SEMANTIC PROSODY AND INTENSIFIER VARIATION IN ACADEMIC SPEECH

by

ALLISON REBECCA WACHTER

(Under the Direction of Chad Howe)

ABSTRACT

The study of English intensifiers has been of interest in sociolinguistic research. This paper analyzes the variation of common intensifiers *very* and *really* in a corpus of Academic English and the language-internal and –external factors that predict this variation. All factors are related to a speaker's evaluation, specifically to the semantic notion of positive, negative, or neutral prosody. Using a variationst approach, this paper furthers insight to the grammaticalization of intensifiers and how the effect of delexicalization can predict the semantic properties of a modified adjective. The significant factors predicting *very/really* variation were academic setting, semantic prosody, academic discipline, and gender. The study further develops a methodological framework for operationalizing semantic prosody and producing quantitative results. A second analysis concerning the distinctions between other modifiers, namely reinforcers and attenuators, are also analyzed in the academic corpus. Finally, the paper discusses its support for the use of smaller corpora to examine and compare linguistic effects in more specific registers.

INDEX WORDS: semantic prosody, intensifiers, language variation

SEMANTIC PROSODY AND INTENSIFIER VARIATION IN ACADEMIC SPEECH

by

ALLISON REBECCA WACHTER

BA, University of Michigan, 2008

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF ARTS

ATHENS, GEORGIA

2012

SEMANTIC PROSODY AND INTENSIFIER VARIATION IN ACADEMIC SPEECH

by

ALLISON REBECCA WACHTER

Major Professor:	Chad Howe
Committee:	Anya Lunden Paula Schwanenflugel

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
May 2012

ACKNOWLEDGEMENTS

This thesis would not have been possible without the guidance of my advisor, Dr. L. Chad Howe. His patience and constant support has not only helped in the development of this thesis, but has also strengthened my abilities as a linguist and researcher. I was very fortunate to work with an organized and caring advisor who took many hours of his time to discuss, edit, and advance my research from abstracts, to conference presentations, to the development of this thesis. Not only is Dr. Howe an excellent sociolinguist, he is also one of the kindest and most supportive individuals with whom I've had the pleasure to share ideas and solve problems in terms of linguistic research. I offer my sincere gratitude to his assistance and guidance in this challenging, yet rewarding experience.

Secondly, I would like to acknowledge my other committee members, Dr. Anya Lunden and Dr. Paula Schwanenflugel. I had the privilege of taking three of Dr. Lunden's courses while at the University of Georgia. Dr. Lunden's enthusiastic teaching has strengthened my desire to develop research abilities and pursue different aspects of linguistic study. She is truly someone I consider a role model and a person whom I will always admire as I continue to develop as a linguist and an individual. I sincerely appreciate all of the helpful comments and support regarding my thesis from both Dr. Lunden and Dr. Schwanenflugel.

Lastly, I would like to thank my parents for their constant love and support. Without them, I would not be in the position to pursue graduate study. Their ongoing encouragement motivates me to strive for my dreams and goals. I genuinely thank them for being the best parents for whom one could ask.

TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS iv

LIST OF TABLES vii

LIST OF FIGURES viii

CHAPTER

1 INTRODUCTION 1

2 BACKGROUND 5

2.1.1 ENGLISH INTENSIFIERS 5

2.1.2 *VERY* AND *REALLY* 7

2.1.3 INTENSIFIERS AND VARIATION 9

2.2 SEMANTIC PROSODY 11

2.3 SEMANTIC PROSODY AND ACADEMIC CORPORA 15

2.4 SEMANTIC PROSODY AND INTENSIFIERS 17

2.5 INTENSIFIER ENVIRONMENT 19

3 METHODOLOGY 21

3.1 EXCLUSIONS 22

3.2 FACTOR GROUPS 23

3.3 SUMMARY OF PREDICTIONS 28

4 RESULTS 30

5 OTHER ADJECTIVE MODIFIERS 36

5.1 ADJECTIVE MODIFIERS AND ACADEMIC ENGLISH 38

5.2 ADJECTIVE MODIFIERS AND SEMANTIC PROSODY 40

6 DISCUSSION 42

6.1 *VERY/REALLY* IN ACADEMIC ENGLISH 43

6.2 ADJECTIVE MODIFIERS AND SEMANTIC PROSODY 46

7 CONCLUSION 48

7.1 LIMITATIONS AND FURTHER RESEARCH 49

REFERENCES 51

LIST OF TABLES

Page

Table 1: Thirty random examples of CAUSE (from Stubbs 2001: 46) 13

Table 2: Top ten collocates of *very* and *really* in COCA 18

Table 3: Adjective collocates of *accused of being* and *praised for being* in COCA 25

Table 4: Multivariate Analysis of *very* and *really* in MICASE 30

Table 5: Multivariate Analysis of Reinforcers and Attenuators in MICASE 38

Table 6: Cross Tabulation of Academic Setting and Academic Discipline (Dependent Variable: *really/very*) 44

LIST OF FIGURES

Page

Figure 1: Very/really as percentage of academic setting 31

Figure 2: Very/really as percentage of semantic prosody 33

Figure 3: Very/really as percentage of academic discipline 34

Figure 4: Very/really as percentage of gender 34

Figure 5: Adjective Modifiers and Collocating Semantic Prosody 40

Figure 6: Google Book NGram Viewer: *very* and *really* from 1800-2000 (Google Books Ngram Viewer, 2012) 46

CHAPTER 1

INTRODUCTION

"That paper is very interesting!" "This music is really cool!" Phrases like these are spoken everyday. Speakers add emphasis to what they are saying for different reasons such as commanding attention, focusing a topic, or making an exaggeration. Speakers use intensifiers to add this emphasis to their utterances. Intensifiers are very common in English and are frequently used to add to or amplify the meaning of an adjective. The most common intensifiers, *very* and *really* seem to be used interchangeably such as "That coffee is *very* good" or "That coffee is *really* good". The current study examines the variation of these intensifiers to determine what factors condition the use of these items.

Academic English is a register that is frequently studied to determine differences in speech and writing depending on academic disciplines and environments. By using an academic corpus, this study analyzes the effects of language-internal and language-external evaluative factors predicting intensifier variation. Language-internally, intensifiers seem to have an embedded evaluative factor concerning their positive, negative, or neutral semantic values. These semantic values are related to the original adjective that gives rise to the Modern English intensifier. Some intensifiers are more closely related to their initial lexical meaning such as *perfectly* or *awfully*, whereas others, including *really* and *very,* stray further. This notion of embedded evaluation is described as semantic prosody. Most research on semantic prosody concerns corpus studies of collocation. The current study adds a variationist analysis and interpretation explaining that an adjective's semantic prosody can predict which intensifier is its

modifier. This adds quantitative data to the relationship between a speaker's evaluation of an adjective and that adjective's intensifier collocation.

Additionally, previous studies have failed to show a reliable and consistent methodology for discerning an item's semantic prosody. Using a solely impressionistic approach, researcher judgments can cause errors labeling whether an adjective is emotional or neutral, positive or negative. With a test based on the lexical properties of the target adjectives, I combine the study of lexical semantics with quantitative variation to create a framework for better methodology of identifying semantic prosody.

This analysis first looks at the variation between the most common intensifiers, *very* and *really*. This study builds upon previous intensifier variation analyses from Tagliamonte (2002, 2005, 2008) and Ito and Tagliamonte (2003). This extensive research has shown social (gender, age, socioeconomic status) and linguistic (sentence placement, collocation) factors predicting intensifier variation. These studies include limited discussions of evaluation and intensifier variation. However, these are strongly related to language-external factors and the historic changes of intensifier use. The present study offers a more objective method for discerning the pragmatic effect of adjectives on their modifiers.

To understand the variation between different instances of intensifiers, I observe several independent variables that shed light on the language-internal (e.g., lexical content of the adjective) and -external (e.g., gender) motivations for intensifier variation. Both language-external and –internal factors are influenced by evaluation. The language-internal factor is a lexically embedded evaluative property such as positive or negative evaluation. The language-external factors also introduce a notion of evaluation based on environment. The formality and subject material of a register, as well as a speaker's social standing, can factor into the variation

of intensifier use. Though *very* is more frequently used in this particular corpus of Academic English, namely the Michigan Corpus of Academic Spoken English (MICASE), the findings show that certain factors favor the use of *really* over *very* in particular social and linguistic environments. Using the methodology for determining semantic prosody, this study also discusses which type of semantic prosody favors which intensifier. Chapter 5 includes a discussion of other adjective modifiers, for instance *pretty* and *awfully*, that do not necessarily intensify the following adjective but still have an effect on the adjective meaning (i.e. the modifier *pretty* acts as a moderator such as *pretty good* or *pretty interesting*). These modifiers can be split into two categories, reinforcers and attenuators, and are also influenced by the factors listed above.

This thesis begins with a background discussion of the pragmatic function of intensifiers and their uses in speech. It will then discuss previous corpus work on semantic prosody and how the prosody of a word can be related to its lexical meaning and semantic extension. The first analysis involves the variation of the most frequently used intensifiers, *very* and *really*, and discusses the factors predicting these semantically and pragmatically similar adjective modifiers. The second analysis involves the variation between other adjective modifiers, specifically those that reinforce and those that attenuate the meaning of the modified adjective. This will provide additional evidence for the grammaticalization effect on intensifier variation. Next, the paper will discuss why certain intensifiers are more closely related to their lexical meanings and how that affects their evaluative characteristics. Finally, the thesis will conclude with a discussion of the importance of environment-specific corpora, like a corpus of Academic Speech.

The purpose of this study is first, to identify and analyze adjective modifiers in Academic Speech, primarily focusing on the variation between *really* and *very*, and second, to provide a

methodological framework for operationalizing semantic prosody as a predictive factor and producing quantitative results. Overall, the relationship between evaluation and intensifier variation as well as the grammaticalization of intensifiers will explain the quantitative results.

CHAPTER 2

BACKGROUND

2.1.1 ENGLISH INTENSIFIERS

The types of adjective modifiers examined in the first part of this study are intensifiers or amplifiers or, as Tagliamonte defines, “those adverbs that maximize or boost meaning” (2003: 258). These are used for emphasis, as in the case of a child asking for, “The *really* big bear, not the *big* bear.” A job application might include a phrase “John is very good at his job,” rather than “John is good at his job.” Pragmatically, the use of an intensifier like *very* produces a scalar implicature. This means that when a speaker uses *very*, as in “very good”, the meaning (i.e. the implicature in pragmatic terms) is "better than just good".[1]

Intensifiers work to determine the semantic category of degree on a scalar level, either scaling the meaning of a modified adjective upwards or downwards (Athanasiadou 2007). Intensifiers can be described based on an intensity scale. Athanasiadou (2007) describes three crucial distinctions among degree modifiers. First, that degree modifiers can either raise or lower the intensity of a modified adjective. Amplifiers, further split into boosters (e.g. *really, very)* and maximizers (e.g. *totally, completely*), scale the meaning of an adjective upwards. Diminishers or attenuators (*e.g. quite, pretty*) scale the meaning of an adjective downwards (Quirk 1985). The second distinction is that the modified adjective must have a gradable quality, and further that the type of degree modifier must semantically match with the modified adjective. For example, a modifier like *completely* has certain restrictions in that something can be *completely full* but not

[1] In neogricean terms, this would be an instance of what Levinson refers to as an M-implicature, in which a "marked description" induces a "marked interpretation" (1995:97).

