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# The Technical Vocabulary Of Newspapers

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### **Abstract**

A seven-million-word newspaper corpus that was made up of approximately 7,600 newspaper articles posted to *The New York Times* website between June, 2015 and October, 2016 was created and analyzed to identify the technical vocabulary of a newspaper and determine its lexical coverage. The results showed that there were 405 technical words of the newspaper as a whole that accounted for 9.76% of the running words in the NYT corpus, and an average of 748 technical words of each newspaper section with an average lexical coverage of 23.82%. Identifying the technical vocabulary of a newspaper is valuable for language learners, because learning these words before reading articles may help to reduce the vocabulary burden. The findings also indicated that reading newspapers from the same section is likely to be more effective to learn vocabulary than reading articles randomly.

**Keywords:** newspapers, technical vocabulary, vocabulary, lexical coverage, corpus linguistics, word lists

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## Chapter 1 Introduction

The present study aimed to identify the technical vocabulary of newspapers as a whole and the technical vocabulary of seven newspaper sections with different topics: politics, business, sports, U.S. news, world news, arts, and technology. A seven-million-word newspaper corpus containing newspaper articles from *The New York Times* was created. The corpus was made up of seven sub corpora according to the seven sections. The lexical coverage and composition of the technical vocabulary of newspapers were analyzed in this study. Lexical coverage refers to the percentage of known words in spoken or written text (Adolphs & Schmitt, 2003). Through the analysis, this study should provide some direction to language learners about how to effectively learn vocabulary through reading newspapers.

### 1.1 Significance of the study

It is useful to investigate the vocabulary in newspapers, because research indicates that second language learners can learn vocabulary through reading newspaper articles (Kyongho & Nation, 1989; Sternfeld, 1989; Schmitt & Carter 2000). Newspapers are often used as language learning material, because of their useful features. For example, both print newspapers and electronic versions of newspapers from websites are easily available around the world. Most students are likely to have read newspapers and be familiar with the style and organization of newspaper texts. Newspapers often provide extra lingual cues to meaning such as photographs and tables, thus making comprehension easier. If learners have already read newspaper articles in a specific section, then they may have enough background knowledge to support them to continue reading the articles about the same topic.

Distinguishing the technical vocabulary of one specific discipline may be particularly useful for learners who have specific learning goals to learn and use language from that area. Technical vocabulary is a collection of words that are closely associated with a particular area, and some technical words may be unknown to some readers who are not familiar with the area (Nation, 2013). Research showed that technical vocabulary makes up a large proportion of the words in a technical text (Chung & Nation, 2003; Chung & Nation, 2004). It is helpful for learners who are specialized in one discipline to learn the technical vocabulary in this area. It could help to lighten the proportion of unknown words, increase the comprehension level when



reading and listening, thus facilitating language learning. Knowing the technical vocabulary also could be the foundation of language use in that area. Nation (2013) suggested that knowledge of vocabulary enables language use. Knowing abundant technical vocabulary of one subject provides the foundation for understanding language and writing or talking about this topic with others.

Identifying the technical vocabulary of newspapers is significant for language learners and teachers. The technical vocabulary of newspapers is likely to be a useful language learning tool. For students, learning the technical vocabulary in advance may lighten the vocabulary load to some extent and increase the background knowledge or newspaper articles, thus making comprehension easier. For teachers, they can make use of the technical vocabulary of different sections to test learners' vocabulary level, in order to help them to choose the section where they know the most words to read.

Identifying the technical vocabulary of seven newspaper sections could also provide support to the use of a narrow reading approach when reading newspapers. One important feature of newspapers is that newspaper articles have various topics and talk about different things. When reading newspaper articles, learners could choose to read articles randomly regardless of the topic, or choose to read articles having the same topic (narrow reading). This study analyzed and compared the technical vocabulary of seven newspaper sections, to determine whether the technical vocabulary in different sections is indeed different. Reading newspapers in the same section may be a more effective reading method to learn language. Moreover, Krashen (2004) suggested that narrow reading could potentially increase the motivation for language learning. Research has demonstrated that motivation plays an influential and positive role in the acquisition of vocabulary (Gardner & MacIntyre, 1991; Mizumoto & Takeuchi, 2009; Tseng & Schmitt, 2008; Tanaka, 2014).

The creation of an English newspaper corpus is not without precedent. Currently, there are several corpora of newspapers. For example, The Corpus of Nineteenth-Century Newspaper English (CNNE) was compiled by Erik Smitterberg, funded by the Royal Swedish Academy of Letters, History and Antiquities, with financial support from the Knut and Alice Wallenberg Foundation (Smitterberg, 2014). Two hundred texts for a corpus made up of 320 thousand words were selected for the online database: 19th Century British Library Newspapers. The Zurich English Newspaper Corpus (ZEN) is a 1.6-million-word collection of newspapers in Early

English, covering 120 years (from 1671 to 1791) of British newspaper history (Schneider & Patrick, 1999). In 2000, Reuters released a corpus of Reuters News stories for use in research and development of natural language-processing, information-retrieval or machine learning systems (Rose, Stevenson & Whitehead, 2002). It contains about 810,000 Reuters, English Language News stories. However, there is not a comprehensive newspaper corpus that has been derived from a critically acclaimed English newspaper. This research aims to create such a corpus to fill this gap.

## 1.2 Research limitations

Because the corpus was created with *The New York Times* articles, the word list created in this research will consist of American English with the language habits of the United States. However, it is not clear if the word list would be consistent with those developed from newspapers in other American regions. In addition, one can assume a certain amount of deviation when compared to word lists created from British, Australian or Canadian newspapers.

