Trends and Recent Change in the Syntactic Distribution of Degree Modifiers: Implications for a Usage-based Theory of Word Classes

Turo Vartiainen

University of Helsinki, Finland

Abstract

This paper examines the syntactic distribution of degree modifiers in both spoken and written English. The results of the empirical case studies show that degree modifiers, both amplifiers (e.g., *very*, *extremely*) and downtoners (e.g., *quite*, *pretty*), are generally more often used in predication than in attribution, a result that is in line with earlier observations of the distribution of individual modifiers. This synchronic trend is also evident in diachronic developments: corpus data show that the recent frequency increase of intensifying *this* and *that* has largely taken place in predication, and the adjectivization of a class of *-ed* participles (e.g., *interested*, *scared*) can also be connected to their frequent co-occurrence with degree modifiers after BE. Finally, the connection between degree modifiers and predicative usage has recently become stronger for a subset of modifiers (e.g., *so*, *this*, *that*) due to the decline of the "Big Mess" construction (e.g., *so good an idea*). From a theoretical perspective, this paper promotes a dynamic, usage-based model of word classes where frequency of use plays a role in categorization. The data investigated in the article are mainly discussed from the perspective of usage-based Construction Grammar, and the theoretical implications of the findings are examined both in light of a more traditional Construction Grammar network model of language and some recent ideas of overlapping word classes.

Keywords

degree modifier, word class, attributive adjective phrase, predicative adjective phrase, *this/that*, *-ed* participle, Big Mess construction

1. Introduction

In many linguistic frameworks, descriptions of word classes are written from the perspective of the distributional potential of the category members (e.g., Aarts 2004, 2007a). For instance, discussions of adjectives tend to focus on their potential to be used both in predication and in attribution as well as in various kinds of grading constructions (e.g., Quirk, Greenbaum, Leech & Svartvik 1985:402-403; Hollmann 2012:672-675). These grading constructions include the comparative and superlative constructions as well as degree constructions, where the scalar meaning inherent in many adjectives is manipulated with amplifiers like *very* and *extremely* or downtoners like *quite* and *rather* (Quirk, Greenbaum, Leech & Svartvik 1985:589-590). While this approach to word class categorization is common, the focus on the potential distribution of the category members is not without problems. First, it largely ignores semantic restrictions that may significantly constrain the use of individual words in the constructions that are considered indicative of category membership. Second, by focusing on the words' usage potential, this perspective overlooks evidence from actual language use that might enrich the description of word classes with probabilistic, frequency-based information. In this paper, I examine one such tendency, the uneven distribution of degree modifiers across attributive and predicative functions, and consider the theoretical repercussions of this distributional trend to word class theory, particularly in usage-based Construction Grammar (CxG).

Semantic restrictions concerning the distribution of degree modifiers have been investigated in Paradis (2001), for example, who makes a distinction between scalar modifiers (e.g., *very*, *extremely*) and totality modifiers (e.g., *completely*, *utterly*). Paradis points out that the combinatory potential of degree modifiers depends in part on the schematic boundedness expressed by the adjective (2001:50). For instance, a "limit adjective" like *dead* readily combines with totality modifiers (e.g., *absolutely dead*, *completely dead*), but it is much less common with scalar modifiers (e.g., *extremely dead*, *somewhat dead*). Some other adjectives, by contrast, may be freely used with both scalar and totality modifiers according to the way in which the degree meaning is construed. For example, a particularly tasty dish can be described either as *absolutely*, *perfectly*, or *utterly delicious* (totality reading) or as *very* or *extremely delicious* (scalar reading).

In addition to these kinds of semantic restrictions, there is corpus-based evidence to suggest that the distribution of degree modifiers may in fact be even more constrained than has typically been discussed in the literature. For instance, in Vartiainen (2013), it was shown that when an attributive adjective is intensified with *very* (e.g., *a very interesting story*), the noun phrase (NP) is much more often indefinite than definite. The exact proportion of indefinite NPs in the data varied from 88.7 percent to 98.7 percent, depending on the adjective, showing that although in principle there is nothing that precludes *very* from being used in phrases like *the very good idea*, such phrases are extremely rare in actual use. In a follow-up study (Vartiainen 2016a), it was shown that indefinite NPs that are modified in degree are used more frequently as a subject or object complement than when the adjective is not modified (50.2 percent versus 37.6 percent, respectively). This result suggests that the use of a degree modifier not only correlates

with the definiteness of the NP in which it is used but also (although more weakly) with the syntactic role of the modified NP.

Earlier studies have also found that degree modifiers may not be equally distributed across attributive and predicative adjective phrases (APs). In a questionnaire study, Bauer & Bauer (2002:248-252) observed that schoolchildren in New Zealand used modifiers like *really* and *too* more often in predication than in attribution, while Ito and Tagliamonte (2003) found a similar tendency for *very* and *really* in an apparent-time study of speakers of York English. Following Mustanoja (1960), who showed that the spread to the predicative function was the last stage in the development of *very* from an adjective to an intensifier (1960:326-327), Ito and Tagliamonte hypothesized that the large proportion of modified predicative APs in their data might be indicative of an even later stage in the development (2003:271). The relevance of the predicative function to grammaticalization was also discussed by Méndez-Naya (2003), who proposed that the grammaticalization of the Old English intensifier *swīþe* was facilitated by its use in predication, and more recently, Vartiainen (2016b) suggested that the reason for why some *-ed* participles (e.g., *annoyed*, *surprised*) are in Present-Day English modified with *very* instead of *much*, i.e., with a degree modifier associated with adjectives, might be explained by their frequent use in predication.

Although the uneven distribution of degree modifiers across attributive and predicative functions has been observed in many studies, the evidence so far is relatively scattered, and there have been no systematic attempts to establish the full scale of the observed phenomenon. Furthermore, the role of the predicative function in the development of degree modifiers has not in itself been the focus of diachronic research, even though several studies have remarked on its potential relevance. Finally, the theoretical implications of the observed tendency have remained

largely unexplored. My goal in this article is to work toward filling these gaps in research by investigating a large number of degree modifiers, both amplifiers and downtoners, in corpora of both Present-Day British English and Late Modern American English. My first goal is to establish the scope of the distributional trend in spoken Present-Day English in order to put the findings made in previous research into better perspective. My second goal is to provide further evidence for the importance of the predicative function in the diachronic development of degree modifiers and changing modification patterns. I will study this diachronic dimension by investigating degree modifiers that have recently become more frequent in English (*this* and *that*) as well as modifiers whose prenominal use has decreased substantially in the past two centuries. These modifiers include words like *too* and *so*, which are prenominally used in the so-called "Big Mess" construction, where the modified AP precedes the indefinite article, as in *too convenient an explanation*, *so great a victory* (see e.g., Huddleston & Pullum 2002:435; Van de Velde 2019; the term "Big Mess" was coined by Berman 1974). Finally, I will study a group of words that has become more adjective-like in terms of its degree modification patterns since the mid-nineteenth century: adjectival *-ed* participles of mental verbs, such as *interested* and *embarrassed* (see Denison 1998; Vartiainen 2016b). These participles used to be modified with *(very) much* in earlier stages of English, but this pattern has recently given way to modification with *very*. Here, I will evaluate the tentative suggestion made in Vartiainen (2016b) that the change from *(very) much* to *very*, which can be interpreted as partial category change of the *-ed* participles from verb to adjective, may in part have been supported by the tendency of these forms to be used in predication (or after BE), that is, in a context where degree modifiers are particularly frequent. As this suggestion was based on only a very limited dataset in the original study, I will now investigate the distribution of twenty *-ed* participles, which allows us to reach

more definitive conclusions about the change. In sum, the case studies examine the use of degree modifiers in both synchrony and diachrony, and taken together, their results will give us information that will be relevant to the theoretical discussion of word classes.

