An Investigation of the Semantic Prosody of Synonyms
—The Case of “Weichi (维持)” and “Baochi (保持)” in Chinese

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In order to better apply the semantic prosody theory to distinguish synonyms, this article chooses to use analysis software and corpus to specifically compare and analyze the difference between “weichi (维持)” and “baochi (保持)”. Although both “weichi (维持)” and “baochi (保持)” show neutral colors in the dictionary, through analysis of collocation words, it is found that “baochi (保持)” is often matched with positively colored words, so it has positive semantic characteristics, while “weichi (维持)” is more neutral and negative semantic prosody characteristics, and in the diachronic and synchronic word frequency survey, the word frequency of “baochi (保持)” is higher than that of “weichi (维持)”.

Keywords: semantic prosody, synonyms, corpus linguistics

1. Introduction

1.1 The Scope of Research Object

This article aims to use the theory of semantic rhyme to distinguish and analyze synonyms, which is about the study of synonyms. Synonyms in “Modern Chinese Dictionary” (Seventh Edition) are defined as “words” with similar meanings, such as “local” and “native”, “inane” and “be just empty verbiage”. Synonyms are words with the same or similar lexical meaning. By comparing the differences in the collocation of the synonymous words, the semantic rhymes are compared to distinguish the synonymous words.

1.2 Significance of the Topic

For a long time, the discrimination of synonyms has mainly relied on the definitions of authoritative dictionaries and the use cases given in them, but sometimes dictionaries will use mutual explaining to explain the meanings of synonyms, so people cannot really know the difference between a group of synonyms. In addition, the current application of semantic prosody is more in English teaching and teaching Chinese as a foreign language, and there is less research on its application in Chinese teaching. Since the theory of semantic prosody mainly focuses on the collocation of words, it’s also suitable for the analysis of Chinese synonyms.

In summary, due to the lack of methods for distinguishing synonyms and the gaps in the application of semantic prosody theory in Chinese, the topic of semantic prosody of synonyms is chosen to investigate.

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1.3 Research Materials and Methods of Semantic Prosody Study

The corpus of this article comes from various monolingual corpora, including the Beijing Language and Culture University Corpus (BCC), the Chinese Web 2017 (zhTenTen17) Simplified Chinese corpus in Sketch Engine, the National Language Commission corpus, and the People’s Daily graphic database.

This paper uses Antconc 3.4.3 to analyze the collected corpus by searching for the common collocations of related words and the semantic prosody type of collocation words in the corpus, and arrange them in descending order according to the significance value M1, then analyzes the semantic prosody of collocation words with higher significance. In addition, this article also compares the M1 value displayed in Sketch Engine with the result of Antconc 3.4.3 to make the data more accurate. On the basis of data analysis, the semantic rhyme colors of “weichi (维持)” and “baochi (保持)” are initially obtained, then randomly extract relevant corpus from BCC and People’s Daily graphic database, and analyze its semantic sentiment one by one to verify the results of data analysis. From the methods above, the synonymous words “weichi (维持)” and “baochi (保持)” are distinguished.

2.1 Literature Review and Theoretical Background of Semantic Rhyme

2.1 The Theory of Semantic Prosody

Semantic prosody theory is proposed by Sinclair, which is based on the phonetic prosody proposed by British linguist Firth. The theory of Semantic prosody refers to a semantic feature produced by certain words often co-occurring with a language unit with a certain semantic feature (Wang & Zhang, 2005). According to the semantic features presented, semantic prosody is divided into three categories: positive semantic prosody, neutral semantic prosody, and negative semantic prosody. Positive semantic rhyme means that the words collocation have clear and positive semantic features. Neutral semantic rhyme is the vocabulary that the words match with both negative semantic features and positive semantic features. Negative semantic rhyme is the word collocation vocabulary which mostly has negative semantic features.

2.2 The Analysis of Achievements of Semantic Prosody Study In China

The current research on semantic prosody theory mainly focuses on the following aspects, which can be divided into two categories: diachronic and synchronic.

2.2.1 Diachronic research

Diachronic research is mainly divided into two categories: literature review and diachronic changes of semantic rhyme of words. A review category, for example, Chen Beibei divides the research phases of domestic semantic prosody and points out the characteristics of the current research status and existing problems (Chen, 2019). There is also a review of foreign semantic prosody research, for example, Zhang Ying classified the application fields of foreign semantic prosody and pointed out the shortcomings (Zhang, 2012).