The oldest newspaper archive is from 1851. For the purpose of this research, the corpus created only covers around 8,000 articles from 2015 and 2016, and is roughly seven million words in total. *The New York Times* website is updated frequently, usually several times in a given day. Thus the contents are constantly growing and being updated. Due to the ever increasing content, this word list will be less applicable as we move forward in time.

In addition, the two non-newspaper corpora used to do the comparison in the validation of the lists both consist of fictional stories. Both the novels in The Corpus of English Novels (CEN) and the movies in Webb and Rodgers (2009a) movie corpus were created by writers to describe stories that are fiction. Including a corpus that consisted of non-fiction text as well as the two fictional corpora may have increased the validity of the comparison.

The research will be conducted with the understanding of the above limitations. In the future, the corpus would benefit with updates from various newspaper resources with a much larger geographical focus. It would also be useful in making the newspaper corpus a living database, updated periodically as new content becomes available to ensure that it reflects vocabulary as time progresses. In the validating test, a non-fiction comparison corpus such as a course book corpus and a spoken English corpus should also be included.

### 1.3 Theoretical framework

The present study is a corpus-based study. Generally, a corpus is a collection of texts that are stored in a computer. Nowadays, the corpus is often used to refer to a digital text collection in a computer file. Corpus-based study is a research method that uses corpora to support a hypothesis or a theory. Corpus linguistics is a collection of methods for studying language via a corpus (Lancaster, 2014). It is the analysis of the sample of one language type on the basis of computerized corpora. Usually, the analysis is performed with the help of the computer, usually with specialized software. In this kind of research, one or many corpora would be created, then the texts stored in the corpora would be analyzed with the help of some specialized software according to the research aim.

Corpora have been commonly used in language learning in recent years. As noted by Leech (1997), there are three areas where corpora can be used for linguistic analysis: language descriptions from a corpus, language analysis of a corpus in the classroom, and learner corpora. Language descriptions from a corpus means that language in a corpus can be used to inform learning in the classroom or learning materials. For example, dictionaries, textbooks and workbooks are all learning materials that are often developed from various corpora. Language analysis of a corpus in the classroom is using the corpora in the classroom as a kind of learning tool to study. Learner corpora is creating a corpus through collecting and analyzing language learners' data. Analyzing this kind of corpora could help to reveal language learning processes and improve language learning. In this research, one large newspaper corpus consisting of various newspaper articles from *The New York Times* website was created. This newspaper corpus was analyzed to identify the technical vocabulary of newspapers.

This study was designed to examine the principle of narrow reading. Narrow reading means reading related texts with the same topic instead of reading unrelated texts. It has been shown to be a method of making reading easier and helping learning (Cho, Ahn & Krashen, 2005; Hwang & Nation, 1989; Kang, 2015; Schmitt & Carter, 2000). Narrow reading could provide rich exposure to related vocabulary and contexts, and this kind of narrow input is more efficient for second language acquisition (Krashen, 1989). Input refers to the target language that language learners are exposed to from various sources such as reading and listening. When reading a series of related texts about one same topic, readers are likely to gain more background

knowledge, meet fewer different words and more repeated words. In the present study, the technical vocabulary of seven different newspaper sections was determined. The analysis of the difference in the technical vocabulary in seven sections may reveal whether the principle of narrow reading strategies could be applied when reading newspapers.

## Chapter 2 Article

### 2.1 Introduction

Newspapers are a valuable resource for language learning. They are considered to be interesting reading material that can be used to learn language (Schmitt & Carter, 2000). Sternfeld (1989) listed several beneficial features of using newspapers for language learning. First, students are likely to be familiar with the characteristics and organization of newspaper articles. Second, newspapers often provide extra lingual information that can be used to derive meaning such as photographs and tables that may help readers to better understand content. Third, the news reported in L2 newspapers is likely to be similar to that reported in their first language, which allows learners to bring a fair amount of background knowledge to the L2 reading. In addition, learners are likely to be familiar with the newspaper stories, because newspaper stories often report real world events. Finally, both print newspapers and electronic newspapers from websites, especially English newspapers, can be obtained very easily around the world. This may be one important reason why newspapers are frequently used as English language learning materials. Because of these features, newspapers are often used in language learning courses in order to develop reading skills and expand vocabulary knowledge (Hwang & Nation, 1989; Klinmanee & Sopprasong, 1997). Some research has indicated that second language learners can learn vocabulary through reading newspaper articles (Kyongho & Nation, 1989; Schmitt & Carter 2000; Sternfeld, 1989).

Technical vocabulary is a group of words that occur more frequently in one topic area than in other areas. Distinguishing one specific technical vocabulary from other vocabulary is useful for learners who have specific language learning goals, such as reading texts or writing technical reports about one specialized technical discipline (Nation, 2013). A list of the technical vocabulary of newspapers would therefore be a useful tool for language learners. Knowing the technical vocabulary of newspapers could help to lighten the vocabulary load of newspaper articles to some extent and perhaps help to gain useful background knowledge, thus making comprehension easier.