From a theoretical perspective, I will argue that the data examined have important implications for word class theory, particularly for usage-based approaches to grammar where our mental representations of individual words and more abstract constructions are assumed to arise from concrete usage experiences (e.g., Bybee 2010:14). Although the role of word classes in Construction Grammar (CxG) is still debated (see section 2; Croft 2016), some scholars working in the CxG framework have suggested that word classes in CxG could be regarded as generalizations (schemas) that arise from language users' repeated usage experiences of different kinds of constructions (e.g., Hilpert 2014:69). This is where the distributional trend discussed in this paper becomes theoretically relevant: if one subscribes to a usage-based, constructionist approach to language, it would make sense that the lower-level constructions that contribute to the abstract word class are not on an equal footing; rather, high-frequency constructions should enjoy a privileged status in categorization. When it comes to degree modifiers and adjectives, for example, it could be argued that our conceptualization of central adjectives depends more on their use with degree modifiers (e.g., *very nice*) than with indefinite pronouns (e.g., *anything nice*) simply because prototypical adjectives like *nice* are frequently modified in degree, while they are more rarely used to delimit the reference of indefinite pronouns. Similarly, if degree modifiers are more often used in predicative APs than in attributive APs, this could be relevant to how the class of degree modifiers is organized on a schematic level.

I will continue in section 2 by briefly discussing some ideas concerning word class categorization and gradient categories that have been brought up in recent literature. This

discussion is intended to provide some background to the empirical part of the article, which focuses on the distribution and diachronic change of a large number of degree modifiers; I return to these ideas in the conclusion of this paper. The case studies are presented in sections 3 and 4. Section 3 starts by discussing the results of studies from spoken Present-Day British English. The data for this section come from the Spoken BNC2014 corpus (Love, Dembry, Hardie, Brezina & McEnery 2017), and the case studies examine both the distribution of degree modifiers in attributive and predicative adjective phrases and the general likelihood of individual adjectives to be modified in degree in attribution and predication. The results of this case study serve as a baseline for the discussion of modified adjective phrases in the following sections. Section 4 focuses on historical studies, which are all based on data from the Corpus of Historical American English (COHA; Davies 2010-). This section examines the recent development of *this* and *that* as intensifiers and investigates the declining frequency of the Big Mess construction. The final case study in section 4 examines the use of degree modifiers with adjectival *-ed* participles and revisits the suggestion in Vartiainen (2016b), according to which the skewed distribution of *-ed* participles might have played a role in the change of their modification patterns. Section 5 concludes the paper with a discussion of the theoretical significance of the empirical findings, especially from the perspective of word class theory, and offers some suggestions for future research.

2. Theoretical Background: Distributional Analysis in Word Class Categorization

Word classes are the basic units of analysis in most linguistic frameworks. The descriptions of word classes typically focus on the meaning of the category members, their morphological properties and syntactic distribution. In a language like English, which has relatively little

morphological marking, distributional criteria are usually given great prominence in word class theory. For example, in their description of English adjectives, Huddleston and Pullum (2002:528) argue that adjectives have three defining properties: (i) they can be used in attributive (e.g., *a nice idea*), predicative (*this is nice*), and postpositive functions (*something nice*); (ii) they are semantically gradable and can therefore be used in intensifying and grading constructions (e.g., *extremely nice*; *nicer*); and (iii), in addition to degree modifiers, they are also modified by other kinds of adverbs (e.g., *surprisingly interesting*).

On closer inspection, it becomes obvious that these criteria only describe the central members of the category. So, while gradable adjectives like *nice*, *beautiful*, and *great* conform to this description, there are many other words that are typically analyzed as adjectives but which only behave in part according to the distributional potential described in Huddleston and Pullum (2002) and other reference grammars of English. For instance, it is well-known that some adjectives are extremely rarely used in attribution (the so-called *a*-adjectives, such as *asleep*, *abreast*; see e.g., Schlüter 2008), while others do not appear in predication (e.g., *mere*, *utter*). Furthermore, many adjectives are semantically non-gradable, and they are therefore primarily used as classifiers (see, e.g., Paradis 2001:51).

The fact that some category members do not conform to all of the criteria that contribute to the formation of a word class has in recent research been taken as proof of the fact that word classes exhibit category-internal, or "subsective," gradience (Aarts 2004, Aarts 2007a:206; Traugott & Trousdale 2010). Indeed, if word classes are conceptualized as being defined by a set of constructions (either in a CxG or a non-CxG sense), and some category members are used in all of them while others are not, it seems obvious that those members which are used in all of the category-defining constructions are better representatives, or more prototypical members, of the

class than others. When conceptualized like this, it seems easy enough to study the degree of membership in a word class. By counting the number of the constitutive constructions in which the words are used, it is possible to rank each member of the word class on a scale (e.g., Aarts 2007b:434).

In all its simplicity, the "count and rank" approach to word classes has received a fair share of criticism. It was discussed, for example, by Aarts and Croft in their well-known debate in *Studies of Language* in 2007. In the debate, Croft (2007) argued that the approach espoused by Aarts (2007a) is flawed because there is no principled way of choosing the constructions that define a word class, nor is it possible to rank these constructions according to their relative importance (Croft 2007:413). For instance, if we consider a word like *mere* to be an adjective, we must place special prominence on the Attributive Adjective construction in the formation of the adjective class, as *mere* does not seem to be an adjective by any other criterion. Likewise, in order to argue that a word like *asleep* is an adjective, it is necessary to regard the word's occurrence in the Predicate Adjective construction as a sufficient condition for class inclusion.[1]

In more recent work, Croft (2016:390) suggests that instead of assuming the existence of abstract word classes like nouns and adjectives, which are defined in constructional terms, we should categorize words at a lower level of abstraction. Croft argues that in place of adjectives, for example, we should have four word classes: attributive adjectives, predicate adjectives, inflectional adjectives, and gradable adjectives. Croft (2016:390) points out that these classes are not intended to be sub-classes of a more abstract adjective class but rather "a set of largely overlapping word classes that have in common a substantial proportion of property concept words."

Croft's (2016) suggestion shifts the focus from abstract categories, where the category members follow a prototype or exemplar-based organization, to less abstract, construction-specific classes. Although this position is also open to criticism (I briefly discuss it in more detail in section 5), Croft's (2016) ideas are certainly thought-provoking. Instead of concentrating on an abstract schema that would at first sight have little to do with language use, Croft (2016) focuses on more concrete categories, and in this way brings the level of analysis closer to actual language use. Moreover, instead of arguing for an abstract word class that should also include probabilistic information (such as the trends discussed in section 1), this information would in Croft's model be located at a lower (more concrete) level of grammatical organization.

These questions are very topical to the theory of word classes in CxG, and degree modifiers provide particularly interesting data to bear on the theoretical discussion regardless of whether one follows a more traditional view of word classes or accepts Croft's (2007, 2016) proposals (see also Vartiainen 2016c:197): in addition to forming a category of their own, degree modifiers contribute in important ways to the formation of adjective and adverb classes. Furthermore, due to the fact that they are used in a large number of constructions, they provide a good starting point for a frequency-based assessment of the relevance of different constructions in word class formation.

3. Trends in the Distribution of Degree Modifiers in the Spoken BNC2014

I start the review of the empirical data by examining the distribution of seventeen degree modifiers in the Spoken BNC2014 (see Love, Hawtin & Hardie 2018 for a description of the corpus). The items studied include both upward-scaling modifiers ("amplifiers") and downward-scaling ones ("downtoners"), which were selected on the basis of lists provided in Quirk,

Greenbaum, Leech, and Svartvik (1985:445) as well as their relatively high frequency in the corpus.[2] The amplifiers studied include *amazingly*, *deeply*, *entirely*, *extremely*, *highly*, *incredibly*, *perfectly*, *terribly*, *totally*, and *very*. The downtoners include *almost*, *fairly*, *nearly*, *pretty*, *quite*, *rather*, and *relatively*. The results obtained from the corpus will function as a baseline against which the data from written corpora of English will be analyzed in section 4.

To ensure high recall, all data were retrieved from the corpus by using lexical queries. After performing the queries, adverbial heads were excluded from the results and the data were checked to ensure that they denoted the intended (amplifying or downtoning) meaning.[3] The data were consequently divided into six categories, which are exemplified in (1)-(6): predicative APs with BE (1), predicative APs with other verbs (e.g., SEEM, BECOME, SOUND) (2), attributive APs (3), fragments (i.e., non-verbal structures) (4), object complements (5), and postpositive APs (6).

