Corpus-Based Approach to Explore the Semantic Prosody of Synonym: A Case Study of "Lead to" and "Result in"

ZHOU Qin, ZHANG Le

University of Shanghai for Science and Technology, Shanghai, China

Semantic prosody has been one of the most important topics in corpus linguistics. Synonyms are difficult for English learners to learn. Traditional teaching methods mostly distinguish them in terms of their meaning, not their usage. This study uses a corpus-based approach to illustrate how to distinguish and employ the synonyms. This study uses the British Academic Written English (BAWE) Corpus, and chooses "lead to" and "result in" to explore their usage from the perspective and semantic prosody. The approach can help learners to understand and use those words or phrases with the same or similar meanings.

Keywords: semantic prosody, corpus linguistics, synonym

Introduction

The rise of corpus linguistics has challenged some traditional viewpoints of linguistics, one of which is the definition of the unit of meaning. Previously, words have been regarded as the basic units of meaning. In recent years, some corpus linguists and lexicographers have extracted some information through large corpora suggesting that the relation between word and the unit of meaning by analyzing the real corpus evidence (Fang, 2012). Sinclair (1996) proposed that the lexical item is the basic unit of meaning and he also proposed the extended units of meaning (including collocation, colligation, semantic preference, and semantic prosody). He used a corpus-based approach to analyze the semantic functions and pragmatic functions and discussed semantic preference and semantic prosody between short-distance collocations. The term semantic prosody is used to describe such phenomena as this. It usually refers to a word that is typically used in a particular environment, and the word takes on connotations from that environment (Sinclair 1991; Louw, 1993; Stubbs, 1996; Hunston, 1995a; Channell, 2000). Semantic prosody is one of the most important tools of expressing attitudinal meaning and communicative purposes. Louw (1993) firstly proposed the concept of semantic prosody. But actually, Sinclair (1988) had discussed with him about the idea. Louw (1993) emphasized the co-occurrence of semantic prosody which indicated that the customary collocation between lexical item and lexical item produced semantic prosody (Zhen & Yang, 2019). It is both semantic and pragmatic; it may control the co-selection choice between word and word or word and structure; it can also indicate the hidden meaning under a co-occurrence context. Semantic prosody of a lexical item is a consequence of the more general observation that meaning can be said to belong to whole phrases rather than to single words. It usually can be

ZHOU Qin, Master, postgraduate student, College of Foreign Languages, University of Shanghai for Science and Technology, Shanghai, China.
ZHANG Le, Doctor, associated professor, College of Foreign Languages, University of Shanghai for Science and Technology, Shanghai, China.

observed by looking at a large number of instances of a word or phrase, because it relies on the typical use of a word or phrase. The semantic prosody of a word or phrase is often not accessible from a speaker's conscious knowledge. So, it may be something that learners are not taught. However, because of the kind of meanings, it can convey and it is an important aspect of language. Vocabulary teaching needs to take account of semantic prosody, and can only do so if the approach is phraseological rather than word-based. Prosody was put forward by Firth (1957) as a concept of phonology. Semantic prosody can be classified into three types: positive prosody; negative prosody; and neutral prosody (mixed prosody) (Stubbs, 1996). No matter what kind of prosody we might meet, there will be a collocational pattern of the node indicating or expressing the language users' attitudes or views. In English vocabulary teaching, teachers attach great importance to English synonyms. Traditional dictionaries can only provide the explanation of synonyms, while the corpus-based approach can be an effective tool to provide sufficient words usage including their connotations and customary usage. Recently, some English learners gradually research on the semantic prosody (Zhang & Liu, 2006; Wang, 2009; Lu, 2010; Wang, 2011; Yang, 2013; Wang & Wang, 2013; Wang & Jiang, 2016). They turn their attention to the semantic prosody and collocation of synonyms to discuss if there are any differences between these synonyms and how they are different. It is necessary for English learners to understand the accurate usage between these synonyms in English writing and teaching.