Identifying the technical vocabulary of different newspaper sections may reveal the best approach to select newspaper articles to be used for learning language. Newspapers are widely used in language learning by teachers and students. For example, some newspaper articles are

frequently selected in English course books as learning materials. Newspapers are also likely to be popular reading materials outside of the classroom. Because newspapers include a wide range of topics such as politics, technology, business, arts, and sports, they are divided into different sections made up of articles about related issues. Newspaper articles might be selected for language learning in two ways: selecting articles according to interest regardless of the topic or section, or selecting related articles from the same section. Reading related texts about the same topic is called narrow reading. Kyongho and Nation (1989) analyzed the vocabulary in four related newspaper articles and four unrelated articles, and found that related newspaper articles included fewer different words, provided more repetition of words, and suggested that these features were likely to make reading easier. By identifying the technical vocabulary of different newspaper sections, this study should provide a useful starting point to reading newspaper articles from each section. Moreover, by comparing the technical vocabulary of different sections and all articles from one newspaper, the research may indicate if reading articles from a single section is a more useful language learning method than reading unrelated articles.

The aim of the present study is to determine the technical vocabulary of newspapers. A large newspaper corpus containing articles from *The New York Times* (NYT) was developed for this purpose. This corpus was made up of seven sections with different topics: politics, business, sports, U.S. news, world news, arts, and technology. Determining the technical vocabulary of newspapers as a whole and the technical vocabulary of each of these sections may provide language learners and teachers with a useful language learning tool. Comparing the technical vocabulary in different sections is important, because it may provide direction towards choosing appropriate newspaper texts to read, and indicate how to effectively use newspapers for language learning. Moreover, analyzing and comparing the words in the seven sections of technical vocabulary could help language learners to better understand the lexical challenges that they may have when reading newspaper articles in seven sections.

## **2.2 Literature Review**

### **2.2.1 What is technical vocabulary?**

Nation (2013) classified vocabulary into three groups according to the frequency of words in modern texts: High frequency words, mid frequency words, and low frequency words.

He also identified two kinds of specialized vocabulary: technical vocabulary and academic vocabulary. Technical vocabulary is a collection of words that are used more frequently in one specialized discipline rather than in other areas (Chung & Nation, 2003). Technical vocabulary is closely related to one specific subject, and may require learners to have specialist knowledge to understand it (Chung & Nation, 2004). Learning technical words therefore plays an important role in learning about a particular discipline. For instance, words such as *acute*, *chronic*, *disease*, and *diagnose* that are used frequently when talking or writing about medical issues are technical words of medicine. Whereas, *fry*, *sear*, *spatula* and *whisk* are the technical words of cooking because they are used frequently when talking or writing about how to cook.

Technical vocabulary is different from academic vocabulary, because it is typically associated with just one discipline while academic vocabulary is used frequently in a wide range of academic materials (Chung & Nation, 2003). For example, academic words such as *goal*, *hence*, and *error* are common to a wide range of academic fields. There has been some research on academic vocabulary and creating academic word lists (Coxhead, 2000; Gardner & Davies, 2013; Nation & Coxhead, 2001). However, some academic words can serve as technical words in a certain genre of text. Sutarsyah, Nation and Kennedy's (1994) research highlights the fact that some high frequency words and academic words are used frequently to talk about specific subjects and play the function of technical vocabulary in specific subject areas. Sometimes, academic vocabulary in one specific discipline can be regarded as technical vocabulary in this area. For example, some words in the Academic Vocabulary List (Gardner & Davies, 2013) such as *function*, *condition*, *system*, *analysis* and *result* are used frequently in academic materials. They are also likely to be used more frequently in engineering texts than other texts and were defined as items in the technical vocabulary of engineering (Ward, 2009).

### **2.2.2 Research on the technical vocabulary of different disciplines**

One earlier study by Chung (2009) involved the creation of a word list designed to represent the technical vocabulary of newspapers. To ensure that the technical words in this list were likely to be unknown to learners from a range of proficiency levels, lexical items from the most frequent 2000 word families were not included for selection. The technical vocabulary of newspapers accounted for 6.8% of the words in the newspaper corpus. One limitation of this study was that the corpus used to identify the technical words was relatively small. Sinclair

(1991) reported that a corpus should include millions of running words to ensure that the sample of language adequately represents the discourse type that is being examined. Chung's newspaper corpus consisted of 579,849 running words, of which 588 words were classified as newspaper words. A larger corpus would allow for a more representative sample of the language of newspapers, and a more representative technical vocabulary.

There are many studies that have focused on identifying the technical vocabulary of different disciplines. Chung and Nation (2003) identified the proportion of technical vocabulary in specialized texts. They chose two subject areas: anatomy and applied linguistics. They identified 4,270 technical words of anatomy which accounted for 37.6% of the total words in an anatomy text, and 835 technical words of applied linguistics which made up 16.3% of an applied linguistics text. Konstantakis (2007) investigated the technical vocabulary of business. Because the focus of the research was to determine the most useful words for language learners who planned to study business, he did not include any high frequency words in his list of technical vocabulary. Konstantakis identified 560 technical words of business within a corpus of 33 Business English course books consisting of 600,000 running words. These words represented 2.79% coverage of the corpus. Fraser (2007) identified 610 technical words of pharmacology from a 185,000-word pharmacology corpus. These technical words accounted for 12.91% of the running words in the corpus. The technical vocabulary of pharmacology also excluded high frequency words. Coxhead and Hirsch (2007) did a pilot study to identify technical vocabulary of science and found that 318 mid and low frequency words covered 3.79% of the 1,761,380 running words in a science corpus. Yang (2014) identified 676 technical words of nursing that were derived from a 1,006,934-word nursing corpus. The coverage of this list in the nursing corpus was 13.64%. Lei and Liu (2016) created a 2.7 million-word corpus of medical texts and identified 819 technical items. These technical medical items accounted for 19.44% of the words in the corpus and 20.18% of the vocabulary in a second corpus of medical texts.

