A corpus-based study of Amplifiers in American English

A study of the differences between amplifiers most frequently used in the different registers in the Corpus of Contemporary American English

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Abstract: This study aims at exploring the most frequently used amplifiers in American English by using the Corpus of Contemporary American English (COCA). The focus is to investigate amplifiers with regard to two contextual factors known to affect the use of amplifiers: amplifier type (both maximizers and boosters) and amplifiers used to intensify adjectives as it has been shown by several studies that most amplifiers are used with adjectival heads. The sociolinguistic variable tested in this study is the difference between registers in amplifier use. To answer the present study's questions, several steps were followed. First, a pilot study was run for the whole corpus and for each register to search for the most frequently used amplifiers. Second, a list of the frequencies of the ten most frequently used amplifiers in each register was created for comparison. Third, a final list of the most frequently used amplifiers in all registers in COCA was set for further analysis. The results gained from the present study suggest that the more formality of the register increases, less intensification is used. It is also found that the more frequency increases in a register, less versatility in the use of different amplifiers is found. Furthermore, this study shows that there is a fixed pattern of boosters being most frequently used in all registers in COCA, and that very so and really are still the most prevailing boosters in American English. Finally, the genre and style of each register affect the amplifiers used, the adjectives collocating with the amplifier and the frequency of intensity and vice versa; certain amplifiers are found to be used more frequently and thus 'preferred' in certain registers and contexts over other amplifiers.

Keywords: Corpus linguistics, adverbs, amplifiers, boosters, maximizers, COCA, registers, genres.

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"I am glad you like adverbs- I adore them; they are the only qualifications I really much respect..."

Henry James, letter to a young admirer, 1902

1. Introduction

The study of English adverbs and specifically adverbs that intensify meaning, known as amplifiers, has always attracted many linguists and researchers who see "intensification as one of the most productive areas of grammar in relation to lexical and semantic change" (Gonzalez 2007: 221). Due to the synchronic and diachronic change in their use, frequencies and collocations, research on amplifiers became one of the major areas of grammatical change and renewal in English (Brinton & Arnovik 2006: 44).

The present study uses corpus methods to investigate the frequencies of the most prevalent amplifiers used in American English by using a variationist perspective to compare differences in amplifier use across different registers. One of the major strengths of the corpus- based approach in the context of quantitative research, discussed by Biber (2015:4), is the high reliability and external validity of this approach, since it uses computational tools and makes the same analytical decision every time it encounters the same linguistic phenomenon. Consequently, linguistic patterns of use described in corpus-based analyses are believed to be generalizable and valid (See section 2.1).

In this investigation, an assessment of the frequency of the ten most prevalent amplifiers, according to their distribution among five different registers in the Corpus of Contemporary American English (COCA) is provided for analysis. Additionally, further analysis for the five most frequently used amplifiers in all registers is provided as well.

1.1 Aim and Research questions

This study aims at providing an account of the most frequently used amplifiers in American English as shown by the attested language use in a sufficiently large representative corpus, the Corpus of Contemporary American English. This aim is achieved by testing a series of contextual factors known to affect the use of intensifiers (e.g. adjective amplification and amplifiers type) as well as the intersection with the

sociolinguistic variable tested in this study; register variation. Accordingly, the present study aims at answering the following questions:

- 1. What are the most frequent amplifiers used by speakers of American English in each register in COCA?
- 2. What are the frequencies of the ten most prevalent amplifiers used in each register?
- 3. How does the frequency of the ten most prevalent amplifiers in each register differ?
- 4. Does the register, i.e. context of use, or discourse mode affect the use of amplifiers or the intensification patterns speakers or writers use?

2. Background

The following section presents the theoretical background for the present study. Section 2.1 presents a general review of corpus linguistics, and the most important factors that characterize good corpora. An account of amplifiers in English and their semantic categorization is discussed in section 2.2. Section 2.3 presents information about registers; the sociolinguistic variable tested in this study, and differences among registers. The last section, 2.4 presents an account of some relevant previous studies on amplifiers in English.

2.1 Corpus linguistics

Corpus linguistics is a research approach that facilitates analysis of language patterns and mirrors the current use of language in a community. Corpus linguistics is based on analyses of a 'corpus or corpora'. Baker (2010: 1) defines corpora as "large collections of computerized texts, usually carefully sampled in order to be representative of a particular language variety". Research studies that use either corpus-driven or corpus based approaches to language analysis aim to analyze certain aspects about the language found in a corpus but from different perspectives (Biber 2011: 15).

Corpus-based analyses, on the one hand, are the most traditional, employing the grammatical categories recognized by other linguistic theories but investigating their patterns of variation and use empirically by analyzing language use and variation in corpora. A corpus- driven approach to research, on the other hand, is more inductive since it involves a corpus analysis that will result in exploring linguistic constructs (Biber 2015: 4).

Several factors characterize a good corpus over other corpora; most importantly the size of the corpus, and its representativeness, among others. Biber (2015:4) states that "Two considerations are crucial for corpus design: size and composition. First, corpora need to be large enough to accurately represent the distribution of linguistic features. Second, the texts in a corpus must be deliberately sampled to represent the registers in the target domain of use".

One of the most crucial factors that need to be taken into consideration when compiling a corpus is its large size i.e. the number of words it contains in representing a language, a genre or a language variety, "Enormous quantities of data therefore allow us to extrapolate linguistic frequencies and patterns, telling us something about linguistic norms" (Biber 2015: 6). The results attained from studying large amounts of texts are believed to be incomparable to any other methodology used for language analysis. Several studies have used relatively small-size corpora to study the use of amplifiers, like Reichelt and Durham (2017) who analyzed 1123 intensifiers out of a 582,000 word-corpus compiled from the TV series Buffy the Vampire Slayer in order to examine how certain linguistic features (like the use of amplifiers in speech) contribute to characterization, and Murphy (2010) who used a corpus of 90,000 words to analyze female talk from several sociolinguistic variationist perspectives (more details on these two studies in section 2.4). In this way, it should always be kept in mind that small size corpora represent the limited range of texts they contain only, and accordingly the range of amplifiers available for study becomes limited as well. This study, however, uses extensively larger sized corpora that provide a very wide range of patterns using amplifiers which is believed to provide a wide range of examples for the current use of amplifiers in American English. It is important to note that the advantages of using a quantitative approach is not only to produce numbers, but rather to use these numbers to identify and explain linguistic phenomena; as "these measures provide the basis for comparative linguistic research" (Tagliamonte 2009: 12).

Another important factor that characterizes reliable corpora is its *representativeness*. The texts chosen for a corpus are usually selected very carefully to be typical of the language investigated. This can be achieved by taking several factors into consideration; the equal amounts of every text type or "register", the variation in styles within the same genre, sources and contexts of each register, several social variables like "age, sex, occupation, geographic region, level of education and the first

language of every speaker", as well as the date the texts were published (Baker 2010: 6). The corpus used in the present study is believed to be representative of its five genres, as shown in more detail in section 3.1.

2.2 Amplifiers

Adverbs cover a wide range of semantic categories that contribute to the meaning of the word or phrase they are modifying. Adverbs can express time, place, manner, degree, stance, additive or restrictive function, and linking. Generally speaking, adverbs can modify adjectives, other adverbs, noun phrases, prepositional phrases, particles, and numerals or measurements, or they can stand alone as structurally independent elements in conversations (Quirk et al, 1985: 551).

This study focuses on adverbs expressing high degree, and these adverbs are used to intensify the word or phrase that follows them. The terminology used to refer to these lexical elements is not completely uniform among scholars and grammarians who studied them. They are defined as "intensive adverbs" by Stoffel (1901), "degree words" by (Bolinger 1972, Bäcklund 1973) and amplifiers by (Quirk et al. 1985, Biber et al. 1999). For this study, Quirk et al.'s categorization will be henceforth followed.

There are two sub-categories of intensifiers: amplifiers and downtoners, as shown in figure 1 below. Amplifiers are adverbs used to increase intensity to different extents, while downtoners have a lowering effect, such as *almost, partly, hardly, more or less*, etc. (Quirk et al, 1985, p.589). The focus in this study is on intensifiers scaling upwards only; namely amplifiers.

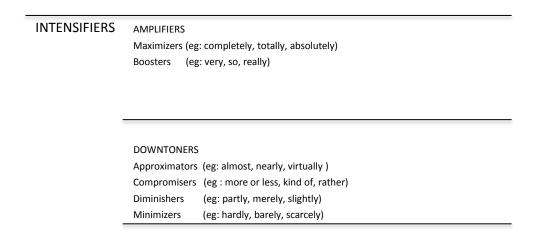


Figure 1. Subtypes of Intensifiers (adapted from Quirk et al. 1985: 590)

Quirk et al. (1985: 591) makes a semantic distinction between two subsets of amplifiers: maximizers and boosters. Amplifiers which scale upwards are distinguished in terms of "maximizers" (e.g. absolutely, entirely, extremely, fully) and "boosters" (so, too, very, strongly, intensely) with the former indicating "the upper extreme of a scale" and the latter merely denoting "a higher degree" but without reaching the extreme end of the scale of intensity; amplifiers maximize or boost meaning.