(1) […] mm I know I will I know it will be *extremely useful* […] (SNLY 222)

(2) […] he's completely incapable of saying a word that doesn't sound *deeply sarcastic* […] (SMGY 202)

(3) […] yes I don't think Monsters Inc is *a very funny film* though […] (S49H 101)

(4) I suppose yeah yes and in the Middle East yeah. *Incredibly boring*, it's all contracts isn't it? (SPG4 2101)

(5) […] yeah I found it *totally boring* […] (S35K 1771)

(6) […] it's usually done by someone *extremely pedantic* […] (SWLS 49)

The predicative categories that are represented in (1) and (2) were subsequently merged into a single category, as the frequency of copular verbs other than BE was very low in the data. Figure

1 shows the distribution of the ten amplifiers studied.[3] The absolute figures that are visualized in Figures 1-5 are given in Appendix.

[FIGURE 1 HERE]

Figure 1 shows that most modified adjective phrases in the data appear in predication: the proportion of predicative complements ranges from 52 percent (*amazingly*) to 76 percent (*terribly*). *Amazingly* is the only amplifier in the data with a relatively even distribution of attributives (*N*=12) and predicatives (*N*=16); however, the raw frequencies are in this case very low, which casts some doubt on the validity of the result. Considering that many of the fragmentary uses like (3) could also be analyzed as predicative complements with an omitted copula, the data in Figure 1 provide robust support to the findings in previous research according to which degree modifiers are more often used in predication than in attribution.

The downtoners studied show similar results to the amplifier data, although the tendency seen in Figure 1 is not quite as convincing for all of them. In this dataset (Figure 2), four of the downtoners (*quite*, *pretty*, *almost*, *nearly*) show a clear trend of being used with predicative adjectives: the proportion of predicative complements ranges from 71 percent (*nearly*) to 89 percent (*quite*). *Fairly* has the lowest proportion of predicative complements in the data (57 percent), followed by *relatively* (58 percent), and *rather* (61 percent). The proportion of modified attributive APs, on the other hand, varies from 30 percent (*rather*) to just 1 percent (*quite*).

[FIGURE 2 HERE]

Although the data in Figures 1 and 2 show some variation in the distribution of individual modifiers, they clearly point to a general trend that concerns a large number of degree modifiers in English: APs that are modified in degree are typically used as predicative complements. However, considering that my data are composed of spontaneous conversations, it is possible that lexical NPs occur less frequently in these kinds of data than in some other spoken and, in particular, written registers. If this were the case, the data could be skewed because the number of attributive APs is expected to correlate with the frequency of lexical NPs in general.

To resolve this question, I studied the distribution of ten adjectives in the Spoken BNC2014, comparing attributive uses to predicative uses and establishing the proportion of intensified APs in both functions. All the adjectives studied are semantically gradable, and they rank highly on a frequency list of adjectives that is based on the original British National Corpus (Leech, Rayson & Wilson 2001). Although the selection of these adjectives was not entirely random, it was necessary to focus on high-frequency items because they provide a more solid basis for the statistical analysis of the data. In this case, a random 200-token sample of each adjective was first collected by using a lexical query, after which the data were sorted and categorized manually. As the intention was to compare attributive uses to predicative ones, all irrelevant tokens (e.g., adverbials, fragments, ambiguous cases) were removed from the final results.

[TABLE 1 HERE]

The data in Table 1 provide further support for the result that predicative adjectives are particularly associated with degree modifiers. There is substantial variation in the proportion of intensified APs according to the adjective studied, but the overall result is clear: each of the adjectives is more likely to be intensified in predication than in attribution. The difference in the proportion of modified attributive and predicative APs is the lowest for *great* (4 percent of the attributive and 12 percent of the predicative APs are modified in degree), while it is the largest for *small* (18 percent of the attributive and 74 percent of the predicative uses are modified). The difference between the modified and unmodified adjectives in attribution and predication is statistically highly significant for eight of the adjectives studied (the *p*-values range from 0.0001 to 0.0007; Fisher's exact test, two-tailed). The two outliers are *great* ($p < 0.14$) and *important* ($p < 0.10$); however, even for these two adjectives the same tendency can be observed, and the *p*-values are reasonably small even if they fall short of statistical significance.

To summarize, the data from the Spoken BNC2014 yield two results. First, degree modifiers are not distributed equally across attributive and predicative adjective phrases, a result that is well in line with previous research carried out on individual modifiers. Although the results show some variation in the exact proportion of predicative uses, all seventeen modifiers studied were found to be more often used in predication than in attribution. Second, by studying the modification patterns of individual adjectives, we were able to examine this phenomenon from another perspective and to confirm that the result cannot be explained by the potential rarity of lexical NPs in spoken data. From a theoretical perspective, the results could be taken to suggest that predicative APs can be considered more important for the formation of the degree modifier class than attributive APs (or, to use Croft's terminology, the classes of gradable

adjectives and degree modifiers overlap with predicate adjectives to a greater extent than they do with attributive adjectives).

4. Historical Trends in the Use of Intensifiers: Evidence from COHA

This section investigates the connection between predicative APs and degree modifiers from a historical perspective. The data come from *The Corpus of Historical American English* (COHA; Davies 2010-), which is a 406-million-word corpus of American English from 1810 to 2009. The large size of the corpus allows for the examination of the kinds of gradual shifts that we are interested in and brings new evidence for us to consider when assessing the relevance of predicative APs to the distribution and development of degree modifiers. Two case studies will be presented: section 4.1 focuses on the development of the intensifying uses of *this* and *that*. This section also includes a more general discussion of the decline of the Big Mess construction, which is the construction where *this* and *that* are used prenominally (e.g. *this big a deal, that good a singer*). Section 4.2, on the other hand, examines the distribution of twenty adjectival *-ed* participles and discusses their gradual category change in relation to the general trend established in the other case studies.

4.1. *This*, *that*, and the Big Mess Construction

The demonstrative pronouns *this* and *that* were already used in an intensifying function in Late Middle English (Calle-Martín 2019). After falling out of general use in the Early Modern period, they started to become more frequent again in the nineteenth century, with a more substantial frequency increase in the twentieth century. Because of their recent frequency increase, *this* and *that* provide us with a good opportunity to study the linguistic contexts in which the intensifying

uses have spread, and to see whether the general connection between degree modifiers and predicative adjectives that was observed in section 3 has played a role in the development of the intensifying uses of *this* and *that*. This case study also fills a small gap in previous research (Calle-Martín 2019), where the items were not studied from the perspective of their distribution across attributive and predicative uses.

The data for this section are taken from the Corpus of Historical American English (COHA). Because of the large size of the corpus (circa 405 million words) and the high frequency of *this* and *that* in general (there are 1.7 million tokens of *this* and 4.7 million tokens of *that* in the corpus), it was not feasible to study the data in its entirety. Consequently, I decided to devise a query that would find instances of intensifying *this* and *that* with a reasonably high precision even at the cost of less-than-perfect recall.[5]

I first searched the corpus for sentence-final predicative APs preceded by *this* and *that* ("*this/that* ADJ" followed by a sentence-final punctuation mark). This query was very effective in terms of precision, but it obviously did not retrieve all the predicative uses of *this* and *that* in the corpus. My second corpus query targeted the prenominal uses of the intensifying uses of *this* and *that*. This query made use of the peculiar structure of the construction in which *this* and *that* are used prenominally: the Big Mess construction ("*this*/*that* ADJ *a*/*an*"). It should be noted that because this query is not restricted to sentence-final uses, the entire dataset collected with these two queries is in fact skewed in favor of prenominal uses. However, this is not a serious fault; the purpose is to examine whether the emerging degree uses of *this* and *that* are particularly connected to predicative APs. By having a dataset that is skewed against this hypothesis, we can assume that any results that we may find in support of it would only be more convincing if the predicative tokens were supplemented with other than sentence-final uses.

Examples (7)-(9) illustrate the kinds of constructs collected from COHA.