Taken together, these studies reveal that there is typically a relatively small technical vocabulary of a discipline that provides a large amount of lexical coverage. The value in determining the technical vocabulary of the different areas is that learning these words provides a means for learners to gain control of very useful words that will likely help them to better understand the subject area.



### 2.2.3 How to identify technical vocabulary?

Although it is important to identify the technical vocabulary for language learning, there is not an agreed upon approach to determining which words are technical items and which words are not. Chung and Nation (2003) described four approaches to identifying technical vocabulary: Using a rating scale, using a technical dictionary, using clues provided in the text, using a computer-based approach. The rating scale approach is to identify the meanings of words. The words whose meanings are closely related to the specialised discipline would be identified as technical vocabulary. However, there is hardly any research using this approach. The second way to determine technical vocabulary is to ask experts to identify technical vocabulary or to look up items in technical dictionaries. One problem with this approach is that the experts are not always available, and there may not be technical dictionaries for some subjects. The third way is to use some clues in the texts provided by writers (i.e., definition of words) to identify the technical vocabulary. Although some texts use some signals to reveal the technical words, it is not a consistent feature among all texts. It is also challenging to pick out all the technical words through examination of materials. The final approach to identifying technical words involves using software to look for words that are specific to a discipline. This statistical approach involves finding words that occur more frequently and are regularly distributed within the technical corpus than in the comparison non-technical corpus.

The present study used the statistical approach to identify the technical vocabulary of newspapers. It is the most commonly used approach to determining technical vocabulary (i.e., Chung, 2009; Coxhead & Hirsch, 2007; Fraser, 2007; Konstantakis, 2007; Yang, 2014). The criteria used to identify technical words using the statistical approach has varied slightly between studies. For example, in Coxhead and Hirsch's (2007) study, they used the criteria of range, frequency, and dispersion to determine the technical vocabulary of science. Whereas, Lei and Liu (2016) used frequency, ratio and dispersion to determine the technical vocabulary of medicine, and Yang (2014) used two criteria to identify the technical vocabulary of nursing: range and frequency. In the present study, minimum frequency, ratio and dispersion were selected as the criteria to select technical words. These three criteria were chosen because they are well-established and effective filter criteria, and were commonly used in other research to identify specialized vocabulary.

### **2.2.4 How should teachers and students select newspaper articles to read?**

When reading texts to learn language, learners can choose to read related texts about the same topic or read unrelated texts. Reading a series of texts about one specific topic is called narrow reading. Krashen (2004) advocated the use of narrow reading as a means to learn vocabulary. The strength of a narrow reading approach is that technical words are likely to be repeatedly encountered within and between texts. This provides greater potential for vocabulary learning than there would be through reading unrelated texts.

Corpus-driven research comparing the vocabulary in related and unrelated texts provides support for Krashen's suggestion. For example, Hwang and Nation (1989) analyzed 20 groups of related and unrelated newspaper articles. They found that reading related texts provided more encounters with words outside the 2,000 most frequent words, thus helping to reduce the lexical burden required to understand the text, and providing better conditions for learning lower frequency words. Schmitt and Carter (2000) focused on the vocabulary in two different sets of newspaper articles: a series of reports about the same topic and a collection of unrelated articles. The two sets of articles contained the same number of running words. They found that the related texts contained fewer different words, and these words were repeated more often in the related articles. Schmitt and Carter suggested that narrow reading may improve reading comprehension by lowering the lexical load required of the learner.

Empirical research indicates that narrow reading may have a positive impact on vocabulary learning. Cho, Ahn and Krashen (2005) had 37 students read a series of related stories over three months, and then complete a vocabulary test and fill out a short questionnaire. They found that learners' interest and confidence in reading improved drastically, and they made significant vocabulary gains after narrow reading. Kang (2015) also found that narrow reading contributed to learning the meanings of vocabulary encountered in related texts. The ability of students to appropriately use these words also improved after narrow reading.

In the present study, a corpus was made up of seven sections from the NYT: politics, business, sports, U.S. news, world news, arts, and technology, and the technical vocabulary of each section was identified. The studies on narrow reading indicate that reading texts which relate to the same topic are likely to be more effective for vocabulary learning. Thus, identifying the technical vocabulary of each section may have greater value to learners than identifying the technical vocabulary of a newspaper as a whole. A comparison of the lexical coverage of the

technical vocabulary of the NYT and each of its seven sections may provide some indication of the most useful approach to using newspapers for language learning.

### **2.3 The Present Study**

This study aims to create a corpus that is representative of articles in *The New York Times*, and identify the technical vocabulary of newspaper articles in NYT. The research addresses the following four research questions:

1. How many word families make up the technical vocabulary of a newspaper?
2. What is the lexical coverage of the technical vocabulary from a newspaper?
3. How many word families make up the technical vocabulary from different newspaper sections?
4. What is the lexical coverage of the technical vocabulary from different newspaper sections?

The first research question focuses on the identification of the technical vocabulary of the NYT. The research explores whether there are words that are more common in newspapers than in other discourse types. Once the technical vocabulary was identified, further analysis was conducted to identify the lexical coverage of these words in the corpus. This activity aims to provide the answer for the second research question. In addition, the technical vocabulary of seven different sections of the NYT was identified. This indicated the most useful words to know in different newspaper sections rather than in the NYT as a whole, and provides the answer for the third research question. After identifying the technical vocabulary of the different newspaper sections, their lexical coverage was determined to provide some indication of the value of these lists of items to language learners.

