additionally, it provides pedagogical guidance for teaching Chinese as a second language, aiding learners in mastering antonymic compounds more easily.

KEYWORDS

Opposite Compounds; Usage Frequency; Word Meaning; Morpheme Meaning; Lexicalization

INTRODUCTION

In modern Chinese, there are a large number of Compounds composed of positive and antisense morphemes, for example, "左右(about)", "褒贬(praise)", "东西(things)", "宽窄(broad and narrow)", "忘记(forget)", etc., that is, Opposite Compounds. Although these words are composed of morphemes with opposite meanings, the overall meaning is unified in opposites, and the frequency of use is high, which is a difficult point in second language

teaching. Students have certain difficulties in the acquisition process and are prone to bias. For example:

- (1) 以出卖身边亲友安危的代价，值得吗？
- (2) 吸烟是为了自己的需要而危害别人的安危。
- (3) 他便慌慌张张地开关。

The asymmetry between the surface grammatical structure and the deep grammatical structure of these words (张金竹, 2018) constitutes a unique phenomenon in Chinese lexicology, which contains the unique features of Chinese culture and is worthy of further discussion. The research on opposite compounds can be divided into synchronic research and diachronic research. Synchronic studies mainly focus on the definition, quantity, word determination and morpheme ordering of opposite compounds (谭达人, 1989; 张谦, 2006; 罗耀华、周晨磊, 2011; 张金竹, 2015/2018 et al.). Diachronic studies mainly focus on the lexicalization process of opposite compounds, such as the motivation of the semantic evolution of opposite compounds (曾丹, 2007; 韩丽丽, 2007; 束定芳、黄洁, 2008), or explore the semantic development and evolution of individual opposite compounds from a micro perspective (方一新、曾丹, 2007a/b; 曾丹, 2008/2011/2013; 袁嘉, 2009; 刘哲, 2011; 黄哲, 2014; 胡静, 2017). There is also a small amount of research on second language acquisition of Chinese opposite compounds. For example, 刘玉倩、孟凯(2019) proved that both the type of semantic relation and the background of native language have an impact on the semantic interpretation of second speakers' opposite compounds through a two-factor mixed test.

At present, the academic community has relatively abundant research on the ontology of Chinese opposite compounds, but some issues have not been studied in depth. For example, whether there is a relationship between the meaning of opposite compounds and the meaning of morphemes, and what role the frequency of use plays in the lexicalization process of antonymous compound words, etc. The study of opposite compounds is an important part of the research on the Chinese vocabulary system. When studying the lexicalization process of a pair of antonymous morphemes gradually condensing from a phrase or a group of words into a single unit, and the role of cognitive mechanisms in the process of semantic integration, the research on opposite compounds corroborates with existing linguistic theories, enriching the achievements of modern Chinese lexicology research to some extent. From a practical perspective, in-depth exploration of opposite compounds plays a significant role in teaching applications, especially in the process of teaching Chinese as a second language. Second language learners often find it difficult to master opposite compounds and are prone to errors. Currently, attempts to integrate the ontology research theory of opposite compounds into the teaching field are ongoing and deepening.

This study is based on the "Modern Chinese Dictionary" (7th edition), exhaustively collecting and organizing a total of 260 examples of opposite compounds. On this basis, two main issues are focused on: First, the relationship between the meaning of opposite

compounds and the meaning of morphemes, through case analysis, the classification of the lexicalization progress of opposite compounds is discussed in terms of its performance in actual language use. Second, is there a correlation between the semantic integration and usage frequency of antonymous compound words?

We propose two hypotheses: First, antonymous compound words whose meanings are exactly equal to the meanings of their morphemes represent an early stage of lexical development. As lexicalization deepens, meanings gradually develop new senses based on the morpheme meanings and gradually diverge from them. In other words, the higher the degree of lexicalization of antonymous compound words, the greater the distance between the word meaning and the morpheme meanings. Second, there is a positive correlation between the degree of semantic integration of antonymous compound words and their usage frequency. That is, the higher the usage frequency, the greater the distance between the meaning of the antonymous compound words and the morpheme meanings.

RESEARCH METHODS

Qualitative Analysis

Based on the Modern Chinese Dictionary (7th edition) published by the Commercial Press, this study comprehensively collected and sorted out 260 examples of antisense compound words. Then, the relationship between the meaning and morpheme of these antisense compound words is classified into three categories: "word meaning = morpheme meaning", "word meaning > morpheme meaning" and "word meaning \neq morpheme meaning", and the gradual development trend of these relationships is discussed. At the same time, through the analysis of "things" and "tailor" and other specific examples, this study discusses the phenomenon of partial meaning and the degree of semantic integration.