On the other hand and syntactically speaking, Quirk et al. (1985: 551) bring to our attention that amplifiers occur in many syntactic constructions modifying adjectives, adverbs, verbs, pronouns, prepositional phrases, and determiners. However, the focus in this study is made to investigate amplifiers modifying adjectives only since they are the most common construction (see section 3.2.2) as in the following examples:

- 1. No, sir, "the watch officer said. # "But you're **absolutely certain** it's him in that warehouse?" # "Yes, sir. (Fiction, 2008, *Dead Heat*)
- 2. Goodell also has been **largely responsible** for establishing the NFL overseas, but the league has been unable to match (Newspaper, 2006, *Washpost*)

Maximizers differ from boosters in several ways; as pointed out by Quirk et al. (1985: 590) and shown in Altenberg's study of amplifiers (1991: 132). Boosters outnumber maximizers, because boosters "form open classes, and new expressions are frequently created to replace older ones", while it is easier to compile an inventory for maximizers. The results gained from this study showed also considerably larger use of boosters over maximizers. The other way boosters are distinguished from maximizers is that boosters tend to have a wider collocational range than maximizers, and they tend generally to modify scalar words like (e.g. *nice*, *intelligent*, *ugly*), while maximizers, on the other hand, typically modify non-scalar words like (e.g. *true*, *sure*, *right*) since they already express an absolute degree (Altenberg 1991: 135).

Although the classification of amplifiers seems to be easy and straightforward, certain forms overlap since many intensifiers fall into more than one semantic category. According to Quirk et al. (1985: 590) several factors lead to the overlap between intensifiers: "(i) the variant effects of intensifiers represent a semantic gradient, which is obscured by a clear cut division into classes; (ii) some intensifiers are sometimes used for different effects; and (iii) speakers vary in their use of intensifiers." In this way, and since the scope of this study is on intensifiers with a

heightening effect, certain amplifiers had to be excluded because of their dual semantic function, as will be discussed in more detail in section 3.2.2.

In summary, amplifiers form a fruitful field of study since they are restricted syntactically and collocationally in different ways which all lead to constant change in use and new patterns. Intensification with a heightening degree in English is described as the most frequent and the most linguistically interesting (Ito & Tagliamonte 2003:258). Added to that, amplification reflects speakers' choices and preferences when intensifying their statements, resulting in different patterns of use and new meanings invented since amplifiers in their nature are described as "unsettled" (Altenberg 1991: 128).

2.3 Registers

The sociolinguistic variable chosen to be tested in association to amplifiers use in this study is variation among five different registers in COCA. The term register refers to the "context of language production" (Baker 2010: 44). Contexts play a major role in determining the sort of language used, and since contexts change constantly, we change the way we speak and our linguistic choices differ accordingly. The variation in language has been coined in several studies with different settings, leading to different patterns and functions used in particular contexts, or registers. Additionally, registers are representative of the language and contexts they are compiled of. In this way, variation in amplifier use is believed to mirror the variation in contexts and language and vice versa; the contexts and language used will present certain amplifiers and amplifier combinations to be more preferable than others by speakers and writers of a particular register.

Since corpus-based research has made it possible to examine the patterns of variation among the full set of spoken and written registers, i.e. genres and subgenres, researchers are able to show that "corpus research offers strong support for the view that language variation is systematic and can be described using empirical, quantitative methods" (Biber, 2015: 2). Added to that, it has been shown by Biber et al. (1994: 170) "that corpus-based analyses enable identification and interpretation of the salient linguistic characteristics within and among the range of registers in a language". In their study, they used corpus based methods to analyze certain linguistic features e.g. prepositional phrases, lexical classes; nominal forms etc., and found differences according to registers. They suggested a "multidimensional approach to register

variation" by identifying the dimensions according to the distribution of the linguistic features that co-occurred significantly more often in certain registers. In other words, they were able to distinguish registers, both spoken and written genres, according to the linguistic features found more frequently used in each register. These registers comprise certain dimensions that distinguish registers from each other (for more details on the dimensions suggested by Biber (see Biber et al. 1994 and Baker 2010: 45 46). Regarding amplifiers, Biber et al. (1994: 182) found them occurring significantly more in the "involved production dimension", which included sub-genres like conversations and interviews, compared with the "informational dimension", which included scientific prose and newspapers, and this is analogous to the findings gained from the present study (see section 4.6 and section 5).

It has been shown by other previous research studies as well that there are considerable differences in language use and language variation among different registers, genres and styles. For example, Biber et al. (1999: 545) showed that there is great versatility in the use of amplifiers based on differences in registers, namely between the spoken and the academic register (see section 4). Moreover, Xiao &Tao (2007: 248) found that there is also great variation in intensification patterns across registers, and according to different genres and discourse modes.

2.4 Previous studies

Intensification is a domain of research that is constantly changing and is characterized by "fevered invention" (Bolinger 1972:18) and "constant renewal" (Brinton & Arnovik 2006) because of the diachronic shifts made to the use of intensifiers and the differences in intensification patterns due to several factors such as age, gender, social class, language variety, educational level and register variations, among others. Intensification of adjectives and adverbs in English has been widely studied (Stoffel 1901; Bolinger 1972; Altenberg 1991; Partington 1993; Paradis 1997; Ito & Tagliamonte 2003, Tao 2007; Méndez-Naya 2008; Tagliamonte 2008; Murphy 2010; Reichelt & Durham 2017, to mention just a few out of numerous studies on intensification). The way each study dealt with intensification differs according to the amount of data analyzed, the syntactic construction of the amplifier chosen for analysis, the language variety, etc. Several studies found it essential to present a historical trajectory of intensification in English in order to understand the diachronic and synchronic development of the use of amplifiers, and recognize the shift in

meaning certain amplifier have undergone, like in Ito & Tagliamonte (2003). The corpus chosen for their study was the York English Corpus and they analyzed amplifiers modifying adjectives only, with respect to age, gender and education as sociolinguistic variables affecting the use of amplifiers. They found that these factors affect the use of amplifiers, and that certain amplifiers are preferred by certain age groups, men or women and according to the educational level. However, their discussion was confined eventually to only two amplifiers *very* and *really*. This study was followed by two other studies by Tagliamonte and Roberts (2005) where they tested the use of intensifiers in the series *Friends* and found that *so* is used more frequently than *very* and *really*, and Tagliamonte (2008) who analyzed intensifiers with adjectival heads by using the Toronto English Corpus which is comprised of informal conversations to test the grammaticalization processes of certain amplifiers and found that *really* is used more frequently than *very*.

Altenberg (1991) used 200,000 recurrent examples of amplifiers used in the London Lund Corpus of Spoken English. Though not a very recent study, Altenberg's research on amplifiers is a very informative source. His study illustrated the collocational patterns of amplifiers and gave a description of boosters and maximizers in terms of their behavior, limitations, overlap between each other and their recurrent collocations. He found that *very* is the most frequently used amplifier according to his data, and that boosters are more "versatile" in the number of adjectives they collocate with and more "productive" in the number of examples they occur in (132). These two findings are similar to what has been found in the present study as well (See also section 4). However, Altenberg (1991) commented on his study saying that "to obtain a more exhaustive account of the use of amplifiers in speech we would need a much larger corpus, perhaps five to ten times the size of the London-Lund Corpus" (Altenberg 1991:133).

Many studies have focused on the use of certain amplifiers, like *absolutely* (Tao 2007), *very much* (Gonzalez 2007) and *really* (Lorenz 2002), the diachronic study of the adverb *all* (Buchstaller & Traugott 2006). Other studies chose to cover larger sets of amplifiers, like in Xiao &Tao (2007). This quantitative study investigated 33 amplifiers and their intersections with several sociolinguistic variables such as age, gender, sex, register, and social class, as mentioned earlier in section 2.3.

The last to be discussed in this section is Murphy's study of amplifiers (2010: 114-118). She used the Female Adult Corpus (FAC) and the Male Adult Corpus (MAC) and her qualitative study included a small number of amplifiers. She investigated amplifiers occurring with adjectival heads, with relation to different age groups and gender. The results obtained from her study indicated differences in amplifier use and selection made by speakers according to these two social factors. She found that older age groups tend to intensify less than younger age groups, and in terms of gender, men intensify less often than women and select certain amplifiers more over others.

In summary, as can be concluded from the discussion above, there have been many studies on amplifiers using corpus based methods and investigating several variables. Some of these studies used small amounts of data while other studies used larger size corpora in order to attain a more comprehensive account of amplifier usage. As will be shown in the discussion section, the results gained from the present study are analogous to the results previously found in other studies.

3. Materials and methodology

The method used in this study is corpus linguistics, which was introduced in section 2.1. In section 3.1, the Corpus of Contemporary American English (COCA), the corpus used as the material for this study, is described. Furthermore, explanations and details on the methodology used are presented in section 3.2. Sections 3.2.1 and 3.2.2 present more details about the methodology followed for the pilot study and for exploring the amplifiers modifying adjectives.

3.1 Materials

The corpus chosen to investigate the use of amplifiers in American English is the Corpus of Contemporary American English. This corpus was created by Mark Davies (Davies, 2008). This corpus was selected for this study mainly because of its large size, accessibility as it is available freely on the web, and because it incorporates grammatical tagging of each word, which facilitates automatic retrieval and analysis.