## **2.4 Methodology**

### **2.4.1 Creating an American newspaper corpus**

To determine the technical vocabulary of an American newspaper, a corpus was created that was large enough to be representative of a newspaper as a whole and each of its sections. The corpus that was created for this study consisted of 7,644 newspaper articles posted to *The*

*New York Times* website between June, 2015 and October, 2016. The dates for the articles were chosen to ensure that the corpus represented current language.

#### 2.4.1.1 Source of the corpus

Articles from *The New York Times* were selected to be the source of texts for the corpus because of their potential as a source of learning for English language learners. *The New York Times* is one of the best known newspapers in the world, and has wide geographic coverage and influence. It was the third most read newspaper in the world after the *Daily Mail* and *The Guardian* in 2016 in a survey by Trending Top Most (Top 10 most read newspapers in the world, 2016). It also topped the 2016 Newspaper Web Rankings (2016 Newspaper web rankings, 2016). In addition, it includes a large number of sections about a variety of topics. Abundant topics and accurate classification of news made it possible to choose seven common sections of newspapers to include in the corpus.

#### 2.4.1.2 Organization of the corpus

Articles were selected from the following seven sections of *The New York Times*: politics, business, sports, U.S. news, world news, arts, and technology. These sections were chosen because they are common among American newspapers. For example, three other well-known American newspapers: *The Wall Street Journal*, *The Washington Post*, and *USA Today* all include each of these seven sections. The corpus was divided into seven sub corpora according to each of these sections. Each sub corpus was made up of approximately one million running words. Table 1 shows the organization of the corpus.

Table 1. Organization of the newspaper corpus

| Section    | Number of articles | Publication date    | Running words |
|------------|--------------------|---------------------|---------------|
| World news | 1,150              | Nov. 2015—Aug. 2016 | 1,001,608     |
| Business   | 1,106              | Dec. 2015—Sep. 2016 | 1,017,607     |
| Sports     | 1,100              | Oct. 2015—Aug. 2016 | 999,675       |
| Politics   | 988                | June 2015—Sep. 2016 | 1,026,323     |
| Technology | 1,150              | June 2015—Oct. 2016 | 1,028,678     |
| U.S. news  | 1,150              | June 2015—Sep. 2016 | 1,0029,37     |
| Arts       | 1,000              | June 2015—Oct. 2016 | 1,058,776     |
| Total      | 7,644              | June 2015—Oct. 2016 | 7,135,604     |

#### 2.4.2 Determining the technical vocabulary of an American newspaper

After creating the newspaper corpus, two methodological issues needed to be considered when selecting technical words: the unit of counting and the treatment of proper nouns.

##### 2.4.2.1 Unit of counting

An important issue when determining technical vocabulary is deciding what to count as a word. In this study, the word family was the unit of counting. A word family consists of a headword, its inflected forms and its closely derived forms (Nation, 2011). For example, members of the word family for the headword *agree* include *agreed*, *agreeing*, *agreement*, *agreements*, *agrees*, *agreeable*, *agreeably*, *disagree*, *disagrees*, *disagreed*, *disagreeing*, *disagreement*, *disagreements*, *disagreeably*.

Nation and Webb (2011) suggested that the most appropriate unit of counting for written text is the word family, because if learners know one member of a family, they may be able to recognize and understand other members of the family. Although some words belonging to the

same word family may be morphologically distinct from each other, they are strongly related in many ways (Nation, 2013). For example, if readers know the word *agree*, they might be able to interpret an unknown derivation such as *agreement* when it is encountered if they can understand the context in which it occurs.

Nation (2006) reported that readers would need to know the most frequent 8000 to 9000 word families to comprehend newspapers. This is a relatively large vocabulary size for L2 learners to attain, thus most students learning English through reading newspapers might be higher proficiency language learners. These readers are likely to already have control of basic word-building processes, so comprehending the meaning of regularly inflected forms or closely derived forms of a word family may not require much effort (Bauer & Nation, 1993).

#### 2.4.2.2 Treatment of proper nouns

Proper nouns are those nouns which are marked with an initial capital letter, and they include personal names (i.e. Clinton, Trump), geographical names (i.e. Australia, Canada), names of objects (i.e. Drumbeat <a boat>), or institutions (i.e. Bank of Montreal) (Biber, Johansson, Leech, Conrad & Finegan, 1999). Nation (2013) reported that readers can understand a sentence where there are some unknown proper nouns well enough even though they have only partial knowledge of these proper nouns. In this research, all the proper nouns were regarded as known words for readers. This approach has been applied in many corpus-driven studies of lexical coverage (i.e. Nation, 2006; Webb & Paribakht, 2015; Webb & Rodgers, 2009a, 2009b), because of the likelihood that more advanced learners are likely to understand proper nouns with little difficulty. Proper nouns were therefore not selected as technical words.

#### 2.4.2.3 Three criteria for determining technical vocabulary

There were three criteria used to distinguish the technical vocabulary of newspapers: frequency, ratio, and dispersion.

*Frequency:* The measure of minimum frequency was used to ensure that the technical words should be of high frequency in the newspaper corpus. Coxhead (2000) used the frequency threshold of 100 occurrences in a 3.5 million-word corpus, or 28.57 times per million words, to select items for The Academic Word List. Lei and Liu (2016) also used the same threshold for their medical word list. This figure was also used in this research, and so selected word families

had to occur at least 200 times in the seven-million-word corpus. When selecting the technical items for each of the seven sections of the newspaper, the word families had to occur at the same proportional frequency; at least 29 times in each of the sub corpora.