Quantitative Analysis

In this study, corpus retrieval and word frequency statistics were carried out using the modern Chinese corpus of the National Language Commission. The positive correlation between the degree of semantic integration and the frequency of use of antisense compound words was verified in this study by comparing the correlation between the frequency of use of near-synonyms and homographs and the semantical relationship of word sense morphemes. For example, through the statistics of the word frequency of the synonyms such as "round-trip", "reciprocating", "reciprocating", and "intercourse", it is found that "intercourse" derives a new meaning of "mutual visit and communication" under the condition of high frequency use. Finally, this study compares the frequency differences of different word examples to find language rules.

Corpus Description

In this study, 260 opposite compounds included in the Modern Chinese Dictionary (7th edition) were used. This study divides the lexicalization progress of Chinese opposite compounds into three categories based on the relationship between word meaning and morpheme meaning. On this basis, we classified 260 opposite compounds using a combination of machine retrieval and manual classification.

When exploring the correlation between the semantic integration and usage frequency of antonym compounds, we base our analysis on a synchronic level, selecting examples from perspectives such as "synonyms" and "homographs". We use the balanced corpus of Modern Chinese from the National Language Commission to count word frequencies, compare the differences in their usage frequencies, and seek out linguistic patterns. The corpus has a large scale, a wide selection of materials, and a long time span, covering 19.45 million characters (including Chinese characters, letters, numbers, etc.), of which about 70 million characters were manually entered before 1997, and about 30 million characters were half-manually and half-electronically entered after 1997. The total number of words in the corpus was 12.84 million, with 162,875 word segmentation units and 151,300 Chinese character words. The sample size was 9487, covering many fields such as political theory, news, literature, popular science, and popular reading materials, ensuring a reasonable frequency of characters, words, sentences, and meanings. The time span was from 1919 to the present, mainly after 1977. The corpus is universal and balanced, and can truly reflect the whole picture of modern Chinese.

RESULTS AND DISCUSSION

An opposite compound is a combination of two morphemes with opposite or opposite meanings, and its meaning is naturally closely related to the meaning of the morphemes. However, with the passage of time and the change of language usage habits, as well as the gradual deepening of lexicalization process, the meaning of opposite compounds is no longer a simple addition of two word-forming morphemes, but constantly integrates, condenses and collates 260 examples of words. We find that the relationship between the meaning of opposite compounds and word-forming morphemes can be roughly divided into the following three categories.

Word Meaning = Morphemic Meaning

The meaning of the first kind of opposite compounds is completely composed of the morphemes of word-forming morphemes, and has not developed other meanings and usages for the time being, and its meaning can be understood literally. The so-called "word meaning = morpheme meaning" includes two cases, that is, "word meaning = morpheme A & morpheme Z" [We represent the two opposite or relative morphemes of the antisense compound as A and Z respectively.] And "Word meaning = morpheme A or morpheme Z".

First of all, look at the first, "word meaning = morpheme A & morpheme Z", that is, the meaning of a word is composed of two word-forming morphemes. According to statistics, there are 146 opposite compounds purely composed of two word-forming morphemes A and Z, accounting for 56.15%. We find that the relationship between "morpheme A" and "morpheme Z" basically presents three kinds of relations: addition, connection and selection.

The additive form accounts for the vast majority, its meaning is A+Z, and the two morphemes of A and Z are side by side, and the whole meaning of the word is less integrated, connected by "and" and "or", which is similar to the parallel phrase, and it is regarded as the primary stage of the lexicalization development of the positive and antisense morphemes combination.

These opposite compounds account for the vast majority. For example, "男女(men and women)", "成败(success or failure)", "卯榫(mortise)", "婆媳(mother-in-law and daughter-in-law)", "起落(rise and fall)", "起止(start and end)", etc., the dictionary basically interprets this part of the word as "A and Z" or "A or B".

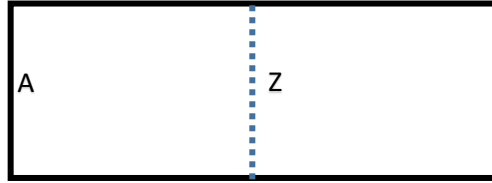


Figure 1. The relationship between morphemes A and Z in additive semantics

The linear form refers to the whole category through these two typical word-formation elements. A and Z are typical polar members of A category, and together these two antisense morphemes form the range that connects the two extremes, "from A to Z." This part of the word is relatively few, for example, "始终(always)", "晦朔(the last and first days of a lunar month)", "东西(things)" and so on, the dictionary interpretation of this part of the word is basically "from A to Z", for example, "始终(always)" is explained as "①the whole process from beginning to end;②from beginning to end;", "晦朔(the last and first days of a lunar month)" is explained as "①From the end of a lunar month to the first day of the next month;②From dark to dawn", "东西(things)" is explained as "①East and west;②The distance from east to west".



