

A Corpus-based Study of Semantic Prosody Change: The Case of the Adverbial Intensifier*

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The concept of semantic prosody is elaborated most notably by Sinclair (1987, 1996a, 1998, 2003), Louw (1993, 2000), Stubbs (1996, 2001), and Partington (1998, 2004). The description of semantic prosody has been greatly facilitated by corpus linguistics. However, previous research has concentrated primarily on its synchronic aspect. This paper deals with semantic prosody both synchronically and diachronically, focusing on certain adverbial intensifiers (boosters). It argues that a diachronic perspective is necessary to make better sense of how adverbial intensifiers have developed the semantic prosodies they have now.

In the study, four adverbial intensifiers are examined: *terribly*, *awfully*, *horribly* and *dreadfully*. Drawing on historical and modern corpus data, the study attempts to track the changes by comparing their frequencies in the company of pleasant and unpleasant words over different historical periods. Over the years they have diverged, to different extents, from the negative pole of semantic continuum and come to collocate with items with neutral or even positive connotations. Louw's (1993) claim that meaning can "rub off on" another word through habitual collocation can explain this linguistic phenomenon.

Key words: semantic prosody, corpus linguistics, adverbial intensifier, diachronic perspective

1. Introduction

Quirk et al. (1985) classify intensifiers into three semantic categories: emphasisers, amplifiers and downtoners. They point out that intensifiers do not necessarily indicate intensification and only "indicate a point on the intensity scale which may be high or low" (p.439). So it is not the case that all intensifiers are really doing an intensifying job. Among the amplifying intensifiers, maximisers concern the extremes, like *completely*, *absolutely*, *entirely*, meaning one "cannot get more than this" (Louw 2005:2), while boosters such as *highly*, *immensely*, *terribly* only indicate that it is "very intense, but there is the possibility of it getting even more intense" (p.2). This paper will centre on certain items of the latter type, but for the sake of convenience will use the term adverbial intensifier to denote this notion.

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aspect. This paper looks at semantic prosody both synchronically and diachronically, focusing on certain adverbial intensifiers. It argues that a diachronic perspective is necessary for a better understanding of how adverbial intensifiers have developed the semantic prosodies they have now.

In the study, four adverbial intensifiers will be examined: *terribly*, *awfully*, *horribly* and *dreadfully*. These items were selected because their old senses are glossed similarly by the Oxford English Dictionary (1989) as “so as to cause terror or dread” or “so as to make one shudder or tremble”, but over time they have developed into intensifiers to “scale upwards from an assumed norm” (Quirk et al. 1985:439). Their semantic prosodies also seem to have undergone a change. Now they have come to collocate with items with neutral or even positive connotations. The study attempts to track these changes by comparing how frequently they appear in the company of pleasant and unpleasant words over different historical periods. Limitations and suggestions for further research are also discussed.

2. Literature review

Semantic prosodies remained hidden from our perception for thousands of years until Sinclair (1987) noticed, by drawing on corpus data, that some items are habitually associated with other words from a definable semantic set. He gives several examples of words or phrases which are associated with negative or unpleasant events. He shows that the items *happen* and *set in* occur primarily with subjects referring to unpleasant states of affairs, such as *rot*, *decay*, *malaise*, *despair*, *ill-will*, *decadence*, *impoverishment* and *infection*. Louw (1993) first introduced semantic prosody to the public. He examines the items *utterly*, *days*, *bent on*, *symptomatic of* and *victim of*, finding that they all have overwhelmingly negative semantic profiles. Some lexical items as mentioned above display highly apparent prosodies. Other items may have much less regular prosodic behaviour and show a tendency to collocate with unpleasant words, but this characteristic is not binding. Such items are sometimes found to collocate with neutral or pleasant words. When the semantic prosody of an item is not obvious even to a native speaker’s intuition, corpus data may be able to reveal its statistical tendencies (Partington 1998).

Partington (1998, 2004) takes semantic prosody as an aspect of evaluative meaning, which he considers to be close to expressive connotation (2004:154). He points out that items such as *timely*, *excessive*, *flabby* are said to have a clearly favourable or unfavourable evaluation, and “semantic prosody describes the same kind of evaluative meaning but spreads over a unit of language which potentially goes well beyond the single orthographic word” (2004:131-132). Sinclair holds a similar

view on this issue, as can be seen in his definition (2003:178):

A corpus enables us to see words grouping together to make special meanings that relate not so much to their dictionary meanings as to the reasons why they were chosen together. This kind of meaning is called a semantic prosody; it has been recognized in part as connotation, pragmatic meaning and attitudinal meaning.

For Sinclair, the semantic prosody conveys attitudinal and pragmatic meaning; it is “the junction of form and meaning” (2000: 200). The attitudinal and pragmatic meaning we wish to express or “the reason why we choose to express ourselves in one way rather than another is coded in the prosody, which is an obligatory component of a lexical item” (p. 200). Partington (2004) groups Sinclair’s attitudinal meaning under the category “expressive connotation”; however, Whitsitt (2005) treats Sinclair’s definition of semantic prosody as a distinct concept as it emphasises the pragmatic function.

Regarding the nature of semantic prosody, Louw (2000:49-50) puts forward an argument that “semantic prosodies are not merely connotational” as the force behind semantic prosodies is “more strongly collocational than the schematic aspects of connotation”. For him, “a semantic prosody refers to a form of meaning which is established through the proximity of a consistent series of collocates” (p.50). In other words, a lexical item may acquire a negative meaning, through a process of semantic transfer, and result in the fact that this new item is “now” almost always associated with unpleasant words. Xiao & McEnery (2006:107) also explicitly claim that “connotation can be collocational or non-collocational whereas semantic prosody can only be collocational”. They argue that the semantic prosody of an item is the result of interplay between the item and its typical collocates. The item does not have an affective meaning until it is put in the context of its typical collocates. On the other hand, it may “take on” that affective meaning even when it is used with other collocates. This idea is similar to Louw’s claim that meaning can “rub off on” another word through habitual collocation (2000).