*_completely tall_, whereas a modifier like *very* is less restricted. *Very full* and *very tired* are semantically acceptable (Athanasiadou 2007: 556). The final distinction notes that degree modifiers are not quantitatively precise. We can say that something is *very big*, adding upward scaling of *big*, but we cannot identify to what extent *very big* is greater than *big*.

Intensifiers develop through a process of delexicalization[2]. The process begins with a lexical word that is occasionally used to scale or intensify an adjective. When the frequency of this usage increases, speakers begin to use the intensifier to modify more and more adjectives (Tagliamonte 2005). The use of intensifiers to modify adjectives began in Old and Early Middle English. Speakers started to use the Old English word *swiþe,* meaning 'strong' or 'powerful', as an intensifier meaning 'extremely' or 'very', shown in the example below (Ito 2003: 259).

(1) mayden swiþe fayr
'maiden very fair' (cited in Ito 2003: 259).

The use of *very* as a modifier of a scalar adjective is first found around 1450 as in (2). This use of *very* implied a notion of "being extreme".

(2) …but it was a *very* peynful & horybyl vn-to hir. (cited in Tagliamonte 2008)

Nearing the end of the fourteenth century, the use of *very* spread to modify adverbs in addition to adjectives such as *very early*. The use of *real(ly)* as an intensifier was not attested until 1658 as in (3).

(3) The *reallest* good turn that can be done from man to another. (1658 *Whole Duty Man* xiii. 35, cited in Tagliamonte 2002: 257*)*.

In discourse, intensifiers are used as a method of expressing speaker evaluation. "Modifiers…involve the speaker's assessment and evaluation of intensity and are characterized

[2] Delexicalized intensifiers are defined in this paper as those that "have experienced a steady decline in their ability to function as independent lexical choices" (Partington 1993: 187). The process of historical delexicalization basically separates an intensifier from its independent lexical meaning. This term stems from Sinclair (2002).

by the position their intensified entities occupy on a scale or, eventually, by the ordering of alternatives offered to the addressee" (Athanasiadou 2007). Before an intensifier is fully delexicalized, it carries its own meaning. This lexical meaning is semantically extended to its intensifier use. Athanasiadou argues that this is carried through the subjectivity and evaluation of a speaker. For example, the adjective *perfect* carries a lexical meaning of 'being entirely without fault or defect, satisfying all requirements' (Merriam-Webster.com 2012). When *perfectly* is used as an intensifier as in (4), the lexical meaning has been extended to add a notion of *perfect* to the modified adjective.

(4) This is a *perfectly spoken* language. (Athanasiadou 2007: 561)

In this case, the language was spoken 'without fault, satisfying all requirements.' Another use of *perfectly* does not include the lexically presupposed notion.

(5) This is a *perfectly good* idea.

In (5), *perfectly* is used as an attenuator, focusing the attention on *good* rather than extending *perfect's* lexical meaning to the notion of *good*. The speaker's motivation determines the type of intensifier and intensifier's use in an utterance. These factors will be further discussed in Chapter 5 when discussing the variation of reinforcers and attenuators.

2.1.2 *VERY* AND *REALLY*

Though many intensifiers like *extremely, totally,* and *so* are commonly used in Modern English, *very* and *really* remain the most frequent (Ito 2003, Tagliamonte 2008). The current study focuses on the variation between *very* and *really* because (1) the intensifiers seem to syntactically and semantically have similar functions, and (2) both are delexicalized and so are commonly used to the extent that neither seem to carry a lexical meaning similar to that of *perfectly* or *completely* but rather focus on an amplification of the adjective modified. For

example, both sentences below are syntactically well-formed and seem to carry the same semantic value.

(6) That dog is *really* large.

(7) That dog is *very* large.

Both sentences express the same scalar meaning of a dog that is bigger than just large or possibly *extra* large.

Very and *really* both derive from lexical meanings of *true, actual,* or *real* (Tagliamonte 2008). In some current uses, they can still function with that meaning.

(8) That *very* idea was what I hoped for.

(9) Did that *really* happen?

In (8), *very* is used more as a focuser and could be replaced with "that actual idea". In (9), *really* is projecting meaning of actuality as in, "did that actually happen?" or "was that real?" Neither of these uses is included in the present study. Instead, I look at the variation between the newer, delexicalized forms as in (6) and (7), though both seem to derive from similar semantic and pragmatic uses.

Though, linguistically speaking, the intensifiers are quite similar, some social factors have been associated in the past with the different forms. Because *very* is an older form, certain notions of prestige were carried with it when other intensifiers came into use. In general the use of intensifiers were associated with women and children (Stoffel 1901, Jespersen 1922, Ito 2003). Intensifiers were also associated with "colloquial usage and nonstandard varieties" (Ito 2003: 260). Fries (1940) later divided different types of intensifiers into "Standard" and "Vulgar" forms. *Very* was included as a "Standard" form of English and *real(ly)* was identified as "Vulgar". Intensifiers were also included as a form of in-group membership.

2.1.3 INTENSIFIERS AND VARIATION

Ito and Tagliamonte (2003) studied the distribution of intensifiers in a corpus of British English and conducted a multivariate analysis observing the interaction of the factors age, education, syntactic function, and sex. They found that 69% of the intensifiers in their corpus were either *very* or *really*, with the other 31% containing a mixture of other intensifiers including *so, absolutely, pretty,* and *too*. They also examined the type of adjectives that *really* and *very* modify. They note that certain intensifiers such as *awfully* are slightly more advanced in the process of delexicalization because it occurs with positive adjectives (*e.g. awfully good*), whereas an intensifier like *terribly* only collocated with negative adjectives *(e.g. terribly evil)*. Because *terribly* does not collocate with positive adjectives, Partington (1993) notes that it is not as advanced in terms of delexicalization as is *awfully* (Ito 2003). Both intensifiers developed from originally negative adjectives and their collocation distribution shows their level of delexicalization.

In terms of *very,* it is labeled as "highly delexified because it combines very widely indeed and is also the intensifier the least independent lexical content" (Ito 2003: 268). In order to test the level of delexicalization, Ito and Tagliamonte divided adjectives into eight groups: dimension, physical property, color, human propensity, age, value, speed, and position. Their primary reason for this study was to observe the differences over time in use of intensifiers in English and which social groups were using which intensifier more frequently. By using the eight adjective groups, they could find which speakers used which intensifiers with more adjective categories. For example, their findings suggested that young speakers used *really* more frequently than *very* to modify four adjective categories (human propensity, value, dimension, physical property) and *very* was only used to modify one (positions). Older speakers never used

really more frequently than *very* for any of the adjective categories. This suggested that *really* was more advanced in the delexicalization process for young speakers than was *very*. They also found that women were leading the change to *really* while men are more likely to avoid using *really* as an intensifier (Ito 2003).

Tagliamonte and Roberts (2005) follow the 2003 study with an evaluation of intensifiers in the television show *Friends*. Using a corpus of television transcripts, they observe which intensifiers are spoken more often throughout the different seasons of the show. They found that the cast of *Friends* use *so* more often than *very* or *really*. They also report that the use of *so* increased throughout the seasons and with an increase in the show's popularity. Again, the female characters led the change, using *so* more often than *really* or *very*. This study also looked at the factor of emotional language. The factor of whether an adjective collocate was "emotional" or "neutral" was significant in determining which intensifier was used. An emotional adjective (such as *jealous, glad)* favored the use of *so* as an intensifier over the use of *very* and *really* (Tagliamonte 2005).

Tagliamonte (2008) discusses the positive and negative evaluation in terms of its indexing grammaticalization, but draws no conclusions about its effects on intensifier variation. However, she notes that those intensifiers that frequently collocate with negative adjectives (*e.g. awfully, terribly*) are less delexicalized than those that collocate with a wide range of adjectives *(e.g. very)*. Building off this portion of the study, my research expands on the "emotional" and "neutral" division and looks specifically at different types of emotional and evaluative language including positive, negative and neutral evaluation. This involves using a notion of semantic prosody (discussed below) and whether the modified adjective has a negative, positive, or neutral semantic value.

2.2 SEMANTIC PROSODY

The definition and description of semantic prosody is debated among scholars. Sinclair (1987, 1991) first coined the term with a description that "many uses of words and phrases show a tendency to occur in a certain semantic environment." Louw (2000) builds upon this definition by explaining that semantic prosody coincides with situational context and relies heavily on collocation. He explains that a word's semantic prosody is different from its connotation, which he considers to be more schematic (Stewart 2010: 14). Xiao and McEnery (2006) define semantic prosody as a collocational meaning, where the node word's collocational meaning is determined by the "proximity of a consistent series of collocates" (Louw 2010). Louw extends this definition as,

> A semantic prosody refers to a form in meaning which is established through the proximity of a consistent series of collocates, often characterisable as positive or negative, and whose primary function is the expression of the attitude of its speaker or writer toward some pragmatic situation. A secondary, though no less important attitudinal function of semantic prosodies is the creation of irony through the deliberate injection of a form which clashes with the prosody's consistent series of collocations (Louw 2000, cited in Stewart 2010: 14).

The term 'semantic prosody' often refers to a process of word meaning and the way in which words create an "aura of meaning" to the surrounding words (Stewart 2010). The process refers to "the way in which apparently neutral terms come to carry positive or negative associations through regularly occurring in particular collocations" (Coffin 2004). In other words, semantic prosody relies on collocational properties rather than a definition or association of a single word. Louw also relays the fact that with this definition it would be impossible to determine the semantic prosody of a word before technological advances introduced the study of corpus linguistics (Huntson 2007).

Another description of semantic prosody does not only concern the collocates of a word, but also combines collocation with evaluation. Huntson defines semantic prosody as a notion that "a given word or phrase may occur most frequently in the context of other words or phrases which are predominantly positive or negative in their evaluative orientation" (2000: 38). Though this study will refer to the many different possibilities of describing semantic prosody, the definition from Huntson is the most general and best way to first define this term in regard to the present study.

Most studies relating to the identification of the semantic prosody of a word or phrase use large corpora to find collocations. For example, Stubbs (1995) studied the semantic prosody of the verb *cause*. Using a corpus of 120 million words of general English, Stubbs looked up 38,000 occurrences of the lemma CAUSE. He found that the most frequent collocates had "unpleasant connotations" (Stubbs 2000: 45). To illustrate this point Stubbs provides a list of randomly selected tokens of *cause* from the corpus. The random thirty tokens, shown below in Table 1, illustrate the frequent negative connotation of the collocates of *cause*.