According to the COCA homepage, COCA is believed to be the largest corpus of American English. It is widely used because of the advanced search features offered freely to users. Furthermore, it is related to a wide range of other corpora of English that were created to offer further extensive insight into variation in English, like COHA Corpus of Historical American English, TIME magazine corpus, British

National Corpus (BYU-BNC), among other corpora. COCA comprises more than 520 million words of text (20 million words each year 1990-2015). It is also a balanced corpus of American English i.e. it is equally divided among its five registers: spoken, fiction, popular magazines, newspapers, and academic journals. These balanced amounts of texts make it easy for researchers to carry out queries and extract results directly without having to normalize the figures they get to compensate for the differences in size among registers, since the frequencies provided are per million words for each register although there are minor differences in registers sizes. The size of each register ranges from 103 to 110 million words, and texts of each register are collected from different sources for the sake of representativeness of the whole genre. The first register is the spoken register, which is composed of transcripts of unscripted conversation from more than 150 different TV and radio programs like: All Things Considered (NPR), Newshour (PBS), etc. The Fiction register is composed of short stories and plays from literary magazines, children's magazines, popular magazines, first chapters of first edition books from 1990 till present, and movie scripts. The popular magazines register consists of nearly 100 different magazines, with a mix (overall, and by year) between specific domains (news, health, home and gardening, women, financial, religion, sports, etc). A few examples are Time, Men's Health, Good Housekeeping, Cosmopolitan, etc. The newspapers register is composed of texts from ten newspapers from across the US, including: USA Today, New York Times, etc. The texts were chosen from different sections of the newspaper, such as local news, opinion, sports, financial, etc. The last register is of the genre of academic journals which contains nearly 100 different peer-reviewed journals selected to cover the entire range of the Library of Congress classification system (e.g. a certain percentage from B (philosophy, psychology, religion), D (world history), K (education), T (technology), etc.), both overall and by number of words per year.

In summary, this balanced and equal distribution of the size and types of texts in COCA is very useful as it provides a very solid base and a potential starting point for research. However, certain information about sociolinguistic variables like age, sex, educational level, and social class are not available in COCA, which restricts the research scope into specific research variables only.

3.2 Methodology

This study uses corpus linguistics methods to investigate the use of amplifiers in COCA among five different registers by taking the frequencies of the amplifiers chosen as a baseline for comparison between registers. Since amplifiers occur in different syntactic combinations, the choice was made to focus on amplifiers modifying adjectives only (see 3.2.1). The frequencies being compared are the absolute frequencies per 520 million words in the whole corpus, and the relative frequencies are about one million words in each register in the corpus.

3.2.1 The pilot study

To answer the present study's questions, the following steps were followed. First, a pilot study was conducted for each register in order to list the amplifiers most frequently used in each register in COCA. This step gives an account of the use of amplifiers in COCA in general regardless of the syntactic construction they occurred in, as the second step (3.2.2) restricts the search to the combination [amplifier + adjective] only. Initially, a frequency search for the entire corpus for adverbs with the potential to function as amplifiers was performed for each register. Using the part-ofspeech feature <POS> available in COCA, the search was limited to adverbs <_r*>, in general, and in each register. The corpus used in this study limited the search at this stage to adverbs in general only, not 'adverbs followed by adjectives'. The corpus used did not perform such a search query because the very general combination [adverb + adjective] occurs more than 40 million times in the corpus and thus cannot be performed because of its very high reoccurrence. After that, a list was compiled for all the amplifiers that have a relatively high frequency only; those occurring more than 1000 times per one million words in each register, because it is impossible to list all the amplifiers used in each register in such a large corpus nor is it needed for the present limited scope of this study (see Appendix 1 for the whole set of amplifiers detected for each register in COCA, and table 1 for the most frequently used amplifiers in each register in COCA).

The part-of-speech feature available in COCA is available only for the main parts of speech e.g. nouns, verbs, adjectives, adverbs, prepositions, etc. but not for the semantic categorizations of adverbs e.g. amplifiers, downtoners, hedges, etc., thus amplifiers were detected manually out of the list of adverbs. Moreover, while searching for amplifier types in order to distinguish between maximizers and boosters, it was found that there are no clear-cut distinctions between these two types; different

studies distinguish amplifiers differently. For example, *absolutely* is considered a booster in Murphy (2010: 135) and a maximizer in Quirk et al. (1985:590), and *extremely* is considered a maximizer by Quirk et al. (1985:590) and a booster in Kennedy (2003:472). Accordingly, and for the sake of consistency throughout the whole study, the classification of the types of amplifiers was done with reference to amplifiers listed in the following references: Quirk et al. 1985, Altenberg 1991, Greenbaum 1996, and Biber et al. 1999.

3.2.2 Amplifiers modifying adjectives in COCA

Second, and to answer the second and third research questions (see 1.1); the choice was made to include the ten most frequently used amplifiers modifying adjectives only in each register in COCA for further analysis.

Ito and Tagliamonte (2003: 263) state that "One of the problems in dealing with intensifiers in an accountable, quantitative way is that of circumscribing the variable context". This means that when studying amplifiers, it is crucial to determine which speech string is to be examined since amplifiers occur in several syntactic constructions (see 2.2). It has been shown by Bäcklund (1973: 279) that intensifiers are mostly used with adjectival heads; he found that "72% of intensifiers were used with adjectival heads". Moreover, several recent studies on amplifiers e.g. Barnfield & Buchstaller 2010, Murphy 2010 and Reichelt & Durham 2017, investigated amplifiers modifying adjectives only since amplifiers are mostly used to intensify the meaning of adjectives. In fact, most of the literature studying intensification has investigated this particular syntactic construction only. Accordingly, the present study takes the combination [amplifier + adjective] as a baseline for searching the most frequent amplifiers used in all registers in COCA by circumscribing amplifiers that are used to modify adjectives only.

In order to get the selection to include forms of the amplifiers that occurred with adjectival heads only, and based on the list gained from the pilot study which contained the most common amplifiers in each register (as shown table 1 and appendix 1), each one of the amplifiers listed in each register was searched for independently as the following example <amplifier _j*>, and the number of hits was assigned to 3000 in order to include all instances of every amplifier in the corpus. After that, a list of the ten most frequent amplifiers used in each register in COCA was established for each register. For example, the amplifier *really* was searched for as <really _j*> in order to

get the frequency of it modifying adjectives only, and this process was repeated for this amplifier in each register, as in the following examples which give two examples of really in two different registers:

- 3. And it's **really difficult** to make a living as an actor, even more so today (Spoken, 2015, *NPR*)
- 4. And he's like a little brother to me. I was **really happy** for him, "Tomlinson said. (News, 2008, *Atlanta*)

The latter step was crucial also in order to distinguish the uses of certain adverbs that might not behave as an amplifier, and that was not achieved through the first step when running the first query to search for adverbs in the whole corpus as the concordance lines included different functions of the form searched for. For example, when searching the amplifier *too*, hits included examples of multiple functions and meanings for the word; where it functioned as an additive adverb (Quirk et al, 1985: 556), as in example (5) and as an amplifier as well, example (6):

- 5. But it is important, **too**, to recognize the privileged place popular culture may have in students' lives (Academic, 2015, *Journal of Adolescent & Adult Literacy*).
- 6. Too rare, **too** rare grow now my visits (Fiction, 2015, *Dreaming spies*).

As mentioned earlier, intensifiers are scaling devices which can be used to modify adjectives to express a certain degree of intensity, whether high, moderate or low. Barnfield & Buchstaller (2010: 256) stated that intensifiers can be differentiated according to the semantic value they assign to their heads: "they can diminish the property denoted by their head, they can moderate it, or they can amplify it, moving the property up or down an imaginary scale." Bäcklund (1973: 69) noted also that it is difficult to categorize degree intensifiers into different groups according to their semantic value because of the "great flexibility in meaning of all adverbs of degree due to a great variety of factors, such as idiolects, the attitude and temporary emotional state of the speaker/writer, the other participants in the conversation, the situation in which the utterance is made etc.," More specifically, it becomes more difficult when certain adverbs like (*quite, pretty, rather*) are used by speakers differently to express variant degrees of intensity, not only high degrees of intensity but rather moderate or

even low degrees. In fact, Bäcklund (1973:69) categorizes *quite*, *pretty*, and *rather* as "degree words expressing moderate degree".

The intensifier *quite* is a good example where it becomes necessary to analyze the context in which this adverb occurred, in order to be able to determine its function correctly. *Quite* can be used either as a maximizer (7) or as a downtoner (8), depending on the context, language variety, what is being highlighted in a sentence, and the words collocating with it (Quirk et al. 1985: 599):

- 7. Hyman was **quite right** to express his concerns regarding school psychology's relationship with other groups. (Academic, 1994, *School Psychology Review*)
- 8. Not bad at all. 1080p movie playback was **quite good** as well (Magazine, 2015, *PC world*)

A recent study by Reichelt and Durham (2017: 65) categorized *quite* as a moderator; a separate class from amplifiers and downtoners, while Quirk et al. (1985: 446) classified *quite* as a downtoner, hence ambiguous between a booster, a moderator or a compromiser. Accordingly, and since this study follows Quirk et al's distinction of intensifiers, and because of the multiple degrees of intensification these three adverbs present, *quite* has been excluded from this study as the focus is made on intensifiers with a heightening effect only. The same applies to the intensifiers *rather*, *pretty*¹, and *fairly*.

Finally, and based on the lists attained for the most frequent amplifiers used in each register, a list of sixteen 'shared' amplifiers, which appeared either in all registers or just in certain registers, was created. Additionally, further analysis for the five boosters shared in all registers in provided as well (see section 4.7).