Literature Review

Sinclair (1991) explored the semantic prosody by using a phrasal verb "set in". As to his findings, he observed that the most striking feature of this phrasal verb is the nature of the subjects. In general, these subjects refer to unpleasant states of affairs; a few are neutral, such as reaction and trend. The main vocabulary is "riot", "decay", "despair", "ill-will", "decadence", "impoverishment", "bitterness", and so on. None of these is conventionally desirable or attractive. The phrase "set in" which co-occurs with these vocabularies indicated something bad. Hunston (2002) also demonstrated semantic prosody by using "sit through". "Sit through" is often preceded by "have to", as most verbs are base forms. More importantly, it often follows "have to" or an expression indicating that someone does not want to do something. In other words, according to the concordance lines, there is evidence that the experience being undergone is unpleasant in some way. In her study, "sit through" might be said to carry connotations of "boredom", amassed through the typical contexts in which the phrase is used. The phrasal verb "sit through" is an example of a lexical item with semantic prosody. Because it is often used with items that indicate something lengthy and boring, connotation of boredom tends to be attached to the phrasal verb itself. Wei (2002) analyzed the semantic prosody of "cause" in the corpus of Science and Technology (JDEST). According to his findings, "cause" appeared 949 times in JDEST. He observed 110 of all concordance lines finding that five of them expressed the meaning of "career" like "the cause of peace" and the rest of them would express the "reason" and "let something happen". From the concordance line, we can easily find that the core collocates with "cause" are negative, such as "problem" and "accident" to warn people of attention. Wang and Wang (2005) also explored the semantic prosody of "cause". They mainly compared the usage of "cause" by Chinese learners and native speakers. According to the results, it can be found that native speakers use "cause" with its collocates producing obvious negative attitude, while Chinese learners obviously use few negative collocates. Zhang and Liu (2006) explored "happen" and "occur" in JDEST. They found that "happen" with its significant collocates showed obvious negative attitudes. Its subjects include "accident", "disaster", "failure", "misfortune", "problem", "unfortunate things", "suicide", and

so on. They also found that "occur" did not show obvious negative attitudes. "Occur" often follows such subjects as "developmental changes", "incidents", "erection", "coincidences", "the biological spring", and so on. Therefore, "occur" may show neutral semantic prosody.

Extended Units of Meaning

Sinclair (1996; 2004) proposed and constructed the extended units of meaning model, which includes five components: node, collocation, colligation, semantic preference, and semantic prosody. The model is centered on node words, attracting other words and co-occurring around it, and forming a fixed pattern (Zhang, 2010). The node is an invariable component. It can be either a word or a phrase; collocation is the co-occurrence of words with node, generally no more than four intervening words; colligation is a grammatical phenomenon that co-occurs with node words, reflecting its syntactic structure; semantic preference is the restriction of regular co-occurrence to items which share a semantic feature; semantic prosody determines the meaning and function of the whole model (Sinclair, 2004; Zhang, 2010). The study of the extended units of meaning extends the unit of meaning research from words or phrases to all relevant patterns around node words. In this model, semantic prosody is at the core of the construction of meaning, and the choice of other components will be affected by semantic prosody. Semantic prosody is created by the whole extended units of meaning model, and each component plays an important role in the production of semantic prosody.

Methodology

This study uses British Academic Written English (BAWE) which contains 2,761 pieces of proficient assessed students' academic writing, ranging in length from about 500 words to about 5,000 words. It is a record of proficient university-level student writing at the turn of the 21st century. Holdings are fairly evenly distributed across four broad disciplinary areas (arts and humanities, social sciences, life sciences and physical sciences) and across four levels of study (undergraduate and postgraduate level). Thirty main disciplines are represented.

This study chooses "lead to" and "result in" as examples to discuss, how the analysis of collocation and semantic prosody could play an important role in the teaching and learning of synonyms for Chinese teachers and students. In this study, we mainly observe the frequency and calculate their percentage in the corpus. This study will mainly follow the procedure: S1, search for nodes: "lead to" and "result in" respectively in the WordSmith6.0, and then extract their concordance lines and analyze them; S2, observe the concordance lines and extract more frequent collocates; and S3, conclude and classify those collocates co-occurred with the nodes respectively, to find their semantic preference and semantic prosody. We can calculate those collocates with different semantic preference and find the semantic prosody of nodes.

