

# How suitable are movie reviews for use as ESL/EFL teaching and reading materials?

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## Abstract

Finding adequate and interesting content is a challenge teachers and writers of foreign language learning materials frequently come across. In this paper, we evaluate how suitable, vocabulary-wise, movie reviews are for English language teaching and learning purposes. Employing the method of lexical frequency profiling, we study a 1.3-million-word corpus of American movie reviews, and find that a knowledge of about 5,000 words is needed to achieve the minimum reading comprehension level (at 95%-vocabulary coverage), whereas as many as 13,000 words are needed for reaching the ideal reading threshold (98%-vocabulary coverage). We conclude that, non-adapted, movie reviews as a genre are only suitable for advanced learners. In addition, the study shows that movie reviews are not an excellent source of formal vocabulary, but are an excellent source of opinion vocabulary, and we therefore suggest that the teaching and learning target in terms of vocabulary for movie reviews in ESL/EFL contexts should be on positive and negative words expressing opinion.

**Key words:** lexical frequency profiling, reading comprehension, movie reviews, vocabulary coverage, word lists

## 1. Introduction

Providing relevant and interesting content is one of the challenges teachers and writers of English language teaching and learning materials face on a daily basis. Bearing in mind the general appeal of movies amongst almost every type of audience, one source of such content may be *movie reviews*, a genre in which opinions on a movie are expressed in a way intended to attract attention and provide entertainment. Movie reviews are readily available on the internet and in newspapers, and are known for their appealing writing style, marked by the use of figures of speech (e.g., puns, metaphors, and irony) and varied vocabulary, particularly vocabulary which expresses attitudes, opinions and emotions. However, to our knowledge, there are no studies evaluating the use of movie reviews in vocabulary teaching and learning contexts.

Based on a corpus of 2,000 movie reviews, this study investigates the suitability of vocabulary encountered in movie reviews for English learning purposes. Particularly, we seek the answer to three research questions:

1. How many words are needed to successfully read movie reviews?
2. How much general, academic and opinion vocabulary do movie reviews contain?
3. Based on the answers to questions 1 and 2, how accessible are movie reviews for ESL/EFL students at various levels of English proficiency?

Answering the first two research questions entails exploring the vocabulary complexity and profile of movie reviews as a genre. These answers will inform the selection of the target learners who are capable of reading movie reviews without too much outside assistance.

The structure of the paper is as follows: we first provide a review of the literature of the field of lexical profiling and word lists. Next, we present the data and the method used in this study. The results and analysis section compose the main part of the paper, followed by a conclusion which also includes pedagogical implications.

## **2. Theoretical background**

The suitability of vocabulary used in various texts for foreign language teaching can be investigated using the method of *lexical frequency profiling*, which, *inter alia*, involves investigating the vocabulary used in large corpora with the help of pre-set word lists, and determining the amount of vocabulary needed to reach the minimum reading comprehension threshold for non-native speakers. In this section, we discuss different vocabulary reading thresholds, provide a review of some of the word lists relevant for this study, and briefly discuss how these word lists were produced. We also provide a review of some previous studies employing these methods.

### **2.1. Vocabulary reading threshold**

How much vocabulary do non-native speakers of English need in order to be able to read an authentic English text without assistance? This question has been the focus of interest in various papers, all departing from the premise that knowledge of vocabulary is predictive of reading comprehension (Laufer and Ravenhorst-Kalovski, 2010), i.e. that these two are significantly related (Coxhead et al. 2017). Schmitt et al. (2011), for instance, show that there is a linear relationship between reading comprehension levels and vocabulary knowledge. In other words, vocabulary knowledge is a pre-requisite for reading comprehension and the more words a speaker knows, the more that person is likely to fully understand the texts he or she reads.