4. Results

4.1. The pilot study

The results gained from the initial pilot study presented a 'preference pattern' of the boosters mostly used across the registers in COCA like: *so, very, much, too, well, right,*

^{1.} After examining the concordance lines for the booster *pretty*, it is found that *pretty* in this register is mostly used as an amplifier with a heightening degree i.e. a booster. However, and in order to be consistent in following Quirk el al's (1985) classification of amplifiers, it had to be excluded from this study.

and *really*. At this stage, the focus is on the range of amplifiers used rather than on frequency, which is dealt with in more detail for each register below (See table 1 and 2 for the most prevalent amplifiers in each register with their frequencies and type of amplifier, for the whole set see appendix 1). Moreover, this pattern is common in all registers but with differences in frequencies for certain amplifiers. It is noted that the closer each register is to another, i.e. by style and genre, the more similarity in the use of amplifiers is found. For example, the maximizer *severely* is found most frequently used first in the Newspaper register and then in the Academic register, as these two registers are believed to be 'close' in style to each other.

The order in which the items appeared in table 1 is representative in terms of amplifiers occurrence in the pilot study, to a certain extent, of the frequencies of the amplifiers modifying adjectives only; this may indicate that amplifiers are mostly used by American speakers to modify adjectives since the order of the overall amplifiers did not much change for certain amplifiers like *very*, *so* and *really*.

On the other hand, this is not the case for all amplifiers. Certain amplifiers which appeared in this stage to be of high frequency by appearing at the top of the list of adverbs (in the overall search for adverbs) were not among the ten most frequently used amplifiers when investigating them at the second stage (when the search was restricted to amplifiers modifying adjectives in each register) like the amplifier *right*, which had a high frequency as an adverb in general, but had a very low frequency when used to modify an adjective. This is believed to be due to dialectal differences among language varieties since *right* is known to be mostly used as an amplifier in British English on the one hand, and to certain semantic or syntactic restrictions on the use of certain amplifiers on the other hand. For example, amplifiers cannot be the focus of a cleft sentence (a syntactic restriction) as in (9):

9. *it was completely that he ignored your request. (Quirk et al. 1985: 597)

Added to this, the collocations of certain amplifiers are likely to be limited in certain ways (semantic restriction). For example, the maximizer *utterly* is found to cooccur generally with adjectives having unfavorable implication (Quirk et al. 1985:597) as in (10-11):

10. "I'm back home after an excruciatingly long and **utterly useless** day in which I tried and failed to warn. (Fiction, 2010, *Intelligence*)

11. "Well, Bob's observation is of course, **utterly absurd** and the campaign is just beginning. (Spoken, 1999, *Fox Sunday*)

Unexpectedly, more 'colloquial or vulgar amplifiers' like *fucking*, *damn*, and *bloody* are found in the fiction register and no such amplifiers are found in the spoken register as would be expected. This may be due to the sources of spoken discourses and conversations in COCA in the spoken registers as they are comprised of TV shows and radio programs but not from spontaneous street conversations where more swearing and colloquial language is expected.

It is also noted that the fiction register contained amplifiers with negative connotations more than in other registers, and this may indicate that the style in this register is less formal due to the age of speakers producing such patterns which may be produced of younger age groups. It has been shown in Murphy (2010: 128) that younger age groups (the twenties age groups/ 20s) use colloquial amplifiers more frequently than older age groups (40s and 70s age groups). For example, while all other registers included one or two amplifiers with negative connotations (spoken *badly* and *terribly*, magazines and newspaper only *badly*, and none in the academic), the fiction register alone included six: *badly*, *terribly*, *fucking*, *bloody*, *violently*, *wildly*, *utterly*, like in the following examples:

- 12. "I didn't know, "says Lena. "I'm **terribly sorry** for your loss. " "Sometimes I want to smack you, robot. (Fiction, 2015, *Tammy*)
- 13. "appeared first on the scene?" "Dordolio claims trickery, and is **violently angry**. But all this to the side, what might you demand of Lora" (Fiction, 1993, *Planet of Adventure*)
- 14. Bram muttered something that sounded like, " **Bloody stupid** muggins, " but Sullivan couldn't be certain. (Fiction 2008, *After the Kiss*)

However, it should be noted that although such amplifiers may give a negative meaning, they are not always used with negative adjectives. Sometimes these amplifiers are used in this way to hyperbole strongly, but not necessarily to give a negative meaning. Murphy (2010: 129) indicates that such amplifiers "have undergone semantic bleaching and pragmatic strengthening" meaning that these words like *fucking* for example, is not always used to convey a negative meaning but rather is

seen to indicate a way of "dynamic communication". The examples below illustrate this point as well, in (15) the amplifier *wildly* is used to express a negative meaning while in (16) it is used to express a positive meaning:

15. "more typical of them to pretend to forget, and then ambush me with a **wildly inappropriate** birthday greeting at my stodgy New York law office. (Fiction, 2012, *Year Zero: A novel*)

16. "A Doll's House and it changed my life, not only because it was **wildly successful**, but because it changed my thinking about myself. " (Fiction, 1994, *North of Montana*)

Table 1. Amplifiers	most frequently	used in Spoken	and fiction re	gisters in COCA.

	Amplifiers/ Spoken	Freq./ 1 m.w	Туре	Amplifier/ Fiction	Freq./ 1 m.w	Type
1	very	171,072	booster	so	61,745	booster
2	so	53,626	booster	very	43,820	booster
3	too	20,087	booster	too	43,687	booster
4	much	12,652	booster	much	8,920	booster
5	absolutely	7,449	maximizer	really	8,449	booster
6	extremely	5,243	maximizer	completely	3,586	maximizer
7	totally	4,042	maximizer	perfectly	3,034	maximizer
8	completely	3,719	maximizer	entirely	2,121	maximizer
9	really	3,391	booster	totally	2,043	maximizer
10	highly	2,577	booster	absolutely	1,742	maximizer
11	well	922	booster	well	956	booster
12	fully	645	maximizer	fully	942	maximizer
13	right	511	booster	deeply	895	booster
14	ultimately	176	maximizer	right	590	booster
15	strongly	121	booster	heavily	482	booster

Another point that can be noted is about the magazine register, which is believed to contain 'shared' amplifiers and can be seen as a connecting point between 'informal' (spoken and fiction) vs 'formal' registers (Newspaper and Academic). This register is compiled of magazines that cover a wide range of social topics (as mentioned earlier in 3.1), and that puts this register in the middle place on a scale of formality. This is indicated in the amplifiers used in this register; an amplifier that appears in the fiction register, for example, *thoroughly* continues to appear in the magazine, newspaper and in the academic register (See appendix 1).

The academic register, on the other hand, appears to be unique at this stage in certain aspects; less intensification rates and more versatility in the use of amplifiers.

Moreover, the choice of amplifiers used in this register reflects the formality of the texts in academic prose. For example, *significantly* appeared quite earlier in this register than in other registers, and *extensively* is used with higher frequency only in this register and specifically when compared to all other registers (see also appendix 1).

Table 2. Amplifiers most frequently used in magazine, newspaper and Academic registers in COCA.

	Amplifier- Magazine	Freq./ 1m.w	Туре	Amplifier- Newspaper	Freq. / 1 m.w	Туре	Amplifier- Academic	Freq. / 1m.w	Type
1	Very	49,931	booster	very	48,864	booster	very	36,635	booster
2	So	39,216	booster	so	30,849	booster	so	14,391	booster
3	Too	26,339	booster	too	21,589	booster	too	11,714	booster
4	Much	12,894	booster	much	10,040	booster	highly	11,560	booster
5	Really	10,262	booster	really	9,904	booster	much	10,098	booster
6	Highly	6,439	booster	highly	4,416	booster	significantly	6,908	booster
7	Extremely	5,443	maximizer	extremely	3,803	maximizer	increasingly	5,905	booster
8	increasingly	3,991	booster	increasingly	3,595	booster	largely	3,261	booster
9	completely	3,477	maximizer	completely	2,141	maximizer	fully	2,380	maximizer
10	Largely	1,992	booster	largely	2,054	booster	completely	2,364	maximizer
11	Fully	1,805	maximizer	absolutely	1,585	maximizer	really	2,284	booster
12	Widely	1,168	booster	fully	955	maximizer	widely	1,535	booster
13	Well	914	booster	well	832	booster	well	929	booster
14	Entirely	706	maximizer	widely	689	booster	ultimately	706	maximizer
15	Ultimately	375	maximizer	ultimately	291	maximizer	strongly	653	booster

The tables provided below for each register illustrate the following data: The fourth column (Freq./520 m.w) represents the absolute frequencies of each lexical item found in whole the corpus, the fifth column represents the relative frequencies per one million words in each register, and the last column represents the percentage of the total use of each lexical item in each register compared to its absolute frequency in the whole corpus i.e. the percentage of the relative frequency of an amplifier in a certain register compared to its absolute frequency in the whole corpus.

4.2 The Spoken register

Unsurprisingly, the results show a striking difference in frequency of intensification for the spoken register compared to other registers. The amplifiers used in spoken discourse present a different range from those most prevalent in other registers. The total frequencies of the ten most prevalent amplifiers per million words in the spoken register are 314,368 which are double the next highest register in frequencies for amplifiers; the fiction register. As shown in table 3, the list starts with

the boosters *very, so, really, too,* and *much*, which are also the most frequently used boosters in all other registers in COCA except for the academic register. Maximizers such as *absolutely, extremely, totally,* and *completely* are the most frequent among other maximizers in this register and thus they are used more frequently in spoken discourse.