Figure 2. The relationship between morphemes A and Z in connective semantics

The morphemes of degree form are mostly descriptive, and the typical characteristics are degree, A and Z form polar opposites, and there is a transition state in the middle. The so-called "degree" indicates that the meaning of the word is biased towards A or Z and how much it is biased, so this category is classified as degree. This part accounts for the same small proportion, for example, "松紧(tightness)", "快慢(speed)", "宽窄(width)", "高矮(height)", "粗细(thickness)", "浓淡(shade)", etc., the dictionary's interpretation of this part of the word is basically "the degree of A or Z", "the degree of A and Z", for example, "高矮(height)" is interpreted as "height" and "thickness" is interpreted as "①the degree of thickness and fineness; ②The degree of roughness and fineness", "浓淡(shade)" is explained as "the degree of color shade" and so on.

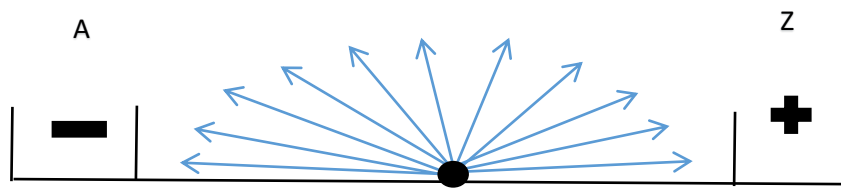


Figure 3. The relationship between morphemes A and Z in selective semantics

Secondly, the second is "word meaning = morpheme A or morpheme Z", that is, the word meaning is composed of a word-forming morpheme. The meaning of these opposite compounds is biased towards one of the two morphemes of positive and negative formation, and the reserved morphemes are either A or Z.

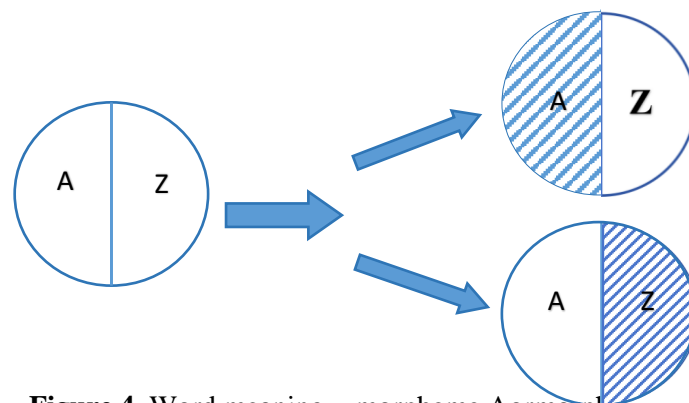


Figure 4. Word meaning = morpheme A or morpheme Z

According to statistics, there are 22 examples in this part. There are 15 morpheme meanings A, accounting for 68.18%. For example, "女儿(daughter)" is explained as "girl, for parents", "舍得" is explained as "willing to give up", "寒热(cold heat)" is explained as "the symptoms of the body cold in Chinese medicine", and so on. There were 7 morphemes with semantic bias towards Z, accounting for 31.82%. For example, "褒贬(praise and denigrate) (softly)₂" is interpreted as "criticizing shortcomings and accusing" and so on.

Such oblique references are stable, and the stability of oblique references is related to word frequency to a certain extent. In specific linguistic communication, due to the linguistic habits brought by the adjustment order (for example, most oblique morphemes are oblique tones with emphasis in themselves, which are constantly emphasized in use, the direction is gradually shifted), or the psychological context brought by the sense order, etc. When people use opposite compounds, the meaning in their minds gradually tends to one of A or Z. With the increase of the frequency of use, one of the partial meanings is gradually fixed, while the other is gradually falling off.

However, through exhaustive sorting, it is found that some of them are still in the transition of immobilization of partial reference. The interpretation given by Modern Chinese Dictionary (7th edition) also retains the morphemes meaning of the two word-forming morphemes, and only shows a tendency of "multi-partial reference" to a certain one. For example, "安危(safety and danger)" is interpreted as "Safety and danger, mostly referring to the dangerous side", "扬弃(sublation)" is interpreted as "① Philosophically, it refers to the positive factors in the old things and the negative factors in the old things are abandoned in the process of metabolism; ② Abandonment ", "异同(similarities and differences)" is interpreted as "① Differences and similarities;②Dissent", etc.