As there has been such confusion and debate over semantic prosody and connotation, Morley & Partington (2009) revisited this issue and proposed to express them in terms of prototypicality (Rosch 1977). In their discussion, semantic prosody is considered to be an aspect of “(evaluative) connotational meaning”, which differs from “connotation” in relation to single words/items as it is “defined as expressed over stretches of discourse” (Morley & Partington 2009:151). Connotation is believed to be more evident than semantic prosody, which resides and is often hidden in the

“collocational patterns of items in a text” (p.150). Morley & Partington (2009) borrowed the prototype theory to illustrate the “obviousness” of evaluative connotation:

...where the items closer to the centre are those with the most evident and consistent evaluative connotation, whilst those closer to the outskirts have an evaluative connotation which is less obvious and consistent and which is perhaps more likely to be switched off or overturned when contextual requirements demand (p.151).

In their illustration, items such as *good*, *murder* are in the centre as they seem to express clearly favourable and unfavourable connotation respectively; items like *cause*, *commit*, *symptomatic* are somewhere in the middle, whilst *set in*, *happen*, and *utterly* are on the outskirts as they were totally obscure before corpus data became available. Other items like *chair* and *tree* are outside the circles as they do not display any statistical tendency even after the corpus data are examined. Therefore, we may relate connotation to semantic prosody in this way: connotation in its narrow sense is more consistent, obvious and often discussed in relation to individual words/items, whilst semantic prosody, as a product of collocation, is less consistent and likely to change with contexts as it is hidden in the collocational patterns of items and spreads over stretches of discourse, so semantic prosody can be considered a part of connotation in the broad sense, a less consistent connotation which is often acquired through collocation. Thus semantic prosody is collocational as well as connotational.

Semantic prosodies are “less accessible through human intuition than most other phenomena to do with language” (Louw 1993:173). It is computational research and corpus linguistics that make it possible to reveal their existence. Whitsitt (2005) points out that semantic prosody is usually empirically observed by using corpora organized synchronically. “The essence of the phenomenon of semantic prosody is, however, historical change: meaning being transferred between terms which appear together frequently over time” (p.287). Obviously, the evidence of diachronic change cannot be derived from synchronically organized corpora. Sinclair has early expressed the necessity of investigating language diachronically, for he writes in his article “The empty lexicon” published in 1996: “[i]n a synchronic view of language, the origins of meaning are not under scrutiny” (1996b:113). Therefore, a diachronic perspective needs to be incorporated into the investigation of semantic prosody in order to better explain this linguistic phenomenon.

3. Methodology and data collection

The data for the synchronic part of this study come from the Bank of English corpus (shortened as BOE) jointly owned by HarperCollins Publishers and the University of Birmingham. The corpus contains 450 million words, composed of contemporary written and spoken texts from the 1980s on. Only the book sub-corpora were selected for this study. The chosen parts consist of American books (50,224,500 tokens) and British books (54,681,389 tokens), totalling 104,905,889 tokens. The contrasted data come from the Corpus of Late Modern English Texts (extended version) (shortened as CLMETEV) (see De Smet (2005) for its sampling principles) and a fiction corpus I compiled myself. The former covers the period from 1710 to 1920. It is subdivided into three sub-periods of 70 years each, i.e. 1710-1780; 1780-1850; and 1850-1920 (De Smet). The fiction corpus I compiled is also composed of texts produced between 1710 and 1920. For the sake of convenience, I will term all the components used as the contrasted data for this study as the Corpus of Late Modern English (shortened as CLME). The great majority of its texts are novels, with some essays, letters and scientific writings also included. As the 1710-1780 part contains only a few instances of two of the four intensifiers to be examined, i.e. *awfully* and *horribly*, and too few instances would make the claim unreliable, I combined the first two periods, i.e. 1710-1780 and 1780-1850, into one category and divided the whole corpus into two parts representing two periods: 1710-1850 and 1850-1920. Table 1 summarises the mark-up of the corpus:

Table 1: Corpus of Late Modern English (CLME)

Sub-corpora	Source	Word Count
1710-1850 corpus	CLMETEV + Fiction Corpus	9,612,418
1850-1920 corpus	CLMETEV + Fiction Corpus	7,519,266

The CLME was subjected to Wordsmith 4.0 analysis. For the synchronic description of their semantic prosodies, the collocates to their immediate right (span 0:1) were examined as the words intensified usually appear in that position. The collocates to the left were also investigated (span 4:0) because they sometimes intensify verbs, with a few words intervening between them. Frequency counts for each typical collocate were also obtained.

For the diachronic part of this study, the goal of the investigation is to see what developments the four adverbial intensifiers have made in semantic prosody over the years. A quantitative-comparative approach is germane to this goal because it shows the prevalence of favourable or unfavourable company versus other categories, and

also reveals clearly the differences across different historical periods. This was achieved by counting the frequency of each intensifier in the company of positive, neutral or negative words. One relevant issue here is that “individual words and the collocations in which they occur may express quite different evaluations” (Stubbs 2001:105) as “meaning is distributed across more than one word” (p.105). To illustrate this, let me repeat Stubbs’s examples: *cosy* may be positive, but *cosy little relationship* can mean “cliquey”; *little* may be positive, but *little old lady* is patronizing. Therefore, in judging whether a collocate is positive, neutral or negative, a wider co-text was carefully examined to make the judgment as sound as possible. In addition, adverbial intensifiers are not doing the intensifying job all the time, so human intuition was also relied on to eliminate invalid instances. For example, WordNet 3.0 (2009) offers the definition of *terribly* as follows:

adverb

- (1) *used as intensifiers; “terribly interesting”;*
- (2) *in a terrible manner; “she sings terribly”.*

Obviously, the second sense is not an intensifier but a manner modifier. Instances like this were excluded from the data.