Table 1 Thirty random examples of CAUSE (from Stubbs 2001: 46)

1	ody's land as long as you don't	cause	a criminal offence then you've g
2	erm bankrupt some firms and so	cause	a lot of social disruption
3	t you get a pay rise that would	cause	a public outery?" And the Gaurdi
4	at to say the wrong thing would	cause	a row er Joanna said er don't
5	here. Erm originally it used to	cause	problems between the children
6	But it's not the sutures that	cause	the would to heal [FOX] it's
7	t make weapons of war you would	cause	unemployment but there's no reas
8	ly go and do anything they want	cause	whatever misery they want cause
9	blizzards for fifty years have	caused	a state of emergency in souther
10	that's another area that that's	caused	antagonism between us is the fa
11	erm has MX's behaviors ever	caused	argument or conflict between yo
12	iliam Hauge In the by-election	caused	by the erm er move er [ZFI] of
13	on are are of are generated and	caused	by the Holy Spirit Himself. You
14	nine percent of all illness is	caused	directly or indirectly by a bas
15	not it sort of [pause] If I say	caused	problems I don't mean it full-
16	ay it was total negligiance that	caused	this and I don't feel that thes
17	events that were happening that	caused	us to go downhill effectively e
18	nd the harm if you like that is	caused	you if you can't have children.
19	any issues which have caud you	caused	you particular stress or distre
20	ed to any school so that always	causes	a bit of erm er er er confusion
21	t so many kilograms per hectare	causes	a loss of something or [F01] Mm
22	ir own crowd so to speak and it	causes	a major disruption not so much
23	[M02] right. Oh uh the air u	causes	a vacuum and that's why it stic
24	d a bit of a smokescreen. If he	causes	chaos in class then the teacher
25	and that the sheer trauma of it	causes	him a heart attack? [M01] Mm.
26	Y the lack of air on the inside	causes	it to stay down. [M02] Pulls it
27	r than to look what cau at what	causes	it which would mean you'd have
28	there are many theories on what	causes	its stages. Too much dairy in t
29	ies away from home. This always	causes	pressures doesn't it. [F02] I t
30	rea is a horrific disease which	causes	severe dementia in middle age.

Stubbs notes that the top collocates of *cause* include *problems, damage, death,* and *disease.* The fact that the lemma *cause* most frequently occurs with words that reference a negative item or situation leads researchers to label *cause* as having negative semantic prosody.

Though this data points toward negative prosody identification, Huntson (2007) criticizes this approach by showing the importance of context. Huntson agrees with Stubbs' findings that *cause* tends to fall with undesirable entities like illness or problems but adds that these are only in cases in which the context concerns human propensities or at least refers to something animate. She notes that other cases, such as "These proteins cause a smell to be less strong", in

which the phrase involves something inanimate, *cause* cannot be identified with negative prosody. Rather than Stubbs' definition that each word has its own semantic prosody that can be determined by its collocates, Huntson argues that semantic prosody is contextual and must be determined by more than a word's most frequent collocations.

The scope of semantic prosody used for this paper concerns its relation with evaluation. Morley and Partington (2009) describe this relationship as a speaker's "desire to evaluate entities as *good* or *bad*" (Morely 2009: 141). They note that this desire may derive from an organism's innate desire to judge the consequences of an action or decision as beneficial or harmful. While scholars such as Stubbs and Louw stress the importance of collocation in determining semantic prosody, this can also be problematic. Morely and Partington point out that to look solely at collocations can cause lexical items to be labeled with similar semantic prosodies when semantically, and using a speaker's intuition, they should not be. Using the examples of *exacerbate* and *alleviate*, they observe that both terms seem to frequently collocate with negative items (*e.g pain, problems, poverty)*. If determining semantic prosody on collocation alone, both *exacerbate* and *alleviate* would be identified as carrying negative semantic prosody. However, the lexical presupposition of *alleviate* tells us that it actually carries a positive evaluation. This supports the idea that a word can carry its own embedded evaluation or lexical presupposition.

While there is considerable debate within the field of the best way to discern semantic prosody, the majority of researchers agree that using one's intuition is unreliable in determining semantic prosody and that we must use techniques in corpus linguistics to determine a word's semantic prosody. Many scholars observe that making a judgment of a word's semantic prosody is unreliable and unscientific, however, there does not seem to be consensus in the literature concerning the best and most reliable methodology to eliminate these judgments in linguistic

research. Previous studies (Tagliamonte 2005, Tagliamonte 2008) identify whether an item is emotional or neutral based on the researcher's own intuitions[3]. This impressionistic technique for identifying semantic prosody is not adequate in quantitative research but it is difficult to find a consistent and reliable methodology for doing so. Using the relationship between semantic prosody and evaluation, we can identify the embedded semantic prosody of an entity by using a test involving lexical presupposition. This is further discussed in Chapter 3. Combining this semantic test with a variationist approach similar to Tagliamonte's, this thesis will provide a methodology to operationalize semantic prosody through a quantitative analysis, thereby removing subjective researcher judgments.

2.3 SEMANTIC PROSODY AND ACADEMIC CORPORA

While some corpus linguists (Kretzschmar 2007, Sinclair 1987) argue that a large corpus is necessary for a proper statistical analysis, there is also evidence that smaller, more specialized corpora can serve an important purpose. Most of the current semantic prosody studies include corpora such as the Corpus of Contemporary English (COCA, 425 million words, Davies 2008), the British National Corpus (BNC, 100 million words, The British National Corpus 2007), or the Google Books Corpus (155 billion words, Jean-Baptiste 2011). The support for using a larger corpus comes from the need for a corpus to be a good representation of some variety of English. Kretzschmar explains that the large corpora can accurately represent language use on a wide spectrum.

> …the use of computer technology leads to a much greater ability to inspect large quantities of language evidence, so that analysts are no longer restricted to talking about what is possible within a language on the basis of few observations, and instead arguments can be made much more convincingly about what is usual or normal in any number of situations of use (2007: 152).

[3] This is not explicitly stated in the articles, and there is no discussion of a different methodology for identifying these categories.

On the other hand, Louw (2010) observes that depending on the topic of analysis, smaller, more specialized corpora are also helpful in determining certain uses of language. The study of academic language is popular among corpus linguistics researchers such as Biber (2006) and Swales (2003) who analyze academic speech and texts to examine different registers. Louw's study of semantic prosody in academic texts shows different levels of semantic prosody pertaining to different academic disciplines. For example, a word like *cause,* which Stubbs observed carrying negative semantic prosody in a larger corpus, can be smoothed to a more neutral semantic prosody in a smaller corpus of scientific writing. He agrees that studying semantic prosody in a certain type of corpus can skew the results of the overall semantic prosody of word. However, he adds that this is important given the realization that depending on the academic environment, the semantic prosody of a word can differ.

Louw looks at tokens of *cause* in a subcorpus of scientific texts, noting that these are likely to be technical and impersonal. He notices that the high frequency negative collocates with *cause* found in larger corpora like the BNC is not present at the same level in the scientific corpora and that there are many instances in which *caused* is used to indicate, for instance, an action resulting from an experiment without implication that the causation was necessarily negative. He notes that "the world of hard science in an impersonal world or cause and effect without human agency" (Louw 2010: 761). He concludes that while *cause* is still found in many negative contexts, its negative prosody can be smoothed when used in a different situational context such as scientific and impersonal texts.

Stubbs (2001) also examines differences in strengths of semantic prosody based on differences in domain and register. He notes that the adjective *lavish* has two possible

connotations: positive in means of 'generosity' or negative in means of being 'excessive' or 'wasteful'. He found that in newspaper prose, the later connotation was more common while in fields of arts and entertainment, *lavish* had a more positive connotation as in "one of the most lavish and entertaining ballets" (Stubbs 2001, cited in Partington 2004: 153).

Following Huntson's, Louw's, and Stubbs' conclusions about the possible changes or smoothing of semantic prosody, this study will use a corpus of Academic English to examine the effects of changes in academic environments and disciplines on semantic prosody and intensifiers.

2.4 SEMANTIC PROSODY AND INTENSIFIERS

Intensifiers and semantic prosody share qualities of evaluation. As discussed above, the semantic prosody of a word combines collocation with the speaker's evaluation, whether it is negative, positive, or neutral. A speaker's use of intensifiers also indexes an evaluation of speech. Swales (2003) describes intensification as a speaker's desire to exaggerate or overemphasize, express an "interpersonal message, or as a marker of group identity" (Swales 2003: 13). Though both intensification and semantic prosody rely on surrounding words, both can also be evidence of a speaker's evaluation of his or her speech.

Certain intensifiers have been identified through an analysis of collocation as having negative or positive semantic prosody. Partington (2004) looks at maximizers including *completely, totally, utterly, absolutely,* and *perfectly.* He notes that a maximizer like *perfectly* tends to co-occur with "good things" like *capable, good, correct, happy,* and *healthy* (Partington 2004: 146). This is likely due to a less advanced delexicalization of *perfectly*. Utterly has been studied with regard to its co-occurrence with unfavorable items (Louw 1993) and is a common example used when describing negative semantic prosody. Partington adds to this by showing

that *utterly* is used with words which express absence like "utterly helpless" or "utterly useless", or with words which express a change of state like "utterly different" or "utterly changed" (Partington 2004: 147). He notes that a human's likelihood of relating absence or change to something negative could explain why *utterly* is usually presented as having negative semantic prosody. He also notes that certain maximizers like *absolutely* tend to occur with a superlative or hyperbole collocate but doesn't necessarily have a favorable or unfavorable semantic prosody.

Other intensifiers, including those that pertain to the present study, act similarly to Partington's explanation of *absolutely* in that there isn't a visible trend of positive, negative, or neutral prosody when looking at collocation in a corpus. The list below, for example, includes the top ten adjective collocates of *very* and *really* from the 425 million word Corpus of Contemporary American English (Davies 2008).

Table 2 Top ten collocates of *very* and *really* in COCA

VERY	**REALLY**
GOOD	GOOD
IMPORTANT	IMPORTANT
DIFFERENT	BAD
HARD	NICE
CLOSE	GREAT
STRONG	BIG
HIGH	INTERESTING
SMALL	TOUGH
CLEAR	COOL

These data suggest that while a favorable word GOOD is the top adjective collocate for both intensifiers the other frequent collocates are unfavorable (BAD) or neutral (BIG). The current study, focusing on *really* and *very*, looks to find a methodology which can determine the semantic prosody of intensifiers that might not have an apparent negative, positive, or neutral semantic prosody based on collocation.

2.5 INTENSIFIER ENVIRONMENT

Tagliamonte uses a definition of the intensifier environment as the intensifier being used as an adjectival head. She bases this definition on a large-scale study by Backlund (1973) who found that a majority of intensifiers fall in that syntactic position. The present study uses the same definition in circumscribing the variable context (see Tagliamonte 2002). Tokens that were included were instances of *very* and *really* that acted as adjective modifiers. Also, tokens of *real* (for example, *a real interesting study)* were included with the other tokens of *really*. Of these cases, 11% were constructed as *real* (N=1,326). The loss of *–ly* does not make a semantic or structural difference and therefore, *really* and *real* can be treated equally as long as they are found in the defined environment. Other adjective modifiers were also extracted and are discussed in detail in Chapter 5. Only instances in which either intensifier could grammatically and semantically occur were included in the analysis. Exclusions are discussed further in the methodology section of Chapter 3.

The examples below show instances of *very* and *really* as intensifiers. The use of *very* or *really* as a modifier to the same adjective has similar meaning.