Word Meaning > Morpheme Meaning

On the basis of preserving the morphemes A and Z, the second kind of opposite compounds enrich their meaning by means of metaphor and metonymy, that is, the meaning includes morphemes and integrations. For example, "厚薄(thickness)", "乘除(multiplication and division)", "天壤(heaven and earth)" and so on, this part of the word examples total 74.

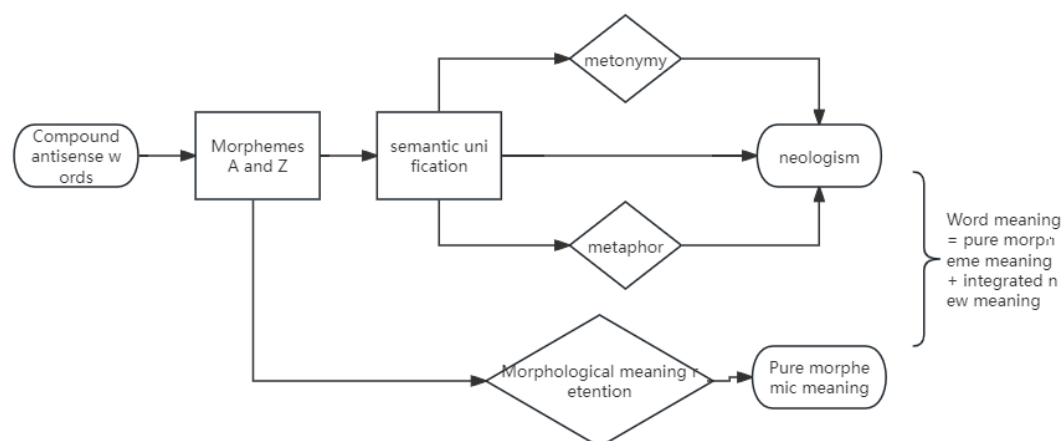


Figure 5. The relationship between word meaning and morpheme meaning in "Word Meaning > Morpheme meaning"

There are two ways of semantic integration and new meaning generation. One is metaphor. In this category, new meanings are constructed according to the morphemes of A and Z. From the perspective of cognitive mode, metaphor belongs to metaphorical cognition, and there are similarities between the two concepts, which is also the basis for the generation of metaphorical cognition. According to statistics, there are 13 examples of this kind of words. For example, "黑白: black and white, represent right and wrong, good and evil". "吞吐: ① To swallow and spit, to come in and go out in large numbers; ② To describe speech or writing indistinctly". "锁钥: ① Lock and key; ② The key to doing a thing well; ③ A metaphor for military positions". The above three examples are adjective metaphor, verb metaphor and noun metaphor respectively, all of which project and construct new meanings based on the similarities between concepts and retain the original morphemes. This projection of similarity is generated in the specific context, and with the increase of the

frequency of use in language communication, the meaning of words gradually solidifies and finally exists alone as a new meaning.

The second is metonymy. The basis of metonymy is often more obvious because metonymy tends to involve a more direct causal or physical connection than metaphor. Indeed, there are 61 examples in this category, accounting for 82.43%. It can be said that metonymy plays a very important role in the integration and extension of opposite compounds. Metonymy is to frame people's cognition according to the correlation between two concepts, by means of allusive or generalized metonymic meaning related to the original morpheme meaning or related to the epistatic meaning.

There are two types of metonymy: 1) metonymy between parts, which is called "allusion". For example, "雌雄(Male and female)": ① Female and male; ② Refer to winning or losing ". The metonymy between parts and parts, the morpheme meaning and the meaning of the word have a borrowing relationship due to correlation, and solidify as one of the meanings, the dictionary interprets as "by means of". 2) The metonymy between the part and the whole, the so-called "general reference". For example, "老少(young and old)" is interpreted as "the elderly and young people, generally referring to family members or all people of different ages", "出纳(cashier)": ① the payment and receipt of cash and bills in organs, groups, enterprises and other units; ② A person who works as a cashier". The relationship between the original morpheme meaning and the newly generated metonymic meaning is partial and overall, and the dictionary interprets it as "generalized".

On the whole, this kind of opposite compounds has a slightly higher degree of integration with morpheme meaning, which is characterized by the development of new meaning and usage on the basis of retaining the first stage of pure morpheme meaning.