Table 3. Frequencies of the most prevalent amplifiers in the spoken register in COCA

	Amplifier	Type	Freq./520 m.w	Freq./1 m.w	%
1	very	booster	368,247	171,072	46.45
2	so	booster	198,383	53,626	27.03
3	really	booster	64,800	33,901	52.31
4	too	booster	123,416	20,087	16.27
5	much	booster	54,604	12,652	23.17
6	absolutely	maximizer	13,438	7,449	55.43
7	extremely	maximizer	22,250	5,243	23.56
8	totally	maximizer	11,577	4,042	34.91
9	completely	maximizer	15,455	3,719	26.06
10	highly	booster	26,408	2,577	9.75
	Total			314,368	

The booster *very* is used significantly more than other amplifiers in this register, and in all other registers as well except for the fiction register. Among the list in table 3, *very* alone accounts for 54.41 percent of total frequencies of the whole list, and 46.45 percent of the use of the amplifier *very* in COCA in general is found in the spoken register, whereas the rest is distributed among all other registers (See appendix 3.a). This indicates that *very* is the most frequently used amplifier in spoken American English since approximately half of its use is found in this register. This finding is consistent with other previous studies on amplifiers which also confirmed a high frequency of *very* as an amplifier in their data (Ito & Tagliamonte 2003:276).

Maximizers most frequently used in this register are *absolutely, extremely, totally* and *completely*. Among the list, six boosters and four maximizers are used for adjective intensification; 93.4 percent of total frequencies of amplifiers used in the spoken register are of boosters and only 6.5 percent of maximizers (See appendix 2: a, b). This shows the strong prevalence of boosters over maximizers in spoken American English, which also indicates that speakers repeat certain amplifiers significantly more often instead of using new amplifiers for intensification.

The material from which this register is composed of (TV shows and Radio programs) affects the choices of amplifiers. For example, no swear terms are among the most frequent amplifiers used which is something found in previous studies investigating spontaneous spoken discourse like in Murphy (2010: 115) for example, who found the word *fucking* is used more frequently as an intensifying element before adjectives.

4.3. Fiction register

The total frequencies of the ten most frequent amplifiers per million words in the fiction register in COCA are 179,147 which are almost half the amount of intensification found in the spoken register. The most frequent amplifiers used in the fiction register are also the boosters found most frequently used in the spoken, newspapers, and magazines registers: *so*, *very*, *too*, *much*, and *really*. However, *so* is most frequently used in this register than in others with 31.12 percent of its use found in the fiction register (see appendix 3.b). If compared to *very* in the spoken register which accounted for more than half of the amplifiers used (55 percent), *so* alone accounts for 34.46 percent of the ten most frequently used amplifiers in this register.

Table 4. Frequencies of the most prevalent amplifiers in the fiction register in COCA

	Amplifier	Type	Freq./ 520 m.w	Freq./1 m.w	%
1	so	booster	198,383	61,745	31.12
2	very	booster	368,247	43,820	11.89
3	too	booster	123,416	43,687	11.09
4	much	booster	54,604	8,920	16.33
5	really	booster	64,800	8,449	13.03
6	completely	maximizer	15,455	3,586	23.2
7	perfectly	maximizer	9,129	3,034	33.23
8	entirely	maximizer	10,265	2,121	20.66
9	totally	maximizer	11,577	2,043	17.64
10	absolutely	maximizer	13,438	1,742	12.96
	Total			179,147	

Although the scale of formal use increases, from spoken to written registers, the amplifiers used in this register do not comprise a very different set from the ones used in the spoken register. It can be suggested that the similarity between the choices of using certain amplifiers is interpreted by considering the effect of spoken discourse on fiction. Additionally, novels in their nature contain certain amounts of verbal exchanges, and thus similarity is found in the way of intensification as well.

In this register the list of the ten most frequently used amplifiers contains five boosters and five maximizers, which indicates more diversity in amplifier use. However, the total frequencies of five boosters in this register account for 93 percent of amplifiers used and five maximizers make only 6.9 percent of intensification (See appendix 2:c, d). The large reliance on boosters continues to prevail in this register, in terms of frequency of use, although the same number of both types of amplifiers is used. This indicates that regardless of the frequency, more diversity in the use of amplifiers is beginning to rise in written registers than in the spoken register. This finding is similar to what has been found previously (Reichelt & Durham 2017: 66).

The maximizer *perfectly* is used most frequently in this register than in all other registers, with 33.23 percent of its use found in the fiction register, and this amplifier is believed to indicate the genre of the contexts of this register. By examining the most frequent concordance lines and the adjectives mostly collocating with this amplifier in the fiction register, it was found that it was used almost always with adjectives conveying positive meanings, and this indicates the descriptive nature of this register, as the following examples illustrate:

- 17. "Her eyes are dark, and her round face looks **perfectly honest**. " So you want to find out what happens to your father" (Fiction, 2015, *Border land*)
- 18. " and let me wear them anyway. I looked **perfectly beautiful** at Caroline's wedding, much prettier than the bride," (Fiction, 1997, *Live Bottomless*)
- 19. The stone was cold, and **perfectly smooth** to his touch, " (Fiction, 2002, *Charles Coleman Finlay*)

4.4 Magazine register

The total frequencies of the ten most frequent amplifiers per one million words in the magazines register in COCA are 159,329 which indicate a small decline in intensification compared with the fiction register (see figure 2). The most frequent amplifiers used in the magazines register are also the boosters found most frequent in the spoken, fiction, and newspaper registers: *so, very, too, much,* and *really*.

The magazine register presents a diverse set of the amplifiers with new items being most frequently used in it. The boosters *very, so, too, much, really, highly,* and *increasingly* are more prevalent than maximizers *extremely, completely,* and *totally* in

this register. Boosters make 92.93 percent of total frequencies of amplifiers in this register whereas maximizers make 7.06 percent (see appendix 2: e, f). *Very* continues to be the most frequently used amplifier in this register as well, but without significant difference with regard to the fiction register (43,820 in fiction and 49,931 in magazines).

It can be noted also that the amplifiers which are less frequently used in this register like *highly*, *extremely*, *increasingly*, *completely*, and *totally* participated with greater percentages; 20- 24 percentage of their overall use is found in this register. This indicates that these formal amplifiers are used less frequently overall but more frequently when compared to their individual presence in this register, and this indicates also more diversity in the intensification patterns.

Table 5. Frequencies of the most prevalent amplifiers in the magazines register in COCA

	Amplifier	Type	Freq./520 m.w	Freq./1 m.w	%
1	very	booster	368,247	49,931	13.55
2	so	booster	198,383	38,212	19.26
3	too	booster	123,416	26,339	21.34
4	much	booster	54,604	12,894	23.61
5	really	booster	64,800	10,262	15.83
6	highly	booster	26,408	6,439	24.38
7	extremely	maximizer	22,250	5,443	24.46
8	increasingly	booster	15,694	3,991	25.43
9	completely	maximizer	15,455	3,477	22.49
10	totally	maximizer	11,577	2,341	20.22
	Total			159,329	

It is interesting to note that this register is closer to the spoken register than the fiction register. The only different amplifier among the two sets is *increasingly* in this register, and *absolutely* in the spoken register. This can be interpreted by considering the texts genres and types of both registers. The spoken register, as mentioned earlier, is compiled of TV and radio programs, and the magazines in this register are also written for the media, which makes the discourse mode and context similar to each other, and this is indicated by the use of amplifiers. Additionally, the results show that the booster *much* is used in the spoken register and in the spoken register with similar proportions (23.17 and 23.61 percent respectively) whereas 16.33 percent of its use is found in the fiction register, and the maximizer *extremely* is used almost similarly in both registers as well (5,243 in the spoken register and 5,443 in magazines).

Accordingly, this can be seen also as an indication of the closeness between the magazines and the spoken registers.

4.5 Newspaper

The total frequencies of the ten most frequent amplifiers per one million words in the newspaper register in COCA are 136,555. The decline in intensification continues as the formality of the register increases (see figure 2). The most frequent amplifiers used in the newspaper register are also the boosters found most frequently in the spoken, fiction, and magazines register: *so, very, too, much,* and *really*.

Table 6. Frequencies of the most prevalent amplifiers in the newspaper register in COCA

	Amplifier	Type	Freq./520 m.w	Freq./1 m.w	%
1	very	booster	368,247	48,864	13.26
2	SO	booster	198,383	30,149	15.19
3	too	booster	123,416	21,589	17.49
4	much	booster	54,604	10,040	18.38
5	really	booster	64,800	9,904	15.28
6	highly	booster	26,408	4,416	16.72
7	extremely	maximizer	22,250	3,803	17.09
8	increasingly	booster	15,694	3,595	22.9
9	completely	maximizer	15,455	2,141	13.85
10	largely	booster	8,316	2,054	24.69
	Total			136,555	

Boosters continue to dominate in this register as well in terms of the number of intensifying elements and their frequencies. Eight boosters in this register account for 95.64 percent of intensification, and two maximizers account for 4.35 percent (See appendix 2: g, h).