(7) But we don't have *this good a time* every day. (COHA, Fiction, 1955)

(8) Is he *that good a shot*? (COHA, Fiction, 1931)

(9) Got to where I couldn't keep my eyes open, I was *that sleepy*. (COHA, Fiction, 1903)

Corpus data show that the frequency of intensifying *that* starts to increase earlier than *this*, and it remains the more frequent of the two items in Present-Day English. The earliest examples of intensifying *that* in my data come from a book by Robert Lowell called *The new priest in Conception Bay* (1858). Lowell uses *that* in an intensifying function three times, once in the Big Mess construction and twice in predication (10)-(12).

(10) When ye're done praching, ye'll be the better of sthretching yer legs a bit, in case ye'd be forgettin' what to do wid thim, yer tongue is *that quick*. (COHA, Fiction, 1858)

(11) "I think he's gittin' someway tired," said he, "his feet's *that heavy*." (COHA, Fiction, 1858)

(12) Is it *that bad a place* for the schoolmasters, then? (COHA, Fiction, 1858)

Considering that the next token of intensifying *that* in the corpus comes from 1883, Lowell seems to have been an early user of *that* as an intensifier. Indeed, the data suggest that the frequency of intensifying *that* only took off in the early twentieth century in American English.[6]

Interestingly for our general hypothesis, the diffusion of the form did not proceed at an equal rate across attributive and predicative functions; rather, as shown in Figure 3, both the majority of the early uses of intensifying *that* and its subsequent frequency increase are connected to predicative adjectives. Furthermore, after the 1970s, it seems that the increase in the frequency of *that* has continued only in predication: in the last two periods studied, the frequency of predicative uses has increased from 2.70 to 4.36 tokens per one million words, while the frequency of prenominal uses has remained practically even in the corpus (1.06 versus 1.12). Moreover, it should be noted that the increased frequency of prenominal constructions from 1950-1969 to 1970-1989 can in large part be explained by the high frequency of a single construct, *that big a deal*. Unattested in the data before the 1970s, this construct accounts for 23.4 percent (*N*=27) of all prenominal tokens of intensifying *that* in the data from 1970 to 2009.

[FIGURE 3 HERE]

The earliest intensifying use of *this* in the data dates to 1913 (13). However, the form is very rare in my data, and the next tokens are from the 1930s. These also include the first prenominal token from 1937 (14).

(13) If I were your kind, and things were different, I'd be crazy about you – crazy! But I'm not your kind – and things are different. "He drew a step nearer still to her in his intentness." *They're this different*. (COHA, Fiction, 1913).

(14) These horses mighty lucky to have *this good a place* to stay. (COHA, Fiction, 1937)

Figure 4 shows that, similarly to intensifying *that*, the frequency of intensifying *this* has primarily increased in predication in the course of the twentieth century. This trend is particularly evident in the latter part of the century: the frequency of *this* as an intensifier has increased from 0.19 to 1.15 tokens per million words in predication from 1950-69 to 1990-2009, while there is almost no change prenominally (0.12 per million words in 1950-69; 0.14 per million words in 1990-2009).

[FIGURE 4 HERE]

In sum, the data from COHA show interesting results about the history of intensifying *this* and *that* in relation to our previous results. We can see that predicative contexts have been particularly important in the diffusion of the modifier use: not only are *this* and *that* used in a modifying function more frequently in predication than in attribution in the linguistic contexts studied, but most of the frequency increase of the forms is due to an increase seen in predication. Considering that the data are somewhat skewed in favor of prenominal uses in the first place, this looks like a robust result.

It must be admitted, however, that the data for the prenominal uses of *this* and *that* are not perfectly comparable to the data obtained from the Spoken BNC2014. As discussed, the construction in which the intensifying *this* and *that* are used prenominally is not in fact the Attributive Adjective construction but what is commonly referred to as the "Big Mess" construction, where the modifier AP precedes the indefinite article (see Van de Velde 2019:2 for a detailed survey of earlier research on this construction). Furthermore, it seems that the

modifiers used in the Big Mess construction typically contain an implicit point of comparison or contrast that we do not generally find in the degree modifiers that are used in the Attributive Adjective construction. From our perspective, however, it is particularly important to note that any changes in the frequency of the Big Mess construction may have had an effect on the results acquired on *this* and *that* above. In other words, if the frequency of the Big Mess construction is decreasing more generally, this could in part explain the trends seen in Figures 3 and 4.

To investigate this question in more detail, I examined the use of four other degree words that are conventionally used in the construction: *so*, *as*, *too*, and *how*, exemplified in (15)-(18).

(15) We have known females, who venerated the object of their affection so completely, as to mourn sincerely their own unworthiness of, and regard themselves as a simple gift of God to *so good a man*. (COHA, Non-fiction, 1840)

(16) The story concerns the son of the hero and heroine of The Little World of Old; but who that is interested in a mother takes *as keen an interest* in her son? (COHA, Magazines, 1901)

(17) The Sailmaker was not to be interrupted; he had got *too valuable a prey* in his clutches to admit a rival. (COHA, Fiction, 1850)

(18) The town is swarming with wild beasts! *How terrible a spectacle*! — *how dangerous a peculiarity*! (COHA, Fiction, 1880)

The corpus query targeted all adjectives that were preceded by one of the four modifiers and followed by an indefinite article (*a* or *an*). The resulting data were checked manually and irrelevant tokens removed from the results. Figure 5 presents a stacked graph of the frequency of

the construction from 1810 to 2009. The results are clear: the construction has steadily decreased in frequency in written American English for the entire period studied. The frequency change of *so* is particularly striking. In the first period studied (1810-1829), the frequency of *so* is as high as 125 tokens per one million words. In the most recent period (1990-2009), by contrast, its frequency has dropped down to five tokens per million words.

[FIGURE 5 HERE]

The results presented in Figure 5 complicate the picture of the development of *this* and *that* somewhat. It is obvious that if the frequency of the entire Big Mess construction is decreasing, this would affect all the individual modifiers that are used in it. Nevertheless, as *this* and *that* cannot be used as modifiers in the Attributive Adjective construction in Present-Day English, we may at least observe that the association between the Predicate Adjective construction and these two degree words has become proportionally stronger in recent history.

4.2. Gradual Category Change from the Perspective of Changing Intensification Patterns: The Case of Adjectival *-ed* Participles

The final case study in this paper focuses on a change where *-ed* participles of mental verbs, such as *frightened*, *embarrassed*, and *excited*, started to be modified in degree with *very* instead of (*very*) *much*. The change began in the mid-nineteenth century, and it has been studied by Denison (1998:230) with data from the ARCHER corpus, and more recently by Vartiainen (2016b) with data from COHA. Both Denison and Vartiainen interpret the change from *much* to *very* as reflecting a gradual shift from more verb-like categorization of the participles to a more

adjective-like categorization. In Vartiainen (2016b), at least some of the *-ed* participles of mental verbs were more likely to be modified in degree in predication than in attribution. However, this observation was based on data from only three participles, which left room for doubt. Nevertheless, Vartiainen (2016b) made the tentative suggestion that if degree modifiers are particularly often used in predication, this might be relevant to the adjectivization of the *-ed* participles: as most of the *-ed* participles are predominantly used in predication, they might be used proportionally more often with degree modifiers than adjectives with a more even distribution across attributive and predicative functions. Consequently, language users might have started to pay more attention to the precise ways in which degree is expressed with these words, and this could have triggered the change from a verbal modification pattern (*much*) to an adjectival one (*very*). Indeed, as shown in Vartiainen (2016b), most of the *-ed* participles have not changed in other ways: attributive uses, for example, have not become more frequent over time.

To see whether the *-ed* participles were particularly often used with degree modifiers when the adjectivization process started, I will examine data from a single decade, the 1850s, which is when *very* starts to gain ground over *(very) much* as the preferred modifier. Table 2 draws together data from a total of twenty *-ed* participles. Ten of the participles were already studied in Vartiainen (2016b); in the present study, these participles are supplemented by ten other *-ed* participles which allows us to get a more fulsome picture of the distribution of intensifiers in attribution and predication. These participles were selected based on their relatively high frequency in the BNC frequency list (Leech, Rayson & Wilson 2001). The need to consult the frequency list of another corpus arose from a practical necessity: it was not possible to extract the necessary frequency information for ten *-ed* participle types from COHA

due to the design of the online corpus tool. Nevertheless, most of the *-ed* participles selected for study also occur frequently in COHA, and only two of the items (*bored*, *frustrated*) were not common. The data were gathered from COHA by using lexical queries, and the results were manually sorted according to the presence or absence of a degree modifier and predicative/attributive usage.