(10) I think actually both of these are *really* good points. (LEL066[4])
(11) I think that's a *very* good point. (OFC060)
(12) I think it be *really* interesting. (LES137)
(13) …which I thought was *very* interesting. (STP010)

As mentioned above, *very* and *really* are two of the most common intensifiers in English. We tend to use them to add emphasis like "*very* exciting" or exaggeration like "*really* small". *Very* and *really* can most often be used to modify the same adjectives. For example, a speaker can say "The house is *very* big" or "The house is *really* big" with the phrase generally having the same truth-conditional meaning. In both instances, the speaker refers to the size of the house and

[4] Indicates transcript number.

adds emphasis to its size. Because of the frequent overlap between *very* and *really* within the context discussed above, I aim to answer two questions in the forthcoming chapters. First, what factors (social or linguistic) will significantly predict the use of *very* as opposed to *really* within the intensifier environment? And second, how do we establish a methodology to determine the semantic prosody of intensifiers that cannot be determined strictly through a study of collocation?

CHAPTER 3

METHODOLOGY

The Michigan Corpus of Academic Spoken English (MICASE) was used for this analysis. This 1.8 million-word corpus was developed at the University of Michigan English Language Institute in 2002. It includes transcripts taken from different academic settings including lectures, discussions, office hours, meetings, and other formal and informal academic environments. I extracted a total number of 6,217 tokens after exclusions (explained in detail below) of the adjective modifiers *absolutely, awfully, completely, entirely, extremely, fairly, fully, perfectly, pretty, quite, really, so, somewhat, totally,* and *very*. 4,157 (66.9%) of those tokens were instances of *very* and *really (*or *real)* within the corpus. Extracted items were identified through the MICASE search engine for each lexical item (i.e. *very* or *really*). All instances were first extracted and later exclusions were made depending on their fit according to Tagliamonte's definition of intensifier. Further detail regarding exclusions is discussed below. After all tokens were extracted, they were coded for semantic prosody, academic setting, academic discipline, and gender. These factor groups will be discussed in further detail below. Moreover, the factor of age has also been found in other studies to be a significant factor in the use of *very* and *really* (Ito 2002) (Tagliamonte 2005). Unfortunately, the MICASE corpus does not include this information in the metadata and therefore this factor could not be included in the statistical model. Following extraction and exclusion, the data were then subjected to a multivariate analysis using GoldVarb X (Sankoff, Tagliamonte, and Smith 2005).

First, I will focus on *very* and *really* for this portion of the study because they are the most frequent intensifiers in the data and show a considerable degree of functional overlap in modifying many different adjectives. After the analysis of *very* and *really*, I will discuss the other adjective modifiers and their distribution in the corpus.

3.1 EXCLUSIONS

In Tagliamonte (2003), tokens that were not affirmative were excluded from the analysis. Her reasoning was that intensifiers in this context did not amplify an adjective's meaning. For example, in sentence (15) below, "it's not really important", the meaning is not heightening the negation as in "it's not important at all", but instead, the meaning could be "somewhat important" or "moderately important".[5] Tokens such as (14)-(16) were excluded because of the intensifier's lack of amplification with the following adjective.

(14) I have never been *very* good at this. (LEL097)
(15) A lot of reactions need M-G but it's not *really* important. (SGR123)
(16) ...it would be very literal and therefore not *very* interesting. (SEM083)

Tokens were also excluded if the token modified a noun rather than an adjective.

(17) …I know *very little* of what is known about it. (LES121)
(18) No, I think there's *very little*, but that's a good point. (STP011)

These tokens were excluded because *very* modifies an anaphoric noun *little*. Similarly, tokens were excluded if they modified a verb or preposition. In the cases below *really* functions more like 'actually' rather than intensifying the adjective.

(19) I'm going to *really increase* my effort. (LEL066)
(20) Evolution is *really about* reproductive success. (LEL034)

[5] In pragmatic terms, the use of an intensifier produces a scalar implicature such that stating that a book, for instance, is *very interesting* entails that it is also merely *interesting*. In the case of negative contexts, as in (14)-(16), the intensifier has a different effect, namely it produces an inverted scale. For instance, in most cases of scalar implicature, the effect can be cancelled--e.g., *The weather isn't freezing but it is quite cold.* In the absence of a particular intonational contour, analogous examples with intensifiers are infelicitous--e.g., *#I've never been very good at basketball but I am quite good.*

Finally, tokens were only counted once if the intensifiers were repeated.

(21) Economically, it's a *very very important* crop. (COL075)
(22) It turns out there's a *really really good* correlation between elevation and mean annual temperature. (DEF131S2)
(23) These lemmings are *very very* interesting. (LEL112)[6]

In each instance above, the intensifier was counted once and the repeated intensifier was excluded.

3.2 FACTOR GROUPS

The factor groups tested in this analysis were semantic prosody, academic setting, academic discipline, and gender. Semantic prosody was coded as either positive, negative, or neutral based on the semantic prosody of the intensified adjective. In order to determine the semantic prosody of the adjective I used phrases that could test specific felicity conditions. Certain verbs of judgment have a lexical presupposition that must be satisfied in order for an utterance to felicitous. For example, the verb *accuse* requires a negative or unfavorable proposition. "Using *accuse* involves attributing some act B to A and presupposing that B is bad…" (McCawley 1975, cited in Green 1996).

(24) Bill *accused* Sally of stealing the car.
(25) #Bill *accused* Sally of volunteering in the hospital.
(26) Bill *blamed* Sally for breaking the window.
(27) #Bill *blamed* Sally for getting an A on the exam.

Sentence (24) is felicitous because the proposition [stealing a car] is associated with an idea of doing something that is wrong or bad (i.e. something worthy of an accusation). Sentence (25) is infelicitous because [volunteering in a hospital] is associated with doing something that is right or good. This can also be seen with synonyms as in sentences (26) and (27). Sentence (27) would

[6] All cases (22) involving both intensifiers, such as "and that's *really, very* nice" were also excluded.

only become felicitous if Bill was accusing Sally of cheating to earn the A, which adds the negative connotation to the sentence.

This type of behavior is also observed with verbs that have a lexical presupposition of taking a clause that is associated with something positive.

(28) Mike *praised* Jill for volunteering in the hospital.
(29) #Mike *praised* Jill for stealing the car.
(30) Mike *applauded* Jill for getting an A on the exam.
(31) #Mike *applauded* Jill for breaking the window.

Again, the only way sentences (29) and (31) would become felicitous was if Mike supported Jill's stealing the car or breaking the window and wanted her to do it in the first place, thereby associating the act with a positive action. These lexical prepositions can relate to semantic prosody because these verbs require certain propositions with a negative or positive value. Therefore, we can assume that if a word or phrase can felicitously combine a word like *accuse*, it must carry a negative value or negative semantic prosody. This can be supported with corpus data that shows the positive and negative collocates to these verbal phrases.

The following table shows the top ten adjective collocates of the phrase *accused of being [ADJ]* and the six collocates of *praised for being [ADJ]* from COCA. The majority of the top collocates of the *accuse* construction have a potentially unfavorable quality while the top collocates of the *praise* construction are more favorable. This corpus data provides evidence for the assumption that these verbs prefer a negative or positive proposition in an utterance.

Table 3: Adjective collocates of *accused of being* and *praised for being* in COCA

ACCUSED OF BEING [ADJ]	PRAISED[7] FOR BEING
INVOLVED[8]	INTELLIGENT
SOFT	ENCOURAGING
RACIST	DISCREET
GAY	ORIGINAL
UNPATRIOTIC	DIFFERENT
SELFISH	VIRTUOUS
OLD-FASHIONED	
ELITIST	
COMMUNIST	
FOREIGN	

For the present study, I utilized the lexical presuppositions associated with these verbs to form sentences that would expose the pragmatic behavior of adjectives. In order to code for semantic prosody while working to avoid researcher judgment, I used the following sentences to test the felicity when a target adjective was substituted.

TEST 1: If phrase is felicitous, adjective has negative value and is coded for negative semantic prosody.

He was accused of/blamed for being _____.

TEST 2: If phrase is felicitous, adjective had positive value and is coded for positive prosody.

He was praised/applauded for being _____.

For example, testing the adjective *bad,* which we would expect to carry a negative value can be seen below.

(32) **TEST 1** He was accused of being *bad*.

TEST 2 #He was praised for being *bad*.

[7] Also includes synonyms of *praised*: *celebrated, applauded, admired*, only 6 tokens available
[8] These cases of involved were cases including "involved in abuses" or "involved in a kidnapping", but not "involved in a charity."

Bad passes TEST 1 because the phrase is felicitous but it fails TEST 2. Therefore *bad* was coded for negative semantic prosody. This can also be supported by corpus data. In the Google Books American English Corpus (155 billion words) we find 76 instances of the phrase *accused of being BAD* and zero instances of the phrase *praised for being BAD*. Similarly, a word, such as *good*, that we might assume to have positive semantic prosody, has 47 instances of *praised for being GOOD* and zero instances of *accused of being GOOD*.

(33) **TEST 1** #He was accused of being *good*.

TEST 2 He was praised for being *good*.

Here we see that *good* fails TEST 1 but is felicitous in TEST 2, supporting the corpus data. An adjective like *good* was coded for positive semantic prosody.

Finally, if an adjective fails both tests, it was coded for neutral prosody. For example, the word *red* was coded for neutral prosody because of the following test result.

(34) **TEST 1** #He was accused of being *red.*

TEST 2 #He was praised for being *red.*

Clearly, both utterances are infelicitous when *red* is inserted in the adjective position. Because *red* fails TEST 1 and TEST 2, it is coded as neutral semantic prosody. Other examples of adjectives coded for semantic prosody are shown below. Each token was subjected to the tests described above.

Positive Semantic Prosody

(35) It was a *very good* class. (OFC149)
(36) I think this is *really cool* because... (LES080)
(37) …some *really amazing* product. (LES078)

Negative Semantic Prosody

(38) Don't smoke, it's *really bad*. (STP141)

(39) I'll be *really upset* if we ignore it. (LAB026)
(40) …you know this is something *very terrible* and… (LES140)

Neutral Semantic Prosody

(41) …she gave a *very detailed* explanation (OFC048)
(42) That's a *very long* time to form a relationship... (LEL150)
(43) It's a *really big* pain in the neck. (TOU030)

The second factor group, academic setting, is based on the type of interaction. The types of settings were split into three groups: large group interaction (discussions, labs, study groups), small group interaction (advising, interviews, meetings, office hours, tours, service), and lecture (colloquia, dissertation, lectures, seminars, student presentation). The purpose of this factor group was to find if a lecture-style register with limited participation predicts different intensifier use from a register of more participation and involvement. Swales and Burke (2005) completed a study on Academic English in which they found *very* to occur more often in written language than *really*. They concluded that this was likely due to the fact that the more formal language preferred *very*. This factor group tests whether the formality of lectures or seminars may also predict *very* over *really* with the smaller, more informal registers favoring *really*.

The third factor group was academic discipline, split into engineering/physical science, biological/health science, humanities, social science/education, and other[9]. These factors may predict if certain styles of language and linguistic content affect the use of one intensifier variant over another. This stems from the discussion in the previous section concerning Louw (2010) and Huntson's (2007) claims that the semantic prosody of a word can change or become less distinct depending on the contextual environment. While testing if a certain discipline favors

[9] *Other* disciplines include disciplines that do not fit into the four major divisions, for example a career planning workshop or freshmen orientation tour.

very over *really*, I also use the disciplines to run different analyses to determine if the prosody values differ depending on academic discipline.

