

A Corpus-based Contrastive Analysis of English-Chinese Main Negatives

—Taking TED English Chinese Parallel Corpus of Speech as an Example

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ABSTRACT

The use and development of negative words are related to the historical development of various languages and different nations' thinking characteristics. This paper has made a contrastive analysis of the negative words of English and Chinese based on "TED English Chinese parallel corpus of speech" to investigate the lexical aspects of negation in the English and Chinese languages and explore the use of negative words and the expression of negative meaning in both languages. Through the corpus comparison, it is found that negative words in Chinese and English have the following differences: 1) English has a richer number of negation words than Chinese, with more diverse negative expressions; 2) Negative words in Chinese are more expressive than those in English, and they often carry subjective cognitive meaning.

Keywords: TED; Speeches; Parallel text; English and Chinese; Negative words

1. INTRODUCTION

Speech is mainly an artistic social practice activity of stating views and expounding theories through verbal language and body language. "Speech" has two features: one is the performance characteristic. The language style used by the speaker is both formal and casual, possessing both universal and individual styles. The other is the narrative characteristic. The vocabulary used in the speech is between written and oral language. It includes both professional words and words in line with public cognition. In this regard, the language used in speeches can be regarded as a natural language flow, which is suitable for linguistic research. TED is a non-partisan and non-profit organization in the United States. Since 1984, the organization has held a TED annual meeting every year, in which elites are invited from different fields to give brief speeches at the annual meeting. In 2007, TED released English subtitles and multilingual translations of selected conference speech videos on the website TED.com. They are open to the public free of charge, which provides opportunities for comparative study of linguistics.

The research focus of this paper is on the negative words in English and Chinese. Negation is an important

research topic in philosophy, logic, psychology, and linguistics. Wittgenstein firstly noticed the negation phenomenon in language and believed that negation exists in every language, and a language without negation cannot be called language. Since Jespersen began to pay attention to the negative form of English, the research content and perspective of English negation have diversified. There have been studies on negation in domestic academic circles, such as Yuzhi Shi's (2000) research on Chinese negative words of "bu" and "mei" [1] and Jianhua Hu's (2007) research on negation, jurisdiction, and focus [2]. It is also not uncommon to find contrastive studies of English-Chinese negation, and its interpretation perspective involves the contrast of negation forms [3], negative tendency components, and negative context [4]. The description and interpretation of negation in the above research provide some enlightenment for the application of negation in Chinese and English.

2. RESEARCH METHOD

Contrast is an important language research method to well understand the individuality and commonness of the two languages by comparing the two languages. The two important axes of language comparison are "diachronic -

synchronic” and “intra language - inter language”, on which linguistic studies focus. Wenguo Pan (1997) believed that the comparison between Chinese and English [5], i.e., the two languages are compared in parallel, starting from English and Chinese, and it is one of the trends of language development to use a certain attribute or category of the language as a base point for comparison. Coincidentally, the parallel corpus has created such a contrast condition.

“TED English Chinese parallel corpus of speech” was created by Beijing Foreign Studies University in 2019, which collects English transcriptions of speech videos from the TED.com website and corresponding Chinese translations of texts, consisting of English and Chinese sentence level aligned texts. The corpus is created by the following procedures: firstly, raw data of the English and Chinese are collected from the WIT3 corpus, then the corpus is proof-read line by line, and some nonverbal annotation words such as background introduction and expression gestures are deleted. The final word count in the TED English Chinese parallel corpus of speech is 6187849, with 2,842,468 English words and Chinese 2,707,571 words. Based on the above characteristics of speech, the use of negative categories can be objectively reflected in language. Therefore, this paper takes TED English Chinese parallel corpus of speech as a tool and language contrast as the research method.

3.DATA DISTRIBUTION OF NEGATIVE WORDS IN THE ENGLISH-CHINESE CORPUS

Firstly, this paper adopts Chang Song’s classification of English and Chinese negative words [6]. English negation is mainly realized by negative affixes “un-”, “mis -” and negative auxiliary words “not” and “no”, while Chinese negation is mainly functioned by “bu”, “mei” and “bie”. This paper mainly studies marked negative words. For the sake of denotation, negative words are used to represent marked negative words in the following.

