The Semantic Features of “v+adv” in Native English Public Speaking Setting

Huijuan Wang
Department of Foreign Languages, Northwest A&F University, China

Yufeng Zou
Department of Foreign Languages, Northwest A&F University, China

Abstract—This paper explores and concludes the features and semantic prosodies of adverbs in public speaking setting by native English speakers through a corpus-driven approach. The corpus used is a sub-corpus (CES_C) from the self-built corpus (CES) comprising of 177 texts (type token) that are original and authentic speeches delivered by celebrities from UK and US. The speakers of these speeches are varied from all walks of life including presidents, business elites and etc. In terms of research methodology, this study is conducted both the quantitative approach of corpus linguistics and the qualitative approach of observation. By annotated part-of-speech (POS) with Treetagger tool, the study examined the occurrence frequency of adverbs and listed top 30 high-frequency adverbs employed in the corpus. Then different categories of adverbs were analyzed in terms of semantic function, and the frequency of occurrence was calculated respectively. The results shows the use of adverbs only accounts for 5% of all the words which is relatively lower than the use of other part of speech. Besides, some adverbs have certain semantic orientations based on different categorized adverbs, which provides intuitive reference resources for English public speaking teaching and learning in ESL/ EFL community. In addition, the combination of research focuses such as corpus, semantic prosody, public speaking and adverbs can be used as reference to enlarge the scope of corpus study and enhance the level of public speaking research.

Index Terms—corpus-driven method, English speech, adverbs, lexical features, semantic prosody

I. INTRODUCTION

Background

According to Hamilton (2012), the purpose of speech is to elicit emotion and reaction among the audience. In reality, numerous thought leaders or grassroots devote to change the world with the power of language and ideas, regardless of what type the speech is (for example, political, economic, academic, military, religious, entertaining and so on). Popular in Western universities, public speech courses are made much of in teachers and students. Consistent with this, Zhong (2011) opines that although those lessons may bring many problems to solve, some Chinese universities have offered public speaking training sessions and have achieved noticeable results at the present pilot stage.

Additionally, in China, a significant number of ongoing competitions and activities to enhance the speaker’s abilities and exchange experiences also attract thousands of scholars and researchers (Zhong, 2011). As more and more research is being done on English speeches in recent years, some interesting discoveries are cropping up. Based on the fast development of corpus technology and corpus linguistics theories, researchers explore a new approach or perspective to study speech and the relevant things. In corpus linguistics, there are mainly two research methods. One is a corpus-based approach, relying on corpus data for hypothesis testing; second is corpus-driven research method with a minimum theory reliance “in order not to hinder the process of discovering new phenomena” (Römer, 2005).

Partington (1998) argues that the use of corpus for teaching English for Specific Purposes (ESP) is one of the most extensive areas in corpus linguistics, especially as regards professional and academic settings. To promote ESP teaching, different corpora have emerged include spoken and written academic discourse, native English speaker corpora, ESP English learner corpora, the use of English in professional contexts, and so on. Since many factors may disturb the design of corpora, challenges in this area lie not only in the construction of the corpora but the organization and connection of information in different text codes. Semantic prosody is one of research focuses (Nelson, 2006). To discover the semantic orientation, how to analyze and generalize the collocation of keywords need attention.

Semantic prosody is one of the most active study areas in corpus linguistics and has made significant contributions to language. Though the study started late in China, scholars have reaped rich fruits (Louw, 2003). During the past decades, it has changed from weak to strong gradually; from simple theory introductions to all-area empirical methods in depth; from single text study to multi-aspect comparison consideration. But some hidden weak points have been buried behind the prosperity: ambiguous objects of study, inappropriate corpus, fuzzy statistical standard, and simple conclusion, etc.
Zaabalawi & Gould (2017) further state that past studies have demonstrated that English collocations, especially with adverbs, form some of the most challenging patterns in English learning and teaching as they are unpredictable and difficult to remember in later use. For learners of English as a second language, the challenge in learning collocations arises from the differences in meanings during the translation process. This is commonplace especially in China where the learning of English collocations is disregarded. In Chinese-English dictionaries, adverb and adjective collocations are mainly ignored, a trend which is attributed to the differences in the roles played by adverbs in both languages.

Through self-built English Speech Corpus, the semantic prosody of adverbs has important implications for ESL/EFL teaching, learning and research. By exploring the features in using adverbs in English public speaking setting, the paper combines some current research focuses: the corpus-driven method, the speech learning and teaching and the semantic prosody, becoming meaningful and innovative.

Problem Statement & Research Questions
As an active part in English speeches, adverb needs to be studied from various angles. But there have few systematical kinds of research since now. In this sense, it is important to list the high-frequency adverbs and find semantic characteristics of adverbs in English speech. Since corpus linguistics is popular in recent years, it provides a new perspective for observing the characteristics of words and phrases. More importantly, the corpus-based and the corpus-driven approaches are scientific, presenting the data in an obvious way. For this reason, the study aims to answer the following questions:

1. In English speech, do native speakers use adverbs frequently? What percentage of adverbs account for?
2. Which are the high-frequency adverbs? What kinds of adverbs should we use in English speeches?
3. Do these high-frequency adverbs have specific semantic preferences? What are semantic prosodies of those words presented in speech texts? If we want to express our feelings or attitudes, which adverbs should we employ?

The Significance of the Study
Although there are many researchers paying attention to speech, most of them explore from a more macro perspective to focus on learning or teaching methods and speech contests (Yule, 2003). Even though the corpus approach is prevalent in general English, it is seldom applied in the speech area and the relevant fields. As a matter of fact, English speech learners may benefit from corpus data to improve their input through corpus-driven and corpus-based approaches. The author collects hundreds of native speakers’ speech texts, then analyzes and organizes the data, finally concludes the rules. The general rules have scientific significance for speech teaching and learning. When learners write a speech text or give a presentation in public, it should easy to avoid ugly situations with such excellent data for consultation. In this sense, corpora can be used directly in the classroom and applied to become teaching materials and syllabus. With the reference of corpus data, teachers can instruct students more accurately and efficiently.