4. Results and discussions

To explore the semantic prosodies of four adverbial intensifiers, i.e. *terribly*, *awfully*, *horribly* and *dreadfully*, and their semantic prosody development across three periods, both synchronic and diachronic corpus data were retrieved. For their development, a quantitative analysis was made to track their semantic prosody change over the years. I first present the results of the synchronic analysis and then make a diachronic comparison of the data across the periods.

4.1 Semantic prosody of the adverbial intensifier

This section analyses the semantic prosodies of the four adverbial intensifiers synchronically. For each intensifier, its typical collocates with occurrence frequency from the BOE is presented and a detailed analysis follows.

4.1.1 *Terribly*

Corpus data allow collocates to be extensively documented. By examining the

favourable or unfavourable tendency of the collocates, the semantic prosody of a language item is revealed vividly. In this study, the first item examined was *terribly*. 1886 occurrences of *terribly* were found in the book sub-corpora of the Bank of English (retrieved in 2009). Its collocates include the following, with a co-occurrence frequency of 3 or above (in this article, I cite lemmas in small upper case, underline non-negative collocates, and rank collocates in descending order of co-occurring frequency but with different thresholds, with the number next to the collocate indicating its occurrence frequency in the corpus):

*sorry*77 *wrong*65 *important*56 *MISS*45 *upset*44 *difficult*30 *afraid*27 *hard*27
*SUFFER*26 *worried*24 *sad*23 *well*23 *funny*17 *tired*16 *excited*15 *guilty*15
*embarrassed*14 *hurt*14 *alone*13 *exciting*12 *ill*12 *lonely*11 *busy*11
*dangerous*11 *interested*10 *shy*9 *unhappy*9 *expensive*9 *concerned*9
*serious*9 *late*9 *sick*8 *interesting*8 *bright*8 *hurt*8 *nice*8 *hot*8
*different*9 *cold*8 *good*10 *impressed*7 *vulnerable*7 *frightened*7
*slow*7 *significant*7 *strong*7 *bad*7 *old*7 *fond*6 *disappointed*6 *dull*6
*clever*6 *shocked*6 *depressed*6 *confused*6 *anxious*6 *sensitive*6
*pleased*6 *nervous*6 *surprised*6 *clear*6 *upsetting*5 *depressing*5
*distressed*5 *amusing*5 *rude*5 *selfish*5 *ashamed*5 *keen*5
*uncomfortable*5 *painful*5 *sweet*5 *dry*5 *easy*5 *short*5 *stuffy*4
*frustrating*4 *swollen*4 *unfair*4 *enthusiastic*4 *curious*4 *stupid*4
*unusual*4 *seriously*4 *quick*4 *happy*4 *simple*4 *low*4 *fatigued*3
*mutilated*3 *distraught*3 *inefficient*3 *scarred*3 *imaginative*3 *earnest*3
*WORRY*3

The long list given above shows a clear picture of the words frequently intensified by *terribly*. A glance at the above words shows that *terribly* does not display a regular prosody. It occurs more often with unpleasant words. Nevertheless, it is also followed quite often by significantly positive words, such as *important*, *amusing*, *well*, *good*, *impressed*, *significant*, *pleased*, *fond*, *keen*, *enthusiastic*, *happy*, *earnest*, *clever* and *strong*. Items like *busy*, *short*, *easy*, *curious*, *quick*, *simple* could be interpreted as “neutral”, though not so in all cases. The exact proportions of positive, neutral and negative collocates for each intensifier in question will be dealt with later in the paper to detail their statistical tendencies.

4.1.2 *Awfully*

Turning to *awfully* we find again a long list of collocates (with a co-occurring

frequency of 2 or above):

good29 sorry25 hard25 nice24 long18 well16 quiet11 glad10
big9 busy8 difficult7 tired6 MIND6 close6 young6 old6 silly5 sweet5
hot5 early5 far5 small 5 keen4 loud4 quick4 fast4 cold4
important4 high4 dull3 clever3 friendly3 funny3 stupid3
pleased3 expensive3 pale3 thin3 angry3 slow3 wrong3 convenient2 shy2
suspicious2 strict2 like2(prep) brave2 steep2 crowded2 intimate2
lonely2 excited2 scared2 upset2 narrow2 careful2 familiar2 bright2
warm2 pretty2 serious2 dark2 late2 soon2 real2 large2

It was not really expected that a different picture would emerge. It appears, according to the list above, that the non-negative collocates of *awfully* accounts for more than half of its collocates. Among the underlined words, quite a few are clearly positive, like *good*, *nice*, *well*, *glad*, *young*, *sweet*, *important*, *clever*, *friendly*, *pleased*, *convenient*, *intimate*, *careful*, *familiar*, *excited*, *bright*, *warm*, *pretty*, *real* and *large*. The others are neutral in most cases, such as *long*, *quiet*, *big*, *busy*, *early*, *high*, *like*, *soon*, *close* and *fast*. It should be noted, however, that there is no clear cut distinction between positive, neutral and negative categories. The classification depends more on the context in which *awfully* occurs because the wider co-text can provide evidence of attitude, which is invisible in the individual word in the collocate list. Taking *large* for example, consider the following citations:

- (1) Finding ten men in two hundred and twenty million is an awfully small needle in an awfully large haystack.
- (2) He is awfully large and nasty-looking...