The negative words of the two languages are retrieved in the corpus. The query mode is a simple query that is case insensitive. The query method of English negation is to search the corresponding negative words first and then the negative affixes. The query method of negative affixes uses retrieval syntax, such as non *_JJ, un*_JJ, and *less _JJ (where JJ means adjective). The results are as follows: in the parallel corpus, the frequency of English negative auxiliary word “not” is the highest, which is 10,429, followed by “no” “never”, “none”, and “nor” with the frequency of 3963, 1463, 193, and 73 respectively. Among negative affixes, the frequency of negative words prefixed with “non-” is the highest, which occurs 655 times, followed by “un -” and “mis -”, with the frequency of 245 and 13 respectively. The frequency of negative words with “- less” as the suffix is the highest,

which is 415. The frequency of negative words with “- proof” is 26. According to the results, the main lexical means used to express the negative category in English are “no”, “not (n’t)” and “never”, of which “not” (“n’t”) is the most frequently used, with a frequency of 10,429, accounting for 0.80%.

The boundary between root and affix is fuzzy in Chinese. This research uses the method of word detection to retrieve the negative words in Chinese in the corpus. When retrieving the word “fei”, we mainly retrieve its occurrence in the corpus as a negative adverb, and the grammar is “fei_b”. The results were summarized as follows: in Chinese, the frequency of “bu” used as negation is the highest with the occurrence of 22,201, and the frequencies of “mei (you)”, “bie”, “fei”, “fang”, “wu” and “fou” decrease in turn, with the lowest occurring 2. It can be seen that the main negative words used in Chinese to express the negative category are “mei (you)” and “bu”, of which “bu” has the highest frequency, a frequency of 22,201, accounting for 0.81%.

Through the above analysis, it can be observed that negative words are classified according to the frequency of occurrence, and there are main negative words, accompanied by other negative words, which jointly represent the negative category in the language in the process of natural use of English and Chinese.

4.COMPARISON OF ENGLISH AND CHINESE NEGATIVE WORDS AND THEIR NATIONAL COGNITIVE STYLES

There are major negative words in both English and Chinese, which is the commonness of the two languages. In addition, this paper also analyzes other negative words in the two languages.

4.1 English negative words and the cognitive style of English negation

This paper investigates the sources of “no”, “not” and “never” in English and selects representative data in the corpus. “No” originates from Old English “non”. It was used as a negative adjective in the 12th century, which is equivalent to “not any” and collocated with nouns to indicate the negative category. “Not” is a variant of the unstressed syllable “noht” in old English, which is equivalent to “in no way”, indicating the category of absolute negation. “Never” comes from old English “naefre”, which was the emphasizing form of “not” at the beginning. Now, “never” is equivalent to “not ever”, which means “not to have” in a sentence. The above shows that the English nation has considered the respective grammatical roles when using negative words to express negation.

Through the investigation of English and Chinese parallel text corpora in the corpus, it is found that “not”

plays the role of statement modification and reference modification in expressing negation. The negative word “no” shares the negation of static words (nouns and adverbs) in English in grammatical form, but in fact, the negation is targeted to the predicate in the sentence. The word “never” also appears more frequently and plays the role of negating reference modification. “Not”, as a negative adverb, mainly modifies the predicate. When modifying noun phrases, “not” modifies the aspect category of sentences. When modifying nouns, “no” mainly negates the predicate of the sentence. When “never” expresses negation in a sentence, it negates the state of the negative verb.

This paper proves that the English language mainly focuses on the form of grammar when expressing negation, and different negative words are used in different grammatical positions, which reflects that the cognitive method of negative words in the English nation is two-dimensional. The sentence predicate is in an objective negative and positive state, and the negation is expressed by adding negative words. After analyzing and sorting the corpus data, the grammatical expressions of negative words in English are summarized as shown in the following table 1 in the next page.