[TABLE 2 HERE]

The results presented in Table 2 are in line with the data investigated in Vartiainen (2016b): *-ed* participles of mental verbs are predominantly used as predicative complements. There are altogether 5897 participle tokens in the data, and 4600 (78 percent) of them are used in predication. More importantly, however, Table 2 also shows a striking difference in the likelihood of degree modification between the two functions: almost thirty percent of the predicative *-ed* participles are modified in degree, while the corresponding proportion for attributive participles is only two percent. In other words, the modification of *-ed* participles in Table 2 looks very similar to the data examined earlier.

Finally, to establish whether the *-ed* participles were more often modified in degree than adjectives with a more even distribution across attributive and predicative functions, I made one final query in order to examine the degree modification patterns of ten adjectives in the 1850s. All the adjectives studied were among the most frequent adjective types in the 1850s sub-corpus in COHA. Because of their high frequency, the data presented in Table 3 are based on a random 200-token sample of each adjective. As before, the data were sorted manually to remove irrelevant tokens.

[TABLE 3 HERE]

The data in Table 3 provide further support to the hypothesis that the adjectivization of the *-ed* participles may have been affected by their high frequency of use in predication and their frequent co-occurrence with degree modifiers. While the two datasets agree on a general level, the proportion of modified predicative *-ed* participles is much higher than the proportion of modified adjectives. According to Fischer's Exact test (two-tailed), the difference is statistically significant at $p < 0.0001$ (*-ed* participles: 1374 modified, 3226 unmodified; adjectives: 181 modified, 666 unmodified).

5. Discussion and Conclusion

This paper has examined the distribution of degree modifiers in attribution and predication. The results of the case studies have established that:

(i) degree modifiers show a convincing preference for being used in predication instead of attribution;

(ii) adjectives are in general more likely to be modified in degree in predication than in attribution;

(iii) the decline of the Big Mess construction has further strengthened the association between several degree modifiers and predicative adjectives;

(iv) a possible explanation for why the degree modification patterns of adjectival *-ed* participles of mental verbs changed in Late Modern English is their particularly frequent use in predication (or after BE).

Although the datasets examined in this paper differ both in terms of variety, register, and the period studied, some general, if tentative, observations can be made based on them. First, the data from the Spoken BNC2014 showed that adjectives are generally quite likely to be modified in degree in spoken British English, which is well in line with the results of earlier research on the distribution of degree modifiers in different varieties of English. In my data, the proportion of modified attributive adjectives was 12 percent, while the corresponding proportion for predicative adjectives was 45 percent. In all, 27 percent of all adjectives in the dataset were used with a degree modifier. In the 1850s written data from COHA, by contrast, only 4 percent of the attributive adjectives selected for study and 21 percent of the predicative adjectives were modified in degree (i.e., 12 percent of all adjectives were used with a degree modifier). Although the modified APs were not analyzed in a larger discourse context, the greater frequency of degree modifiers in the spoken data might be interpreted to reflect a high degree of speaker involvement in spontaneous conversation when compared to the written genres represented in COHA (e.g., Biber 1988; Biber & Finegan 1989).

From the perspective of word class theory, the results of this study suggest that the constructions which are traditionally considered to be important to the formation of the adjective category overlap in different ways (to use the terminology in Croft 2016). In this study, the overall distribution of unmodified gradable adjectives across different syntactic roles was not investigated, but the potential of adjectives to be graded in degree is clearly much higher in

predication than in attribution. If we acknowledge the existence of abstract word classes, such as adjectives, nouns, and verbs, this result implies that the precise way in which the constructions are organized in the constructional network should be studied more closely in the future: it seems that a model that only describes word classes in terms of connections between different formative constructions, and ignores the relative strength of these connections, only offers a partial picture of the category. On the other hand, if we accept Croft's (2016) suggestions concerning lower-level word classes (e.g., predicate adjectives, gradable adjectives), the uneven frequency distributions could be modeled in terms of degree of overlap. In this particular case, the overlap would concern three "word classes" (in Croft's sense) in particular: predicate adjectives, gradable adjectives, and degree modifiers (although the final class may be too abstract for Croft's model).

Croft's (2016) suggestions about the nature of word classes are based in cross-linguistic work, and many of his ideas originally stem from a critique of word classes as fundamental linguistic units that should be universally applicable (e.g., Croft 2001). At the moment, it is not clear whether his model (Croft 2016) will turn out to be a serious contender to more traditional conceptions of word classes, even in constructional approaches to grammar. In the context of this paper, the idea of categories that overlap in varying degrees seems promising, but there are other contexts where the model may run into complications. For instance, if we accept the existence of a word class like adjective, it is very easy to explain why a newly-coined word (say, *sparty*, to describe a particularly creative performance in sports) can immediately be used in all the constructions associated with adjectives: *spartier*/*more sparty*, *spartiest*, *very sparty*, *a sparty trick*, *that was sparty*, *something sparty*. Indeed, this phenomenon, which concerns the distributional potential of a word, is precisely what underlies the "traditional" descriptions of

word classes that are found in reference grammars. In the strands of CxG that accept the existence of abstract word classes, the same phenomenon can be modeled as a spread of activation in the constructional network. In Croft's model, however, we would need to explain the distributional potential of *sparty* by saying that, after its invention, the word immediately becomes, for reasons that are not entirely clear, associated with a number of independent, yet overlapping word classes, such as the Comparative Adjective construction (*spartier*/*more sparty*), the Degree Modifier construction (*very sparty*), the Attributive Adjective construction (*a sparty player*), and so on. Compared to the alternative, this idea seems rather complicated, although it might be explained in terms of analogical thinking.

To conclude, I hope to have shown that the skewed distribution of degree modifiers is relevant both from a theoretical and a practical perspective. On the one hand, the status of word classes is still debated in some theories of language, and I have suggested that frequency information of the kind presented in this paper should in some way be incorporated as part of word class theory (particularly in usage-based and constructional theories of language). On the other hand, the connection between degree modifiers and predicative adjectives emphasizes the role of predicative constructions in the development of degree modifiers. While the development pathways of individual lexical items are always unique, the macro-trend observed in this paper is certainly something to take into account both in future studies examining the development of degree modifiers and in discussions pertaining to word class categorization.

Notes

1. This discussion is not dependent on a CxG analysis of language: the question is simply about whether some constructions hold a privileged status in word class formation.

2. These lists include a total of sixteen amplifiers and twelve downtoners, but not all are attested in the Spoken BNC2014. Furthermore, words with a token frequency lower than ten were left out from the discussion.

3. As pointed out by the editors, it can be difficult to establish the intended meaning for modifiers like *quite* or *pretty*. In this study, I read the contexts and ultimately made a forced choice between amplifying and downtoning meanings.

4. The data include all the tokens of the ten amplifiers in the Spoken BNC2014 with the exception of *very*. The data for *very* are based on a random sample of 1000 tokens. Absolute frequencies on which all the Figures are based are given in the appendices.

5. The queries recalled 129 tokens of *this* and 739 tokens of *that* in the corpus. Compared to the manually-sorted data in Calle-Martín (2019), the recall of the queries seems to have been better for *this* than for *that* (129 versus 168 tokens of *this* were recalled as opposed to 739 versus 2857 tokens of *that*).

6. As discussed in Calle-Martín (2019:157), *this* and *that* were already used as intensifiers in Middle English, but they went out of use in the Early Modern period. According to Calle-Martín, they start to reappear in an intensifying function at the beginning of the nineteenth century, initially with adverb heads in particular.

Corpora and Databases

COHA = Davies, Mark. 2010-. *The Corpus of Historical American English*: 400 million words, 1810-2009. http://corpus.byu.edu/coha/ (1 December, 2018-1 March, 2019).