It seems that *awfully large* is neutral in Example (1) as it simply contrasts the smallness of a needle and the largeness of a haystack. In Example (2), however, it has an unfavourable inclination since it is followed by *nasty-looking*, which is notably unpleasant. So as stated earlier in Section 3, the judgment should be made on a case by case basis if a percentage figure needs to be obtained to reveal its statistical tendency.

4.1.3 Horribly

The semantic prosody of *horribly* appears to be deterministic as it occurs overwhelmingly with words which have unpleasant connotations. Evidence of this can be seen in its collocates (with a co-occurring frequency of 2 or above):

wrong²⁸ SUFFER¹⁰ disfigured⁷ aware⁶ swollen⁵ embarrassed⁵
like⁵(prep) mutilated⁴ injured⁴ ACHE⁴ wounded⁴ vulnerable⁴ burned⁴
guilty⁴ sick⁴ alone⁴ embarrassing³ shy³ uncomfortable³
exposed³ familiar³ empty³ afraid³ cold³ clear³ long³
maimed² mangled² disappointing² tedious² scarred² insecure²
inward² distorted² selfish² brutal² destructive² battered²
bored² ugly² confused² painful² expensive² nervous² active²
angry² dangerous² quiet² near² true² hard² old²

As can be seen from the above, the majority of the words *horribly* intensifies have apparently unfavourable implications. Only a tiny minority seem to be favourable, such as *active* and *true*. *Horribly true* is positive, as shown in Example (3):

(3) Professor Morris had said and so far been horribly true to his word...

Horribly active, however, describes something quite neutral, if the wider co-text is taken into consideration, as in:

- (4) These radicals are known, respectively, as the hydrogen radical and the hydroxyl radical, and both of them are horribly active.
- (5) Oh, Holy Mother, roll away in a clean, neat, dexterous ball and be rid of this horror. He had managed to distance himself a little way from the body when it became horribly active.

Some other items like *clear*, *familiar*, *aware*, *like*, *empty*, *inward*, *long*, *quiet* and *near* seem to be neutral as well. It is worth noting, nevertheless, that *horribly* is not strongly negative as some of its collocates are found to have positive connotations:

- (6) And every morning there was fog and the fog helped the enemy, helped them horribly. Whenever John's men weren't in direct contact with the enemy, German shells seemed to find them...
- (7) "quite horribly well done", said the New Statesman
- (8) Irene is always the name –or kind of name, slightly unusual but banal--of the ordinary-seeming girl whom a young man may pursue idly, in a bored time, and then wham! fall horribly in love with, blasted in love with this person he never bothered to even particularly look at and now it's too late...

4.1.4 *Dreadfully*

The collocational data for *dreadfully* are presented below (with a co-occurring frequency of 2 or above):

*MISS*20 *sorry*14 *wrong*14 *upset*4 *worried*4 *ill*4 *hot*4 *bored*3
*disappointed*3 *dull*3 *seasick*2 *graceful*2 *clumsy*2 *rude*2 *boring*2
*unhappy*2 *attended*2 *wounded*2 *vulnerable*2 *hungry*2 *guilty*2 *sick*2
*thin*2 *familiar*2 *afraid*2 *serious*2 *difficult*2 *alone*2 *low*2

A simple glance at the list will show that *dreadfully* displays a typically negative semantic prosody. It has a strong tendency to co-occur with unfavourable words, like *sorry*, *wrong*, *upset* and *disappointed*. *Familiar* and *attended* seem to have no particular semantic colouring. Only *graceful* shows a pleasant association of evaluation. It is interesting to note that *dreadfully* co-occurs with *MISS* most frequently (20 out of 248 instances, 8%) in the corpus, as illustrated in Figure 1.

It is true that *miss* means “to feel the lack or loss of” (American Heritage Dictionary 2009), which could be interpreted as unpleasant. Compared with other overwhelmingly negative feelings, such as *anger*, *sorrow*, *shame*, however, *missing* is much less negative. *Missing* denotes an emotion that one wants to have something that one used to have. It is much closer to the neutral point than to the negative pole in the semantic continuum. In Chinese culture, *xiangnian/sinian* ‘missing’ has no negative connotations at all. Instead, it often suggests a beautiful feeling, which means that one can get satisfaction by thinking affectionately of someone or recalling what happened in the past.

We may argue that the strong association of *dreadfully* with *MISS* helps it become less negative. In addition, *dreadfully* occasionally occurs with words which have positive semantic implications. Examples follow (1 instance for each in my data):

- (9) “Oh, he’s *dreadfully serious-minded* and peculiar, all Latin and Greek and pre-1914 Liberalism and acid speeches in the House of Lords, and she can’t talk about anything except gardening, but the girls are quite...”
- (10) They’re so *dreadfully sincere*.
- (11) But if you consider what an angel really might be, you get a different idea. A creature *dreadfully powerful* and awesomely old, for example. A creature not necessarily at all manlike.