Results and Discussion

The result shows that there are 1,121 entries of "lead to" and 596 entries of "result in", among all the frequent collocates, the positive collocates of "lead to" take 28%, the neutral collocates take 20% and the negative collocates take 52%. As Table 1 shows, "lead to" often collocates with some negative words, such as "dissatisfaction", "problems", "decrease", "disagreement", "inaccuracies", and so on indicating something bad. Therefore, "lead to" may express obvious negative semantic prosody. From the concordance lines in Table 2, we also can observe "lead to more poverty", "lead to chaos", "lead to unsafe designs", and so on.

Table 1

Collocates of "Lead to"

Positive collocate	Neutral collocate	Negative collocate
Satisfaction, productivity, increase, necessarily, better, great, global, more, greater, development, hopefully, improved, high, production, significant, progression, development, better, positive	Turn, conclusion, intense, ultimately, consequences, levels, performance, different, employee, forms, results, formation, expansion, ventilation	Dissatisfaction, problems, inaccuracies, confusion, incorrect, decline, inevitably, unreliable, loss, error, reduction, poor, failure, resentment, rejection, deterioration, decrease, inequalities impoverishment, irrevocable, misconception, instability, lack, abnormal, unexpected, serious, false, disease, low, less, incorrect, disagreement, difficulties, deficiency, decline, contamination

Table 2

Concordance Lines of "Lead to"

1. can boost wealth but also	lead to	more poverty. While accepting
2. tions, lack of which could	lead to	chaos and most probably u
3. ood in the UK is likely to	lead to	an expansion of the amount
4. overy was made that could	lead to	a quantum computer capable
5. tatic failure theories can	lead to	unsafe designs when loads
6. n amount of nutrients will	lead to	deficiency diseases, but
7. gramming language would	lead to	extra cost or even a project
8. group; this would possible	lead to	a careless conclusion tha
9. training. Which inevitably	lead to	the loss of business, cus
10. ork. The studio work will	lead to	a cramming project - a pr
11. onquered by the Romans	lead to	a mixture and adaptation
12. black youth; fundamental	lead to	the violent explosions on
13. e wrong way, this will all	lead to	a lack in motivation. As
14. s advantageous. They can	lead to	well known problems include in
15. e practice and, hopefully	lead to	higher standards of patience

Secondly, we analyzed frequent collocates of "result in". It can be observed that British students are likely to use "result in" with neutral words or negative words. They are less likely to use positive collocates. The positive collocates take 21%; the neutral collocates take 35%; the negative collocate take 44% among these frequent collocates. According to the concordance lines in Table 4, "result in" is likely to collocate with negative words, such as "loss", "ineffective", "decrease", "incapacitating", and so on. "Result in" also collocates with the neutral words, such as "research", "calculation", "conclusion", and so on.

Table 3

Collocates of "Result in"

Positive collocate	Neutral collocate	Negative collocate
Increase, better, expected, equalization, success, positive, more, increased, considerable, growth, satisfaction, significant, production, profits, potential, higher, good	Subcontracting, toxins, normal Cellular, premature, opportunity, learning, intervention, competition, people, social, brain, output, change, specific, action, conviction, response, project, weight, objective, temporary, situation, management, exploitation, emotion, rand	Loss, overestimation, less, lower, Death, decrease, severe, errors, failure, inaccurate, mistakes, deficiency, conflicts, inequality, antisocial, closure, limited, problems, lack, minimum, erroneous, constriction, error, cost, reduction, wastage, nervous, pressure, premature, losses, incorporated, death

Table 4

Concordance Lines of "Result in"