The analysis of the diachronic changes of the semantic rhyme of parts of speech, or the diachronic analysis of specific words, such as Chen Fei’s diachronic investigation of the semantic rhyme of the word “Yuefa (越发)”, which describes the changes of the semantic rhyme of “Yuefa (越发)” from both ancient Chinese and modern Chinese (Chen, 2016). However, this type of diachronic analysis is only a presentation of the phenomenon of changes in semantic prosody, and there is a lack of analysis of the reasons for this phenomenon.
2.2.2 Synchronic research

The synchronic research on semantic prosody theory mainly focuses on the four aspects: English vocabulary teaching, teaching Chinese as a foreign language, translation, and the study of semantic prosody of a certain part of speech or individual words in modern Chinese.

Since the theory of semantic prosody is a theory put forward by Western researchers, it can be directly applied to the teaching of English vocabulary. Among them, more researches are on word collocation and synonym discrimination. The second is the research on teaching Chinese as a foreign language. For example, Mi Xia pointed out that in teaching Chinese as a foreign language, “the study of semantic prosody explores the semantic interaction between language units through the combination of language units, which has certain guiding significance for determining the meaning and usage of words” (Mi, 2019, p. 78). In this article, examples of the use of positive words such as “being” and “praise” are mentioned. Therefore, the application of semantic rhyme in teaching Chinese as a foreign language can solve the problem of improper vocabulary collocation that non-native Chinese speakers appear in the process of Chinese learning.

Again about translation studies, such as applying semantic rhyme to translation criticism. Fang Yuhua and Xiong Songtao used the English translation of the “Zao (早) + verb” structure in “A Dream of Red Mansions” as an example to verify the applicability of semantic prosody research in translation criticism (Fang & Xiong, 2019).

On the basis of translation studies, it can be extended to cross-language semantic rhyming studies, namely comparative studies of synonyms in different languages, such as comparative studies of “bai (白) and white” and “chun (春) and spring”, and the analysis of the semantic meaning of verbs paoqi (抛弃), desert and abandon (Wu, 2019). This kind of research mainly uses corpus research methods to compare the semantic prosody of cross-language synonymous collocations from the perspective of class connection, and find the similarities and differences.

In addition, there are a large number of studies on the semantic rhyme of a certain word or individual words in modern Chinese which aims to provide reference for lexicography and deepen the understanding and cognition of Chinese vocabulary. The studies of a certain word, such as the study of the semantic rhyme of mood adverbs, frequency adverbs, adverbs of degree of ambiguity, and collective quantifiers, the studies of individual words are concentrated on the analysis of similar words, such as the study of the semantic rhyme of abstract nouns “views, ideas, statements”.

3. Dictionary Definitions of “Weichi (维持)” and “Baochi (保持)”

3.1 Modern Chinese Dictionary (The Commercial Press, Seventh Edition):

**Baochi (保持):** Maintain (as it is) so that it does not disappear or weaken.
E.g: Keep calm (保持冷静); Keep prices stable (保持物价稳定)
Keep in close contact with the masses (跟群众保持密切联系)

**Weichi (维持):** ① keep it continue to exist; keep:
E.g: Maintain order (维持秩序).
② Protect; Support:
E.g: Thanks to his secret maintenance, we were able to be safe (亏他暗中维持, 才得以平安无事).
3.2 Modern Chinese Synonym Dictionary (Shanghai Lexicographic Publishing House, July 2009)

**Weichi (维持)**: To preserve in its original and proper form.

E.g: Maintain order at the station (维持车站秩序); The class monitor is maintaining order (班长在维持序); This situation can not be maintained (无法维持如此的局面); Maintaining public order is everyone’s responsibility (维持社会治安是大家的责任); He also wants to maintain the current rules and regulations (他还想继续维持现在的规章制度).

“Weichi (维持)” emphasizes that it does not change the status quo, and is often used with words such as “order, status quo, public security, and life.” “Baochi (保持)” emphasizes that the original condition does not disappear and maintains it for a longer period of time. “Baochi (保持)” is often combined with words such as “quiet, balance, tradition, water and soil, silence, distance, level, vigilance, status quo” to form phrases like “keep balance (保持平衡), keep good traditions (保持优良传统), please keep quiet (请大家保持安静)”.

3.3 Xinhua Synonyms Dictionary (The Commercial Press, January 2003)

**Baochi (保持)**: Refers to being constant and lasting longer. The object is the condition of things and the activities of people, such as water and soil, level, tradition, identity, honor, style, habits, life, vigilance, contact, etc.

**Weichi (维持)**: Refers to a certain limited or temporary maintenance, so as not to change the original and current situation. The objects are mostly the order of human activities, the status quo, life, and public security.