*Ratio:* After determining potential technical items in the first step, the frequency of these word families in the newspaper corpus was then compared with their frequencies in other non-newspaper corpora to determine their ratio. The ratio criterion indicates that potential items are more likely to occur more frequently in newspaper articles than in other forms of text. The Corpus of English Novels (CEN), compiled by Hendrik De Smet was used for the comparison. To meet the ratio criterion, the frequency of each word family had to be at least 50% higher (1.5: 1) in the newspaper corpus than in CEN. Gardner and Davies (2014) performed extensive experimentation with this ratio before adopting the 1.5: 1 ratio as one criterion for selecting items for their Academic Vocabulary List. They observed that too high of a figure (i.e., 2.0) would cause the loss of many useful words, and too low a ratio would lead to the inclusion of too many general high-frequency words.

*Dispersion:* Dispersion was included as the third criterion to ensure that the technical words appeared evenly in the corpus. Dispersion ensures that words that are very frequent in one part of the corpus but are infrequent in other parts were not selected as technical words. Juilland's D (Juilland, Brodin, & Davidovitch, 1970) was used to measure the dispersion of word's sub frequencies over N equally-sized subcategories of the corpus. In this research, the dispersion of 0.8 was used as the threshold. Gardner and Davies (2014) used this figure to select items for the Academic Vocabulary list. They also completed repeated tests on their data and found that 0.8 was the most appropriate dispersion for selecting words.

#### 2.4.2.4 Validating the technical vocabulary of newspapers

After creating lists of technical words that met the three criteria for selection for the corpus and each section, the validity of the lists was then tested. Validity tests provide some indication of the value of each list as a whole (Liu & Han, 2015). This was done by comparing the lexical coverage of the technical word lists in the newspaper corpus and two non-newspaper corpora. The two non-newspaper corpora were: The Corpus of English Novels (CEN) and Webb and Rodgers (2009a) movie corpus. CEN, compiled by Hendrik De Smet, consists entirely of novels, written by twenty-five novelists. All novels are written between 1881 and 1922. It

contains roughly 26 million running words. Webb and Rodgers (2009a) movie corpus consists of 2,841,887 running words from the scripts of 318 movies. All the English movies in the corpus were from the following genres: action, animation, comedy, crime, drama, horror, romance, science fiction, war, western, and classic. The classic movies were released in 1955, and the other genres of movies were released from 1991 to 2001.

## 2.5 Results

### 2.5.1 The technical vocabulary of an American newspaper and its lexical coverage

In answer to the first research question, a total of 405 word families were extracted from the total newspaper corpus and identified as the technical vocabulary of *The New York Times*. In the first step, 2,830 word families met the frequency criterion of at least 200 occurrences in the corpus. The second criterion (ratio) eliminated about half of these word families. There were 1,558 word families that met the first two criteria. After the third criterion (dispersion) was applied, there were 405 word families remaining that made up the technical vocabulary of the newspaper. Table 2 shows examples of the technical words and their frequency of occurrence in the corpus. In answer to the second research question, the 405 word families occurred 696,176 times and accounted for 9.76% of the corpus.

Table 2. Examples of the technical vocabulary of The New York Times

| Five most frequent words | Number of occurrences | Five least frequent words | Number of occurrences |
|--------------------------|-----------------------|---------------------------|-----------------------|
| Year                     | 22,526                | Underscore                | 212                   |
| New                      | 17,808                | Equivalent                | 210                   |
| Work                     | 13,693                | Counterpart               | 208                   |
| People                   | 12,870                | Vacation                  | 208                   |
| Also                     | 12,701                | Soar                      | 206                   |



### 2.5.2 The technical vocabulary in different sections of a newspaper and their lexical coverage

In answer to the third research question, on average there were 748 word families that met the three criteria and were selected as technical vocabulary for each newspaper section. Table 3 lists the number of technical words, their frequencies, and their lexical coverage in each of the seven sections. The technical vocabulary of the sports section was made up of the fewest word families (534). The world news section consisted of the most technical vocabulary (859). On average, the technical vocabulary of each newspaper section occurred about 242,582 times in that section.

In answer to the fourth research question, the average lexical coverage of the technical vocabulary of each section was 23.82%. The smallest amount of coverage was provided by the technical vocabulary derived from the arts section (18.81%), while the technical vocabulary derived from the business section provided the most coverage (27.19%).

Table 3. The technical vocabulary of the seven newspaper sections

| Section    | Number of word families | Number of occurrences in this section | Coverage in this section |
|------------|-------------------------|---------------------------------------|--------------------------|
| World news | 859                     | 267,536                               | 26.71%                   |
| Business   | 822                     | 276,701                               | 27.19%                   |
| Technology | 820                     | 261,265                               | 25.40%                   |
| U.S. news  | 790                     | 245,615                               | 24.49%                   |
| Arts       | 707                     | 199,131                               | 18.81%                   |
| Politics   | 703                     | 259,588                               | 25.29%                   |
| Sports     | 534                     | 188,240                               | 18.83%                   |

### 2.5.3 Validation of the technical vocabulary

A validity test was done to determine whether the technical vocabulary is what it was claimed to be—a reliable list of newspaper vocabulary rather than high-frequency vocabulary.

Table 4 shows the coverage of the technical vocabulary in three corpora made up of different discourse types: newspaper articles, movies, and novels.