Apart from the contributions of the corpus in ESP teaching and learning, the study also fills the blank on the study of the semantic prosody of adverbs in English speech. The author hopes to find some specific features in speeches and decides to explore the usage of adverbs from the aspect of semantic prosody. After a literary review, it is found that many researchers concentrate on the semantic prosody of verbs, nouns, verb phrases and noun phrases. From this condition, it is essential, to sum up, the semantic prosody of other word classes, for example, the adverbs. The research will help people realize that the collocation of some adverbs may show a specific semantic orientation to some extent.

Because semantic prosody plays a crucial role in deciding the appropriate word choice in context, it may have significant value in researching the typical collocation of lexical items, especially for the unique style—speech. When it comes to ESL, employing right words with proper semantic prosody is one of the capacities students should have, though native speakers can use collocations subconsciously. To have a growing habit to obey the grammatical rules of using collocations can also avoid semantic misunderstandings or pragmatic errors (Yukel, 2013). So, the study of speech from the semantic prosody perspective provides new insight, no matter for lecture writing or public speaking practice.

When addressing various groups of people on different occasions, speakers always employ language differently cater to all needs from an audience. In all aspects of the characteristics of the speech style like syntax, rhetoric, phonetic and discourse structure, lexical items reflect expressive effect indeed. The study of adverbs holds an important position in the grammar research, but often be neglected by scholars (Zhong, 2011). In theory, the in-depth and in-width achievements have been obtained with the rapid growth of research methods and technology.

However, few people choose English speech style as a breakthrough point. In this way, through the detailed research of high-frequency adverbs in speech, the findings will provide an effective learning and teaching mode to standardize the use of adverbs. It is worth to initiate discussion on this blank new area and attract more and more people to achieve valuable results.

II. Theoretical Framework

Different theories have been put forward to discuss the various aspects of adverbs in the English Language. This section discusses four approaches that add into the knowledge repository about adverbs namely, the syntactic Role and Reference Grammar, the Functional Grammar, and Croft’s approach.

Role and Reference Grammar (RRG).
Yuksel (2013) argues that this theory describes the primary differences between arguments and non-arguments, which is defined as the core and the periphery in the structure of a layered clause. Within the core is the predicate which is found in the nucleus, as well as the arguments brought forth by the predicate. On the other hand, the periphery is composed of non-arguments which might be present in a clause. A simple clause is only consisting of the core and the periphery at the same level while in more complex clauses, the nucleus, the core and in some instances, the clause as a whole may have their peripheries. In this instance, the noun phrase will have a core which has a periphery and may have a nucleus which translates into the presence of another periphery.

Within the RRG model, there is an operator which is defined as the grammatical item that modifies each clause level like the tense, modality, among others (Zhao, 2010). They are not found in the nucleus, core, or periphery; instead, they modify each of the levels, and they are denoted externally to them in the layered structure. In some cases, operators such as negation, and an aspect modify the nucleus where they perform this role without the mention of the participants.

Additionally, Yule (2003) argues that operators are found among directional and event quantification, internal negation, and modality where they play the role of modifying the relation between the core argument which is defined as the actor and the action. As such, they can be compared to the periphery of the core which is composed of adverbs of pace, manner and locational adverbs which cannot describe the actions alone without mention of participants.

Zhong (2011) further adds that there are parallels between the levels on which different modifiers are found when drawing comparisons between the noun phrase and the clause. The RRG model provides an in-depth insight into the role played by modifiers drawing attention to the fact that the view of adjectives and adverbs does not always depict the entire image on a par. It emphasizes that the noun phrase which has several sublevels is very different from the clause with its sub-levels as shown by the different types of modification.

Adjectives are found in the nuclear periphery and can only modify the referent while manner adverbs are located in the periphery of the core at the clausal level. They change not only the predicate but also its participants. As such, the model concludes that the scope of modification of adjectives is narrower while manner adverbs modify the events that are denoted by verbs as well as other participants and other aspects of activities into their scope (Yuksel, 2013). This translates into that manner adverbs modify more complexly.

**Functional Grammar Approach**

According to Zaabalawi & Gould (2017), predication holds a more central role and is defined as the designating the application of a predicate to an appropriate number of arguments with the predicate specifying a relation or a property. Based on this, the different parts of speech are given definitions which are related to their uses as predicates. As such, an adverbial predicate is defined as those predicates which are used as modifiers of non-nominal heads and which correspond to manner adverbs. Although they are defined as predicates, they do not have any predicative uses. This is viewed as a feature of English where the non-predicative adverbs modify predicative verbs (Yuksel, 2013). Verbal predicates are considered the only predicate type of those which serve as a basis for differentiating the parts of speech which have a predicative use only. This aspect opens up possibilities of nominal, adverbal and adjectival predicates being used in predicative functions.

**Use of Adverbs as Modifiers of Predicates**

The semantic division of parts of speech that has been used traditionally is considered inadequate as the classes are not restricted to a single part of speech each. Croft (1999) then proposes that while the semantic levels are not sufficient in the discernment of the part of speech categories, they are still required to do so. He adds that there is a need for a different dimension which gives the functions that the semantic classes are used in.

He opines that within every language, there are expressions for three primary pragmatic or propositional act functions. In this, they perform the tasks of modification, predication, and reference. Based on this, then, adverbs modify predicates since adjectives modify referents. As such, it is conclusive to say that adjectives and adverbs are closely related where adverbs are usually formed from adjectives such as when the suffix –ly is added to words in the English language. However, in other languages, there is no formal distinction between adjectives and adverbs.