Finally, the fourth factor group is gender. This is a common social variable in many sociolinguistic studies including those on intensifier variation. Tagliamonte and Ito (2003) conclude that female speakers use *really* more than *very*, while male speakers are more likely to use *very*. Age could not be included in my factor groups based on the incomplete coding of age in MICASE. However, age has been found as a significant predictor of intensifier use in previous studies (Ito 2003, Tagliamonte 2005).

The 4,157 tokens of *very* and *really* were analyzed using Goldvarb X and tested with the four factor groups. Goldvarb X is a variable-rule analysis program in which a set of factor groups is believed to condition the variation of a set of possible realizations. These effects are tested using logistic regression, which determines which factors significantly influence variation, and which factors have stronger influences than others. The effects are reported as factor weights where a factor weight above .50 indicates the variant is favored and a factor weight below .50 indicates a the variant is disfavored (Sigley 2003).

3.3 SUMMARY OF PREDICTIONS

The linguistic-internal factor of semantic prosody will show whether an adjective with negative, positive, or neutral prosody favors *very* or *really.* Based on Tagliamonte's (2005, 2008) findings, I predict that an adjective with neutral semantic prosody will favor *very* as an intensifier. Because *very* developed earlier than *really*, it is likely that its delexicalization is more advanced and can therefore occur with a greater number and wider variety of adjectives. This would also support Tagliamonte's (2005) findings that more “emotional” language favored collocation with *really*. Because of the proximity to its lexical meaning of *real* and the positive

association to true or real entities, I also predict that adjectives with positive semantic prosody will favor *really*.

It is difficult to predict the outcome of the language-external factors of academic setting and academic discipline because little work on intensifier variation has been done within the register of Academic English. However, based on Swales (2003) finding that *very* is more frequent in written Academic English than spoken, I predict that the academic settings involving a more formal setting (i.e. lectures and colloquia) will favor *very* over *really*. My prediction concerning academic discipline is that those disciplines within the fields of natural science and engineering will favor *very*. This is based on the idea that topics in these fields tend to be less open to subjective comments (e.g. see the citation in Chapter 2 from Louw (2010) regarding the hard sciences and decreased "human agency"). Finally, gender should follow the patterns of previous studies including Ito (2003) and Tagliamonte (2008). These studies find that females favor *really* and males favor *very*. Because of the prevalence of this finding, the current study should likely share these results.

CHAPTER 4

RESULTS

There were a total of 4,157 (1,326 *really,* 2,831 *very*) tokens of intensifiers *very* and *really* extracted from MICASE. Table 1 shows results from a multivariate analysis in GoldvarbX. *Very* occurs with a total of 742 unique adjectives. *Really* occurs with a total of 408 unique adjectives. In total, there are 946 unique adjectives modified by *really* and/or *very* in this data.

Table 4: Multivariate Analysis of *very* and *really* in MICASE

VERY/REALLY (Input value = very)	**Probability**	**% *Very***	**N (*Very*)**	**% Data**
Academic Setting				
Lecture	.578	75.5	2284	72.8
Small Group Interaction	.335	51.2	337	15.8
Large Group Interaction	.257	44.3	210	11.4
Range[10]	32			
Semantic Prosody				
Neutral	.558	74.1	2019	65.6
Positive	.413	58.7	667	27.4
Negative	.314	49.2	145	7.1
Range	24			
Academic Discipline				
Engineering/Physical Science	.574	74.3	512	16.6
Biological/Health Science	.545	73.9	709	23.1
Humanities	.511	72.1	711	23.7
Other	.440	56.6	275	11.7
Social Science and Education	.427	60.2	624	24.9
Range	15			
Gender				
Male	.553	73.4	1218	39.9
Female	.464	64.6	1613	60.1
Range	9			
Log likelihood = -2369.883 p<.001				

[10] Range is a measurement of strength or magnitude of effect, indicating which constraints are stronger factors of variation. It is calculated by subtracting the lowest factor weight from the highest factor weight. The highest range represents the strongest constraint and the lowest range represents the weakest constraint (Tagliamonte 2006).

As shown in Table 4, *very* is used more frequently as an intensifier than *really* in the corpus (68.1% *very,* N=4,157). All factor groups were selected as significant predictors of intensifier use, with academic setting and semantic prosody showing the highest ranges. This constraint ranking shows that academic setting is the strongest predictor of variation, followed by semantic prosody, academic discipline, and gender.

Within the first factor group, academic setting, lecture-based settings favor *very* and small and large group interactions disfavor *very*. This supports Swales and Burke's (2003) finding that a more formal, lecture-based or written setting would favor the use of *very*. Lectures are often prewritten or given as a prepared presentation. This may also explain why a lecture-based setting favors *very*. The informal meetings and less structured discussions favor the use of *really*. This shows that variation of *very* and *really* is heavily influenced by the level of interaction among participants. Figure 1 below shows the frequency distribution for *very* and *really* in terms of academic setting.

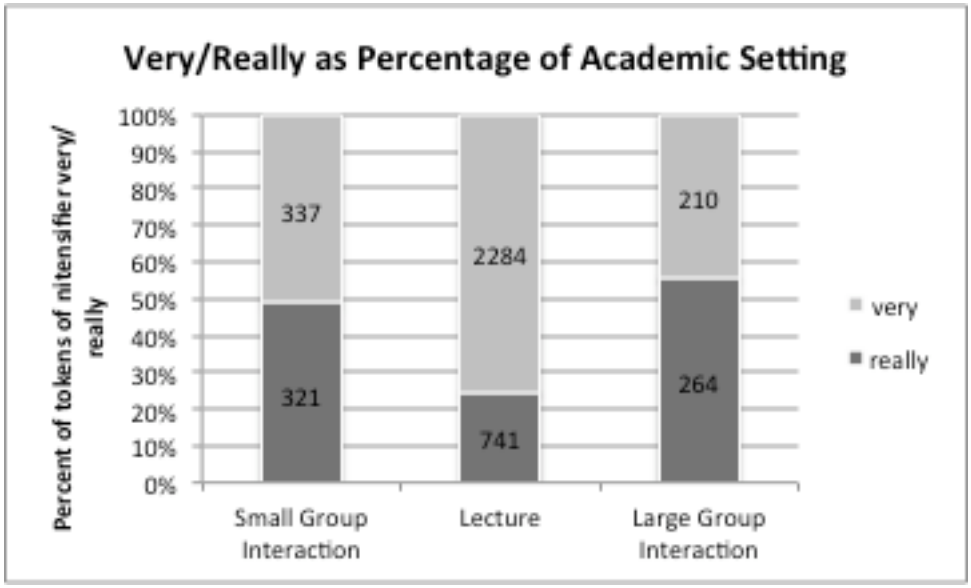

Figure 1: Very/really as percentage of academic setting

The second factor group, semantic prosody, shows adjectives with neutral semantic prosody slightly favor *very*, and adjectives with positive and negative semantic prosody highly disfavor *very*. This supports my prediction that adjectives with neutral semantic prosody prefer to collocate with *very* over *really* and that adjectives with positive or negative semantic prosody prefer to collocate with *really* over *very*. This also supports Tagliamonte (2005)'s finding that *really* was favored by 'emotional' language and *very* was favored by 'neutral' language. This adds support that *very* may carry a neutral semantic prosody and *really* carries an emotive semantic prosody.

Additionally, this strengthens the notion that *very* may be more advanced than *really* in the delexicalization process. As discussed above, most intensifiers that still carry a semantic extension similar to their original lexical meaning, or the meaning of the lexical entity from which the intensifier derived, seem to frequently collocate with adjectives with a negative or positive semantic prosody. For example, *awfully* frequently occurs with negative adjectives and *perfectly* with positive adjectives. The fact that *very* is disfavored by positive and negative adjectives shows that its semantic function as an intensifier is also neutral. Intensifiers that remain closer to their lexical meanings add a higher intensification than those that are further delexicalized (Partington 1993). This could explain why *really* is favored by more emotional adjectives. The use of *really* adds a greater intensification than *very* based on its more recent development and lesser advancement in delexicalization.

The finding that *really* is favored by both adjectives with negative and positive semantic prosody is surprising. It seems more plausible that the connection of *really* to the meaning of *real* or *true* would support a finding of only positive adjectives highly favoring *really.* However, the idea that *really* may function as a modifier that intensifies a speaker's emotion might

reinforce a speaker's desire to make a negative entity more extreme or emphatic. If a speaker desires to express an extreme negative idea, he may prefer an intensifier that adds greater emphasis and amplification to what is expressed. Figure 2 below shows the frequency distribution for *very* and *really* in terms of semantic prosody.

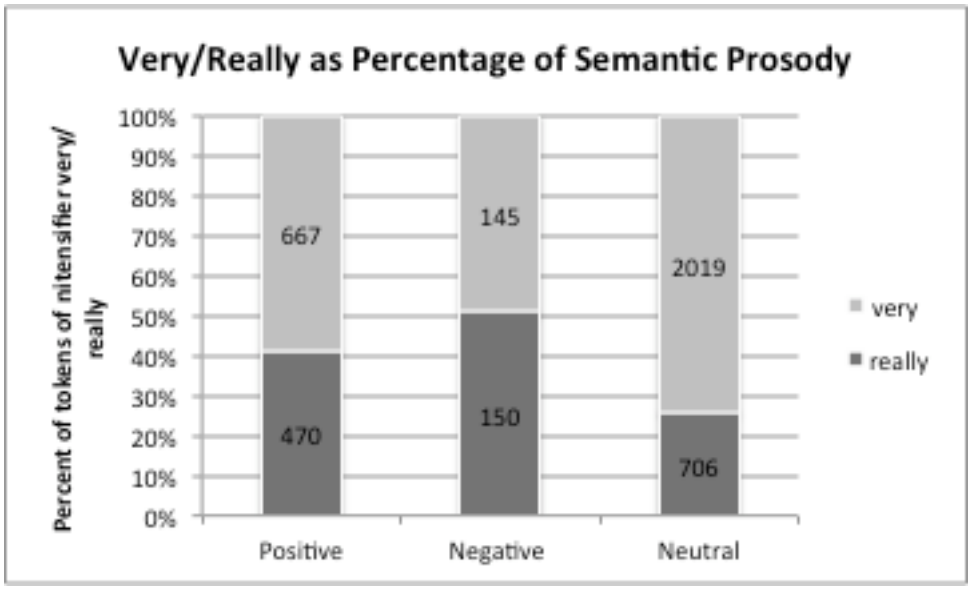

Figure 2: Very/really as percentage of semantic prosody

The third factor, academic discipline, shows that biological/health science and engineering/physical science favor *very*, humanities slightly favors *very* and social science/education and other disciplines disfavor *very*. This shows that the register is important in predicting intensifier use. These will be further discussed relating to semantic prosody in Chapter 6. Figure 3 below shows the frequency distribution for *very* and *really* in terms of academic discipline.