Meaning ≠ Morpheme Meaning

These opposite compounds are highly lexicalized, and the meanings formed by pure morphemes fall off. Most of the meanings cannot be understood from the morphemes of the two word-forming morphemes A and Z. There are a total of 18 examples of these words. For example, "动静(quiet)" is interpreted as "the sound of movement or speech; ② Inquire or investigate the situation ", "dynamic" and "static" state meaning falls off; "手脚(Hands and feet)" is interpreted as "① refers to a move or action; ② The action taken secretly in order to achieve some purpose, the derogatory sense ", "hand" and "foot" of the name falls off; "水火(Water and fire)" is explained as "refers to the excretion of urine and feces, which is more common in early vernacular", and the meaning of the name "water" and "fire" falls off, and so on.

Different from the second category of opposite compounds above, although there is a new idea, there is still a strong correlation or similarity with the original morpheme meaning, and the similarity or correlation between the meaning of this part of words and the morpheme meaning of word formation is low. The morphemes of opposite compounds either fall off and disappear, or exist as another word because of the same high frequency of use. For example, "裁缝₁(tailor)" and "裁缝₂(softly)tailor" are each listed in the dictionary. The former is a verb, interpreted as "cutting and sewing clothes", which belongs to the first category of "word meaning = morpheme meaning"; The latter is a noun, which is interpreted

as "a person who makes clothes as a profession", and has shed the action meaning of the original word-forming morphemes "cutting" and "sewing", belonging to the third category of "lexical \neq morpheme meaning". If these two meanings are listed as one entry, they should be classified into the second category of "meaning $>$ morpheme meaning", which is similar to the above mentioned "收发(sending and receiving)". Two meanings are listed as one entry, both verbs and nouns. However, the dictionary lists "tailor₁" and "tailor (soft)₂" as two entries, because the latter is used as a noun, and with the solidification of usage and meaning, the pronunciation also has a certain difference, and the noun "tailor" is soft, which is special but also reasonable. In addition, there are "多少₁(how much)" and "多少 (softly)₂(how much)", "东西₁(thing)" and "东西 (softly)₂(thing)", etc., which belong to this case.

There are many circumstances and reasons for the loss of the meaning of the original morpheme. Taking "东西" as an example, with the consolidation of the new ideas produced by the integration of "east and west", its original morpheme meaning of "east" and "west" has gradually fallen off. There is a big difference in meaning between the new and old meanings, and there is also a difference in pronunciation (the last syllable of the new meaning of "things" is weakened, and the "west" is read softly), so the dictionary treats it as two words "东西₁(thing)" is explained as "① East and west; ② Refers to the distance from east to west", "东西(softly)₂(things)" is explained as "① Generally refers to concrete or abstract things; ② Especially refers to people or animals (often containing dislike or affection). Tracing the rationale from a diachronic point of view, we can see that the production of "东西(softly)₂(thing)" experienced two metonymy. Zhu Zhiping (2005) believed that the trade between East and West in ancient China was frequent, and the trade of "东西(thing)" was mainly for the exchange of "articles", so the use of "things" to refer to "articles" was the first metonymy between the part and the whole. With the increase of the frequency of use, the meaning of "things" no longer refers to the "goods" exchanged in east-west trade, but the general meaning of all concrete or abstract things, which is the second metonymy between the part and the whole. After two metonymy experiences, the new idea generated by the integration of the word "东西(things)" is very different from the meaning formed by the original morpheme meaning, so the two are bound to be separated and fall off. Its special feature is that its original morpheme meaning does not disappear like the words "买卖(trading)", "动静(movement)", "手脚(hands and feet)" and other words, but exists as another word.

Above, according to the relationship between word meaning and morpheme meaning, 260 opposite compounds are divided into three categories, namely "word meaning = morpheme meaning", "word meaning $>$ morpheme meaning" and "word meaning \neq morpheme meaning".

On the basis of the analysis of the meaning characteristics above, the degree of semantic condensation in the process of lexicalization is comprehensively considered, and the 260 opposite compounds are classified one by one. At the same time, "word meaning = morpheme meaning", "word meaning $>$ morpheme meaning" and "word meaning \neq morpheme meaning" show a progressive development trend, which shows the development

course of opposite compounds from the juxtaposes of antisense morphemes to high lexicalization to some extent. It is found that there is a correlation between the semantic integration and the frequency of Chinese opposite compounds.