However, there is a limitation to this approach that arises from the use of the terms reference and referent with regard to modification (Zaabalawi & Gould, 2017). Modification by a property aptly captures the similarities between adjectives and adverbs. On the other hand, the ability of modification to act within either referring or predicating expressions is illustrative of their different functions. To overcome this challenge, prototypical adverbs should be treated as property modifiers within predicating expressions which then gives a clear delimitation.

**III. LITERATURE REVIEW**

**Adverbs**

There have been studies exploring the role played by adverbs as modifiers. There are marked differences between native and non-native speakers of English in their usage of intensifiers; the ESL speakers made more use of a restricted number of core vocabulary items. Adverbs, especially those ending with –ly are a productive category of collocation since they involve a complicated interplay of lexical, semantic and stylistic restrictions. The focus of this paper is the lexical features of the English adverbs, so the related knowledge of adverb is discussed, including the following parts: the definitions of adverbs and the classifications of adverbs.

*Definitions of Adverbs*
Different dictionaries and grammar books give different interpretations of adverbs. From the perspective of semantic and syntactic functions, Merriam-Webster Dictionary describes adverb as “a word belonging to one of the major form classes in any of numerous languages, typically serving as a modifier of a verb, an adjective, another adverb, a preposition, a phrase, a clause, or a sentence, expressing some relation of manner or quality, place, time, degree, number, cause, opposition, affirmation, or denial, and in English also serving to connect and to express comment on clause content.”

According to Wikipedia encyclopedia, “an adverb is a word that modifies a verb, adjective, another adverb, determiner, noun phrase, clause, or sentence. Adverbs typically express manner, place, time, frequency, degree, level of certainty, etc., answering questions such as how, in what way, when, where, and to what extent.”

**Classifications of Adverbs**

Regarding word formation, adverbs fall into the following groups:
1. Simple adverbs. e.g. in, down, only, etc.
2. Compound adverbs. e.g. somehow, therefore, anyway, etc.
3. Derivational adverbs. e.g. actively, backwards, clearly, etc.
4. Fixed phrases. e.g. Of course, kind of, at last, etc.

In terms of syntactic function, adverbs can be divided into:
1. Modification adverbs. e.g. early, above, little, etc.
2. Conjunctiva adverbs. e.g. how, when, so, etc.
3. Relative adverbs. e.g. how, when, where, etc.
4. Sentence adverbs. e.g. how, when, where, etc.
5. Exclamatory adverbs. e.g. how, what.

In terms of semantic function, Leech divided adverbs into ten categories:
1. Adverbs of manner: Adverbs provide information on how someone does something.
   - For example, Tom works quietly.
2. Adverbs of Time: Adverbs provide information on when something happens.
   - For example, I met Tom yesterday.
3. Adverbs of Place: Adverbs provide information on where something happens.
   - For example, I will meet Tom there.
4. Adverbs of Frequency: These adverbs are used to show the timing of the action that is happening.
   - For example, I meet Tom every week.
5. Adverbs of Degree: They show what extent or how much has action been done or will be done.
   - For example, I love Tom.
6. Adverbs of Comment and Attitude: give a comment or opinion about a situation.
   - For example: Fortunately, I finished my paper.
7. Adverbs of Linking. e.g. firstly, however, therefore, etc.
8. Adverbs of Adding and Limiting. e.g. too, also, else, etc.
9. Adverbs of Viewpoint. e.g. strictly, mentally, officially, etc.
10. Adverbs of Length of Time. e.g. just, long, never, etc.

**Semantic Prosody**

**Definitions of Semantic Prosody**

Semantic prosody is also known as the semantic set (Stubbs, 1995; Hunston, 2002), semantic harmony (Lewandowska-Tomaszczyk, 1996), semantic associations (Hoey, 2003; Nelson, 2006) and so on. Sinclair (1987) first noticed the phenomenon that some words or phrases always occur in a specific semantic surrounding. For example, the phrase “set in” mainly connects with the subjects expressing unpleasant things: “decay”, “despair”, “rot” and “prejudice”.

Then, enlightened by Sinclair, Louw (1993) created the term semantic prosody in one of his papers. He borrowed the word “prosody” from phonological prosody which used by Firth (1957) in phonology. Louw enriched the basic idea of Sinclair and defined semantic prosody as “a consistent aura of meaning with which a form is imbued by its collocates” (Louw, 1993). He illustrated this language phenomenon with examples: “utterly” and “bent on”. They both have negative prosody because the expressions connected with these two words usually refer to bad things such as “sins”, “depression” and “ruining”. Stubbs then broadened it and suggested semantic prosody as “a particular collocational phenomenon” and collocation as “the habitual co-occurrence of two or more words” (Stubbs, 1996). According to Partington, the term is “the spreading of connotational coloring beyond single word boundaries” (Partington, 1998). In 2000, Hunston offered a new perspective that semantic prosody can express language users’ emotional tendentiousness include attitude, viewpoint and opinion.

As seen from the different definitions given by the scholars, a clear comprehension of semantic prosody should be realized. It is not confined to a single word, the certain meaning transfers from one word and another and even spread to the sentences and the whole context. And the pattern of collocation of lexical items shows language users’ feelings and evaluation. adverbs and the classifications of adverbs.
Classifications of Semantic Prosody

According to the evaluation of the node words, the semantic prosody can be classified into positive, neutral and negative (Stubbs, 1996). Positive semantic prosody refers that the collocates of the node word are the words with distinct positive semantic characteristics. While negative semantic prosody means the collocates are words having negative semantic features; the words of natural semantic prosody attract compound words which can wither specific positive or negative meaning. Wei Naixing (2002) used the term “mixed semantic prosody” to refer to a complex one that has both positive and negative connotations.