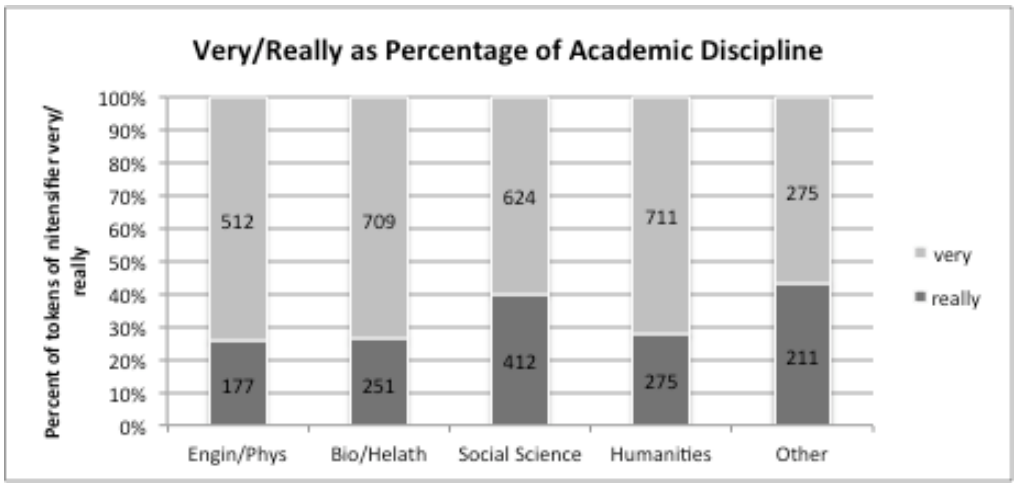

Figure 3: Very/really as percentage of academic discipline

The final factor, gender, shows male speakers slightly favoring *very* and female speakers slightly disfavoring *very*. Though this has the lowest range, it is nonetheless a significant predictor of intensifier variation. This finding supports Tagliamonte (2005) and Ito (2003) that female speakers favor the use of *really* and male speakers favor the use of *very.* This could be affected by the possibility that emotional language is associated more often with female speakers than with male speakers. If this is the case, the previously discussed result that emotional language favors *really* may influence the greater use of *really* among female speakers. Figure 4 below shows the frequency distribution for *very* and *really* in terms of gender.

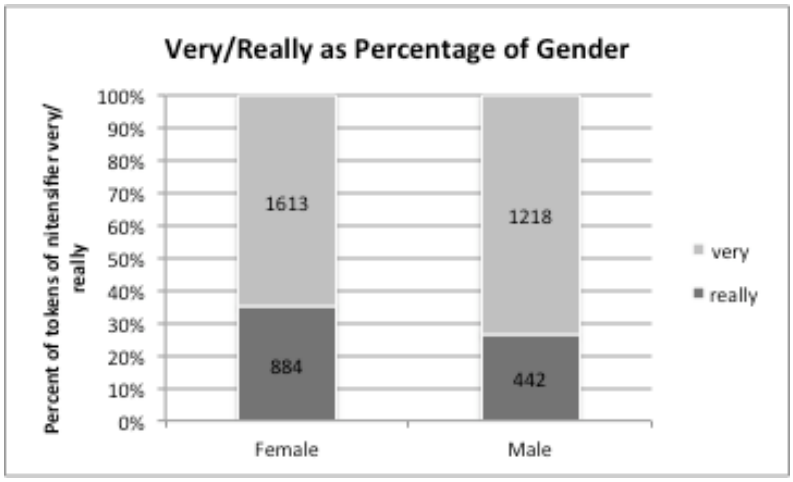

Figure 4: Very/really as percentage of gender

In summary, the most influential factor on variation between *very* and *really* is academic setting. This suggests that the language-external factor of environment and possibly of formality is important in determining which intensifier is used. The semantic prosody of a modified adjective is also a significant predictor of variation. This is likely due to the widespread use of *very* and advancement in delexicalization that allows *very* to be favored by neutral adjectives. Academic discipline is less influential than semantic prosody but is still a significant factor with biological/health sciences, physical sciences and engineering, and humanities favoring *very* and social sciences, education, and other disciplines favoring *really.* Finally, gender is the least influential factor with female speakers slightly favoring *really* and male speakers slightly favoring *very*.

CHAPTER 5

OTHER ADJECTIVE MODIFIERS

Before turning to a discussion of the results presented in Chapter 4, I will discuss other adjective modifiers (also known as degree modifiers) that were also present in the corpus and should not be ignored. Paradis (1997) defines degree modifiers using a syntactic and semantic description. Syntactically, they were only included in her study if they modified adjectives. Semantically, she states that degree modifiers "are concerned with the assessment of a gradable constituent" (Paradis 1997: 19). This definition was used as I extracted my tokens of adjective modifiers. Paradis also categorizes different types of degree modifiers. She models the English degree modifiers using a scalar method, listing the modifiers from strongest to weakest, strength referring to maximum and minimum force of reinforcement on the following adjectives.

She splits this scale into two major categories: reinforcers and attenuators. The reinforcers category breaks down further into maximizers and boosters and the attenuators into moderators and diminishers. While the analysis concerning *very* and *really* observes the variation between two similar modifiers which share the function of boosting the meaning of a modified adjective, this further analyses instead looks at the variation between modifiers which either reinforce (maximize or boost) or attenuate (moderate or diminish) the meaning of a modified adjective. There are clear distinctions between the semantic and pragmatic function of reinforcers and attenuators but with regard to variation, it is less clear as to what language-internal and language-external predict the use of a reinforcer over an attenuator. There is very

little research that observes the differences between and predictors of reinforcing and attenuating modifiers.

Based on a diachronic analysis of attenuators, Rissanen (2008) finds that attenuators are good predictors of grammaticalization. He notes that many adjectives that give rise to moderators begin with a positive lexical meaning. For example, *fairly* derived from Old English *fæger*, meaning 'beautiful'. *Pretty* derived from Middle English *pretty* meaning 'fine', 'excellent', and'handsome'. *Quite* derived from Middle English *quite* meaning 'free', 'safe' and 'clear' (Rissanen 2008: 346). As modifiers, these now work to lessen or moderate the degree of the modified adjective. For example, in Modern English, *fairly large* has a closer meaning to 'kind of large' or 'slightly large' rather than the OE meaning of 'beautifully large'. Similarly, the most common use of *pretty* as a modifier is in an example like *pretty good* which draws attention to an entity's goodness but not to its excellence as the ME form would. *Pretty good* has a more similar meaning to *moderately good* than to *excellently good*. Based on these descriptions of delexicalization, it is more likely that these attenuators are favored by neutral adjectives than by adjectives with more emotional prosodies. For the same reason that *very*, the more semantically bleached intensifier, was favored by neutral adjectives, these highly delexicalized attenuators should also be favored by adjectives with neutral semantic prosody.

Using the language-internal and language-external factor groups described in Chapter 3, I first analyze the variation between reinforcers and attenuators in MICASE. I will secondly consider their semantic prosodies and how they differ from the discussion of *very* and *really* above.

5.1 ADJECTIVE MODIFIERS AND ACADEMIC ENGLISH

Using Paradis' definition and modifier examples, I extracted tokens of the following adjective modifiers (removing *very* and *really* for the discussion at hand) and classified them as shown below.

(44) Reinforcers (N=1,114):
Maximizers: *absolutely, completely, entirely, fully, perfectly, totally*
Boosters: *awfully, extremely, greatly, incredibly, so terribly*
(45) Attenuators (N=946): *fairly, pretty, quite, somewhat*

The tokens were extracted using the same method described in Chapter 2. Exclusions were also made according to the guidelines discussed above. Because *really* and *very* made up over half of all the modifier tokens, they were removed for this part of the analysis so their results would not skew the results of the other modifiers. The table below shows results of the multivariate analysis. The dependent variable was type of modifier: reinforcer or attenuator. Reinforcers occur with 547 unique adjectives. Attenuators occur with 379 unique adjectives.

Table 5 Multivariate Analysis of Reinforcers and Attenuators in MICASE

Reinforcers/Attenuators (Input value = reinforcers, *R*)	**Probability**	**% *R***	**N (*R*)**	**% Data**
Semantic Prosody				
Negative	.668	70.4	152	10.5
Neutral	.496	53.8	757	68.3
Positive	.426	46.8	205	21.3
Range	24			
Academic Discipline				
Humanities	.581	61.0	308	24.5
Social Science and Education	.494	55.1	302	26.6
Engineering/Physical Science	.486	52.2	200	18.6
Biological/Health Science	.451	49.3	189	18.6
Other	.442	47.7	115	11.7
Range	14			
Gender				
Female	.550	58.6	648	53.6
Male	.443	48.8	466	46.4
Range	11			
Academic Setting				
Large Group Interaction	[.548]	58.8	170	14.0
Lecture	[.503]	54.4	725	64.7
Small Group Interaction	[.459]	50.0	219	21.3
Log likelihood = -1384.355 p=.001				

These results differ from those of *very* and *really*. Using only these modifiers, the factor group of academic setting was not selected as significant. The other factor groups are significant but are ranked differently from the ranking of *very* and *really*. In this case, semantic prosody is the strongest predictor of the use of a reinforcing or attenuating modifier. An adjective with negative semantic prosody (*e.g. bad, upset)* favors a reinforcer while adjectives with neutral (*e.g. blue, large)* and positive *(e.g. good, pleasant)* semantic prosody favor an attenuator. This supports my prediction in that neutral adjectives did favor attenuators, albeit slightly. However, it is surprising that positive adjectives also favor attenuators and only negative adjectives favor reinforcers. One possible explanation for this is that when a person uses negative evaluation with a negative adjective, he may want to exaggerate the unfavorable aspect of the utterance. When using an adjective with negative semantic prosody such as *bad*, it might not be enough for a speaker to say "That was *bad*". Instead, the speaker often adds emphasis to how bad it was by adding a reinforcing modifier like *incredibly bad* or *extremely bad.* This is similar to the finding of *really* above which also showed the less semantically bleached modifier favored higher by adjectives with negative prosody than by adjectives with positive prosody. Further detail concerning modifiers and semantic prosody is discussed in Section 5.2 below.

Academic discipline is also a significant factor predicting the type of modifier. Humanities is the only subject that favors a reinforcing modifier. This shows that register has an effect on the type of modifier a speaker uses. It seems that reinforcers may be used with more emotive language or to add more emotion to a specific context. Most discussions in engineering or natural science classes do not require that type of emotional language. This could explain the disfavoring of reinforcers. Gender is also a significant factor with females favoring reinforcing modifiers and males favoring attenuating modifiers.

5.2 ADJECTIVE MODIFIERS AND SEMANTIC PROSODY

The analysis above shows that the semantic prosody of a collocating adjective significantly favors the type of modifier used. The figure below breaks down the groupings by individual modifier to show the frequency of the different semantic prosodies of the modified adjective.