The question of how many words in a text the reader must know in order to understand the text has received partly different answers in different studies, i.e., comprehension levels are set differently in the different studies. A much-cited study by Laufer (1989) found that a knowledge of 95% of the words in a text is required for "reasonable", or minimum, reading comprehension. The meaning of some of the words from the remaining 5% can be deciphered from the context. Another frequently-cited

study, by Nation (2006), sets the required level to ensure an "ideal" comprehension level higher, at 98%. The differences between the two studies arise from the fact that the required comprehension levels are defined differently and that the percentage of vocabulary needed depends on how high we aim those levels to be. For example, to reach the "ideal" comprehension level, Nation (2006) estimates that some 8,000 to 9,000 *word families* are needed for unassisted reading. Under word family, Nation assumes a group of words consisting of a head word (the base word), with all its morphological forms, as well as all the words derived from it and their morphological forms. To exemplify: *run, runs, ran, running, runner, runners* would all belong to one word family, represented by the head form *run*.

Both the comprehension levels referred to above require knowledge of thousands of words, which may be a problem for non-native speakers of English. Nation (2013) estimates that there are about 70,000 word families in the English language, of which a typical adult native speaker who has graduated from high-school knows up to 20,000. As a contrast, Nation and Waring (1997) argue that many adult speakers of English as second or foreign language know fewer than 5,000 word families, which is significantly fewer than the number of words they would need to know to fully understand many texts.

As evident from the figures presented above, and as any foreign language teacher has experienced, learning enough vocabulary is one of the greatest problems in foreign language learning. Thus, when selecting texts for instruction and reading tasks, teachers and writers of teaching materials arguably need to make sure that the vocabulary level is suitable for the target students' pre-existing knowledge, as texts containing too much unfamiliar vocabulary might severely impede their comprehension or render it impossible, and discourage the students from taking part in such reading activities. A challenge here is that although teachers may have intuitions about whether a certain word is frequent in the target language and whether their students have knowledge of the word, overreliance on intuition, particularly when writing extensive teaching materials, might prove costly. To avoid such pitfalls, empirically derived data gauging the suitability of various genres for students at different proficiency levels is useful.

## **2.2. Lexical frequency profiling**

One method to gauge the vocabulary of a certain text is Lexical Frequency Profiling (LFP), developed by Laufer and Nation (1995). LFP provides a lexical profile of a certain corpus, i.e., its lexical frequency data. In other words, we can find out how many frequent words and how many not so frequent words a corpus contains or determine its so-called vocabulary level or load. In a similar fashion, we can obtain data about the type of vocabulary in the corpus, for instance, how much general, academic, technical, etc., vocabulary the corpus contains.

The LFP method is widely considered to be the best band-based measure of frequency (Crossley et al. 2013) and has been used extensively for many years (see e.g., Cobb & Horst 1999; Morris & Cobb 2004; Read & Nation 2006; Douglas 2015 etc.). Laufer and Nation (1995) introduced it to measure the vocabulary load of English learners' essays. They found that LFP correlates with other methods of lexical richness, which has also been confirmed by others (e.g., Lindqvist et al. 2013), and that it produces a stable measure of the vocabulary level of the same author across a number of texts. The method has also received some criticism, however. For example, Crossley et al. (2013) point out that a certain 'information loss' accompanies the grouping of words according to frequencies, and that such grouping also involves a bias towards receptive knowledge (especially since it typically deploys the word family approach, which assumes that a learner will recognize the meaning of the derived forms if he/she knows the base word). Some criticism has also been forwarded by Meara and Bell (2001) and Meara (2005), who suggest that the method is not sufficiently sensitive to register modest changes in the vocabulary size of learners' production. However, Laufer (2005) questioned the use of the simulated data employed by Meara (2005) to arrive at such conclusions.

### **2.3. Word lists**

Over the last two decades, a number of researchers have developed word lists of different types and for different purposes. Word lists are typically derived from large corpora and can be used for various pedagogical needs and purposes: as resources for foreign language learners (Khani and Tazik 2013), as reference resources for foreign language textbook writers and curriculum developers (Jin et al. 2013), and as a guide for selection of teaching materials for course designers (Wang et al. 2008). This last purpose will be the one in focus in this study.

Many word lists were, of course, developed even before the computer era and one of the most popular lists, which has been in use for decades, is West's (1953) General Service List (the GSL), containing around 2,000 high-frequency English words. This list was developed manually for foreign language teachers and learners, as a selection of the words which should be taught and learned first, on the argument that the learner should start with the most frequent words.