Tribble, C. (1998) proposed global semantic prosody and local semantic prosody regarding linguistic style. Global semantic prosody is appropriate for all kinds of texts; however local semantic prosody is applied in a specific context or manner.

Pertington (2004) realized that semantic prosody is gradable, involving favorable or unfavorable features more or less. It mainly depends on whether the node item always connects with positive, negative or natural words. Absolutely, as a complicated linguistic phenomenon, whether semantic prosody is positive or not is hard to distinguish.

Public Speaking

Definitions of Public Speaking

Many scholars define “speech” for different purposes. Speakers need to be taken into account, so Byrns (1997) believed that speech is a fundamental means of conveying information because the speaker often prepares the goal of a speech and deliver the intended message vividly. As to Dance (1996), speech is an act of using spoken language or gestures to communicate with audiences or participants. This is not a one-person show. Participants or, more often, listeners determine whether the speech is successful or not.

From the perspective of purpose, Wilson claimed that “A speech is usually considered as a unified strategy aimed to achieve a special effect, informative, persuasive, or others, to the extent that it is clear, interesting, credible and appropriate for the audience within a given time limit.” Regardless of the purposes involved, the attitude and the value of speeches usually affect listeners, so public speaking is “a value-embodied activity” (Osborn, 1998).

Lucas (2003) claimed a speech should involve seven elements—speaker, message, channel, listener, feedback, interference, and situation. In public speaking, the speaker is the person who presents information with appropriate oral language according to the speech context and the audience. What the speaker decides to convey is a message. Channel is the medium of intercourse between speaker and participants. Most speeches are transmitted in the wind through sound waves. Listeners are receivers who get messages, attitudes, values, knowledge and experiences from the speaker, accepting speaker’s verbal signals and non-verbal behaviors. To meet their needs, the speaker should also adjust his/her language according to audiences’ feedbacks. The situation includes time, place and other relevant environmental factors. Interference refers to noises that obstruct the communication, including not only the external noises but also more complicated one-internal interference.

Studies on Public Speaking at Home

In recent years, with the continuous development of all kinds of English speech competitions, many universities are gradually opening the relevant courses in our country, attracting a lot of people to study in this field. But in the process of gathering information, relevant research findings in corpus linguistics are insufficient.

For the study of speech, scholars have analyzed from multiple perspectives. To take a whole view, Wang Huijuan (2011) did a comprehensive survey of trends and problems of public speaking in China. Most of the studies focus on political or inspirational speeches, identified by the speech type property. Wang Hongyang (2007) did contrastive research of modifiers in English political speech and academic speech and found that different modifiers in political and educational speeches help speakers express different meanings. Jiang Xue (2009) and Cao Xia (2014) both do research based on speeches delivered by Barack Obama. Other political leaders are also popular in studies.

Public speaking teaching is a significant part as well. There are three main groups: non-English majors; English majors and other English learners. Wang Lifei and Wen qiufang (2007) pointed out that the number of participants in our country is naturally small, comparing with other countries. And schools are supposed to find ways to improve students’ oral English proficiency. Therefore, it is a practical way to achieve this goal by integrating English speech teaching into daily teaching schedule (Ji Zhimei, 2009). Some researches put particular emphasis on the cultivation of students’ thinking ability in English speech teaching process. Zhang Jingping, Huang Xiumin (2009) claimed that for many years, our country’s foreign language teachers emphasize the inflexible rules of language skills and the existing knowledge of books rather than the practical application ability and critical thinking. Everybody welcomes independent minds and voices.

According to the theories adopted, abundant research achievements have been gained, combining speech and pragmatic principle, discourse analysis, systemic functional grammar, among others. However, there is no systemic and thorough research in the field of semantic prosody. Additionally, adopting this theory in studying adverbs is still a new field, so the relevant issues need to be further examined; positive and negative meanings.

IV. RESEARCH METHODOLOGY

This study is conducted through a combination of both the quantitative approach of corpus linguistics and the qualitative approach. Generally, researchers use quantitative studies to open doors to reveal questions and show the
relationship between data and observation. Employing mathematical theories and developing statistic models are essential in the quantitative method because of the central questions such as “how many”, “what are they” can be solved by using them.

The applications of quantitative studies spread throughout many research fields, making contributions to social sciences, natural sciences and language studies. In a scientific study, both corpus-based research and corpus-driven study are quantitative methods. After deciding what to study, researchers design specific and valuable questions and then collect quantifiable data from various sources to analyze useful numbers by using statistics. Finally, findings and results can be concluded with objective and unbiased observation.

In this study, the author asks questions about the frequency and characteristics of adverbs first. Then a native speakers’ speeches corpus of around five hundred thousand has been established, aiming to discover the answers to the questions mentioned above. The author intends to render the results objectively, without excessive suppositions. So, the quantitative research method is used to observe the relation between data and information in this paper.

A qualitative study, however, is a process of exploration. It is also a process of identifying questions. After dealing with issues about quality (For example, “what they are” “why this phenomenon happens” and so on), researchers can describe the thing or phenomenon in words.

In this way, the quality and features of the studied object will be reflected indeed, comprehensively and deeply. The qualitative study lays particular emphasis on language explanation and illustration of the phenomenon. The significant steps of qualitative research include: explore the aspect; reveal what the problems are; find out the feasible solutions.

Furthermore, the methods of qualitative research mainly comprise the case study method, interview and observation. In this study, the author regards the various kinds of adverbs as research objects and takes English speeches as research texts. And much of the work is interpretative from the accurate observation rather than speculative ideas.

The reasons why the author combines both qualitative and quantitative study are that these two methods have their specific superiority and practicability, but they also interrelate with each other to some extent. With these two complementary approaches in one study, the author could research the same issues from different angles, thus bringing forth conclusions roundly and accurately. Accordingly, the mixed methodology is conducive to understanding the fundamental laws of using adverbs.