The newspaper register is believed to be too close to the magazine register in terms of intensification; the list of amplifiers most frequently used is almost the same, except for the new amplifier used in this register *largely* (see table 6). However, less intensification is shown in this register and this can be interpreted in terms of the sort of texts included; newspaper articles from different sections.

The booster *highly* appears after the prevailing pattern of the five boosters, which indicates that it is used significantly in this register. It also indicates more versatility in amplifiers use in this register as it is followed by the amplifiers *extremely*, *increasingly*, *completely* and *largely*.

4.6 Academic register

The total frequencies of the ten most frequent amplifiers per one million words in the academic register in COCA are 105,136. The decline in intensification continues more in this register as the formality of this genre of texts increases (see figure 2). The most frequent amplifiers used in the academic register are not the pattern of boosters found most frequently in the spoken, fiction, magazines and newspaper registers which makes this register unique in the amplifiers used for intensification. Eight boosters in this register account for 91.16 percent of intensification, and two maximizers account for 8.81 percent (See appendix 2: i, j).

Table7. Frequencies of the most prevalent amplifiers in the Academic register in COCA

	Amplifier	Type	Freq./520 m.w	Freq./1 m.w	%
1	very	booster	368,247	36,635	9.9
2	SO	booster	198,383	14,391	7.25
3	too	booster	123,416	11,714	9.49
4	highly	booster	26,408	11,560	43.77
5	much	booster	54,604	10,098	22.14
6	significantly	maximizer	8,457	6,908	81.68
7	increasingly	booster	15,694	5,905	37.62
8	largely	booster	8,316	3,261	39.21
9	fully	maximizer	6,727	2,380	35.37
10	really	booster	64,800	2,284	3.52
	Total			105,136	

The list of amplifiers most frequently used in this register is different and diverse. Firstly, the list begins with the boosters *very, so, too, highly,* and *much. Really*, which is regarded as an informal amplifier by Xiao & Tao (2007:247) is used significantly less in this register by appearing at the end of the list, only 3.52 percent of its use in the whole corpus is found in this register, whereas it appeared earlier in the lists with higher frequency of use in all other registers (see appendix 3.c). The maximizer *significantly* appeared in the list among the ten most frequently used amplifiers in this register only, and it is interesting to note that 81.68 percent of its use is found in this register, which makes it a special amplifier to this register as no other amplifier in this study was used as much in any register. The maximizer *fully* appeared only in this register as well with 35.37 percent of its use in the whole corpus found in this register which indicates its high frequency of use in the academic register.

This new range of different amplifiers found in the academic register reflects its style as more formal amplifiers are used more frequently than in others and this finding was also shown in (Biber et al. 1999: 564). However, although a wider range of amplifiers are used here, yet the frequency of intensification is much lower.

4.7 Amplifiers most frequently used in all registers in COCA

This section presents further analysis of the amplifiers that appeared among all the lists of the ten most frequently used amplifiers in each register in COCA as shown in table 8. Five of these amplifiers are 'shared' among all registers and they are the boosters *very, so, really, too, much,* and the rest are shared among two or three registers only, or specific to certain registers. These sixteen shared amplifiers are used significantly more frequently than other amplifiers by American speakers and writers in COCA. The list includes eight boosters and eight maximizers; however boosters are used in significantly higher frequencies than maximizers. Eight boosters account for 89.83 percent of the total frequencies of the sixteen shared amplifiers and eight maximizers make only 10.16 percent of the total use of these shared amplifiers (see appendix 2 k,l). This finding illustrates also the nature of amplifiers used; high frequency of use is correlated with a narrower range of amplifiers.

Table 8. Most frequent amplifiers used in all registers in COCA

	Amplifier	Туре	Freq./520 m.w
1	very	booster	368,247
2	SO	booster	198,383
3	too	booster	123,416
4	really	booster	64,800
5	much	booster	54,604
6	highly	booster	26,408
7	extremely	maximizer	22,250
8	increasingly	booster	15,694
9	completely	maximizer	15,455
10	absolutely	maximizer	13,438
11	totally	maximizer	11,577
12	entirely	maximizer	10,265
13	perfectly	maximizer	9,129
14	significantly	maximizer	8,457
15	largely	booster	8,316
16	fully	maximizer	6,727
	Total		957,166

As can be seen in figure 2, there is a sharp decline in frequency beginning with the booster *very* and ending with the maximizer *fully*.

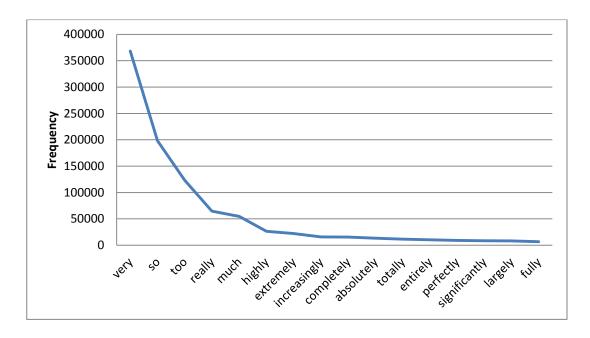


Figure 2. Frequency of amplifiers in all registers in COCA per 520 million words

Very, or as Talgiamonte (2008: 382) calls it "the out-going intensifier", is favored in this corpus by almost all registers, except for the fiction register. This reflects its overarching nature as it presented the highest frequencies of use amongst all other registers. Very alone accounts for 38.47 percent of the total frequencies of the sixteen amplifiers most prevalent in all registers in COCA. This makes very a significant lexical item used for intensification in American English. Previous studies that analyzed the use of *very* according to several social factors like age, for example, found that very is favored among older age groups (+35), as the data collected in York showed (Ito and Tagliamonte 2003: 267). Analogous results come from Toronto in Tagliamonte (2008: 372), and in Barnfield & Buchstaller (263: 2010) in British English in Tyneside as well. Although the age of writers and speakers in COCA is not provided, the registers examined in this study indicate that they are compiled of texts written by older age groups. For example, the spoken register is compiled from TV interviews and radio programs, the fiction register from novels, magazine newspapers and academic prose are all written by people of older ages i.e. not by young people around 15-20 years old. This is believed to explain the striking frequencies of use of the booster very assuming that texts in COCA are generally produced by older age groups. It has been shown by Pertejo & Martínez (2014: 218) who studied amplifier

use in British English that "[..] The adverbs so and really are the most frequent adjective intensifiers in the language of teenagers. [..]. In turn, very and so are the most popular adjective intensifiers among adults". A closer examination of the adjectives modified by very revealed that it is mostly collocated with good, important, difficult, different, hard, close, strong, high, small and clear. As stated in Quirk et al. (1985: 590) it is noted that all these adjectives modified by boosters are scalar or gradable words.

So is the second most prevalent amplifier in this corpus. As noted earlier, so is most frequently used in the fiction register, and not very, as can be seen in figure (3) which illustrate how these shared amplifiers differ in their frequencies in COCA in each register. The booster so is found most frequently used by younger age groups, in the (twenties /20s old age group), and less used by the (40s old age group) in Murphy's study (2010: 177). This, in a way, reflects the nature of the fiction register if we assume that the characters producing speech are of younger ages or the style of writing is less formal and more colloquial. However, such conclusions cannot be made unless closer analysis to the fiction register is made in order to examine every instance of the amplifier. The adjectives most frequently used with so are good, bad, important, hard, great, long, happy, sure, easy, and different. These scalar adjectives also are different from the ones found collocating with very, and this suggests that although it is thought that very and so might seem interchangeable, people choose to amplify certain adjectives with certain amplifiers differently.

Really is the third amplifier used most frequently in COCA. Previous studies on amplifiers have showed that really is mostly preferred by younger age groups. Really in COCA is used mostly with the scalar adjectives like good, important, hard, bad, great, nice, big, interesting, cool, and tough. Moreover, really, like so, is used in the fiction register more frequently than in the spoken register and this again may suggest that intensified adjectives in the fiction register might be produced by younger speakers. As mentioned earlier in section (4.6), really is used significantly less in the academic register and this as well indicates the nature of really as being mostly used by teenagers, because as it is known academic prose writers are of older ages. By examining the concordance lines for certain adjectives collocating with really like really nice, it is found that the first hundred examples are used in the spoken, fiction and magazines register, but not in the newspapers or the academic register. On the one

hand this explains the informal use of *really*, and on the other hand this indicates that not only certain amplifiers are preferred in certain registers but also certain amplifier adjective combinations are preferred as well.

Too is the fourth booster ranking among the most frequently used amplifiers in COCA. The adjectives more frequently collocating with too are *late*, *bad*, *big*, *small*, *young*, *busy*, *high*, *old*, *good*, and *early*, and this gives as well a new set of adjectives used particularly more frequently with too, like *too late* and *too old*. *Too* is used mostly in the magazines and the newspaper register, while less used in the spoken, fiction and academic registers (See appendix 3.d).

The last booster being most prevalent in COCA is *much*. *Much* is almost similar to *too* in that it is used more frequently in the magazine and newspaper registers more than it is used in the spoken register (see appendix 3.e). This can be interpreted in terms of the higher frequencies of other boosters in the spoken register like *very* and *so*, which made the frequency of use of *too* and *much* become lesser. This also indicates that in spoken registers people tend to repeat *very*, *so* and *really* more than using *much* and *too*.