3.4 Synonym Dictionary (Shanghai Lexicographical Publishing House, October 2010)

**Baochi (保持)—Weichi (维持)**: The two constitute a synonymous relationship in the sense of “making things continue to exist and keep unchanged”. However, the two are different in their semantic focus, applicable objects and semantic importance. “Baochi (保持)” focuses on keeping the original state or level from disappearing or weakening for a long time. It is mostly used in tradition, level, honor, speed, mentality, distance, connection, etc., with a heavier semantics; “Weichi (维持)” focuses on referring to a certain level maintain within limits or temporarily, so as not to change the status quo. It is mostly used in life, order, public security, governance, relations, etc., with lighter semantics.

Modern Chinese Dictionary (seventh edition), Modern Chinese Synonyms Dictionary” and Xinhua Synonyms Dictionary all explain the meanings of “baochi (保持)” and “weichi (维持)” respectively, and distinguish them from the objects of “baochi (保持)” and “weichi (维持)”. Among the three dictionaries, the Synonym Dictionary points out the similarities and differences between the two and analyzes them from a semantic perspective. However, the conclusions of the four dictionaries are not quite different. They all emphasize the difference in duration and scope of the two words. In addition, the use cases cited in the four dictionaries are relatively simple. The use cases for “weichi (维持)” are all “order, status quo, public security,” etc., while the use cases for “baochi (保持)” are all “water and soil”. To sum up, although the four dictionaries have a certain distinction between “weichi (维持)” and “baochi (保持)”, it is not clear enough. This article will make statistics and analysis of the words that match them from the perspective of semantic rhyme, so as to have a new understanding of the difference between them.
4. Corpus Analysis

4.1 Word Frequency

The author retrieved the word frequencies of “weichi (维持)” and “baochi (保持)” in BCC, Sketch engine, and the National Language Commission Corpus respectively, and analyzed the word frequencies of the two from a synchronic perspective. The results are as follows:

| Word   | BCC (Newspaper item) | Sketch engine | National language Commission Corpus |
|--------|----------------------|---------------|-------------------------------------|
| Baochi | 188479               | 3147125       | 1739                                |
| Weichi | 40180                | 1007717       | 856                                 |

In addition, from a diachronic point of view, a diachronic search was performed in the BCC corpus, and the word frequency of “baochi (保持)” and “weichi (维持)” was compared over time, as shown in the following figure:

![Figure 1. Frequency comparison chart of “weichi (维持)” and “baochi (保持)”](image)

It can be seen from the Figure 1, whether it is from a synchronic or diachronic perspective, the frequency of use of “baochi (保持)” is higher than that of “weichi (维持)”, and it also has a wider range of collocations than “weichi (维持).”

4.2 Semantic Prosody Analysis of “Weichi (维持)” and “Baochi (保持)”

Semantic prosody refers to a kind of semantic feature produced by certain words often co-occurring with a language unit with a certain semantic feature. According to this, the analysis of the semantic prosody of a word should be based on the language unit with which it often co-occurs, and the characteristics of the semantic prosody of the word can be learned by analyzing the characteristics of the co-occurring language unit. Therefore, this article mainly randomly selects relevant corpora from the National Language Commission Corpus, uses
Antconc 3.4.3 for analysis, and ranks the collocations through the calculated M1 value. M1 mutual information value reflects the mutual trust and attraction relationship between node words and collocation words. The greater the mutual information value, the higher the collocation strength between the two words. The mutual information value may be positive or negative. If it is negative, it indicates that there is mutual exclusion between the two words, that is, the two words do not tend to co-occur in a certain language.

Table 2.

| Baochi (保持) | M1 | Weichi (维持) | M1 |
|-------------|----|-------------|----|
| Balance (平衡) | 11.84 | Run (运行) | 6.02 |
| Good (良好) | 11.10 | Rule (统治) | 6.02 |
| Commodity price (物价) | 11.10 | Order (秩序) | 6.02 |
| Clean (清洁) | 11.10 | Privilege (特权) | 6.02 |
| Active (活动) | 11.10 | Situation (状况) | 6.02 |
| Power (势力) | 11.10 | Commodity price (物价) | 6.01 |
| Body strength (体力) | 10.51 | Balance (平衡) | 6.01 |
| Relationship (关系) | 10.78 | Stable (稳定) | 6.01 |
| Status quo (现状) | 10.10 | Live (生活) | 6.01 |
| Situation (局面) | 9.52 | Life (生命) | 6.01 |

In addition, in order to make the analysis results more precise, the author compared “baochi (保持)” and “weichi (维持)” in the word sketch difference of Sketch engine, and sorted them in descending order according to their significance. Each selected eleven strong combinations, that is, words with high co-occurrence frequency, as shown in the following table:

Table 3.