**Corpora Used in This Study**

To collect the original and authentic materials from native speakers, the author decided to download classical and famous speeches delivered by celebrities. After searching on the Internet, the public 100 speeches were chosen. 137 renowned experts in public speaking selected those speeches which have often been retold and recited around the world because of social influence and the art of language. Also, the author found dozens of 21st speech texts on the Internet, including commencement speeches, festival speeches, entertaining speeches and so on. As a whole, there are 177 articles in the self-built English speech corpus, having 20,542 types and 485,406 tokens. The speakers are varied: from the president to student, from Her Majesty to feminist, from business elite to AIDS patient……They give the audience substantial contents.

The topics are various that related to political issues, economic development, education reformation, cultural diversity, military strategies, social environment, scientific and technological advance, etc. The reasons why the author adopted famous speeches not simple homework from Western students or impromptu speeches given by native speakers are that the famous speeches are popular not only among the English-speaking countries but also in other regions. It is easier for learners to grasp knowledge with the help of familiar and vivid texts. Then, they are formal and standard. To obtain the correct usages of words, learners are supposed to regard the official speeches as “reference textbooks”. Finally, because they are recorded in the form of text or radio, the convenient access to the original texts make them adequate for corpus construction.

**Instruments**

**TreeTagger**

The TreeTagger is a tagging software, noting text with POS and lemma information. The founder Helmut Schmid defined the tool as “Markov Model tagger which makes use of a decision tree to get more reliable estimates for contextual parameters” (Helmut Schmid, 1995). The tagger works very well for not only English but also several other languages where even large corpora are available based on thousands of studies. It can be successfully used to tag German, French, Italian, Bulgarian, Portuguese, Russian, Dutch, Spanish, Greek, Chinese texts, etc. According to Helmut Schmid, the best tagger version shows the high accuracy, 97.5%. Furthermore, the running speed is fast. About 8000 tokens are tagged per second.

**AntConc**

AntConc is a freeware corpus analysis toolkit developed by Japanese scholar Laurence Anthony for concordance and text analysis. One of its fundamental functions is to search and extract all the entries of a word or a phrase. People can collect and analyze statistics by using word lists or cluster lists. Besides, some keywords will be listed through the comparison between the observed corpus and reference corpus, reflecting the usages of words in different contexts as well as the relationship between the words. AntConc is applied in this research to count the frequencies and semantic orientations of adverbs.

**PatternBuilder for Treetagger**

© 2018 ACADEMY PUBLICATION
PatternBuilder for Treetagger is an object creation software which provides a fast and easy way to design patterns. With this software, the construction of a complex object from its representation is separated. By doing so, the same construction process can create different representations. The difficulty of it is to use patterns to edit objects that contain flat data (HTML code, SQL query, X.509 certificate...), which means, data that can't be easily edited step by step. Using a builder class is the best way to construct these kinds of complex objects. PatternBuilder for Treetagger is an efficient tool designed for it specifically.

**Procedures**

Firstly, the articles are selected and converted into a textual format. Because subjects in this study are various forms of adverbs, we should extract them to do some further researches. As seen above, adverbs are divided into simple adverbs, compound adverbs, derivational adverbs and fixed phrases. However, it seems unlikely that all the categories can be covered in a single limited study due to some practical reasons. Therefore, the author has narrowed the subjects down to words rather than phrases. By using Treetagger software, the tagged articles are as follows.

_Mona NP and_CC I_PP would_MD like_VV to_TO take_VV this_DT opportunity_NN to_TO greet_VV our_PPS friends_NNS here_RB in_IN China_NP and_CC our_PPS old_JJ friends_NNS back_RB home_RB in_IN America_NP SENT_

According to English Treetagger tag set, RB symbolizes adverbs. So there are three adverbs in the excerpt: “here”, “back”, “home”. Likewise, the author filters the data so that all the RB type of words, that is, adverbs, can be extracted by using Excel. The obtained adverbs are placed in a txt file named “adverbs”. The writer then applies the AntConc search tool which provides the occurrence frequency of each of the adverbs to list the top 30 adverbs that are commonly used by native speakers.

Adverbs can be classified in different ways. For ease of operation and editing, the types are given as follows: adverb of time, place, frequency, degree, conjunction, sentence and other kinds of adverbs. With the aid of AntConc, the author observes the quantities of each type and calculates the frequency of occurrence respectively. When it comes to the number of adverbs in the whole corpus, it is necessary to use PatternBuilder for TreeTagger tag set to get any adverb’s pattern. After knowing the total number of adverbs, the proportions of every type in the general adverbs can be calculated as well.

In the next step, to find out whether high-frequency adverbs have a specific semantic preference or not, the writer uses AntConc to analyze the corpus data. By searching the adverbs in this software, the total number of collocate types and collocates are presented, which can also obtain the most markedly used verbs. With those verbs, some specific semantic preferences will be created. At last, the prosody of some adverbs will be analyzed, and the frequently used verbs will be listed. Conducive to understanding fundamental laws of using adverbs.

V. RESULTS AND DISCUSSION

**General Studies of Adverbs**

**Overall Frequency**

At first, the speeches should be tagged by Treetagger that adds the part-of-speech of each word. Next, the author searches symbol of adverbs (R) in the PatternBuilder for TreeTagger tag set, then gets the pattern of adverbs: “$+_RB\w*$. After opening the corpus, the writer hides tags but allow tag search in Conc/Plot/File View, and searches “$+_RB\w*$” in AntConc to observe the overall frequency of adverbs. The study also contains the searches of noun’s pattern “$+_N\w*$”, verb’s pattern “$+_VV\w*$”, and adjective’s pattern “$+_JJ\w*$” as references.