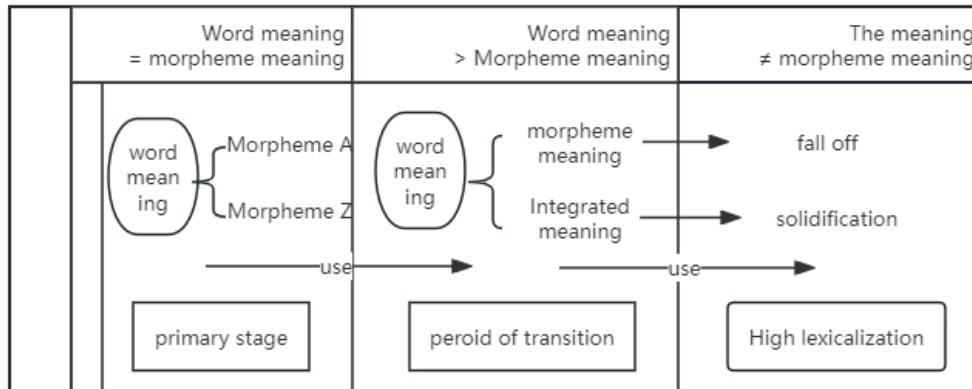


Figure 6. Three types of development diagrams

Based on this, we propose the hypothesis that the degree of semantic cohesion of opposite compounds is gradually deepened, and there is a positive correlation with the frequency of use, during the process from the quasi-" relationship of word meaning and morpheme meaning to the process of generating integrated new ideas and even gradually dropping the original morpheme meaning.

At the synchronic level, different words belong to different categories, and the frequency of use cannot be compared. Therefore, we select word examples from the perspective of "synonyms" and "homomorphic words", search and count word frequency through corpus, compare the differences in their use frequency, and find language rules from them.

The corpus we use is the National Language Commission Modern Chinese Corpus¹. This corpus is a large-scale balanced corpus with diverse language materials. Under the premise of controlling the proportion, extensive sampling is achieved to ensure that modern Chinese characters, words, sentences and meanings have a reasonable frequency of occurrence in the corpus. As a general corpus, the Modern Chinese Corpus of State Language Commission truly reflects the whole picture of modern Chinese in characters, vocabulary, grammar, semantics and so on. Based on this corpus, we calculated the usage frequency of each opposite compound to verify the hypothesis.

Synonyms

¹ The number of characters in the Balanced Corpus of Modern Chinese of State Language Commission: 19,455,328 (including Chinese characters, letters, numbers, punctuation, etc.), the sample number of the corpus is 9,487 (the number of samples is the number of chapters), and the modern Chinese works such as political articles, news reports, various literary and artistic works, popular science books, academic monographs, and various applied writing styles are selected. In terms of time span, the corpus of each period from 1919 to now is selected; The corpus is mainly from 1977 to the present, supplemented by corpus from other periods. Website: <http://www.cncorpus.org/>.

Let's take the Chinese words "往返", "往复", "往还", "往来" for example. These four words are synonyms, among which, the words including "往返", "往复" and "往还", all have the meaning of "round-trip", which retains the morpheme meaning A and Z, belonging to the first type of "word meaning = morpheme meaning". In addition to the meaning of "back and forth", "exchange" also integrates the new meaning of "mutual visit, communication", which belongs to the second type of "word meaning > morpheme meaning".

Table 1. Word frequency statistics of “往返”“往复”“往还”“往来”

word	meaning	type	frequency
往返	来回，反复	word meaning = morpheme meaning	72
往复	① 来回，反复；② 往来，来往	word meaning = morpheme meaning	43
往还	往来，来往	word meaning = morpheme meaning	8
往来	① 去和来；② 互相访问，交际	word meaning > morpheme meaning	223

Among the four words with similar meanings, the frequency of use of "往来" is much higher than that of the other three words, and it is also the only opposite compound that integrates new meanings on the basis of preserving the original morphemes.

Table 2. Word frequency statistics of "修短" and "长短"

word	meaning	type	frequency
修短	长短	word meaning = morpheme meaning	0
长短	① 长短的程度；② 意外的灾祸、事故；③ 是非、好坏；④ 副词，表示无论如何	word meaning > morpheme meaning	224

The words "修短" and "长短" have the meaning of "long and short", among which, "修短" only retains the morpheme meaning A and Z, belonging to the first type of "word meaning = morpheme meaning". "长短" in addition to the morpheme meaning A and Z integrated into the new meaning of "② Unexpected disaster, accident; ③ Right and wrong,

good and bad; ④Adverb, which means "no matter what". It belongs to the second type of "word meaning > morpheme meaning".

Through the online search of two words in the corpus, the word "修短" did not retrieve the corpus, maybe it belongs to the written term, so the daily use frequency is low. As the synonym "长短", we retrieved 224 cases in corpus. The frequency of use is higher. Correspondingly, its semantic development is also higher integration.

Homomorphs

Homographs are words that have the same form but are treated as two words. For example, "东西₁(east and west)" and "东西(轻声)₂(thing)", "裁缝₁(tailor)" and "裁缝₂(tailor)", and so on. Let's first look at the homonyms of "东西₁(east and west)" and "东西(轻声)₂(thing)".