| Baochi (保持) | Node word frequency | M1 | Weichi (维持) | Node word frequency | M1 |
|-------------|--------------------|----|-------------|--------------------|----|
| Stable (稳定) | 61485 | 9.4 | Order (秩序) | 24064 | 9.6 |
| Consistent (一致) | 48501 | 9.2 | Livelihood (生计) | 13321 | 9.1 |
| Status (状态) | 54896 | 8.8 | Rate (利率) | 15504 | 9.0 |
| Clean (清洁) | 31289 | 8.6 | Shake (震荡) | 12240 | 8.9 |
| Contact (联系) | 34099 | 8.5 | Original verdict (原判) | 11309 | 8.9 |
| Distance (距离) | 32454 | 8.5 | High position (高位) | 10435 | 8.7 |
| Attitude (心态) | 31392 | 8.5 | Balance (平衡) | 13163 | 8.7 |
| Increasing (增长) | 31464 | 8.4 | Stable (稳定) | 12340 | 8.5 |
| Balance (平衡) | 27634 | 8.3 | Status quo (现状) | 10833 | 8.2 |
| Trend (态势) | 22801 | 8.0 | Low position (低位) | 6489 | 8.0 |
| Advantage (优势) | 21324 | 7.5 | Life (生命) | 9921 | 7.8 |
| Healthy (健康) | 25297 | 7.9 | Weak (弱势) | 3020 | 7.0 |

Based on the analysis results of the two tables, it is found that the combined words on the right side of “baochi (保持)” are “advantages, stability, happiness, health, growth, good”, which are mostly positive words. The author retrieved 100 “baochi (保持)” use cases in the newspapers of the BCC corpus. After judging one by one, 56 showed positive emotions, accounting for 56%; 39 showed negative emotions, accounting for 39%;
There are 5 items that show neither positive nor negative emotions, accounting for 5%. The results of the extraction and analysis in the People’s Daily’s graphic database also account for the largest proportion of positive emotions (a total of 100 items were extracted, of which positive: 64; negative: 2; neutral: 34). This shows that although the meaning of the word “baochi (保持)” in the dictionary is neutral, it tends to be more positive in use.

The combined words on the right side of “weichi (维持)” are more neutral or negative words, such as “order, status quo, life, inferiority, weakness”, etc. The author retrieved 100 “weichi (维持)” items in the newspapers of the BCC corpus. After judging one by one, there are 9 showing positive emotions, accounting for 9%; 38 showing negative emotions, accounting for 38%; 53 showing neutral emotions, accounting for 53%. In addition, the author randomly selected 100 “weichi (维持)” use cases from the People’s Daily graphic database, and the results were similar to those obtained in BCC (positive: 18; negative: 35; neutral: 47). It can be seen that “weichi (维持)” is mainly used to express neutral emotions, and secondly to express negative emotions.

The semantic rhyme colors of the modifiers of “weichi (维持)” and “baochi (保持)” are also very different. In the sketch engine, the left collocation items with a higher co-occurrence rate of “baochi (保持)” include words such as “always, moments, long-term, forever”, The left collocation items with a higher co-occurrence rate with “weichi (维持)” are “reluctant, still, difficult, weak, insufficient, only” and other words with negative emotion and meaning. For example, although “weichi (维持)” is always combined with neutral words such as “livelihood”, it often shows negative semantics in sentences. As shown in the use cases found in the sketch engine corpus:

1. Up to now, the vast majority of “drama models” are elderly people. It is difficult for “drama models” to recruit apprentices because it’s difficult to make ends meet.

2. Some people say that they did not expect that city radio stations that had barely survived by road traffic would die in the hands of Didi and Kuaidi, and advertisers retired.

From the perspective of people’s cognition, people are more inclined to stay in a positive mood or state for a long time than in a negative state, so in language expression they tend to choose to “baochi (保持) + positive semantic rhymes” to express their positive expectations. “Weichi (维持)” has no obvious emotional tendency. It mostly expresses neutral emotions and states that things are in a state. Therefore, “weichi (维持)” often appears in more objective texts such as financial interest rates and legal judgments. This makes “weichi (维持)” mostly show a neutral semantic rhyme color. The right side of the word “weichi (维持)” often co-occurs with words such as “livelihood and life” that express the meaning of survival, making it a realistic color. In addition to the collocation words on the left side mentioned above, the word “weichi (维持)” has a negative semantic rhyme in use.

5. Conclusion and Discussion

This article takes “weichi (维持)” and “baochi (保持)” as examples, and further analyzes the differences between this group of synonyms from the perspective of semantic prosody and related corpus. Since the semantic rhyme of a word is produced in use, it is dynamic and therefore different from static commendatory and derogatory meanings. This article analyzes synonyms from this perspective and has a deeper understanding of vocabulary. If the scope of the research object is expanded from this group of words to commonly used words in
Chinese, it will not only deepen the cognition of Chinese vocabulary from the perspective of semantic rhyme, but also promote the interpretation of Chinese vocabulary in dictionaries.

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