<table>
<thead>
<tr>
<th>Table 4.1</th>
<th>OVERALL FREQUENCY OF ADVERBS IN CORPUS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adv.</td>
</tr>
<tr>
<td>_corpus size</td>
<td>485,406</td>
</tr>
<tr>
<td></td>
<td>(5.36%)</td>
</tr>
</tbody>
</table>

The data from Table 4.1 reveals that native speakers use fewer adverbs in their speeches compared with nouns, verbs and adjectives. However, it is undeniable that adverbs occupy an important place in English language, especially in speeches. Like other kinds of words, adverbs should be valued sufficiently. laws of using adverbs.

**High-frequency Adverbs in Corpus**

With the function of word list, the list of high-frequency adverbs is observed. The 30 most commonly used ones are as shown in the table below.
As we can see, native speakers rely heavily on the negative adverb—“not”, accounting for nearly 20 per cent in the whole group. The reason why “not” is so significant is that quite a number of negative clauses contain this word. And it is clear that negative sentences are widely used in speeches in order to express the opposite ideas, emotions, facts and so on. Therefore, the proper use of negative sentences in both general English and English speeches will play an active role in language learning. The second frequently used adverb is “so”. When used as an adverb, the most important function is to show what extent or how much has an action been done or will be done. Other popular adverbs of degree also include “just” “only” “very” “too” “much”. Besides, there are some words that have complex semantic meanings, for example, “as” can be used as an adverb of degree showing the same meaning with “equally” and “the same as”. The third one is an adverb of time: “now”.

One of the purposes of those speeches in corpus is to charm the audience. Often, they may be concerned about the things at the moment. If the speaker mentioned a current situation and emphasized it by using the word “now”, the audience would be motivated, inspired and encouraged to put into practice. In this way, some adverbs of time, not just a symbol of time, play a major role in attracting audience. Other kinds of adverbs, such as adverbs of manner, adverbs of frequency, adverbs of place, are used widely so that the rich and varied sentences can form an informative and attractive speech.

From the table 4.2, the native speakers tend to use adverbs which are simple and multifunctional. All the words are pretty ordinary in our daily life. The possible reason may be that the speeches need to be enormously easy to understand so that the ideas of speakers could convey to audiences clearly. Therefore, learners are supposed to use simple but meaningful adverbs in public speaking.

### Distribution of Each Semantic Category of Adverbs

In terms of semantic function, the adverbs can be divided into several groups. However, it is inevitable that the boundaries of each category are not very clear because both the overlaps and gaps are existed. Table 4.3 shows a general summary of the distribution of different types of adverbs. Besides, some examples are also mentioned.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 adverb of degree</td>
<td>5774</td>
</tr>
<tr>
<td>2 other kinds of adverbs</td>
<td>5581</td>
</tr>
<tr>
<td>3 adverb of time</td>
<td>5292</td>
</tr>
<tr>
<td>4 adverb of place</td>
<td>4440</td>
</tr>
<tr>
<td>5 adverb of conjunction</td>
<td>3406</td>
</tr>
<tr>
<td>6 adverb of frequency</td>
<td>1299</td>
</tr>
<tr>
<td>7 adverb of sentence</td>
<td>207</td>
</tr>
</tbody>
</table>

In order to make the data more comparable, the writer draws a pie chart with proportions of different categories of adverbs.
The results reveal that native speakers use various kinds of adverbs in English speeches, especially the adverbs of time, place and degree. The proportions of those three categories are 22%, 20% and 17%, which occupy relatively large part in Chart 4.1. Other kinds of adverbs embrace the adverbs of manner, the restrictive adverbs and some adverbs with more than one semantic meaning. It is also a large part because it accounts for 22% of all those adverbs. Those adverbs of frequency that used to show the timing of the action that is happening, including “always”, “usually”, “often” and so on, accounting for about 5 per cent. Though the percent of adverbs of sentence is only 1%, we cannot ignore this category. Therefore, ESL learners can master idiomatic usages of adverbs with the help of the corpus data.

**Specific Studies of Adverbs**

As is mentioned in last part, all the adverbs are extracted utilizing the AntConc and Excel programs. Next stage is to place those adverbs in their original contexts to find out the rules, that means the author should open the corpus files and observe the specific semantic preferences of adverbs through KWIC concordance method provided by AntConc. Some words can create certain semantic preferences, and the phenomena occur with a degree of regularity (Ernst, 2002). The major types of semantic prosody will be investigated in this part, followed by a detailed observation and analysis. Furthermore, the verbs, which collocate with different adverbs, will be listed as well.

**Positive Semantic Prosody**

A speaker tends to choose positive adverbs to modify verbs, adjectives and other adverbs when he or she wants to spread optimistic emotions, convey positive attitudes and provide positive messages to listeners. A speaker also would like to use those kinds of adverbs to draw the audiences' attention so that the purpose of speeches will be accomplished. Several adverbs with positive prosody are listed below.

<table>
<thead>
<tr>
<th>Adverbs(freq.)</th>
<th>Collocates(freq.) V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>wisely(23)</td>
<td>use(3); act(2); form(2); perform; extend; strengthen; inaugurate; solve; undertake; order; forecast; make; fulfill; invest; regulate; exempt; face; admonish; spend</td>
</tr>
<tr>
<td>faithfully(22)</td>
<td>execute(9); report(2); manifest; observe; discharge; carry; serve;</td>
</tr>
<tr>
<td>perfectly(19)</td>
<td>adapt(2); work; illustrate; appear; make; correlate; sell; demonstrate; think</td>
</tr>
</tbody>
</table>