advantage. But you would miss it dreadfully, and find life very difficult, if
 Incidentally, I hope you miss me dreadfully, too!" <p> In later years, Sara
 with schoolmates. "I miss you dreadfully," she told Franklin in July, "and
 friend, "and I shall miss him dreadfully. I cannot understand it. He
 so silly --- but I do miss it dreadfully. The temptation is so strong,
 of it, I hear. Misses your father dreadfully. I liked your father so much.
 you must be missing her so dreadfully and yet here I am, whining away
 here to sort you out. I miss her dreadfully. I know she and I didn't always
 Alistair had missed the Griffins dreadfully during the last few days of their
 everything. "Won't you miss her dreadfully?" Elizabeth asked both Hannah and
 so we did. I still miss her quite dreadfully at times." "You were good
 part of my life. I still miss her dreadfully and now I am going to lose him."
 the funeral. We will miss him dreadfully, but he was full of years and he
 but I do really miss you dreadfully. I thought I'd never find anybody
 the whorehouse. Now he missed her dreadfully. Sensing a foreign presence, he
 soon, and they would all miss him dreadfully. And someone had to make up to
 Kate. He was missing Kate most dreadfully, and the guilt he felt about the
 fed up and missing my children dreadfully, because I saw them only at
 daily; I was missing Old Brigid dreadfully, resenting Maggie in proportion
 someone quite unlike.'² I miss him dreadfully. I could weep for all that

Figure 1. Concordance listing of *miss+dreadfully*

4.1.5 Comparison

The observations of the intensifiers discussed are summarised in Table 2, where only the top 10 collocates with a t-score above 2 are shown. *Horribly* has only 7 collocates with a t-score above 2. Generally speaking, a t-score of above 2 is taken to be significant (Hunston 2002). This paper refers to them as typical collocates. Of the collocates of *awfully* shown in Table 2, *sorry* and *hard* have unpleasant associations. *Good*, *nice*, *well* and *glad* obviously fall into the semantically favourable category. The rest are quite neutral. At the negative end, *horribly* has a predominantly negative prosody.

Horribly co-occurs typically with *wrong*, *SUFFER*, *disfigured*, *swollen* and *embarrassed*. *Dreadfully* exhibits almost the same unfavourable tendency as *horribly* does. All its typical collocates—*MISS*, *sorry*, *wrong*, *upset*, *worried*, *ill*, *hot*, *bored*, *disappointed* and *dull* have a semantic element of “unpleasant”. The picture for *terribly* is a bit different. It often co-occurs with negative words, such as *sorry*, *wrong*, *upset*, *difficult*, *afraid*, *hard*, *SUFFER* and *worried*. In Table 2, the only positive

Table 2. The typical collocates of the adverbial intensifiers

<i>terribly</i>	<i>awfully</i>	<i>horribly</i>	<i>dreadfully</i>
<i>sorry</i> 77	<i>good</i> 29	<i>wrong</i> 28	<i>MISS</i> 20
<i>wrong</i> 65	<i>sorry</i> 25	<i>SUFFER</i> 10	<i>sorry</i> 14
<i>important</i> 56	<i>hard</i> 25	<i>disfigured</i> 7	<i>wrong</i> 14
<i>MISS</i> 45	<i>nice</i> 24	<i>aware</i> 6	<i>upset</i> 4
<i>upset</i> 44	<i>long</i> 18	<i>swollen</i> 5	<i>worried</i> 4
<i>difficult</i> 30	<i>well</i> 16	<i>embarrassed</i> 5	<i>ill</i> 4
<i>afraid</i> 27	<i>quiet</i> 11	<i>like</i> 5	<i>hot</i> 4
<i>hard</i> 27	<i>glad</i> 10		<i>bored</i> 3
<i>SUFFER</i> 26	<i>big</i> 9		<i>disappointed</i> 3
<i>worried</i> 24	<i>busy</i> 8		<i>dull</i> 3

collocate of *terribly* is *important*, but it has a very high co-occurring frequency (56 instances). The high frequency of *important* may play an important role in its semantic divergence from the negative pole.

Another observation is that *terribly*, *awfully*, *horribly* and *dreadfully* share a large number of collocates. In other words, there is a high degree of collocational overlap amongst them. Take the typical collocates shown in Table 2 for example: *terribly*, *awfully* and *dreadfully* share *sorry*; *terribly* and *dreadfully* share *MISS*, *wrong*, *worried* and *upset*; *terribly* shares *hard* with *awfully* and *SUFFER* with *horribly*.

A close investigation of the individual significant collocates of *terribly*, *awfully*, *horribly* and *dreadfully* is most intriguing. From the collocates shown in Table 2, we can see that *awfully* has a wider semantic preference—from emotions (*glad*, *sorry*), qualities (*big*, *long*), to general evaluations (*good*, *nice*, *hard*). However, *terribly*, *horribly* and *dreadfully* typically occur with words relating to emotions and states of mind: *sorry*, *MISS*, *upset*, *worried*, *bored*, *disappointed*, *embarrassed*, *SUFFER*, *afraid*, *aware*, and *dull*. This common feature is different from those found by Partington (2004) for a different group of amplifiers: *absolutely*, *perfectly*, *utterly*, *totally*, *completely*, *entirely*, and *thoroughly*. He discovered that *utterly*, *totally*, *completely* and *entirely* all have a preference for “absence of a quality” or “change of state”; however, *thoroughly* co-occurs often with items relating to emotions and states of mind: *annoyed*, *approved*, *enjoyed*, *confused*, *happy*, *sure*, *disgruntled*. Its collocates also include items relating to water and washing: *wet*, *dry*, *absorbed*, *cleaned*, *filtered*. Partington argues that this is because *thoroughly* “retains traces of its ancient sense of thorough-like, of penetration, and both water and emotions penetrate ‘through and through’” (p.148).