The adjectives most frequently collocating with *much* are *better*, *higher*, *larger*, *easier*, *smaller*, *greater*, *bigger*, *worse*, and *different*; all these adjectives are in the comparative form, except for different. This indicates that this booster comes most frequently with adjectives in the comparative form, which may explain its position being the last most frequently used booster among the list.

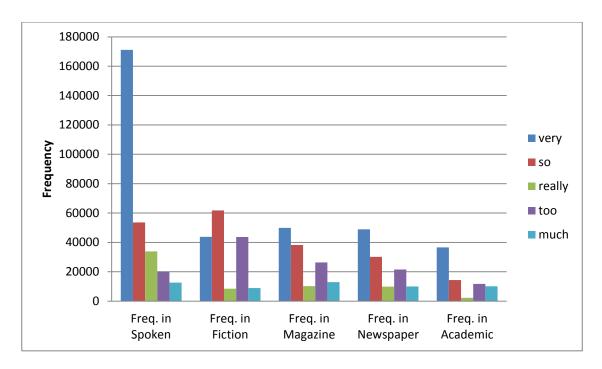


Figure 3. Frequency of the five most prevalent boosters in all registers in COCA per 520 million words

The rest of the shared amplifiers used in COCA are not used in all registers which makes the comparison restricted to certain registers only. As discussed in more detail in the previous sections, some of these amplifiers are found particularly more frequently used in certain registers like *significantly* in the academic register, and *perfectly* in the fiction register, while others extend to be more frequently used in more than one register like *highly* which is found most frequently used in all registers except for the fiction register, and *absolutely* which is used in the spoken and fiction registers only.

5. Discussion

As can be noted from the results, there is a tendency towards less intensification as we move on to more informational and formal registers; from spoken to academic (see figure 4). This finding suggests two factors; less intensification is used in written prose whereas more intensification is used in the spoken register, and the more formality increases among registers the less intensification is found. This can be interpreted by acknowledging the nature of discourses in each register. When writing, people tend to be more careful of the extent to which they intensify their statements, and it continues to escalate as the subject of the written discourse becomes more scientific, as in academic prose.

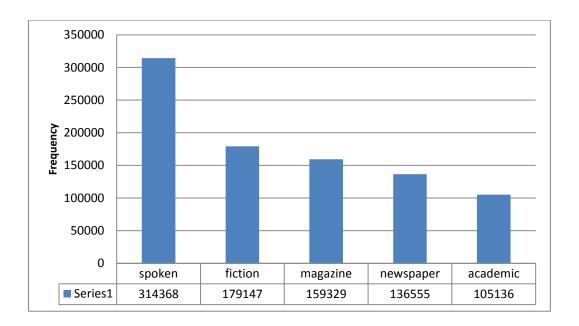


Figure 4. Total frequencies of adjective intensification for the ten most prevalent amplifiers in all registers in COCA.

It is believed that speakers choose to intensify their statements differently according to their beliefs and opinions when communicating verbally or nonverbally, and the choice they make to choose certain amplifiers is usually made "to capture the audience attention" which leads to variation in intensifiers' use and cause constant shift in meaning to certain amplifiers (Ito & Tagliamonte 2003: 257). Moreover, Lorenz (1999: 24) stated that intensification reflects individual preferences, and that "being emphatic conveys a great deal about personal speaker's or writer's point of view i.e. the importance and personal involvement they assign to quality value judgements and their own propositions. "Amplifiers prevalence in spoken discourse in American English mirrors speaker's choices since it is believed that "degree words are key elements in conveying interpersonal meanings: they are used to highlight specific parts of the speaker's message in an original, different way" (Gonzalez 2007: 221).

On the other hand, it is noted that certain registers affect the choice of amplifiers used according to the genre of the register and that certain registers can be identified according to the high frequency of use of certain amplifiers. For example, the spoken register included the highest frequencies of amplifiers used for intensifying adjectives which makes this register identifiable in terms of the high frequency of intensification found in it. Moreover, the amplifier *significantly* is used with higher frequency particularly in the academic register which indicates the nature of this register and accordingly the academic register can be identified by the high frequency of use of the

amplifier *significantly*. This can be interpreted also with regard to Biber et al. (1994) theory previously discussed in section 2.3.

The results presented a 'fixed pattern for intensification' among the first four registers, with the boosters *very*, *so*, *too*, *much*, and *really* being most prevalent in them. Compared with other research studies, like in Bäcklund (1973:290) who showed that *very* is mostly used in contemporary American English, this finding gained from this study continues to be consistent also with what has been found later about the most frequently used amplifiers in American English:

"As mentioned previously, Quirk et al. (1985:590) found *very* to be the most frequent intensifier in contemporary British English, while Labov (1984:44) suggested that *really* was one of most frequently used intensifiers in North America, an observation that was later confirmed quantitatively by Rickford et al. (2007:9) and Tagliamonte (2008:367). ... In terms of the specific intensifiers used, numerous other studies (Bolinger 1972; Stenström 1999; Stenström et al. 2002; Ito & Tagliamonte 2003; Tagliamonte & Roberts 2005; Macaulay 2006; Tagliamonte 2008; Barnfield & Buchstaller 2010; Tagliamonte 2012) found that the most frequent intensifiers are: *very*, *really*, *so*, *pretty*, *totally*, *extremely*, *absolutely*, *quite*, *and rather*. While this general pattern is consistent across many studies, the ranking of the most frequent intensifiers varies by speech community" (Reichelt & Durham 2017: 66).

However, the academic journals' register presented a different set of amplifiers, which can be interpreted in terms of the style of this register and the nature of scientific topics. The results gained from this study showed that different registers promote different amplifiers, and that the more one register is close to the other, in style and discourse mode, the more similarity between the amplifiers used is found. The lists of the most prevalent amplifiers presented in this study suggest that they reflect, to a great extent, the style and genre of each register and vice versa; the choice of amplifiers made by speakers is affected by the register and styles according to the genres of the texts. For example, although it seems axiomatic not to find swear items used as amplifiers like *fucking* and *bloody* in the academic register, the amplifiers selected for each register tell us about its style and how speakers systematically use certain amplifiers over others according to the context of use.

Similar to what has been proven by previous research on amplifiers; it is found that spoken registers include more amplifiers than other registers. However, a smaller range of amplifier use is found in the spoken register, which means that a wider variety of amplifier forms is found in written registers. Another observation that is similar to what has been by found by Biber et al. (1999: 545) is that in spoken speech, people tend to repeat a limited set of amplifiers where as in written registers more versatility in amplifier use is found but lower frequency of use.

The process of choosing to intensify certain items in certain ways with certain adjectives is not a random one and is affected greatly by speakers' choices and by different registers and contexts of use as well. Additionally, there is a change in the choice of amplifiers according to each register. In spoken discourse, it is believed that speakers usually have less time to determine which amplifier to use for intensifying their statements, thus there is a relatively smaller set of amplifiers being repeated more frequently.

Not only due to closeness in genres is the similarity in intensification patterns found, but also because of the sources of the texts within each register. In other words, the sources of which registers are compiled from affect the use of amplifiers. As mentioned earlier in (section 3.4), spoken and magazine registers presented almost the same set of amplifiers, except for two amplifiers *absolutely* and *increasingly*. Both registers are compiled of texts and discourses targeted for media and publishing. Accordingly, it can be suggested that the closer the sources and contexts of the genres of registers, the more similarity in amplifiers use is found.

It is interesting to note that the occurrence of certain amplifiers can be traced among registers, and that if a certain amplifier is not frequently used in a register, it does not appear again in the next register among the most prevalent ones. For example, *absolutely* appeared in the spoken and fiction registers with high frequency among the ten most prevalent amplifiers, and disappeared from the lists in all other registers. It can be concluded here, again, that the similarity in style and genre between registers affects the amplifiers used.

At several stages in this study the fiction register appeared to be different in certain points which make it a potential field for exploring linguistic variation. First, it alone showed colloquial or swear items used for intensification. Second, its list of the ten most frequently used amplifiers included a unique amplifier *perfectly* which is found to be used more significantly in this register and is believed to be used to convey positive meanings about the descriptive nature of the register. Added to that, unlike all registers *so* was the most prevalent amplifier used and not *very*.

By examining the adjectives mostly collocating with the five boosters most prevalent in all registers in COCA, it is shown that certain amplifiers tend to collocate with certain adjectives, since they are found most frequently used in the data analyzed.

This indicates that people tend to repeat not only certain amplifiers but also certain adjectives for intensification in certain registers.

In previous studies investigating amplifiers, it was found that *really* is used less frequently by older age groups (40s and 40s age groups) as in Murphy (2010:116), and Lorenz (2002) who showed also that *really* is a feature of the younger age groups (20s age groups). Talgiamonte (2008:388) whose study was on intensifiers in Toronto, Canada, also showed that *really* is being used by younger age groups," Here, recurrent use of the intensifier *very* is a mark of being over 50, while an overarching penchant for *really* will identify a speaker as much younger". This can interpret the very low frequency of use of *really* in the academic register since, as known, writers of academic journals are of older ages.