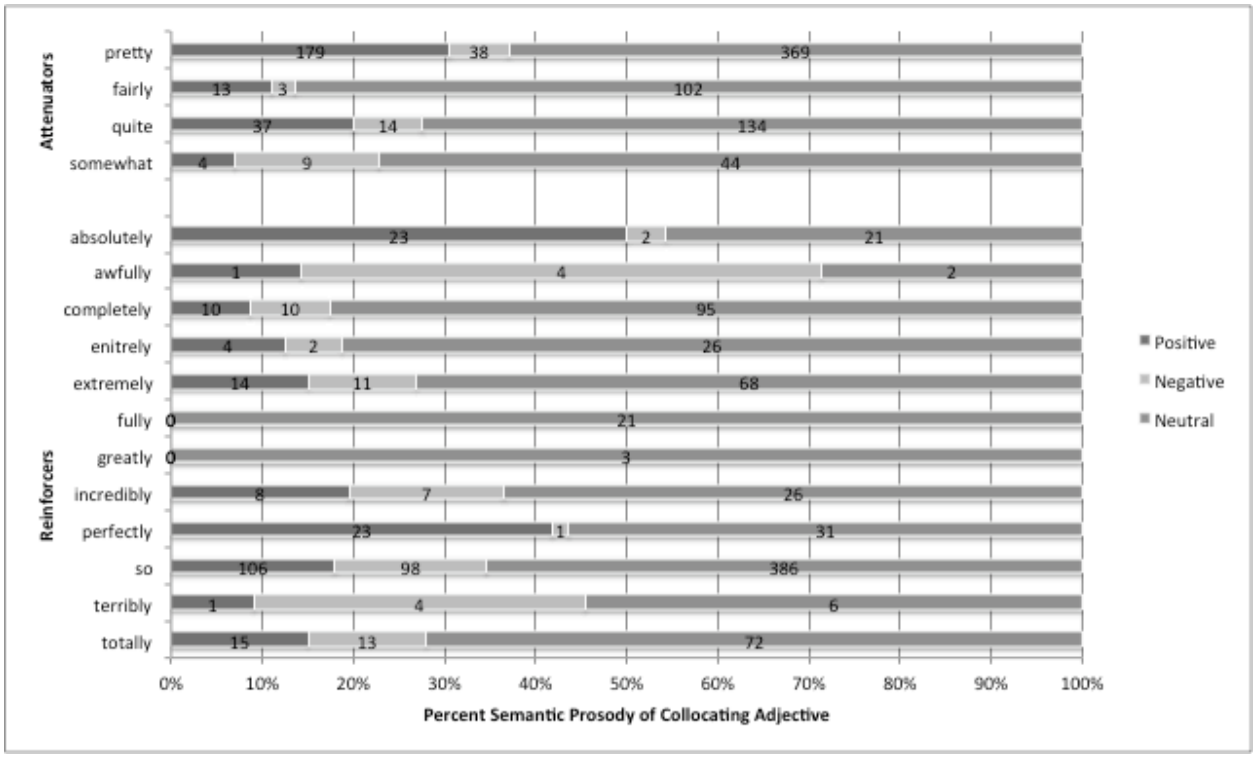

Figure 5: Adjective Modifiers and Collocating Semantic Prosody

As seen above, certain modifiers show definite patterns in regard to the semantic prosody of the adjectives they modify. For example, *awfully* and *terribly* have a much higher percentage of modified adjectives with a negative semantic prosody than most of the other modifiers have. *Perfectly, absolutely,* and *pretty* have the highest percentages of modified adjectives with a positive semantic prosody. *Fully* and *greatly* only modify adjective with neutral semantic

prosody. This further supports the notion that certain modifiers are greater delexicalized from their original lexical meanings than others.

Previous research has shown that certain modifiers carry a semantic prosody. For example, Louw's (1993) research on *utterly* showed that *utterly* "tends to have unfavorable implications" (Partington 2004: 147). Partington (2004) shows that *perfectly* frequently collocates with "good things" such as *capable, correct, good, happy,* and *lovely.* The data in MICASE supports this with certain modifiers like *pretty* and *perfectly* modifying a higher percentage of adjectives coded for positive semantic prosody and others like *terribly* and *awfully* modifying a higher percentage of adjectives coded for negative semantic prosody. While these clearly prefer certain prosodies, other modifiers, such as *very* and *really* do not have that clear semantic prosody associated with them. Again, this shows the semantic bleaching that has slowly occurred throughout history from increased usage of modifier forms. Forms like *very* and *really* are used much more frequently than forms like *perfectly* or *awfully.* This leads to a relatively bleached meaning from the original meanings of *true* or *real,* while the less frequent modifiers continue to carry pieces of their lexical meanings of *perfect* and *awful.* For forms like *very* and *really*, the data from Chapter 4 show that a multivariate analysis can give insight into identifying these further delexicalized modifiers with a conceivable semantic prosody.

CHAPTER 6

DISCUSSION

This paper combines two linguistic concepts that have received increased attention within the field of variationist sociolinguistics. Intensifier variation and semantic prosody both relate to collocation and speaker evaluation. Previous variationist studies have accounted for certain intensifier distributions within corpora. This study focuses on a register of Academic English and adds the component of semantic prosody.

Semantic prosody is a term whose meaning is greatly debated among scholars. Whether it is solely determined by collocation or identified through evaluation of the speaker, there is no reliable and consistent method to approach it for which researchers agree to best. Studies like Louw (2003), Stubbs (2005), and Partington (2004) identify words that have a clear semantic prosody such as *utterly* or *cause*, based on collocational studies in large corpora. This paper seeks to find a methodology that allows us to identify a semantic prosody for words like *very* and *really,* which do not have an apparent semantic prosody with which they are associated. This also discusses the further advancement delexicalization of some modifiers over others. For example, the fact that *very* is an older modifier than *really* and has greater semantic bleaching from its original meaning of *true* or *real* leads to its greater use with neutral adjectives and greater use overall. Other modifiers, such as *perfectly*, remain semantically close to the adjective, which gave rise to the entity's use as a modifier. It seems that the closer a modifiers' meaning is related to its original lexical entry, the more likely it is to co-occur with a negative or positive adjective. This is possibly due to a speaker's want for more impact and emphasis on a negative

expression than on a neutral or positive expression. These findings could also provide evidence for pathways of change in grammaticalization. It seems that a modifier first co-occurs with adjectives that have the same semantic prosody to the modifier's original lexical meaning. Then, as the modifier becomes more grammaticalized it also co-occurs with adjectives that have the opposite semantic prosody. As the modifier becomes more semantically bleached, it can then co-occur with neutral adjectives.

6.1 *VERY/REALLY* IN ACADEMIC ENGLISH

Though *very* and *really* seem to function in similar ways, modifying similar adjectives, this analysis has shown that certain factors can help to determine which intensifier a speaker will use. First, examining the language-external factors, we see that the type of environment and formality of situation factors into which intensifier is used. *Very* is favored by more formal, lecture-style environments that have limited interaction and *really* is favored by informal group discussion that have a higher rate of interaction. This supports Swales (2003) finding that *very* is used more in formal writing than in less formal speech.

I also found that academic discipline is a significant factor within the natural sciences and engineering fields favoring the use of *very* more than the social science and humanities disciplines at a university. It is important to note that these results may be influenced by the status of speakers and formality of the environment. There may be more people of higher status, such as professors, in certain academic disciplines or certain academic environments than others. For instance, if an academic discipline has more formal settings or if there are more speakers with higher status, based on the findings described above, it would be likely that these disciplines also have more instances of *very*. The cross tabulation below shows the distributions of academic setting and academic discipline.

Table 6 Cross Tabulation of Academic Setting and Academic Discipline (Dependent Variable: *really/very*)

		2	%	3	%	1	%	Σ	%
B	r	165	21	71	46	15	50	251	26
	v	612	79	82	54	15	50	709	74
Σ		777		153		30		960	
H	r	220	27	32	68	23	19	275	28
	v	601	73	15	32	95	81	711	72
Σ		821		47		118		986	
O	r	53	24	0	--	158	59	211	43
	v	167	76	0	--	108	41	275	57
Σ		220		0		266		486	
P	r	61	13	51	47	65	52	177	26
	v	396	87	57	53	59	48	512	74
Σ		457		108		124		689	
S	r	242	32	110	66	60	50	412	40
	v	508	68	56	34	60	50	624	60
Σ		750		166		120		1036	
Σ	r	741	24	264	56	321	49	1326	32
	v	2284	76	210	44	337	51	2831	68
Σ		3025		474		658		4157	

The horizontal list represents academic setting where 2 represents a lecture-type setting, 3 represents large group interaction and 1 represents small group interaction. We can see that there are large numbers of lecture settings that fall under Biological/Health Sciences, Humanities, and Social Sciences. Physical Science and Engineering has fewer instances of *very* or *really* but still has many more lecture settings that small or large group interaction. If we were to combine small and large group interaction (both favored *really* in the analysis) we see that Social Science/Education has much greater number of these interactions (286) than Biological Sciences (153) or Humanities (165). This could possibly explain why Social Science/Education favored *really* more than Biological Sciences or Humanities. The *other* category is more evenly split across lectures and small group interaction but has no instances of *very* or *really* in large group interaction.

These results show that breaking down registers is important in establishing a description of intensifier use or any language use more generally. As Louw (2010) discusses, if one style of language is preferred in a larger set of data, it may differ in when separated into a more specific

register. For example, looking at one variant in a corpus of Academic English may differ from looking at that same variant in a corpus of Natural Science and Engineering disciplines alone. Louw also explains that studying speech in a more specified register can assist for pedagogical purposes to "help students comprehend and produce these registers appropriately" whether they are native or non-native English speakers. For example studying a corpus of business school language can "give students insights into how business people use language" (Louw 2010: 759). Thus, not all corpus linguistic research needs to use an extra large corpus. It can be just as valuable to break down corpora into smaller components and analyze the differing results. This can give insight into how language works in a specific environment such as Academic English. A large corpus may be preferable to describe overall language trends but those findings could inaccurately describe language trends in a more specific environment. Academic speech is a specific form of language that should be described for its own patterns and characteristics. These findings can later be compared to findings in larger corpora in order to compare general trends to more environment-specific trends.

The final social factor of gender was also significant. This finding has been well documented in the field by researchers like Tagliamonte, showing that *really* is favored by female speakers and *very* is favored by male. This could be due to a language change in progress of the historically older *very* slowly losing ground to *really*. Historically, it is common for language change to be led by female speakers and this could be an example of one intensifier eventually replacing another. Extensive research has noted a female's role in language change including Ito (2002) and Eckert (1988). The figure below shows the use of *very* and *really* in Google Books from 1800-2000. *Very* is clearly still frequently used and used more often than

really. However, there is a decline in the use of *very* and a slight incline in the use of *really*. This could be more evidence for a language change slowly starting to develop.