1. r to gain a more reliable	result in	a given research situation
2. ts full extent. This will	result in	Branca gaining a competition
3. asuring equipment would	result in	a more accurate calculation
4. f marketing strategy may	result in	loss of opportunities. A
5. ances happened. This will	result in	ineffective overall cont
6. uns, however, will likely	result in	a more decisive conclusion
7. point. These adjustments	result in	a decrease in the number
8. million inhabitants would	result in	250,000 incapacitating c
9. ic conditions. This would	result in	a more accurate represen
10. s" in the sense that they	result in	shared responsibility an
11. from the Sun) is bound to	result in	error a precise understanding
12. ts based approach would	result in	a more objective approach
13. ilian exports. This could	result in	a downturn in Brazil's B
14. etition. These issues can	result in	opportunities and threat
15. tered) Hypovolaemiama	result in	hypotension and tachycar

Conclusion

This study introduced the importance of semantic prosody and its necessity. Since semantic prosody was put forward, it has been valued in applied linguistics especially corpus linguistics. This study mainly discussed the collocation and semantic prosody of the synonym—"lead to" and "result in". The empirical research on semantic prosody still remains inadequate. We choose phrases as the example to explore more detailed information about collocation and semantic prosody. But the corpus used in this study might be old for further study and one set of phrases did not have clear semantic prosody. Therefore, choice of the node word or phrase must be reconsidered. Traditional linguists make efforts to show that syntax takes the most important position which can regulate the formal choice and words are materials to complete the grammar. Semantic prosody has revealed the atmosphere of context to show a hidden meaning. Once the lexical item or the node develops its own semantic prosody, the collocates with the node will be affected by this prosody. Semantic prosody is of great importance for language learners for their distinguishing of synonyms. There are lots of synonyms in English, and they are more or less different in terms of the collocation and semantic prosody. The differences of semantic prosody need to be distinguished by corpus approach. Chinese learners are unskillful at distinguishing the synonyms. It is necessary for them to use corpus-based approach to find the differences of them. Semantic prosody is one of the developing directions of corpus linguistics. It provides a new perspective to observe and describe the lexical item.

References

Altenberg, B., & Granger, S. (2002). *Lexis in contrast: Corpus-based approach*. Amsterdan &Philadelphia: John Bemjamins.

Huston, S. (2002). *Corpora in applied linguistics*. London: Cambridge University Press.

Sinclair, J. (1991). *Corpus, concordance, collocation*. London: Oxford University Press.

Sinclair, J. (2004). *Trust the text*. London: Routledge.

Fang, Z. C. (2012). Syntactic preference and meaning of collocation. *Technology Enhanced Foreign Language Education*, (147), 18-23.

Lu, J. (2010). A corpus-based study on collocational behavior and semantic prosody of near synonyms in Chinese learner English. *Modern Foreign Languages*, (3), 276-288.

Wang, C. Y. (2009). A Corpus-based Study of the Distinction of English Synonyms for Chinese Learners. *Foreign Languages and Their Teaching*, (6), 27-31.

Wang, H. H,, & Wang, T. S. (2005). A contrastive study on the semantic prosody of CAUSE. *Modern Foreign Languages*, (3), 297-307.

Wang, J. Y. (2011). A Multi-Perspective View of English Synonym. *Foreign Language and Literature*, (5), 79-83.

Wang, R. &Jiang, X. (2016). A Corpus-based Comparative Study on the Semantic Prosody of COMPLETE, FINISH and PERFORM. *Technology Enhanced Foreign Language Education*, (5), 29-33.

Yang, M. (2013). A contrastive study of semantic prosody of near synonyms: A bilingual perspective. *Journal of Guangxi University for Nationalities*, (3), 181-184.

Zhang, J. D., & Liu, P. (2006). A Corpus-based Study of the Differences between the three synonyms: Happen, occur, & "fasheng". *Foreign Languages Research*, (5), 19-22.

Zhen, F. C., & Li, W. Z. (2017). Firth's linguistic theory and influence on corpus linguistics. *Journal of Foreign Languages*, (4), 15-24.