Today, there are several word lists made in GSL's image, developed from vast corpora. The creation of these word lists typically involves using software and making a series of carefully weighted decisions regarding the criteria for word inclusion. Two lists have the same name – the New General Service List (NGSL) – both published in 2013. One list was produced by Brezina and Gablasova (2013a), from a corpus of 12 billion words, and the other list was produced by Browne, Culligan and Philips (2013b), who used a subsection of the Cambridge English Corpus, containing 273

million words. The former contains 2,494 lemmas<sup>1</sup>, whereas the latter contains 2,368 word families or 2,800 lemmas. Both lists report better coverage results in the corpora they were derived from than those achieved using the GSL. Comparisons of the coverages reached by these lists in various other corpora do not offer definitive conclusions; some studies point to certain differences – for instance, Browne (2014) shows that the GSL outperforms the new lists in classic literature (which reflects the fact that the GSL was produced from an 'old' corpus) and that Browne et al.'s NGSL outperforms the other NGSL in more modern corpora such as *Scientific American* and *the Economist*. It should be pointed out, however, that some authors argue that these differences might arise from the number of items these lists contain, as well as the different word definitions they apply (cf. Kwary and Jurianto 2017).

Another competitive list, or rather a set of lists, is that produced by Nation (2012), containing 25 1,000-word lists, derived from a combined BNC<sup>2</sup> and COCA<sup>3</sup> corpus of 450 million words. Nation also produced word lists of proper names, marginal words, transparent compounds and abbreviations, to accompany the set. Whereas the word lists produced by Brezina and Gablasova (2013) and Browne et al. (2013) only contain the most frequent words of English, Nation's set of word lists is much more comprehensive and therefore more suitable for lexical profiling studies of various types of texts.

Amongst the most famous word lists is certainly the Academic Word List (AWL), built by Coxhead (2000). It contains 570 word families which are outside the GSL, but particularly frequent in academic texts. Coxhead used an academic corpus containing 3.5 million words to select the words for the AWL and applied several criteria: exclusion of high-frequency words (those from the GSL), frequency, dispersion and range, and so obtained a word list which covered 10% of the words in her academic corpus. The AWL covers formal vocabulary to a great degree (Nation 2013: 294), which is why we can use its coverage as an indication of the proportion of formal vocabulary in a corpus.

Following Coxhead (2000), who produced her AWL to function in conjunction with the GSL, Brown, Culligan and Philips (2013c) produced the NAWL, containing 963 lemmas, to work in conjunction with their NGSL list, referred to above. The AWL also paved the way for many researchers to produce more specialised word lists. These include word lists derived to represent various academic fields, such as the social sciences (Kwary & Artha 2017), spoken hard science (Dang 2018a), spoken soft science (Dang 2018b), medicine (Wang et al. 2008; Lei & Liu 2016), agriculture (Martinez et al. 2009), applied linguistics (Khani & Tazik 2013), chemistry (Valipouri

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<sup>1</sup> Under this principle, only the morphologically derived forms of a word are included.

<sup>2</sup> British National Corpus, originally created by Oxford University Press, contains 100 million words.

<sup>3</sup> Corpus of Contemporary American English. A large balanced corpus of American English, made available online for free by Mark Davies (Davies, 2010).

& Nassaji 2013), environmental science (Liu & Han 2015), nursing (Yang 2015), and linguistics (Moini & Islamizadeh 2016). Other authors also included more technical, discipline-specific vocabulary in their lists, representative not only of some academic fields but also of various trades. Examples of such word lists include the science list (Coxhead & Hirsch 2007), the pharmacology list (Fraser 2007), the undergraduate business list (Konstantakis 2007), the engineering list (Jin et al. 2013), the computer science list (Minshall 2013), and the plumbing word list (Coxhead & Demecheleer 2018).

### 3. Data and method

The corpus used in this study consists of 2,000 movie reviews (1,000 positive and 1,000 negative movie reviews), containing a total 1,330,555 running words. The corpus was compiled by Pang and Lee (2004) for the purpose of sentiment analysis. The reviews were written by 312 authors, and a maximum of 20 reviews by the same author are included in the dataset. This corpus is freely available at the website of Cornell University<sup>4</sup>.