Google Book NGram Viewer: *very* and *really* from 1800-2000

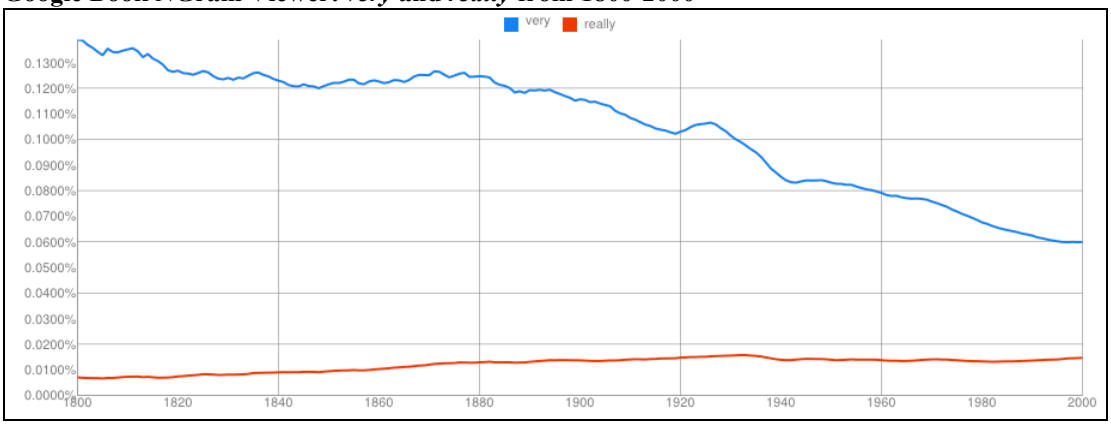

Figure 6 (Google Books Ngram Viewer, 2012)

6.2 ADJECTIVE MODIFIERS AND SEMANTIC PROSODY

The overall goal of this paper is to provide a better methodology for operationalizing semantic prosody for quantitative analysis. To do so, I have combined a semantic definition of lexical presupposition with a variationist analysis using data from a 1.8 million-word corpus. Using the verbs that have a particular lexical presupposition, I was able to establish a consistent process for determining an adjective's semantic prosody. After determining the prosody of the adjectives, I could use that as a factor in a multivariate analysis to find which types of semantic prosody favored which intensifier. For example, finding that neutral semantic prosody favors *very* and positive and negative semantic prosody favors *really*.

Based on the fact the adjectives with neutral semantic prosody favor collocation with *very*, we can extend that *very* also has some sort of neutral semantic prosody with which it can be associated. It is still difficult to directly state that *very* has neutral semantic prosody, but we know that it has a strong association with adjectives that do. We also know that *really* associates

with some sort of emotional prosody. This is a step forward in the identification of semantic prosody using quantitative methods with those words that favor a certain collocation determined from the statistical analysis.

CHAPTER 7

CONCLUSION

This study combines intensifiers and semantic prosody within the register of Academic Speech. The most common intensifiers, *very* and *really* function in similar matters within our grammar and certain linguistic and extralinguistic factors are significant predictors of which intensifier will be used. Academic environment, semantic prosody, academic discipline, and gender were significant factors of the variation between *very* and *really*. *Very* was favored by lecture-type environments, hard sciences, males, and adjectives with neutral semantic prosody. This also includes evidence predicting a possible language change in progress with the increasing use of *really*.

After increasing the scope of the analysis to discuss the other adjective modifiers, I found that I could classify the modifiers into two categories: reinforcers, which added emphasis or intensified the following adjective, and attenuators, which weakened the force of the following adjective. Reinforcers were favored by adjectives with negative semantic prosody, the academic discipline of humanities, and female speakers.

Scholars have previously found that certain modifiers like *perfectly* or *awfully* have a tendency to co-occur with adjectives of positive or negative value (Athanasiadou 2007, Paradis 1997, Tagliamonte 2008). This study supports those findings but also adds to the concept of adjective modifiers and semantic prosody. By creating the test to more reliably code for semantic prosody and extend that to an analysis that predicts which type of semantic prosody a modifier is likely to co-occur, we can develop a method to identify patterns of semantic prosody for words

that do not have apparent negative, positive, or neutral collocations. For example, finding that *really* was favored by positive and negative semantic prosody shows that the priming for *really* is related to an emotional context or a speaker's choice to add an emotional value to an utterance. These findings also relate to delexicalization processes. Certain modifiers, especially those whose intensifier function is historically older, are more semantically bleached, or less related to their original lexical meaning than others.

Finally, this analysis supports the study of smaller corpora in a study of variation, arguing that a smaller register is more accurate in determining language trends and patters relating to a specific environment. Register has a definite impact on language use and the use of a smaller, more specific corpus can better account for the register effects on language use. Though we must be aware that the findings within a smaller register may not be able to accurately extend to language in a larger context, we can still find interesting linguistic phenomena that are common to certain environments. Academic Speech is a register that can be broken down into many different parts and each part may show substantial differences in linguistic patterns.

7.1 LIMITATIONS AND FURTHER RESEARCH

One limitation of this study concerns the lexical test created for determining an adjectives semantic prosody. While this test is certainly better than using solely an impressionistic approach, there are still possibilities for error. According to some scholars (Louw, Stubbs), semantic prosody must involve a study of collocation rather than an embedded notion of semantic evaluation, which is not what this paper discusses. Another possible limitation is that in extracting tokens of intensifiers, I extracted all tokens that match Tagliamonte's variable context discussed above. In a further study, it would be more accurate to extract only tokens in which an adjective was modified by both *very* and *really*. For example, if there was an instance of *very*

bright and no instance of *really bright*, that token would be excluded. This would have caused errors in my analysis due to the limited corpus size. Also, concerning Chapter 5's analysis of other modifiers, tokens were extracted by searching for specific modifiers that were previously mentioned in the literature, primarily those modifiers that were most common. It would be beneficial to go through the entire corpus to find all instances of adjective modifiers in order to add a discussion about the rare tokens.

This study has proposed a methodology for the study of semantic prosody, particularly with respect to its application to linguistic variation. The combination of semantic tests with a quantitative analysis has lessened researcher bias in labeling semantic prosody. This could be extended with another study that tests these methods by asking participants to identify the semantic prosody of adjectives or by asking if the sentences are felicitous when the adjective is included. It would also be interesting to use a study like this in a different register of speech such as an analysis speech in a medical or law environment to find if the conclusions are the same. Additionally, a closer look at age might confirm the language change in progress of an increasing use of *really.* If younger speakers are using *really* more than older speakers, this claim would be supported.

REFERENCES

Athanasiadou, Angeliki. 2007. On the subjectivity of intensifiers. Language Sciences. 29: 554-565.

Barbieri, Federica. 2008. Patterns of age-based linguistic variation in American English. Journal of Sociolinguistics. 12 (1): 58-88

Biber, Douglas. 2006. University Language: A corpus-based study of spoken and written registers. Philadelphia: John Benjamins Publishing Company.

Davies, Mark. 2008. The Corpus of Contemporary American English: 425 million words, 1990-present. Available online at http://corpus.byu.edu/coca/.

Green, Georgia M. 1996. Pragmatics and Natural Language Understanding. Mahwah: Lawrence Erlbaum Associates.

Hustson, Susan. 2007. Semantic prosody revisited. Journal of Corpus Linguistics. 12 (2): 249-268.

Huntson, Susan and Geoff Thompson. 2000. Evaluation in Text: Authorial Stance and the Construction of Discourse. Oxford: Oxford University Press.

Ito, Rika and Sali Tagliamonte. 2003. Well weird, right dodgy, very strange, really cool: layering and recycling in English intensifiers. Language in Society 32: 257-279.

Jean-Baptiste Michel*, Yuan Kui Shen, Aviva Presser Aiden, Adrian Veres, Matthew K. Gray, The Google Books Team, Joseph P. Pickett, Dale Hoiberg, Dan Clancy, Peter Norvig, Jon Orwant, Steven Pinker, Martin A. Nowak, and Erez Lieberman Aiden*. 2011. Quantitative Analysis of Culture Using Millions of Digitized Books. Science 331.

Kretzschmar, William A. 2009. The Linguistics of Speech. Cambridge: Cambridge University Press.

Levinson, Stephen C. 1995. Three levels of meaning. *Grammar and meaning*, ed. by F. R. Palmer, 90-115. Cambridge: Cambridge University Press.

Louw, Bill. 1993. Irony in the text or insincerity in the writer? The diagnostic potential of semantic prosodies, in Text and Technology: In Baker, Mona et al. (eds.) Honour of John Sinclair. Philadelphia: John Benjamins Publishing Company.

Louw, Bill. 2010. Semantic prosody for the 21st century: Are prosodies smoothed in academic contexts? A contextual prosodic theoretical perspective. JADT 2010: 10th Interntational Conference on Statistical Analysis of Textual Data.

Morely, John and Alan Partington. 2009. A few *Frequently Asked Questions* about semantic-or *evaluative* – prosody. International Journal of Corpus Linguistics. 14 (2): 139-159.

Paradis, Carita. 1997. Degree modifiers of adjectives in spoken British English. Sweden: Lund University Press.

Partington, Alan. 1993. Corpus Evidence of Language Change: The Case of the Intensifier, in Text and Technology: In Baker, Mona et al. (eds.) Honour of John Sinclair. Philadelphia: John Benjamins Publishing Company.

Partington, Alan. 2004. "Utterly content in each other's company": Semantic prosody and semantic preference. Journal of Corpus Linguistics. 9 (1): 131-156.

Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. A comprehensive grammar of the English language. London: Longman.

Rissanen, Matti. 2008. "From 'quickly' to 'fairly': on the history of *rather*. English Language and Linguistics. 12 (2): 345-359.

Sankoff, David, Sali Tagliamonte & Eric Smith. 2005. Goldvarb X. Computer program. Department of Linguistics, University of Toronto, Canada. Available for download at: http://individual.utoronto.ca/tagliamonte/Goldvarb/GV_index.htm

Sigley, Robert. 2003. The importance of interaction effects. Langauge Variation and Change. 15: 227-253.

Simpson, R. C., S. L. Briggs, J. Ovens, and J. M. Swales. 2002. The Michigan Corpus of Academic Spoken English. Ann Arbor, MI: The Regents of the University of Michigan.

Sinclair, John M. 1991. Corpus, concordance, collocation. Oxford: Oxford University Press.

Stewart, Dominic. 2010. Semantic Prosody: A Critical Evaluation. New York: Routledge.

Stubbs, Michael. 1995. Collocations and semantic profiles: on the cause of the trouble with quantitative studies. Functions of Language. 2 (1): 23-55.

Stubbs, Michael. 1996. Text and Corpus Analysis: Computer-assisted studies of language and culture. Oxford: Blackwell.

Stubbs, Michael. 2001. Words and Phrases: Corpus Studies of Lexical Semantics. Oxford: Blackwell Publishing.

Swales, J. M. & Burke, A. 2003. "It's really fascinating work": Differences in evaluative adjectives across academic registers. In Meyer, C. & P. Leistyna (eds.) Corpus Analysis: Language structure and use. Amsterdam: Rodopi. pp.1-18.

Tagliamonte, Sali. 2008. So different and pretty cool! Recycling intensifiers in Toronto, Canada. English Language and Linguistics. 12 (2): 361-394.

Tagliamonte, Sali. 2006. Analyzing Sociolinguistic Variation. New York: Cambridge University Press.

Tagliamonte, Sali and Chris Roberts. 2005. So weird; so cool; so innovative: the use of intensifiers in the television series Friends. American Speech 8(3).

The British National Corpus, version 3 (BNC XML Edition). 2007. Distributed by Oxford University Computing Services on behalf of the BNC Consortium. URL: http://www.natcorp.ox.ac.uk/.