Spoken BNC2017 = Love, Rob, Claire Dembry, Andrew Hardie, Vaclav Brezina & Tony McEnery. 2017. *The Spoken BNC2014*: Designing and building a spoken corpus of everyday conversations. *International Journal of Corpus Linguistics* 22(3). 319-344.

References

Aarts, Bas. 2004. Modelling linguistic gradience. *Studies in Language* 28(1). 1-49.

Aarts, Bas. 2007a. *Syntactic gradience: The nature of grammatical indeterminacy*. New York: Oxford University Press.

Aarts, Bas. 2007b. In defence of distributional analysis, pace Croft. *Studies in Language* 31(2). 431-443.

Bauer, Laurie & Winifred Bauer. 2002. Adjective boosters in the English of young New Zealenders. *Journal of English Linguistics* 30(3). 244-257.

Berman, Arlene. 1974. *Adjectives and adjective complement constructions in English. Mathematical linguistics and automatic translation*. PhD thesis, Dept. of Linguistics Harvard University. *Report NSF 29*. Cambridge (Mass.): Aiken Computation Laboratory, Harvard University.

Biber, Douglas. 1988. *Variation across speech and writing*. Cambridge: Cambridge University Press.

Biber, Douglas & Edward Finegan. 1989. Drift and the evolution of English style: A history of three genres. *Language* 65(3). 487-517.

Bybee, Joan L. 2010. *Language, usage and cognition*. Cambridge: Cambridge University Press.

Calle-Martín, Javier. 2019. *No cat could be that hungry*! *This/that* as intensifiers in American English. *Australian Journal of Linguistics* 39(2). 151-173.

Croft, William. 2001. *Radical Construction Grammar: Syntactic theory in typological perspective*. Oxford: Oxford University Press.

Croft, William. 2007. Beyond Aristotle and gradience: A reply to Aarts. *Studies in Language* 31(2). 409-430.

Croft, William. 2016. Comparative concepts and language-specific categories: Theory and practice. *Linguistic Typology* 20(2). 377-393.

Denison, David. 1998. Syntax. In Suzanne Romaine (ed.), *The Cambridge history of the English language*, vol. 4, *1776-1997*, 92-329. Cambridge: Cambridge University Press.

Diewald, Gabriele. 2002. A model for relevant types of contexts in grammaticalization. In Ilse Wischer & Gabriele Diewald (eds.), *New reflections on grammaticalization*, 103-120. Amsterdam: John Benjamins.

Hilpert, Martin. 2014. *Construction Grammar and its application to English*. Edinburgh: Edinburgh University Press.

Hollmann, Willem B. 2012. Word classes: Towards a more comprehensive usage-based account. *Studies in Language* 36(3). 671-698.

Huddleston, Rodney & Geoffrey K. Pullum. 2002. *The Cambridge grammar of the English language*. Cambridge: Cambridge 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.

Leech, Geoffrey, Paul Rayson & Andrew Wilson. 2001. *Word frequencies in written and spoken English: Based on the British National Corpus*. London: Longman.

Love, Rob, Abi Hawtin & Andrew Hardie. 2018. *The British National Corpus 2014: User manual and reference guide (version 1.1.)*. http://corpora.lancs.ac.uk/bnc2014/doc/BNC2014manual.pdf. (1 December 2018).

Méndez-Naya, Belen. 2003. On intensifiers and grammaticalization: The case of *swīþe*. English Studies 84(4). 372-391.

Mustanoja, Tauno F. 1960. *A Middle English syntax*, vol. 1. *Parts of speech*. Helsinki: Société Néophilologique.

Paradis, Carita. 2001. Adjectives and boundedness. *Cognitive Linguistics* 12(1). 47-64.

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

Schlüter, Julia. 2008. Constraints on the attributive use of "predicative-only" adjectives: A reassessment. In Graeme Trousdale & Nikolas Gisborne (eds.), *Constructional approaches to English grammar*, 145-179. Berlin: Mouton de Gruyter.

Traugott, Elizabeth Closs & Graeme Trousdale. 2010. *Gradience, gradualness and grammaticalization*. Amsterdam: John Benjamins.

Van de Velde, Freek. 2019. Wayward categorial shift: So odd an article. *Language Sciences* 73. 146-164.

Vartiainen, Turo. 2013. Subjectivity, indefiniteness and semantic change. *English Language and Linguistics* 17(1). 157-179.

Vartiainen, Turo. 2016a. Evaluative nominals in Present-day English: A corpus-based study of the definiteness and syntactic distribution of subjective and objective NPs. *Folia Linguistica* 50(1). 243-268.

Vartiainen, Turo. 2016b. A constructionist approach to category change: Constraining factors in the adjectivization of participles. *Journal of English Linguistics* 44(1). 34-60.

Vartiainen, Turo. 2016c. *Challenges in categorization: Corpus-based studies of adjectival premodifiers in English*. Helsinki: Société Néophilologique.

Author Biography

Turo Vartiainen works as a postdoctoral researcher at the University of Helsinki. His main interests include language variation and change, categorization theory, and Construction Grammar. His PhD dissertation on *Challenges in categorization: Corpus-based studies of adjectival premodifiers in English* appeared in the Mémoires de la Société Néophilologique de Helsinki series in 2016. Over the years, Turo Vartiainen has been an active member of a number of research projects at the University of Helsinki, among them *Language of Evaluation: Constructing the Social Margins of England, 1650-1900*, *Reassessing Language Change: The Challenge of Real Time*, and *Categorization, Creativity and Change in Construction Grammar*.

Acknowledgements

The author gratefully acknowledges funding from the Academy of Finland (project n:o 333944).

TABLE 1

Intensified Adjectives in Attribution and Predication (Spoken BNC2014)

	Attributive	**Intensified**	**Predicative**	**Intensified**
Bad	64	10 (16%)	112	68 (61%)
Good	55	7 (13%)	119	45 (38%)
Great	70	3 (4%)	85	10 (12%)
High	74	12 (16%)	55	38 (69%)
Important	62	16 (26%)	129	50 (39%)
Large	136	27 (20%)	31	19 (61%)
New	137	6 (4%)	15	6 (40%)
Old	110	2 (2%)	62	20 (32%)
Small	126	23 (18%)	47	35 (74%)
Young	99	10 (10%)	77	39 (51%)
Total	**933**	**116 (12%)**	**732**	**330 (45%)**

TABLE 2

Twenty *-ed* Participles in Attribution and Predication (COHA, the 1850s)

***-ed* participle**	**Attribution**	**Intensified**	**Predication**	**Intensified**
Amazed	9	0	98	12
Amused	21	0	123	57
Annoyed	0	0	90	41
Bored	1	0	4	1
Confused	155	2	82	27
Disappointed	111	1	400	98
Disgusted	2	0	76	17
Embarrassed	30	3	115	47
Excited	247	4	309	138
Exhausted	88	1	90	25
Frightened	80	1	190	59
Frustrated	3	0	1	0
Interested	72	4	621	258
Pleased	56	1	852	218
Satisfied	30	2	665	158
Scared	18	1	29	6
Surprised	23	2	758	187
Terrified	58	0	13	6
Troubled	290	4	63	12
Worried	3	0	21	7
Total	**1297**	**26 (2%)**	**4600**	**1374 (30%)**

TABLE 3

Ten Adjectives in Attribution and Predication (COHA, the 1850s)

Adjective	**Attribution**	**Intensified**	**Predication**	**Intensified**
Fine	150	11	22	12
Full	97	2	85	16
Happy	162	9	37	15
High	106	7	41	13
Important	141	11	59	15
Necessary	46	1	154	23
Small	79	1	121	37
Sure	9	0	165	18
Sweet	145	2	46	17
True	83	0	117	15
Total	**1018**	**44 (4%)**	**847**	**181 (21%)**

Figure 1: The Distribution of *Terribly*, *Deeply*, *Entirely*, *Incredibly*, *Highly*, *Perfectly*, *Extremely*, *Totally*, *Very*, and *Amazingly* in Spoken British English, Arranged According to the Proportion of Predicative Adjectives