We used the Lexical Frequency Profiling method to create the lexical profile of the corpus. The word lists against which the movie review corpus was profiled include a selection of the lists presented in the theoretical section of the paper: Nation's (2012) set of word lists derived from the BNC/COCA corpus, West's GSL (1953), Coxhead's AWL (2000), and Browne et al. (2013b; 2013c) NGSL and NAWL. Additionally, we used another corpus-based word list, one of which was not developed for language learners – that of opinion vocabulary manually compiled by Hu and Liu (2004), the *Opinion Lexicon: A list of English positive and negative opinion words or sentiment words*, containing 6,800 items. By opinion words, Hu and Liu (2004) refer to the words used to express either a positive or a negative opinion – hence their lexicon is divided into two sublists.

In this study, we determine the level of vocabulary needed to reach the minimum requirements for reading comprehension (in thousands of words). We also determine the type of vocabulary contained in the said datasets – namely, the general, academic, as well as sentiment vocabulary (both positive and negative). For comparison, we use a reference corpus – a 1.7-million-word COCA sample.<sup>5</sup>

The software employed in the study is AntWordProfiler 1.4.1 (Anthony 2014), a freeware tool<sup>6</sup> developed by Laurence Anthony for determining the vocabulary level and complexity of corpora.

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<sup>4</sup> Available at [www.cs.cornell.edu/people/pabo/movie-review-data/](http://www.cs.cornell.edu/people/pabo/movie-review-data/) (review corpus version 2.0).

<sup>5</sup> Available at: <https://www.corpusdata.org/formats.asp>

<sup>6</sup> Available at: <https://www.laurenceanthony.net/software/antwordprofiler/>

#### 4. Results and analysis

This section presents our results and analysis for each of the research questions posed in the introduction.

##### 4.1. How many words are needed to successfully read movie reviews?

To answer our first research question, we measured the coverages reached in the corpus with different numbers of words (in thousands of words). For this purpose, we used the BNC/COCA word lists (Nation 2012). As explained earlier, these lists include the four lists of the words which have no or a minimum learning load (proper names, abbreviations, transparent compounds and abbreviations), as well as word lists representing various frequency bands (i.e. the first 1,000-band contains the most frequent 1,000 words of English; the 2,000-band has the second most frequent 1,000 words of English, etc.). The coverages are presented in Table 1.

Table 1. Vocabulary coverage in the movie review corpus (%)

BNC/COCA word lists	Movie reviews
Proper names (PN)	4.32
Abbreviations (A)	0.21
Transparent compound nouns (TCN)	0.50
Marginal words (MW)	0.07
2,000 + PN, A, TCN, MW	88.41
3,000 + PN, A, TCN, MW	92.31
4,000 + PN, A, TCN, MW	94.08
<b>5,000</b> + PN, A, TCN, MW	<b>95.08</b>
6,000 + PN, A, TCN, MW	95.95
7,000 + PN, A, TCN, MW	96.58
8,000 + PN, A, TCN, MW	97.05
9,000 + PN, A, TCN, MW	97.38
10,000 + PN, A, TCN, MW	97.62
11,000 + PN, A, TCN, MW	97.83
12,000 + PN, A, TCN, MW	97.99
<b>13,000</b> + PN, A, TCN, MW	<b>98.13</b>
25,000 + PN, A, TCN, MW	98.47

As can be seen, a significant coverage portion of 4.32% was reached by proper names only, which can be expected from the characteristics of the movie review as a genre, as it entails many names of actors, directors, characters, etc. Abbreviations, marginal words and transparent compounds together made up less than 1% of the corpus. The words contained in the said four lists, which are generally considered easy to recognize

and understand by the readers, together made up 5.1% of the corpus. Along with these, the first two BNC/COCA word lists constituted 88.41% of the corpus, which is a considerable coverage. Nevertheless, more than one word in every 10 words was outside the said five lists (which generally translates to one word per every line of text), which would put great strain on the reader of movie reviews who knows just the words from these lists.

The results for the first two BNC/COCA lists can be compared to those for some other genres. That is, in the corpus of movie reviews these two lists cover 83.31% (without the additional four lists), which is significantly less than Nation (2016) found for novels (88.88%), TV/movies (90.87%) or US spoken language (91.82%). This strongly suggests that movie reviews are much more demanding than these genres as a potential source of teaching material for ESL/EFL classes.