It might be for the same reason that the three items discussed here--*terribly*,

horribly and *dreadfully*--also have a greater tendency to intensify emotions or states of mind. There might be a historical reason for this similarity. It might well be that this group of words have developed their current semantic prosodies through a historical process starting with intensifying negative emotions since they are all derived from items denoting negative emotions—*terror*, *horror* and *dread*. It would have been highly natural to map these overwhelmingly negative emotions onto the intensity scale of other negative emotions, leading to collocations such as *terribly angry*, *terribly worried*, *terribly anxious*, *terribly afraid* and *terribly embarrassed*. The association would then have been extended to states of mind, quality, general evaluation etc., so they came to collocate with a greater range and number of words. This process is called delexicalisation, which can be defined as “the reduction of the independent lexical content of a word, or group of words, so that it comes to fulfil a particular function but has no meaning apart from this to contribute to the phrase in which it occurs” (Partington 1993:183). The intensifiers discussed in this study originally came from negative emotions. When they are used as intensifiers, their negative contents are reduced, but not lost completely. The more non-negative items an intensifier premodifies, the further it has diverged from its original negative semantic content, and the less negative its semantic prosody becomes, and the more delexicalised it is. The rest of the study will focus on the historical development of the semantic prosodies of the four intensifiers. To illustrate the gradual change they have undergone, I will make a diachronic comparison of their frequencies in the company of pleasant or unpleasant words in three corpora representing different periods.

4.2 Semantic prosody change

Shifting to the diachronic part of the study, a detailed analysis was made of the four intensifiers to reveal their semantic prosody change. For the two historical sub-corpora, all instances occurring were counted and examined. In counting the instances, a collocate which occurred several times successively was counted only once. For example, in the 1850-1920 sub-corpus, *awfully quaint* occurs 4 times repeatedly in a very narrow context, as shown in Example (12):

- (12) Her companion, at this, focussed again Mr. Verver’s innocence. “It’s awfully quaint.” “Of course it’s awfully quaint! That it’s awfully quaint, that the pair are awfully quaint, quaint with all our dear old quaintness...

In such a case, *quaint* should be counted only once as the corpus is not big enough to balance itself; otherwise, it would spoil the validity of the data. For the BOE, which is enormous in size, the frequencies of these intensifiers are very high and it was

unmanageable to examine all of them, so only 100 instances of each intensifier were randomly chosen to be investigated. After the data were extracted, the author and another trained rater independently rated them and had an average agreement rate of about 81%. Then the two raters discussed all the cases on which they disagreed and reached agreement after discussion. In rating, the same criteria were used throughout the three periods. The results are presented in Tables 3-6.

It might be easier to see the differences in the relative frequencies of negative and non-negative collocates across the three periods by observing the data graphically.

Table 3. Distribution of *awfully* across meaning categories in CLME and BOE

	Negative	Neutral	Positive	Total
<i>awfully</i> 1710-1850	10(48%)	8(38%)	3(14%)	21
<i>awfully</i> 1850-1920	136(43%)	54(16%)	130(41%)	318
<i>awfully</i> 1980-	42(42%)	23(23%)	35(35%)	100 out of 557

Table 4. Distribution of *terribly* across meaning categories in CLME and BOE

	Negative	Neutral	Positive	Total
<i>terribly</i> 1710-1850	66(79%)	14(17%)	4(5%)	84
<i>terribly</i> 1850-1920	122(76%)	25(16%)	13(8%)	160
<i>terribly</i> 1980-	60 (60%)	22(22%)	18(18%)	100 out of 1866

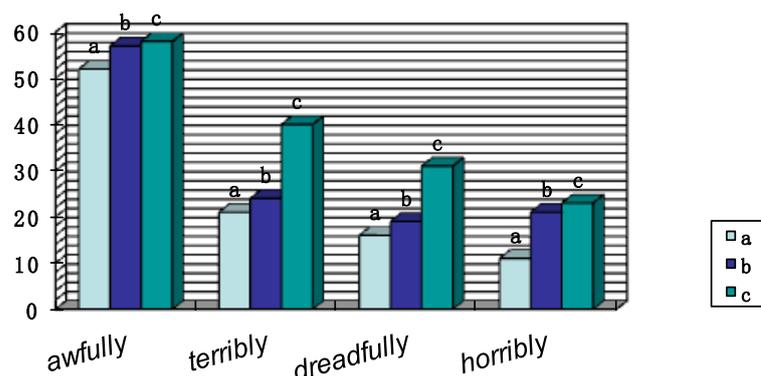
Table 5. Distribution of *dreadfully* across meaning categories in CLME and BOE

	Negative	Neutral	Positive	Total
<i>dreadfully</i> 1710-1850	62(84%)	9(12%)	3(4%)	74
<i>dreadfully</i> 1850-1920	94(81%)	15(13%)	7(6%)	116
<i>dreadfully</i> 1980-	69(69%)	25(25%)	6(6%)	100 out of 248

Table 6. Distribution of *horribly* across meaning categories in CLME and BOE

	Negative	Neutral	Positive	Total
<i>horribly</i> 1710-1850	16(89%)	2(11%)	0(0%)	18
<i>horribly</i> 1850-1920	81(79%)	20(20%)	1(1%)	102
<i>horribly</i> 1980-	77(77%)	20(20%)	3 (3%)	100 out of 486

Graph 1 illustrates the relative frequencies of which the intensifiers co-occur with non-negative (neutral and positive) items (a=1710-1850; b=1850-1920; c=1980-, henceforth). It shows that there is a general trend that the relative co-occurring frequencies with non-negative words increase through time. It tells us that *terribly* (24%-40%) and *dreadfully* (19%-31%) increase markedly from the 1850-1920 period