The coverage of the technical vocabulary of the seven newspaper sections in the seven newspaper sub corpora was much higher than in the novel corpus and the movie corpus. For example, the technical vocabulary of business news accounted for 27.19% of the section from which it was derived. This was approximately four times its coverage of the movie corpus (6.79%). Its lexical coverage of the novel corpus was 5.56%.

The difference between the lexical coverage of the technical vocabulary of the newspaper as a whole in the three corpora was smaller than it was for technical vocabulary of the seven sections. However, the lexical coverage of the newspaper corpus was still approximately three times greater than of the comparison corpora. The technical vocabulary of the newspaper as a whole accounted for 9.76%, 3.18%, and 3.17% of the words in the newspaper, movie, and novel corpora, respectively. The large difference indicates that those words selected as technical vocabulary in the newspaper are most likely representative of the words in newspaper articles.

Table 4. Coverage of the technical vocabulary of a newspaper in corpora made up of different discourse types

| Corpora      | Coverage in newspaper sections | Coverage in movie corpus | Coverage in novel corpus |
|--------------|--------------------------------|--------------------------|--------------------------|
| World news   | 26.71%                         | 7.68%                    | 7.31%                    |
| Business     | 27.19%                         | 6.79%                    | 5.56%                    |
| Sports       | 18.83%                         | 8.19%                    | 4.72%                    |
| Politics     | 25.29%                         | 7.65%                    | 6.13%                    |
| Technology   | 25.40%                         | 7.08%                    | 5.76%                    |
| U.S. news    | 24.49%                         | 7.13%                    | 6.27%                    |
| Arts         | 18.81%                         | 5.03%                    | 4.70%                    |
| All sections | 9.76%                          | 3.18%                    | 3.17%                    |

## 2.6 Discussion

The present research expanded on earlier studies by examining the vocabulary in a widely used discourse type for language learning that has not received much attention: newspapers. Earlier studies have looked at the vocabulary in course books (Groves, 2016; Harmon, Hedrick & Fox, 2000; Hsu, 2014), academic texts (Coxhead, 2000; Gardner & Davies, 2013), academic lectures (Dang & Webb, 2014; Dang, Coxhead, & Webb, 2017), English proficiency tests (Webb & Paribakht, 2015), graded readers (Nation & Wang, 1999; Waring &

Takaki, 2003; Udorn, 2008; Webb & Macalister, 2013), movies (Webb, 2010a; Webb & Rodgers, 2009a), and television (Rodgers & Webb, 2011; Webb, 2010b; Webb, 2010c; Webb, 2011; Webb & Rodgers, 2009b). Examining the technical vocabulary in newspaper sections has great value because it may provide some indication of the lexical challenge that learners may have when reading newspapers; might indicate the best approach to learning with newspapers; and the items identified as technical words may help readers to prepare to study with newspapers.

### **2.6.1 Proportion of technical vocabulary in the NYT as a whole is relatively small**

The results indicated that the number of technical words in newspapers as a whole may be relatively small. There were 405 word families that were identified as the technical vocabulary of the NYT. These words accounted for 9.76% of the running words in the NYT corpus. This figure is lower than the lexical coverage of technical vocabulary found in other areas. For example, Chung and Nation (2003) identified 37.6% of the words in an anatomy text and 16.3% of the words in an applied linguistics text as being technical. Similarly, a word list containing the technical vocabulary of nursing provided 13.64% coverage of a nursing corpus (Yang, 2015), while a list of the technical vocabulary of medicine accounted for 19.44% and 20.18% coverage of two medical corpora (Lei & Liu, 2016).

The number of technical words in the NYT as a whole was also smaller than the number of technical words in each of the seven newspaper sections. There was an average of 748 word families in the technical vocabulary of each newspaper section that accounted for 23.82% of the running words of the sections. The technical vocabulary of the arts section had the smallest lexical coverage of the seven sections (18.81%). However, this figure was still almost twice the lexical coverage of the technical vocabulary of the NYT as a whole.

The reason for the difference in the number of technical words in the NYT and in each section is that a complete newspaper includes a wide range of topics. Unlike most other kinds of texts, the topics of newspaper articles are continually changing, and often topics are not related to each other. Newspaper sections help to organize the topics around those that are most likely to relate to each other. The findings indicated that vocabulary in the seven sections is quite different. The methodology adopted in this study provides a clear way of showing the variation in words used in the different sections. Some words were not identified as technical vocabulary,

because they only occurred frequently in only one or two sections instead of occurring evenly in all seven sections. For example, *computer* occurred 1,275 times in the technology section. However, in the other six sections combined, it occurred only 85 times. Thus, while *computer* is an important word to know when reading the technology section, it is far less important when reading the other sections.

### **2.6.2 Diversity of number of technical words in newspaper sections**

The results also revealed that the number and proportion of technical words in the seven sections are quite different from each other. One interesting finding was that there were fewer words in the technical vocabulary of sports news. There were only 534 technical words of sports news, while there are at least 703 words in the technical vocabulary of the other six newspaper sections. The section about world news had the most technical words (859 words).

The reason why the sports section had relatively few technical words was that sport events tend to change over the seasons. For example, the regular season for Major League Baseball is from April to October; The National Football League regular season starts in September and ends in December; The regular season for the National Basketball Association is from November to April. Thus, during the baseball season, newspapers are likely to intensively report on baseball, and the varying aspects of that game and its players. However, in baseball's off-season, the vocabulary in sports articles is more likely to reflect the other sports that are being played at that time, and many of the technical terms common to baseball may be used rather infrequently. In the NYT corpus, all the articles were organized and arranged in reverse chronological order. Because of the seasonal nature of sports, some specialized words relevant to one kind of activity were excluded from the technical vocabulary of the sports section because of their lower dispersion and frequencies. For instance, *wrestle* occurred 46 out of 63 times, and *gymnastics* occurred for 117 out of 157 times between December 2015 and September, 2016 in the lead up to and just after the Olympics. Although there are likely to be similar instances of technical terms being seasonal in nature, the topic of sports appeared to be affected by this much more often than the other topics of the other sections.