From this table, “wisely”, “faithfully”, “perfectly” are mostly modify the verbs. However, the searching result shows that “fortunately” is an adverb which modify the whole sentence in more cases. Table 4.4 Concordance lines of WISELY (span=5)

held to account to spend wisely, reform bad habits, and do in sharing burdens, will we wisely perform the work of peace. of business on currency, have wisely extended their investigations in European. must be sacredly preserved and wisely strengthened. The constituted authorities affairs of foreign governments wisely inaugurated by Washington, keeping ourselves of our people to solve wisely and for civilization the mighty our task must be undertaken wisely and without heedless vindictiveness. Our Constitution and that weak but wisely ordered young nation that looked be the duty of Congress wisely to forecast and estimate these might arise, and provision was wisely made for it. The freedom to the great mission so wisely and bravely fulfilled by our majorities, the Executive has been wisely invested with a qualified veto those political institutions that were wisely and deliberately formed with reference proof that a popular government, wisely formed, is wanting in no just powers. You have been wisely admonished to " accustom yourselves to Constitution our commerce has been wisely regulated with foreign nations and the functions of religion, so wisely
exempted from civil jurisdiction; to that we use this gift wisely and that we avert some uses his freedom and equality wisely well. My good friends, I is the strength to act wisely when most we are afraid, problem if we face it wisely and courageously. It can be interest. Whether we use it wisely or unwisely, we can use nation, to act -- to act wisely, to act vigorously, to act

Take “wisely” as an example, the author finds 23 occurrences in corpus. After observing the 23 concordance lines of “wisely” with eyes at first, the verbs that connect with it are noted down. According to the classification of speeches, the words all existed in the inaugural addresses and political speeches. Therefore, when it comes to some political policies or declarations in public speaking or writing, learners can use the item “wisely” appropriately like native speakers.

**Negative Semantic Prosody**

There are also unpleasant events in speeches. It is such an effective way to show the bad feelings or express griefs over incidents or concern about the situations with the negative adverbs. Though the purpose of lecture is to give audiences the strength and courage, the negative prosody, to some extent, uncover the dark side of the society and bring the truth to light. The number of these kinds of adverbs is relatively small in corpus.

<table>
<thead>
<tr>
<th>Table 4.5</th>
<th>THE ADVERBS WITH NEGATIVE SEMANTIC PROSODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverbs(freq.)</td>
<td>Collocates(freq.) v.</td>
</tr>
<tr>
<td>unwisely(5)</td>
<td>choose; cede; control; use; disturb</td>
</tr>
<tr>
<td>Unfortunately(8)</td>
<td>Deteriorate</td>
</tr>
</tbody>
</table>

Table 4.5 Concordance lines of UNFORTUNATELY of our system, but, unfortunately, it has not been executed in a manner to accomplish ring revolutionary music, the Marseillaise (which unfortunately has deteriorated into a war tune) soive military assistance to Cambodia itself. Now unfortunately, while we deeply sympathize with the public and the press invited. Sometimes, unfortunately, Communists are driven to cation of how many people saw what you gave them. Unfortunately, it does not reveal the depth I meetings that have been scheduled thus far, but unfortunately I had to scrub the Western one -- you go ahead and clean up. Then the young lady, unfortunately for her first argument, proved excess is almost sure to invite a reaction; and, unfortunately, the reactions instead of taking the

Statistics shows that “unfortunately” appears only 8 times in corpus. The mainly function is to modify the whole sentence to express the negative feelings. Speakers may feel sorry for something, may share regrets in life, or even keeps people alert to convince people completely. Therefore, when learners need to comment on things that have identical properties with those in corpus, they are supposed to employ the negative adverb “unfortunately”.

**Mixed Semantic Prosody**

These kind of adverbs have a complex prosody, showing positive or negative semantic prosody on the basis of different feelings and attitude conveyed by speakers. There is no good or bad trend in other situations. Comparatively speaking, the number of this type is smaller than words with positive or negative prosody.

<table>
<thead>
<tr>
<th>Table 4.6</th>
<th>THE ADVERB WITH MIXED SEMANTIC PROSODY</th>
</tr>
</thead>
<tbody>
<tr>
<td>adverbs(freq.)</td>
<td>collocates(freq.) v.</td>
</tr>
<tr>
<td>carefully(22)</td>
<td>Positive guard(2); endeavor; cultivate</td>
</tr>
<tr>
<td></td>
<td>Negative avoid; control</td>
</tr>
<tr>
<td></td>
<td>Neutral read(2); examine; look; listen; calculate; pick; control; analyze; select; check out; consider; think</td>
</tr>
</tbody>
</table>

Table 4.6 Concordance lines of CAREFULLY for I assure myself that whilst you carefully avoid every alteration which might endanger on a long walk in Central Park, listened carefully to me, and finally said, “That sounds like curious that the Americans, who calculate so carefully on the possibilities of military victory the jury, my comrade and co-defendant having carefully and thoroughly gone into the evidence to be keep women in the places they have carefully picked out for them. Treitschke, made rights of the citizens of other nations as carefully as it protects the rights of its own America’s weapons are nonprovocative, carefully controlled, designed to deter, and capable on the circumstances. We find him carefully analyzing the society for which he was publications we all have seen that carefully select quotations out of context from the plane, we had to check out everything carefully. And we’ve had the plane protected and the appropriate time not just a few articles carefully called for the Government;’s purposes, but let me start a rumour. Like you, I have carefully read President Kennedy’s messages about consider such clearance reports carefully when making up its mind about the reason for taking the time today to think carefully and clearly on the subject of human of rationalizations, and if you read carefully the President’s last speech to the people within the privacy of courts or behind carefully guarded

By analyzing the collocates of “carefully”, we are able to know the exact usages of those adverbs which have complex semantic prosodies. It is clear that “carefully” can cause positive prosody when speakers express positive ideas
or attitude. The negative prosody will be created if speakers share bad feelings with listeners. Besides, speakers use the neutral semantic prosody to narrate in a calm and objective manner. With the help of data in corpus, ESL learners can easily have a grasp of this kind of adverbs.