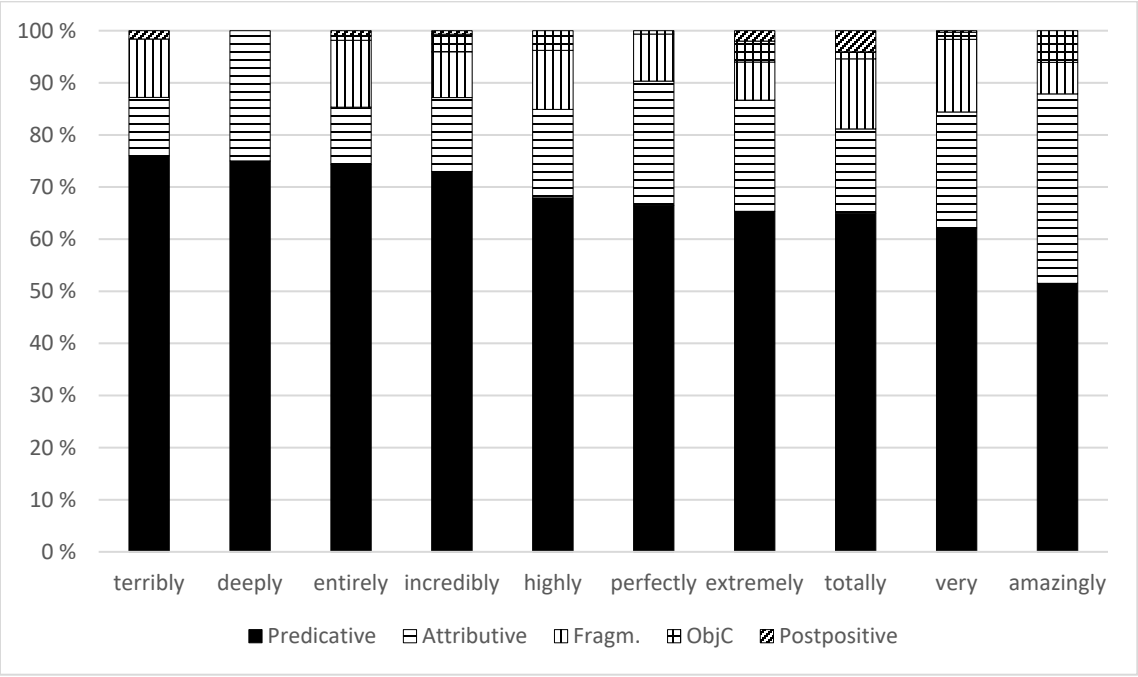


Figure 2: The Distribution of *Quite*, *Pretty*, *Almost*, *Nearly*, *Rather*, *Relatively*, and *Fairly* in Spoken British English (Spoken BNC2014) Arranged According to the Proportion of Predicative Complements

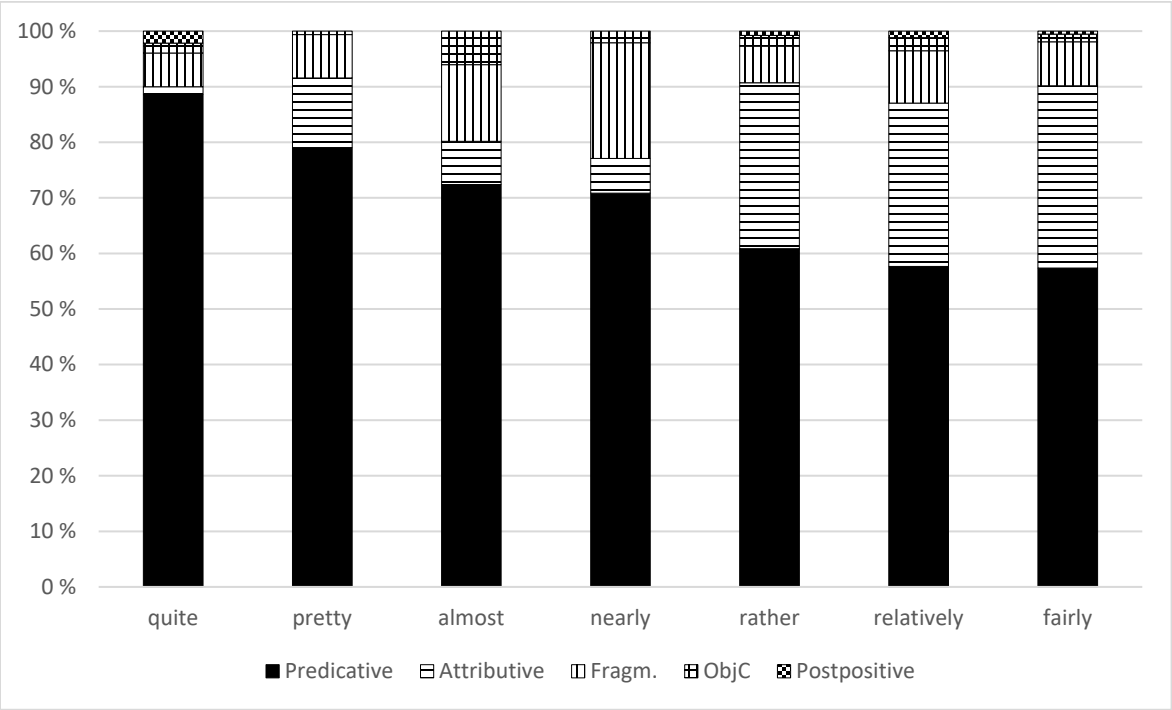


Figure 3: *That* as a Degree Modifier in Attributive APs and Sentence-final Predicative APs Normalized to One Million Words (COHA 1850-2009)

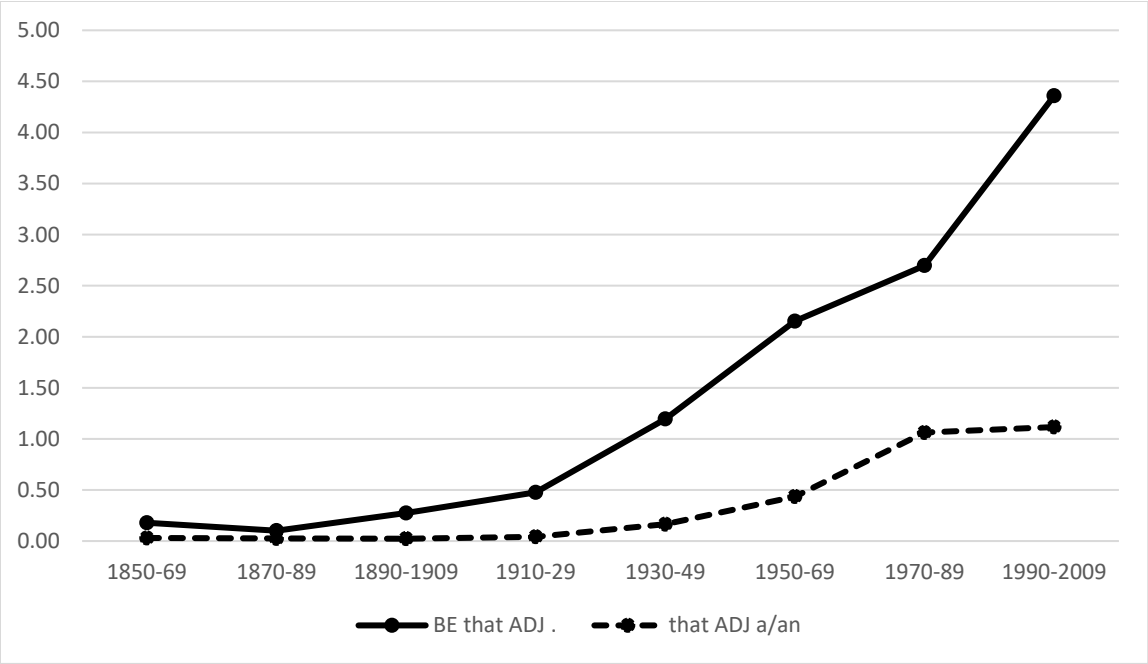


Figure 4: *This* as a Degree Modifier in Attributive APs and Sentence-final Predicative APs Normalized to One Million Words (COHA 1910-2009)