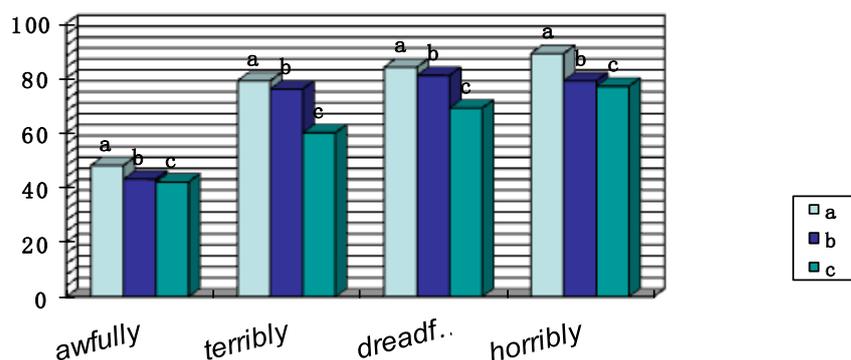
Graph 1: Relative frequencies of neutral and positive items intensified

to the 1980- period, whilst the main change for *horribly* (11%-21%) occurred in the 1850-1920 period. It seems that *awfully* (52%) was already more positive than negative during the 1710-1850 period. This explains why *awfully* has different collocational behaviour from the other three as discussed in Section 4.1.5. According to Dictionary.com (2009):

Awful and *awfully* as adverbial intensifiers—*awful(ly)hot*; *awful(ly)cold*—appear in the early 19th century, following much the same pattern as *horribly* and *dreadfully*.

It seems that *awfully* started to lose semantic content associated with the feeling of “awe” and was used as an intensifier in the early 19th century. This may account for the fact that only a minority of its occurrences as an intensifier (21 occurrences) were found in the 1710-1850 corpus. Its occurrences as a complete intensifier increased markedly (21- 318 occurrences) in the 1850-1920 period. If the above quote is true, it follows that *awfully* underwent a dramatic change from negative to neutral from the early to mid 19th century. This was possible because the association of “awe” is less negative than that of “horror”, “terror” or “dread”. However, the corpus used in this study is too small to trace such a change. A finer and larger diachronic corpus is needed to narrow down the time period and obtain sufficient instances to find the exact time period during which the change came about. An alternative possibility would be *awfully* as an intensifier started with a less negative semantic prosody because it was less negative in meaning. In the later periods, its relative frequencies to intensify pleasant words seem not to have increased much (52%-57%-58%), revealing that it did not change much in semantic prosody later.

Graph 2 presents the gradual decrease of frequency with which the intensifiers collocate with negative items across the three periods:



Graph 2: Relative frequencies of negative items intensified

It shows that the relative co-occurring frequency with negative words drop over the years. The semantic prosodies gradually move away, at different rates, from the negative pole of the semantic continuum. Tables 3-6 seem to reveal that these items can be arranged on a semantic continuum, from positive to negative as follows: *awfully* (42%), *terribly* (60%), *dreadfully* (69%), *horribly* (77%), in the same order as in the 1710-1850 period: *awfully* (48%), *terribly* (79%), *dreadfully* (84%), *horribly* (89%). After constant change over two and half centuries, the majority of the instances for *terribly*, *horribly* and *dreadfully* still fall into the negative category, though the percentages decrease markedly across the three periods. Among the three, *terribly* has gone a little farther along the road of diverging from the negative pole, since its modern collocates only show a slight degree of preference for negative items (60% negative). *Dreadfully* has gone less far and *horribly* is the most “stubborn”. In comparison, *awfully* (42% negative) is much more delexicalised, displaying a pronounced tendency to co-occur with pleasant items.

Terribly changes markedly after 1980 (76%-60%), and this might be due to its increase in frequency in the 1980- period (1866, ranking the 1st among the four), indicating that it is increasingly applied to items which are not negative. In contrast to *terribly*, *awfully* (557) drops from 1st (318>160>121>109) in the 1850-1920 period to 2nd in frequency (1866>557>486>248) among the four intensifiers. In the 1850-1920 corpus, the occurrence frequency of *terribly* is only about half of that of *awfully*; however, in the 1980- corpus, *terribly* occurs 3 times more than *awfully*. This switch of roles shows that *terribly* has replaced the previously popular position of *awfully* and become the most frequent intensifier of the four. *Awfully* suffers the comparative neglect and thus has not changed much (48%-43%-42%) in meaning and function. In addition, it still frequently intensifies such items as *good*, *sorry*, *hard*, *nice*, *glad* and *well* as it did in the 1850-1920 period. The differences in delexicalisation between

terribly and *horribly* may have to do with the fact that *terror* has been perceived as an expression of emotion but became, after the French Revolution, a term associated with extremism in politics, and only rarely any longer with the emotion of *terror*. *Horror*, on the other hand, was always an expression of a strongly negative emotion and has stayed that way –thus *horribly* is still found in connection with items which are considered as emotionally very negative. Therefore, *horribly* is the most “stubborn”. *Dreadfully* has become less negative than *horribly* probably because *dread* is emotionally less negative than *horror*.

To track the change of these intensifiers in semantic prosody, consider the following representative samples from the 1710-1850 period:

- (13) Town is awfully empty;
- (14) The flames caught the parched branches of the trees, and in a few seconds the whole grove was on fire. The sight was awfully grand, for the wind, which was blowing strongly, swept the flames forward, so that they devoured all before them.
- (15) To those who can reflect and will attend to the passing scenes before them, the times are indeed awfully interesting;

In the above citations, only *awfully empty* seems to be neutral, but *awfully grand* suggests that the scene is very impressive, while *awfully interesting* clearly indicates it is favourable. In addition, *terribly* and *dreadfully* are also found to appear at times in less negative environments in the 1710-1850 sub-corpus, as illustrated in the following citations:

- (16) ...yet the sea ran dreadfully high upon the shore...
- (17) ...and a quantity of fowls that look terribly tall to me, walking about, in a menacing and ferocious manner...