Neutral Semantic Prosody

More words, in fact, show a neutral attitude lack of the obvious preference. Because in more cases speakers should maintain their objectivity to narrate things in a calm and fair manner.

<table>
<thead>
<tr>
<th>the adverbs with neutral semantic prosody</th>
</tr>
</thead>
<tbody>
<tr>
<td>adverbs(freq.)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>truly(39)</td>
</tr>
<tr>
<td>completely(39)</td>
</tr>
<tr>
<td>politically(30)</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

After the observation of these words, we can find that the semantic prosodies of them are not apparent. It reminds us that knowing the usages of those words is necessary for the process of practical teaching and learning, because not every ESL learner can make good use of adverbs. Sometimes, they may use these adverbs to create good or bad semantic orientation and make mistakes.

Major Findings

(1) When compared with nouns, verbs and adjectives, the frequency of adverbs is relatively low in English speeches, and it only accounts for 5 % of all the words. However, it is undeniable that adverbs occupy a prominent place in English teaching and learning, especially in speeches.

(2) According to semantic functions, adverbs can be divided into several categories: adverbs of time, place, degree, frequency, conjunction, sentence and other types. The most commonly used class is the adverbs of frequency, while the adverbs of sentence occupy a small part.

(3) Through the process of data observation and analysis, the author finds that the Top 3 widely used adverbs in the corpus are: “not”, “so” and “now”. Besides, more adverbs of degree occur in the list of high-frequency adverbs.

(4) The study finds that some adverbs have certain semantic orientations. And when those adverbs connect with verbs, some typical semantic prosodies are created including positive, negative, neutral and mixed prosodies. For example, “wisely” shows positive prosody, “unfortunately” creates negative preference, and “carefully” has the mixed semantic prosody.

Pedagogical Implications

The present study is particularly relevant to language teaching, and the findings can be employed in the classroom as it would make sense for both teachers and students. Firstly, knowing the appropriate use of lexical items may improve the learner’s English performance. Learners are supposed to aware of the importance of using adverbs, however, in practice, a large number of Chinese students have not realized the flexible functions of adverbs thus paying little attention to usages. Therefore, teachers should make more significant effects, like urging students to learn the specific usages of different kinds of adverbs. Only when they use adverbs as well as other words correctly, can they write very precise English and speak idiomatic speech.

In this paper, the author explores some general using habits in public speaking, hoping to enlighten ESL learners more or less. When a learner begins to prepare for a speech, he may use a reasonable amount of various kinds of adverbs under native speakers’ guidance. Furthermore, his views, attitudes and feelings may be reflected by choosing appropriate adverbs. So, it’s a matter of studying laws of semantic preferences and following them.

Semantic prosody, which is an important part of linguistics, has not become a focus in previous researches of adverbs. To find the hidden rules at the same time is to identify the right collocates (Biber, 1999). In the rich and diverse lexical environment surrounding speech words, some adverbs have certain semantic prosodies while others do not share regular patterns. It is important, besides, that learners list commonly used verbs that integrate adverbs into semantic groups to express emotions conveniently. In public speaking, speakers need to use positive adverbs to speak highly of the excellent morals of people or extend sincere gratitude to them, while they tend to use negative adverbs to criticize the dark side of the society. ESL learners should have a good grasp of semantic prosody in the specific context to attract the attention of the audience.

Thirdly, the corpus provides sufficient evidence as to how to use the adverbs. As corpus involves important real examples, which offers a clear overview for the formation of semantic prosodies. It is much easier for learners to understand how adverbs connect with verbs and how the semantic preference is created instead of memorizing complex grammatical rules in books. The corpus-based and corpus-driven approaches can be adopted in the classroom, which may lighten the load of both lecturers and students. Teachers can extract words with concrete examples in the corpus and regard them as teaching materials while students can distinguish different words and digest them with the aid of corpus.

VI. LIMITATIONS AND RECOMMENDATIONS
The paper attempts to make a tentative study on features of adverbs in English speeches based on the corpus data. However, some restrictions also existed due to subjective and objective reasons. One of the limitations is that the author only analyzed a few aspects of lexical features. Due to the constraints of time and technical means, the research does not cover more information, for example, the origin of an adverb, the grammatical meanings and some individual usages. If possible, those will be valued in future studies.

With regard to semantic prosody, the discussion runs out of material. Since semantic prosody is a preferred usage of language by people, it may be changed more or less with the development of age, mind, knowledge of people and other outside factors like times, society and language itself. It is almost impossible to master idiomatic usages of all words, so it is not easy to explain every word’s semantic prosodies. For future research, some authentic and definite theories about semantic prosody could be established. And researchers may study semantic prosody in special English which reflects language users’ idiomatic choices.

Also, there are challenges with the corpus. First, the corpus is relatively small in size. Some researchers are based on foreign corpora such as BNC which provides a total capacity of 100 million words or a 450,000,000-word COCA corpus. Even the smaller BROWN covers 1014300 items. It is misleading if we do not verify the findings and rules in large-scale corpora. However, the accepted corpora for particular purposes have not appeared. For this reason, expert professionals and researchers need to build up a series of larger ESP corpora to obtain much more sophisticated research productions.

ACKNOWLEDGEMENTS

This study is sponsored by Northwest A & F University Research Project (Grant No. 2015RWYB29)

REFERENCES


Huijuan Wang was born in Shaanxi, China, in 1981. She got M.A in applied linguistics and is currently a lecturer in Department of Foreign Languages, Northwest A&F University, Shaanxi, China. Her research interests include English teaching and learning, English public speaking.
Yufeng Zou was born in Shaanxi, China, in 1981. He is currently a lecturer in Department of Foreign Languages, Northwest A&F University, Shaanxi, China. His research interests include English teaching and learning and corpus-driven study.