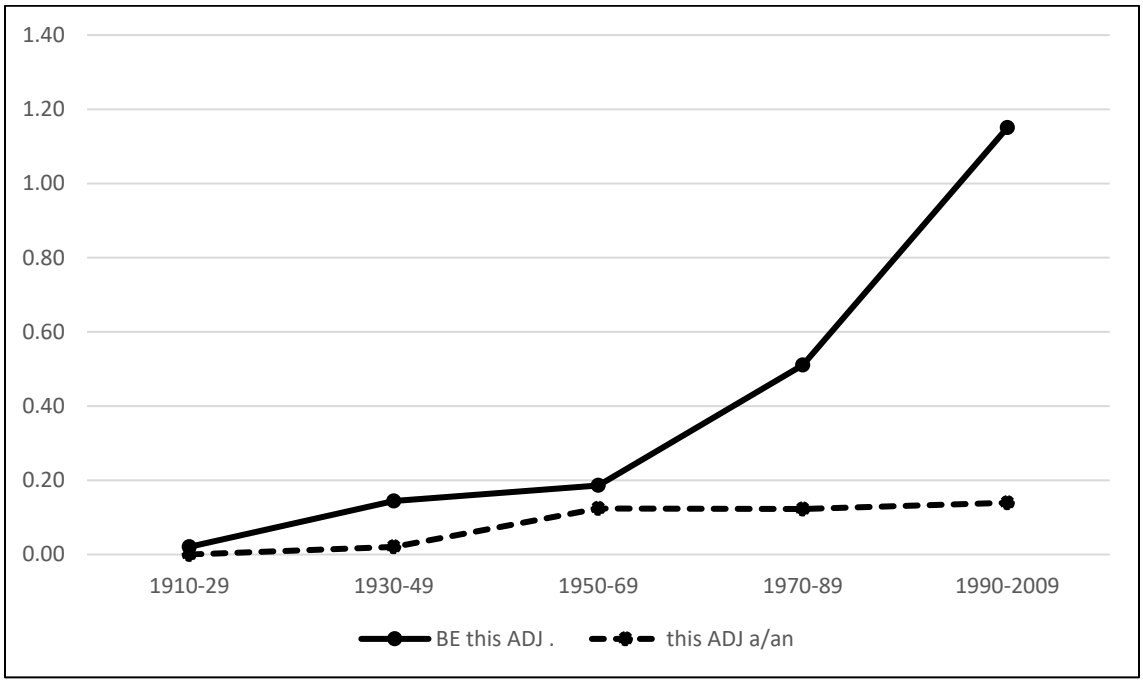
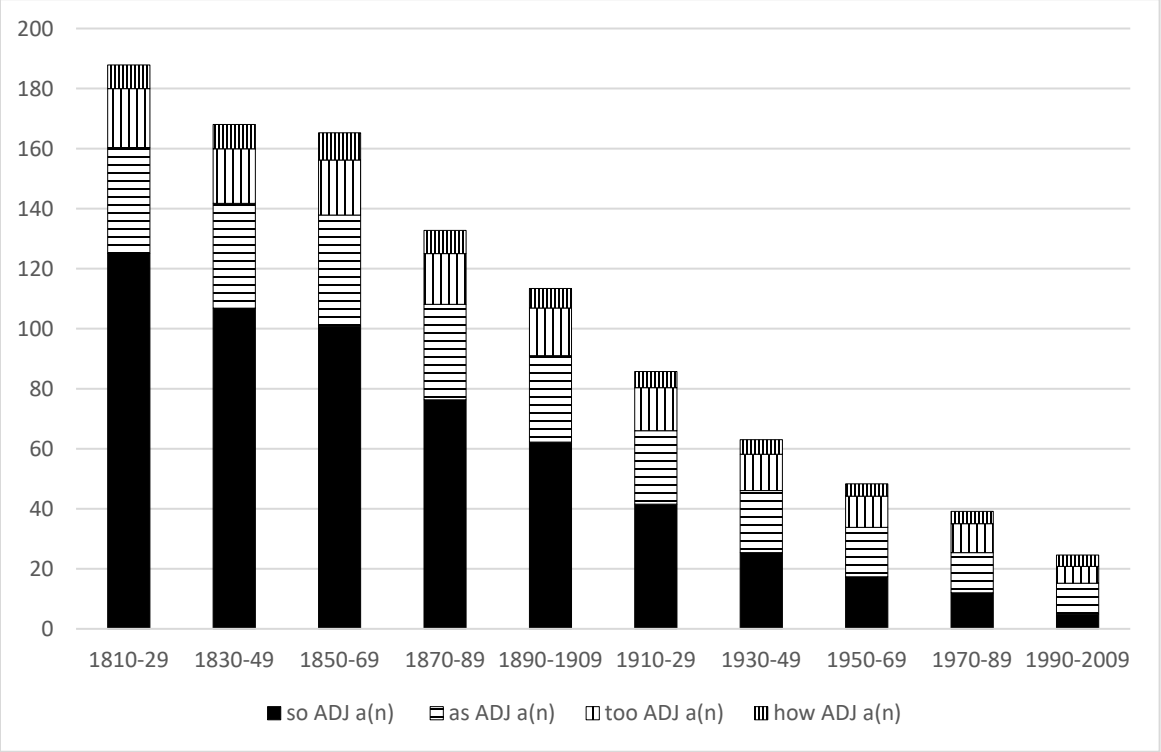


Figure 5: The Frequency of *So*, *As*, *Too*, and *How* in the Big Mess Construction Normalized to One Million Words (COHA 1810-2009)



Appendix

Table A. The Distribution of *Terribly*, *Deeply*, *Entirely*, *Incredibly*, *Highly*, *Perfectly*, *Extremely*, *Totally*, *Very*, and *Amazingly* in Spoken BNC2014

Degree modifier	Predicative	Fragment	Object Complement	Attributive	Postpositive	Total
Totally	193	40	4	48	12	297
Extremely	98	11	6	32	3	150
Incredibly	108	13	5	21	1	148
Amazingly	17	2	2	12	0	33
Deeply	9	0	0	3	0	12
Entirely	81	14	1	12	1	109
Highly	36	6	2	9	0	53

Perfectly	103	14	1	37	0	155
Terribly	95	14	0	14	2	125
Very	598	134	13	214	3	962

Table B. The Distribution of *Quite*, *Pretty*, *Almost*, *Nearly*, *Rather*, *Relatively*, and *Fairly* in Spoken BNC2014

Degree modifier	**Predicative**	**Fragment**	**Object Complement**	**Attributive**	**Postpositive**	**Total**
Almost	84	16	7	9	0	116
Fairly	210	29	5	120	2	366
Nearly	34	10	1	3	0	48
Pretty	385	38	3	61	0	487
Quite	248	17	5	4	6	280
Rather	157	17	5	77	2	258
Relatively	49	8	2	25	1	85

Table C. *That* as a Degree Modifier in Attributive APs and Sentence-final Predicative APs in COHA 1850-2009

Degree context	**BE *that* ADJ**	***that* ADJ *a*/*an***
1850-69	6	1
1870-89	4	1
1890-1909	12	1
1910-29	23	2
1930-49	58	8
1950-69	104	21
1970-89	132	52

1990-2009	250	64

Table D. *This* as a Degree Modifier in Attributive APs and Sentence-final Predicative APs in COHA 1910-2009

Degree context	**BE *this* ADJ**	***this* ADJ *a*/*an***
1910-29	1	0
1930-49	7	1
1950-69	9	6
1970-89	25	6
1990-2009	66	8

Table E. The Frequency of *So*, *As*, *Too*, and *How* in the Big Mess Construction in COHA

Degree context	**1810-29**	**1830-49**	**1850-69**	**1870-89**	**1890-1909**	**1910-29**	**1930-49**	**1950-69**	**1970-89**	**1990-2009**
so ADJ *a(n)*	125	107	101	76	62	42	25	17	12	5
as ADJ *a(n)*	35	35	37	32	29	24	21	16	13	10
too good a(n)	20	18	18	17	16	14	12	10	10	6
how ADJ *a(n)*	8	8	9	8	7	5	5	4	4	4