Table 3. Word frequency statistics of“东西₁”“东西₂”

word	meaning	type	frequency
东西 ₁	①方位词，东边和西边;②指从东到西的距离	word meaning = morpheme meaning	245
东西 ₂ (轻声)	①泛指具体的或抽象的事物;②特指人或动物(多含厌恶或喜爱的感情)	word meaning ≠ morpheme meaning	4130

"东西₁(east and west)" and "东西(轻声)₂(thing)" are both nouns and in the same form. However, the dictionary regards them as two words. The meaning of the word "东西₁(east and west)" retains the morpheme meaning A and Z, belonging to the first type of "word meaning = morpheme meaning". The word "东西(轻声)₂(thing)" acquires a new meaning through integration, and the new meaning has no correlation with the original pure morpheme meaning, that is, belongs to the third type of "word meaning ≠ morpheme meaning".

A total of 4375 corpora were retrieved, of which 245 were "东西₁(east and west)", accounting for 5.6%, and 4130 were "东西(轻声)₂(thing)", accounting for 94.4%. Among them, the more frequently used "东西(轻声)₂(thing)", its lexical integration degree is higher, and the distance from the original pure morpheme meaning A and Z is further.

Table 4. Word frequency statistics of "裁缝₁(cut and sew)", "裁缝₂(tailor)"

word	meaning	type	frequency
裁缝 ₁	剪裁缝制衣服	word meaning= morpheme meaning	2
裁缝 ₂ (轻声)	以做衣服为职业的人	word meaning> morpheme meaning	34

"裁缝₁(cut and sew)" is a verb and its meaning is "to cut and sew clothes", which retains the morpheme meaning A and Z and belongs to the first type "word meaning = morpheme meaning". "裁缝₂(tailor)" is a noun, meaning "a person who makes clothes as a profession", the original morpheme meaning has fallen off, belonging to the second type, that is, "word meaning > morpheme meaning".

A total of 34 corpus materials were retrieved, including 2 cases of "裁缝₁(cut and sew)", accounting for 5.88%, and 32 cases of "裁缝₂(tailor)", accounting for 94.12%. The higher the frequency of use of "裁缝₂(tailor)", the higher the degree of lexical integration, and the farther the distance from the original pure morpheme meaning.

Above, we select several groups of synonyms and homonyms to discuss. By comparing the correlation between the frequency of use of synonyms and homomorphic words and the morpheme relationship of the three types of semantic meanings, we find that: In the synonyms, the words with low frequency of use do not produce integrated new meanings, and there is a simple one-to-one correspondence between the word meaning and morpheme meaning, that is, "word meaning = morpheme meaning"; On the other hand, words with high frequency of use are more likely to generate new meanings on the basis of pure morphemes along with the context, habit and other factors. New meanings are emphasized and solidified under the high frequency of use, and the meaning of words obtains integrated meaning outside the pure morphemes meaning, that is, "word meaning > morphemes meaning". Among the homomorphic words, the words with low frequency of use have no integrated new meaning, and there is a one-to-one correspondence between word meaning and morpheme meaning, that is, "word meaning = morpheme meaning". The words with high frequency of use produce new meanings through integration on the basis of morpheme meaning, that is, "word meaning > morpheme meaning". However, the original pure morpheme meaning gradually fades until it falls off in actual use due to less frequent use, or it is separated into two separate entries. After the morpheme meaning falls off or the entry is separated, the meaning of the word cannot be obtained from the morpheme meaning, that is, "word meaning ≠ morpheme meaning".

To sum up, we can see that opposite compounds are gradually formed by the juxtaming of positive and negative morphemes. "Word meaning = morpheme meaning" is a kind of "combination" relationship in which word meaning and morpheme meaning correspond one by one, and the word meaning is gradually integrated in use. "Word meaning

> morpheme meaning" presents a transitional state, including the original morpheme meaning and the new meaning generated by the integration. The new meaning is emphasized and consolidated under the high frequency of use, and the original morpheme meaning gradually falls off or is listed as another word, and the meaning and the original morpheme meaning are completely separated. Meaning \neq morpheme meaning.

According to the relationship between the meaning of opposite compounds and morpheme meaning, we divide them into "meaning = morpheme meaning", "meaning > morpheme meaning" and "meaning \neq morpheme meaning", which reflects the lexicalization progress of opposite compounds to some extent. In the process of integration and solidification of opposite compounds, the frequency of use plays an important role of natural selection and promotion.