The threshold of 95%, which is often referred to as the required minimum for reasonable reading comprehension (as explained in the theoretical section of the paper), was reached at the level of 5,000 words (together with proper names, abbreviations, marginal words and transparent compounds). This finding also confirms the vocabulary complexity of this genre when compared to some other genres – for instance, Nation (2006) finds that 4,000 word families are needed to reach a 95%-coverage for novels, newspapers and children's movies, whereas 3,000 words suffice to reach the same coverage for spoken English.

The ideal reading threshold of 98% was reached at 13,000 words, which is very high, if we take into account the findings for other genres. In the study mentioned above, Nation (2006) determines that 6,000 words are needed to reach this level for children's movies, 7,000 for spoken English, as well as 8,000 and 9,000 for newspapers and novels, respectively.

To illustrate the level of words in terms of frequency band in a sample from the corpus, we present an extract from the corpus. The superscripts mark the level of words, e.g. ,1<sup>st</sup> 1,000 words (the most frequent 1,000 words of English), 2<sup>nd</sup> 1,000 words (the next 1,000 most frequent words) and "PN" stands for *proper noun*:



Sayles is<sup>1</sup> not<sup>1</sup> a<sup>1</sup> particularly<sup>1</sup> inventive<sup>7</sup> director – he<sup>1</sup> likes<sup>1</sup> to<sup>1</sup> let<sup>1</sup> his<sup>1</sup> actors<sup>1</sup> do<sup>1</sup> most<sup>1</sup> of<sup>1</sup> the<sup>1</sup> work<sup>1</sup> – but<sup>1</sup> he<sup>1</sup> and<sup>1</sup> cinematographer<sup>4</sup> Slavomir Idziak ("Gattaca") successfully<sup>2</sup> evoke<sup>4</sup> both<sup>1</sup> the<sup>1</sup> beauty<sup>1</sup> and<sup>1</sup> the<sup>1</sup> danger<sup>1</sup> of<sup>1</sup> the<sup>1</sup> Central<sup>1</sup> American<sup>PN</sup> terrain<sup>5</sup>.

Sayles also<sup>1</sup> maintains<sup>2</sup> a<sup>1</sup> strong<sup>1</sup> sense<sup>1</sup> of<sup>1</sup> authenticity<sup>4</sup> by<sup>1</sup> filming<sup>1</sup> everything<sup>1</sup> on<sup>1</sup> location<sup>2</sup> in<sup>1</sup> Mexico<sup>PN</sup>, using<sup>1</sup> all<sup>1</sup> Latin American<sup>PN</sup> actors<sup>1</sup>, and<sup>1</sup> having<sup>1</sup> all<sup>1</sup> the<sup>1</sup> dialogue<sup>3</sup> spoken<sup>1</sup> in<sup>1</sup> either<sup>1</sup> Spanish<sup>PN</sup> or<sup>1</sup> native<sup>2</sup> Indian<sup>PN</sup> dialects<sup>6</sup>.

The<sup>1</sup> one<sup>1</sup> exception<sup>3</sup> is<sup>1</sup> a<sup>1</sup> couple<sup>1</sup> of<sup>1</sup> bumbling<sup>11</sup> American<sup>PN</sup> tourists<sup>2</sup> who<sup>1</sup> work<sup>1</sup> not<sup>1</sup> only<sup>1</sup> as comic<sup>4</sup> relief<sup>2</sup>, but<sup>1</sup> as<sup>1</sup> evidence<sup>2</sup> of<sup>1</sup> just<sup>1</sup> how<sup>1</sup> clueless<sup>2</sup> the<sup>1</sup> United<sup>2</sup> States<sup>2</sup> is<sup>1</sup> about<sup>1</sup> what<sup>1</sup> is<sup>1</sup> going<sup>1</sup> on<sup>1</sup> a<sup>1</sup> few<sup>1</sup> hundred<sup>1</sup> miles<sup>1</sup> south<sup>1</sup> of<sup>1</sup> the<sup>1</sup> Texas<sup>PN</sup> border<sup>3</sup>.