Table1. Negative expressions of English negative words

	No	Not (n't)	Never
Part of speech	adverb	adverb	adverb
Whether modifying nouns	Yes, present, progressive, perfect tense of the actual negative action	/	/
Ways of modifying verbs	/	Present, progressive, perfect tense of the actual negative action	Present, progressive, perfect tense of the actual negative action
Ways of modifying adjectives	/	Denying the change of the nature or state	/
Tense	Unlimited	Unlimited	Unlimited

In this paper, the negative words in sentences are retrieved from the corpus, and it is found that “bu” mainly plays the role of modifying statements, appearing before verbs, adjectives, adverbs, and so on. When the negative word is used in front of a noun, the noun becomes an adjective or verb in the process of expressing meaning, and “bu” remains to be a predicate. In addition, “bu” often carries the meaning of certain components of subjective willingness when negating action behavior. This phenomenon can be observed through text comparison. There are verbs related to the meaning of willingness in English translation, such as “could” and “should”. In this case, Chinese negative words add corresponding willing verbs when translating English into Chinese. To some extent, this reflects that Chinese

4.2 Chinese negative words and their cognitive styles

This paper also examines the origins of “bu”, “mei” and “bie” in Chinese, and selects representative corpora for semantic analysis. Yuzhi Shi (2000) has examined the Chinese negative markers in the 15th century and believed that the negative word “mei you” appeared during this period, and its grammatical function changed, which led to the disappearance of a number of negative words such as “wu”, “wei” and “bu ceng”, which made the function of the most stable negative marker “bu” clearer[1].The initial meaning of “bie” refers to separation and segregation, extending to distinction and discrimination, and then to the negative meaning of departure and violation, and finally to the negative adverb of forbidding or discouraging, which is equivalent to “mo” and “bu yao”. The Chinese character “lan” is an ideographic character, which originally expresses the meaning of “dependence in the heart”, and later is developed into “tired” and “powerless”. It is used as a negative adverb meaning “willingness” in modern Chinese.

negative words take account of the subjective will of the speaker or the subject when expressing negative semantics. “mei you” can modify a noun, which indicates the end of the action when it is paired with a verb.

In the Chinese language, when using negative words to express negation, in addition to choosing the negative word according to the tense of the sentence, it is also necessary to consider the subjective will and mental state of the speaker and the subject. This paper holds that the negative words in the Chinese language are three-dimensional. In addition to the objective boundary of affirmation and negation, there are also more subjective and objective considerations. The grammatical distribution of Chinese negative words is summarized in the table below.

Table 2. Negative expressions of Chinese negative word

	“bu”	“mei (you)”	“bie”
Subjective/Objective	Objective	Subjective	Subjective
Whether modifying nouns	No	Yes	No
The way of modifying adverbs	Negate the verb progressive state of action	Negate the completion state of action	Negate the verb progressive state of action
The way of modifying adjectives	Negate the nature of things	Negate the change of the nature or state of things	/
Tense	Unlimited	Not denying future actions	Not denying past actions

5.CONCLUSION

This paper explores the negative words in the two languages from the perspective of contrast. There are two main differences in vocabulary between English and Chinese. The first is the diversity of negative means. English negative words have more kinds of expressions. They not only have negative adverbs, but also use negative prefixes and suffixes to form negative words; in Chinese, negation is mainly expressed by negative words, and there is no affix. This paper uses “TED English Chinese parallel corpus of speech” to explore the use of negative words in the language and expound the different means of negative expression in the two languages.

Another difference is that Chinese and English negative words have different ways of expressing meaning, that is, the two languages have different ways of negative cognitive expression. Chinese is an ideographic language system. Negative words not only express negative meaning but also express the will of the speaker or subject. In English, the subjective wishes of the subject and the speaker are borne by other words, and the negative words are only responsible for the expression of the negative category of the sentence, which can be obtained from the corpus in the text. The research explores the origin of negative words in the two languages from a historical perspective. It investigates the grammar of negative words in the language from a synchronic perspective and explains the internal semantic expression of negative words. English and Chinese express negation in different ways.

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