CONCLUSION

This study combines qualitative and quantitative analysis to investigate the classification of opposite compounds and the correlation between semantic integration and usage frequency. The main conclusions drawn are as follows:

Firstly, based on the relationship between the meaning of the word and the meaning of its morphological components, 260 opposite compounds can be divided into three categories: "meaning = morphological meaning," "meaning > morphological meaning," and "meaning \neq morphological meaning." The study found that these three categories exhibit a progressive developmental trend, which to some extent shows the evolution of opposite compounds from a combination of semantically opposite morphemes to a highly lexicalized state.

Secondly, we conducted statistics on the usage frequency of opposite compounds from different categories based on a corpus. The study found that there is a clear positive correlation between the degree of semantic integration of opposite compounds and their usage frequency.

ACKNOWLEDGMENT

I would like to express my deepest gratitude to my supervisor, Professor Qi Feng, for his invaluable guidance, insightful suggestions, and continuous support throughout the course of this research. And I would like to thank my advisor in the undergraduate period, Professor Zhang Ping, who has given me many suggestions on the topic selection and research methods of my thesis. At the same time, this paper was reported in the first international academic conference of Confucius Institutes in Southeast Asia, and the experts and scholars at the meeting gave many valuable suggestions, so I would like to express my thanks to them. I would like to thank State Language Work Committee for providing access to Modern Chinese balanced corpus of National Language Commission, which were instrumental in conducting this study. Lastly, I would like to thank my family and friends for their unwavering support and understanding during this challenging yet rewarding journey. In conclusion, I am truly grateful to all those who have contributed to the success of this research. Your support has been invaluable.

REFERENCES

- [1] Kaewbut, P. . (2023). A Study on the Establishment of a Faculty of Chinese Proficient Teachers and the Development Model of Chinese Expert Thai Teachers at the Primary and Secondary level in Thailand: 泰国中小学优秀当地汉语教师团队建设与培养建议研究. *MANDARINABLE : Journal of Chinese Studies*, 3(1), 10–17.
- [2] LU, Y. (2022). Analysis of “Harmony” and “Unity” Concepts in Indonesian and Chinese Culture. *MANDARINABLE : Journal of Chinese Studies*, 1(1), 10–16.
- [3] Phanata, S. (2024). The Demand for “Chinese +” Talent Training: A Case Study of Chinese Language Program at Universitas Sebelas Maret. *MANDARINABLE : Journal of Chinese Studies*, 3(2), 167–175.
- [4] 朱志平(2005).汉语双音复合词属性研究[M].北京:北京大学出版社.
- [5] 中国社会科学院语言研究所词典编辑室.现代汉语词典(第7版)[M].北京:商务印书馆,2018.
- [6] 张谦(2006).现代汉语反义语素合成词研究,河北大学硕士学位论文.
- [7] 张金竹(2018).反义复合词内部语义表达及概念层级,汉语学习,(04):60-66.
- [8] 张金竹(2015).反义复合词在现代汉语中的词类定位,语言教学与研究,(06):89-97.
- [9] 袁嘉(2009).“早晚”的词汇化,西南民族大学学报(人文社科版),30(09):240-246.
- [10] 谭达人(1989).略论反义相成词,语文研究,(01):27-33.
- [11] 束定芳,黄洁(2008).汉语反义复合词构词理据和语义变化的认知分析,外语教学与研究,(06):418-422+480.
- [12] 罗耀华,周晨磊(2011).“反正”类反义复合副词的认知阐释,华中学术,(01):206-217.
- [13] 刘哲(2011).反义复合词“死活”的语法化,安康学院学报,23(02):49-52.
- [14] 刘玉倩,孟凯(2019).二语学习者反义复合词词义识解的影响因素,汉语学习,(03):69-77.
- [15] 黄哲(2014).浅析反义复合情态副词“高低”,语文知识,(11).
- [16] 胡静(2017).反义复合词“好歹”与“好赖”比较分析,柳州职业技术学院学报,17(06):84-89.
- [17] 韩丽丽(2007).现代汉语反义复合词的产生及其发展,语文学刊,(20):121-122.
- [18] 方一新,曾丹(2007b).反义复合词“好歹”的语法化及主观化,浙江大学学报(人文社会科学版),(01):64-71.
- [19] 方一新,曾丹(2007a).“多少”的语法化过程及其认知分析,语言研究,(03):76-81.
- [20] 曾丹(2013).反义复合词“去就”形成演变的认知分析,语文学刊,(19):35-37.
- [21] 曾丹(2011).反义复合词“高下”、“高低”的形成演变及其竞争关系,人文论谭,(00):18-24.
- [22] 曾丹(2008).反义复合词“买卖”形成演变的认知分析,汉语史学报,(00):168-173.
- [23] 曾丹(2007).反义复合词形成演变的认知研究,浙江大学博士学位论文.