It<sup>1</sup> would<sup>1</sup> not<sup>1</sup> be<sup>1</sup> a<sup>1</sup> stretch<sup>2</sup> to<sup>1</sup> say<sup>1</sup> that<sup>1</sup> "Men<sup>1</sup> with<sup>1</sup> Guns<sup>1</sup>" is<sup>1</sup> a<sup>1</sup> depressing<sup>2</sup> film<sup>1</sup>. In<sup>1</sup> fact<sup>1</sup>, the<sup>1</sup> two<sup>1</sup> feelings<sup>1</sup> it<sup>1</sup> evokes<sup>4</sup> most<sup>1</sup> are<sup>1</sup> hopelessness<sup>1</sup> and<sup>1</sup> failure<sup>3</sup>.

In<sup>1</sup> addition<sup>1</sup> to<sup>1</sup> loss<sup>2</sup>, the<sup>1</sup> main<sup>1</sup> characters<sup>2</sup> are<sup>1</sup> also<sup>1</sup> failures<sup>3</sup> at<sup>1</sup> something<sup>1</sup>, whether<sup>1</sup> that<sup>1</sup> be<sup>1</sup> dr.<sup>1</sup> Fuentes<sup>PN</sup> failure<sup>3</sup> to<sup>1</sup> change<sup>1</sup> anything<sup>1</sup> through<sup>1</sup> medicine<sup>2</sup>, or<sup>1</sup> padre<sup>8</sup> Portillo<sup>PN</sup>'s inability<sup>1</sup> to<sup>1</sup> stand<sup>1</sup> up<sup>1</sup> and<sup>1</sup> be<sup>1</sup> the<sup>1</sup> martyr<sup>5</sup> he<sup>1</sup> always<sup>1</sup> dreamed<sup>1</sup> of<sup>1</sup> being<sup>1</sup>.

Nevertheless<sup>3</sup>, it<sup>1</sup> is<sup>1</sup> bleak<sup>5</sup> material<sup>2</sup> Sayles has<sup>1</sup> chosen<sup>1</sup>, and<sup>1</sup> he<sup>1</sup> deals<sup>1</sup> with<sup>1</sup> it<sup>1</sup> accordingly<sup>2</sup>.

The<sup>1</sup> last<sup>1</sup> shot<sup>1</sup> of<sup>1</sup> the<sup>1</sup> film<sup>1</sup> does<sup>1</sup> offer<sup>1</sup> a<sup>1</sup> hint<sup>3</sup> of<sup>1</sup> hope<sup>1</sup>, even<sup>1</sup> in<sup>1</sup> a<sup>1</sup> world<sup>1</sup> where<sup>1</sup>, as<sup>1</sup> one<sup>1</sup> character<sup>2</sup> puts<sup>1</sup> it<sup>1</sup>, "nobody<sup>1</sup> refuses<sup>2</sup> the<sup>1</sup> men<sup>1</sup> with<sup>1</sup> guns<sup>1</sup>!"

(An extract from a movie review from Pang and Lee's corpus (2004))

The words dominating the extract are those from the first 2,000 words of English in terms of frequency. Some words come from the 3<sup>rd</sup> and the 4<sup>th</sup> frequency bands, and many also come from the proper name list. Still, some are much rarer – e.g., *bleak*, *martyr* and *terrain* come from the 5<sup>th</sup> 1,000 words of English; whereas *dialect*, *inventive*, *padre* and *bumbling* represent the 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> and the 11<sup>th</sup> BNC/COCA word lists. In this sample of about 200 words, 19 words exceed the level of the first 2,000 words of English. It seems clear that if students only have knowledge of the words on the first two lists, reading this text would mean that they need to look up a number of unfamiliar words, which would put a lot of strain on them and also take considerable time.

#### 4.2. How much general, academic and opinion vocabulary do movie reviews contain?

In this section, we deal with the type of vocabulary encountered in movie reviews, in terms of 'general', 'academic' and 'opinion' vocabulary, so as to be able to better profile the type of ESL/EFL students for whom these materials might be of best use.

We first measured the presence of general and academic vocabulary in the corpus of movie reviews. In addition to using the more recent word lists (NGSL+NAWL), we also used the older word lists (GSL+AWL), so as to be able to compare the results of this study with those of earlier studies. The results are presented in Table 2 below.