Dreadfully high and *terribly tall*, shown above, seem to be neutral in semantic colouring since they are used to describe the sea or the height of animals. More examples follow:

- (18) “That poor Cupid!” she said; “how dreadfully he was in love with me, and what a fool he was!”
- (19) He found her engaged with the writings of the Evangelists, and terribly demure.
- (20) But a blight had come over my existence, and I only visited these people for the sake of the information they might give me on the subject in which my interest was so terribly profound.
- (21) He described the meeting as “terribly affecting.” These friends had scarcely recovered from their tears...

Positive instances, such as *be dreadfully in love with*, *terribly demure*, *terribly profound* and *terribly affecting*, can occasionally be observed in this period, suggestive of a further step away from the semantically negative pole.

Over the centuries the semantic prosodies of these intensifiers have changed to different extents and been found at different points along the continuum between complete lexicalisation (a manner modifier), where only negative emotion meaning is expressed, and complete delexicalisation (a complete intensifier without any negative tendency). This change has resulted from the interplay between these intensifiers and their typical collocates. Take *terribly* for example. Its contiguity with words will influence its linguistic and collocational behaviours. When *terribly* started to be used with non-negative words more often, their non-negative prosodic meaning rubbed off on it through habitual collocation. Then it took on the less negative affective meaning and became less negative, gradually losing its emotionally negative content and getting closer to a complete intensifier. When it acquired the less negative meaning through semantic transfer, its semantic prosody started to change. This change has been hidden in its change in collocational behaviours, i.e. its collocation frequency with negative items relative to that with non-negative items. The semantic prosody of an intensifier is the result of its collocation that spreads over the intensifier and its collocates, so it is strongly collocational, hidden and can only be revealed via corpus technology. The semantic prosody of an intensifier is also a part of its evaluative connotation in the broad sense as discussed earlier in Section 2, which is a less consistent connotation developed through habitual collocation and more likely to change with contexts. As such, the semantic prosody of an intensifier is both connotational and collocational. For intensifiers, and actually also for other lexical items, it is through collocation that the aspect of evaluative connotation of semantic prosody is established and through the change of collocation that the aspect of evaluative connotation of semantic prosody is changed.

5. Limitations and suggestions for further research

Due to the fact that historical texts are “restricted in scope and size” (Ooi 2001:178), it is less likely that a diachronic corpus can be compiled comparable in size with the Bank of English, but more reliable statistics for *awfully* (21) and *horribly* (18) in the 1710-1850 period can still be expected by using a larger corpus. In addition, semantic prosody is also genre-specific, as illustrated in Ooi’s (2000) *cheat* example, which shows that *cheat* has a positive prosody in electronic games and Hunston’s (2007) *cause* example demonstrating that *cause* is basically neutral in scientific writing. Therefore, a finer genre selection of the texts would be an obvious

step forward.

In this paper, I have tried to illustrate the value of using diachronic corpora in the investigation of semantic prosody change. These adverbial intensifiers seem to have followed the same historical route of moving away from the negative pole of the semantic continuum over centuries. One could go on to explore these adverbial intensifiers' corresponding adjectival ones in nominal groups such as *terrible beauty*, *awful lot*, *horrible details*, *dreadful waste*, in order to find out whether they have undergone the same process and what they have in common in terms of semantic change with their cognate adverbial intensifiers.

6. Conclusion

Prosodies are “the product of a long period of refinement through historical change” (Louw 1993:164). The “terribly” group of intensifiers discussed are found at different stages on the continuum of complete lexicalisation and delexicalisation. They have diverged, to different extents, from the negative pole of semantic continuum over the years and have developed the semantic prosodies they have now through a continuous historical process. Louw (1993) relates semantic prosody to “contagion” or “semantic transfer”. He argues that meaning can “rub off on” another word through habitual collocation. Such a rubbing-off could happen because marked collocations tend to get more attention. Of course it may take a long time to show a significant change in semantic prosody. However, it seems that Louw’s idea can explain well semantic prosody change of lexical items and that studying diachronic processes can be of great value in tracking the development of such change, revealing the historical routes and providing insight into how and why they have the semantic prosodies they have today.

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基於語料庫的語義韻變化研究：以強化副詞為例

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語義韻曾經被眾多語料庫語言學研究者詳細論述過，以前的研究主要從共時的角度來探討。本文提出，要想更好地了解語義韻的變化以及現有的語義韻是如何來的，歷時的角度是非常必要的。該研究借助歷史的和現代的語料庫數據，以 *terribly*, *awfully*, *horribly* 和 *dreadfully* 四個強化副詞為例，從共時和歷時兩種角度去分析它們的語義韻，通過考察它們在三個不同歷史時期分別和積極義、中性義以及消極義的詞的搭配頻率來追蹤它們語義韻的歷時變化。研究表明，幾個世紀以來它們已經不同程度地偏離了語義連續統的否定意義極，逐漸和越來越多的非否定義甚至肯定意義的詞搭配。語料庫研究發現意義可以通過習慣性的搭配而“傳染”給別的詞，那麼我們可以這樣解釋這些強化副詞的歷時變化：本來極具否定意義的情感副詞如果經常與不具否定意義甚至具有肯定意義的詞搭配使用，這個詞就會被“感染”上該種“非否定”的語義特點，從而改變其消極的語義韻，逐漸向純粹的、不具任何否定意義傾向的強化副詞的方向發展。

關鍵詞：語義韻、語料庫語言學、強化副詞、歷時角度