6. Conclusions and further research

6.1 Summary and Conclusions

This study aimed at examining the most prevalent amplifiers used by American speakers of English in a large-size corpus, the corpus of contemporary American English in order to be able to explore the amplifiers used most frequently in each register for further analysis as it would mirror the current use and choices speakers and writers make when intensifying their statements. This study looked specifically at amplifiers modifying adjectives. The results attained from the present study suggest the following conclusions:

- Amplifiers are lexical items used more frequently in COCA which indicates that speakers of American English intensify their statements by using amplifiers to boost or maximize the meaning of adjectives.
- *Very* is the most frequently used amplifier in American English since it is found most frequently used in almost all registers in COCA.
- The differences in intensification among registers are believed to be due to personal preference and different contexts. People choose different amplifiers according to the context they are in, whether they are writing academic paper, or talking to their friends.
- Registers play a major role in determining the type of amplifiers booster/maximizer used; registers are considered a factor in determining amplifiers used for intensification. Additionally, the choice of amplifiers reflects to a great extent the style

of the register and the register itself determine which amplifiers are commonly acceptable and more coherent in a particular context and genre.

- Certain registers can be identified according to the high frequency of use of certain amplifiers e.g. *significantly* in the academic register.
- Boosters outnumber maximizers in all registers, which reflects the nature of boosters as they make an open-ended set of intensifying items (Quirk et al. 1985).
- The spoken register shows higher frequencies of amplification and less diversity in amplifiers selection. On the other hand, written registers present more versatility in amplifiers used with a wider range of different amplifiers.
- Formal registers such as newspapers and academic journals display a wider range of amplifiers and less intensification, and informal registers such as spoken and fiction registers make more use of informal amplifiers with high frequency of amplification.
- The adjectives most collocating with boosters and maximizers are found to be different according to each amplifier, and according to certain syntactic and semantic restrictions. This indicates that certain amplifiers are mostly used with certain adjectives to reveal certain meanings, and that people choose to intensify their statements by using certain amplifiers with certain adjectives.
- On the whole, the most frequently used patterns of intensification are similar to what has been found in previous studies on intensifier use in that the most common intensifiers (*very*, *really*, *so*) are being used most frequently.

6.2 Further research

The present quantitative study points to important questions to be explored in more qualitative sociolinguistic research. For example, what other factors affect the use of amplifiers other than register variation? It would be very fruitful also to build on the results gained from this study and explore more qualitatively about the sixteen amplifiers that are found to be most frequently used in COCA among all registers, and to investigate more about the differences between subgenres as well (see section 4.7). In this way, the study could be carried out by several ways e.g. to investigate the diachronic change in the use of these amplifiers, or to explore their collocations and contexts of use. Another way of using the results gained from the present study is by following the same criteria followed in this study but for investigating downtoners or

hedges. This would enable the researcher to compare the extent to which people either intensify or hedge their statements more in the corpus as a whole and with regard to different registers as well. Another way of studying intensification is to investigate the use of other patterns of intensification i.e. using amplifiers with different syntactic constructions other than those occurring with adjectival heads. This would enable us to study different syntactic constructions and consequently explore the pragmatic implications of different patterns of intensification.

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Appendix 1

This table is generated to extract the most frequent amplifiers in each register in COCA. At this stage, the frequencies are not the focus, but rather the amplifiers themselves. Out of this table the ten most frequently used amplifiers in each register is set for analysis.

Table 1. Forms with the potential to function as amplifiers in COCA in all registers.

	Amplifiers in Spoken register	Amplifiers in Fiction register	Amplifiers in Magazines register	Amplifiers in Newspapers register	Amplifiers in Academic register
1	SO	so	SO	SO	SO
2	well	too	too	very	very
3	very	well	very	too	well
4	right	right	well	really	too
5	really	very	really	well	much
6	too	really	much	much	significantly
7	much	much	completely	largely	highly
8	absolutely	completely	highly	increasingly	really
9	completely	perfectly	fully	highly	increasingly
10	totally	entirely	increasingly	completely	largely
11	extremely	absolutely	largely	ultimately	fully
12	ultimately	deeply	extremely	fully	ultimately
13	fully	fully	ultimately	widely	strongly
14	highly	totally	widely	absolutely	widely
15	strongly	heavily	entirely	extremely	completely
16	incredibly	fucking	totally	heavily	entirely
17	deeply	extremely	deeply	totally	extremely
18	entirely	highly	perfectly	deeply	right
19	badly	wildly	absolutely	entirely	greatly
20	perfectly	altogether	heavily	strongly	deeply
21	largely	utterly	significantly	significantly	heavily
22	increasingly	terribly	dramatically	dramatically	dramatically
23	heavily	increasingly	strongly	perfectly	considerably
24	terribly	thoroughly	thoroughly	badly	totally
25	dramatically	violently	greatly	greatly	altogether
26	widely	incredibly	badly	incredibly	severely
27	significantly	ultimately	altogether	thoroughly	perfectly
28	overwhelmingly	fiercely	incredibly	altogether	absolutely
29	extraordinarily	strongly	remarkably	considerably	thoroughly
30	greatly	bloody	considerably	severely	extensively

Appendix 2

The following tables are created to account for the percentage of boosters and maximizers, respectively, according to the total frequencies of the ten most frequent amplifiers in each register.

(a)

Boosters in Spoken]	Freq./1 m.w
very		171072
so		53626
really		33901
too		20087
much		12652
highly		2577
Total	293915 Overall freq.	314368
%		93.4

(b)

Maximizers in Spoken		Freq./1 m.w
absolutely		7449
extremely		5243
totally		4042
completely		3719
Total 20453	Overall freq.	314368
%		6.5

(c)

Boosters in Fiction			Freq	ı./1 m.w
so				61745
very				43820
too				43687
much				8920
really				8449
Total	166621	Overall freq.	179147	
%			93	

(d)

Maximizers in Fiction			Freq./1 m.w
completely			3586
perfectly			3034
entirely			2121
totally			2043
absolutely			1742
Total	12526	Overall Freq.	179147
%			6.9

(e)

Boosters in Magazines			Freq./1 m.w
very			49931
so			38212
too			26339
much			12894
really			10262
highly			6439
increasingly			3991
Total	148068	Overall freq.	159329
%			92.93

(f)

Maximizers in magazines			Freq./1 m.w
extremely			5443
completely			3477
totally			2341
Total	11261	Overall freq.	159329
%			7.06

(g)

Boosters in Newspaper		Freq./1 m.w
very		48864
so		30149
too		21589
much		10040
really		9904
highly		4416
increasingly		3595
largely		2054
Total	130611 Overall freq.	136555
%		95.64

(h)

Maximizers in Newspaper			Freq./ m.w
extremely			3803
completely			2141
Total 5	5944	Overall freq.	136555
%			4.35

(i)

Boosters in Academic	Freq./103.4 m.w
very	36635
so	14391
too	11714
highly	11560
much	10098
increasingly	5905
largely	3261
really	2284
<i>Total</i> 95848	Overall freq. 105136
%	91.16

(j)

Maximizers in Academic		Freq./1 m.w
significantly		6908
fully		2380
Total 928	8 Overall freq.	105136
%		8.83

(K)

Boosters in COCA			Freq./520 m.w
very			368247
SO SO			198383
too			123416
really			64800
much			54604
highly			26408
increasingly			15694
largely			8316
Total	859868	Overall freq	. 957166
%			89.83

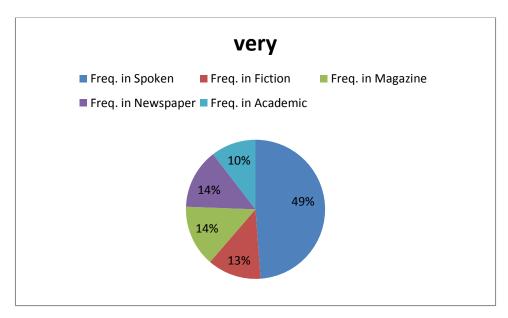
(L)

Maximizers in COCA	Freq./520 m.w
extremely	22250
completely	15455
absolutely	13438
totally	11577
entirely	10265
perfectly	9129
significantly	8457
fully	6727
Total	97298 Overall freq. 957166
%	10.16

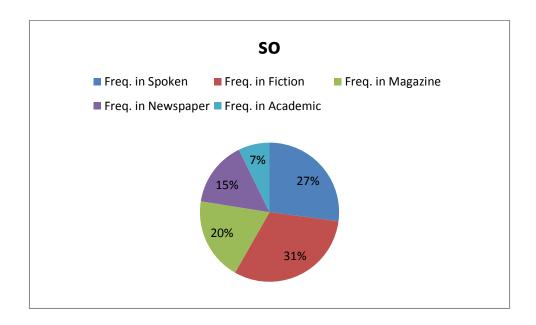
Appendix 3

The following figures illustrate the percentages of use of each amplifier in each registers for the five most frequently used amplifiers in COCA. The percentages shown in the following figures are approximate, exact percentages are found in the tables in the results section.

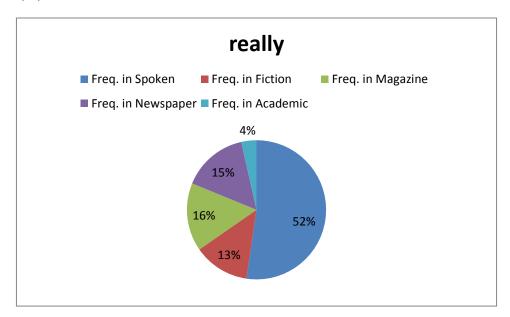
(a)



(b)



(c)



(d)