Table 2. General and academic vocabulary in the movie review corpus (%)

Word list	Coverage	Word list	Coverage
GSL	80.09	NGSL	82.95
AWL	3.20	NAWL	1.21
<b>Total</b>	<b>83.29</b>	<b>Total</b>	<b>84.16</b>

Table 2 shows that the overall coverage of both the word list sets are similar (83.29% vs. 84.16%), but the comparison cannot be entirely fair as the lists do not have the same number of items and also do not apply the same word-definition criteria.

In line with the results for the two BNC lists, which overlap to a great degree with the GSL list, we found a lower coverage of the GSL in the movie review corpus compared to some other genres – for instance, Nation (2013) found that the GSL covers 88.44% in novels, 89.09% in TV/movies and 90.14% in his US spoken corpus. Out of the three lists used, the BNC/COCA lists had the best coverage with the first 2,000 word families (covering 83.31%, vs. 80.09% for the GSL and 82.95% for the NGSL, which achieves that percentage with 2,368 word families). This is probably due to the fact that the BNC/COCA lists were partly derived from a corpus of American English and our movie review corpus is from the USA.

When it comes to the presence of academic vocabulary, as represented by the AWL, we found that it covered 3.2% of the words in the corpus. As suggested earlier, the AWL list covers formal vocabulary to a great degree (Nation 2013), which is why it makes sense to check for its coverage in the movie reviews as a genre, bearing in mind that this genre employs a formal register. For comparison, in newspapers, the AWL covers around 4% (Nation, 2013), which is rather similar to our results. Of course, the levels reported here are much lower than those reported for academic written genres, which generally average around 10% (Coxhead 2000). The results for the NAWL are much lower than those for the AWL (1.21% vs. 3.2%), but this mostly has to do with the fact that the NGSL, on top of which the NAWL was built, is a longer list.

Another type of vocabulary which is prominent in movie reviews is opinion vocabulary, which can be either positive or negative. We used Hu and Liu's (2004) opinion word lists to determine the amount of specifically positive and negative opinion vocabulary, respectively, as explained earlier.

Table 3. Opinion vocabulary in the movie review corpus (%)

Word list	Movie reviews
Positive opinion words	8.17
Negative opinion words	6.02
<b>Total</b>	<b>14.19</b>

As evident in Table 3, positive opinion words made up 8.17% of the words in the corpus of movie reviews, whereas negative words constituted a further 6.02%, making a total of 14.19% in the corpus, which is a substantial coverage.

As there are no previous studies on the coverage of Hu and Liu's (2004) list using the methods we employ in this study, we used a 1.7-million-word sample of the COCA corpus for comparison, as explained in the section 3. In this sample, we found the positive words to feature a coverage of 6.49% and the negative words to cover a further 4.42%, i.e., the opinion words covered less than 11%, which is a substantial difference when compared to movie reviews. We therefore conclude that movie reviews are indeed a good source of opinion vocabulary for ESL/EFL learners, should they have such vocabulary as their learning target; however, it is only suitable for advanced learners, bearing in mind our findings presented earlier.

For illustration, we present another extract from the corpus (the words in bold present positive opinion vocabulary, whereas those underlined are negative opinion words):

Verhoeven is actually having it both ways -- he's making **fun** of gung-ho boosterism even as he fires his **fresh**-faced recruits into battle on a gung-ho booster rocket of visual effects. If that makes starship troopers hypocritical, at least it's **enthusiastically** staged hypocrisy. There may not be a person **worth** caring about in the whole film, but it moves like nobody's business. Verhoeven stages some **thrilling** action sequences, sending swarms of bugs after the anonymous grunts then having various body parts strewn about the screen like landscaping. It is that rare special effects **blockbuster** which demonstrates a sense of pacing to match its budget; I was caught up in the action enough of the time that I wasn't perpetually groaning over the absence of real human beings. I wish I could find it in myself to work up more outrage over the callous way humans are dispatched in starship troopers, but it didn't **work** out that way. That would be punishing Verhoeven for getting to the heart of his material. The **magic** of this film lies in its unorthodox setting and methodical build-up that makes it **wonderfully** horrifying.

(An extract from a movie review from Pang and Lee's corpus (2004))

As can be seen, positive words from the list include items such as *fun*, *fresh*, *enthusiastically*, *worth*, etc., whereas negative words include items such as *hypocritical*, *outrage*, *callous*, *unorthodox*. These words come from different frequency bands – while those most frequent prevail, some come from the pool of much rarer words (*hypocrisy* (6<sup>th</sup> 1,000), *blockbuster* (7<sup>th</sup> 1,000), *callous* (8<sup>th</sup> 1,000)).

#### **4.3. Based on the answers to the questions 1 and 2, how accessible are movie reviews for ESL/EFL students of various levels of English knowledge?**

With reference to research question 1, we found that the minimum reading threshold (vocabulary coverage of 95%) is reached at 5,000 words, and that the ideal reading threshold (98%) is reached at 13,000 words. Bearing in mind that only very proficient speakers of English typically reach the level of 9,000 words, e.g., students completing doctoral studies in English (Nation 2013), we can conclude that very few English language learners can read movie reviews on their own, without outside assistance. We would therefore recommend that if movie materials are used in class, assistance should be provided, and the tasks should be aimed at advanced learners. For those with a knowledge of 5,000 words, one word in every 20 words (or typically two lines) would have to be explained, but the strain is proportionally reduced for students in higher proficiency levels.

With reference to our research question 2, we found that the corpus of movie reviews featured 3.2% of the most frequent academic words (as represented by the AWL), much fewer words than is typically found in academic written genres. This means that a strong knowledge of formal and academic vocabulary is not a prerequisite for reading this genre. In addition, given the limited proportion of this type of vocabulary in movie reviews, this genre is not suitable in English for Academic Purposes (EAP) courses. We also established that the movie-review corpus had a substantial share of opinion vocabulary, significantly larger than that found in general English. This finding suggests that the genre of movie reviews is suitable to students who need material for developing opinion vocabulary.

#### **5. Conclusions with pedagogical implications**

In this study, we found that students who know the most frequent 5,000 words of English can read movie reviews at the minimum satisfactory level, and that those commanding as many as 13,000 words can read them at the ideal level. We thus concluded that, non-adapted, movie reviews as a genre may be used as a source for teaching and learning materials for advanced learners only. For students with lower levels of English, movie reviews need to be adapted. One of the ways to do this could be to highlight the words beyond the word frequency bands which the students command, using some lexical profiling software as the one employed in this study and as illustrated in two extracts from the corpus (see section 4.1). To be suitable for lower level learners, we suggest that most of the low-frequency words in a text should be replaced by their synonyms from the higher frequency bands, or be explained or translated. Given the findings from the literature, 2% to 5% of such words can be left unexplained, as the reader can handle that many unknown words and still read the text successfully. These words could provide the motivational challenge for the readers to further expand their vocabulary knowledge. It would make sense, however, that such words are taken from the word frequency bands which are closer to the students'

vocabulary threshold – e.g. if the students command about 5,000 words, the words that are left unexplained should come from the next 1,000-2,000 most frequent words, as these will be more valuable for them in the long run (given their higher frequency in general English).

We also wanted to see how much general, academic and opinion vocabulary movie reviews contain, in order to draw some pedagogical implications in relation to the results obtained. We saw that the movie reviews in our corpora contain less general vocabulary than some other genres, and that formal vocabulary, which makes a significant part of the vocabulary categorized under academic word lists, is present to a degree in this genre. This means that the movie-review genre can be used as a source of this type of vocabulary, but it is not an excellent source, bearing in mind that more formal vocabulary would be found in newspapers, for instance. Thus, we do not recommend this genre for inclusion in EAP materials.

Instead, we suggest that movie reviews can be used as a good source of opinion vocabulary, should the teaching and learning focus be on such words (both positive and negative opinion vocabulary). Thus, in general, we suggest that movie reviews can be used in conjunction with the speaking activities in which students are asked to express opinions (including the genre of debates), as well as with writing opinion pieces and argumentative essays, for instance. They can be used as a source of vocabulary for all tasks which require students to provide an evaluation or assessment in general, or read or listen to such evaluations or assessments, as is the case with tasks based on advertising, including the most recent genre of online products reviews.

All in all, we conclude that English language teachers should proceed very carefully if attempting to use movie reviews in English teaching and learning materials, as the reading tasks based on this genre are too demanding for most ESL/EFL students.

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