### 2.6.3 Composition of technical vocabulary of newspapers

It is useful to look at the lexical profile of the technical words identified in this study. A lexical profile shows the proportion of items that are found at different word frequency levels. Almost half of the words in the technical vocabulary of the seven sections and the NYT as a whole are mid frequency words (the most frequent 3,000-9,000 word families), and less than 1% of the words are low frequency words (words less frequent than the most frequent 9,000 word families). Table 5 shows the lexical profile of the technical words in each section and the NYT as a whole. For the technical vocabulary of the NYT as a whole, 63.45% of the items were high-frequency words and 36.54% of the words were mid frequency words. The technical vocabulary of seven newspaper sections has similar profiles. On average, about 60.52% of the technical words for the sections were high frequency words, 39.17% of the words were mid frequency words, and 0.31% were low frequency words. The technical vocabulary from the world news section included the largest proportion of mid frequency words (43.53%), while the technical vocabulary of the sports section had the smallest proportion of mid frequency words (30.52%). The relatively high percentage of mid frequency words in each section suggests that there are likely to be a reasonable number of these words that are unknown to beginner and intermediate level learners. This suggests that lists of these technical items might be useful learning tools for the majority of language learners.

Table 6 listed a few high, mid, and low frequency technical words for each section and the newspaper as a whole. Examples of mid frequency technical words for the whole NYT corpus are *navigate*, *factory*, *legacy*, and *scrutiny*. Examples of mid frequency technical words from the technology section are *corporate*, *innovate*, *neural*, and *sensor*, and low frequency words for the technology section are *blog*, *Fahrenheit*, and *oculus*. Research suggests that the majority of EFL learners are unlikely to master the high frequency words (Danelund, 2013; Nurweni & Read, 1999; Webb & Chang, 2012), so also most mid frequency and low frequency technical words identified in this study might be unfamiliar words for EFL learners when reading. Learning the technical words found in newspapers will help to increase lexical coverage, reduce the lexical burden, and potentially make comprehension of newspapers easier (Hu & Nation, 2000; Schmitt, Jiang, & Grabe, 2011).

Table 5. Composition of technical vocabulary of seven newspaper sections and newspapers as a whole

| Word list | World news    | Business      | Sports        | Politics      | Technology    | U.S. news     | Arts          | All sections  |
|-----------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 1,000     | 213<br>24.80% | 221<br>26.89% | 202<br>37.83% | 193<br>27.45% | 235<br>28.66% | 229<br>28.99% | 187<br>26.45% | 119<br>29.38% |
| 2,000     | 271<br>31.55% | 262<br>31.87% | 169<br>31.65% | 224<br>31.86% | 262<br>31.95% | 264<br>33.42% | 214<br>30.27% | 138<br>34.07% |
| 3,000     | 293<br>34.11% | 279<br>33.94% | 127<br>23.78% | 229<br>32.15% | 259<br>31.59% | 238<br>30.13% | 204<br>28.85% | 135<br>33.33% |
| 4,000     | 52<br>6.05%   | 38<br>4.62%   | 19<br>3.56%   | 33<br>4.69%   | 35<br>4.27%   | 37<br>4.68%   | 51<br>7.21%   | 9<br>2.22%    |
| 5,000     | 16<br>1.86%   | 12<br>1.46%   | 5<br>0.94%    | 15<br>2.13%   | 13<br>1.59%   | 15<br>1.90%   | 13<br>1.84%   | 2<br>0.49%    |
| 6,000     | 10<br>1.16%   | 3<br>0.36%    | 4<br>0.75%    | 1<br>0.14%    | 0<br>0%       | 3<br>0.38%    | 13<br>1.84%   | 1<br>0.25%    |
| 7,000     | 3<br>0.35%    | 5<br>0.61%    | 2<br>0.37%    | 4<br>0.57%    | 7<br>0.84%    | 0<br>0%       | 10<br>1.41%   | 0<br>0%       |
| 8,000     | 0<br>0%       | 1<br>0.12%    | 3<br>0.56%    | 1<br>0.14%    | 3<br>0.37%    | 2<br>0.25%    | 8<br>1.13%    | 1<br>0.25%    |
| 9,000     | 0<br>0%       | 1<br>0.12%    | 3<br>0.56%    | 1<br>0.14%    | 1<br>0.12%    | 1<br>0.13%    | 3<br>0.42%    | 0<br>0%       |

Table 6. Examples of high, mid and low frequency technical words for each section and newspapers as a whole

|              | High frequency words                     | Mid frequency words                            | Low frequency words           |
|--------------|--|--|-------------------------------|
| World news   | accept, crime,<br>indicate, oppose       | blast, dissent, plague,<br>influx              | anti                          |
| Business     | advice, balance,<br>commit, number       | corporate, discount,<br>global, outlet         |                               |
| Sports       | against, center, team,<br>opportunity    | basketball, host,<br>hockey, victory,          |                               |
| Politics     | country, citizen,<br>support, war        | agency, secretary,<br>ambassador,<br>anonymity | anti, billionaire             |
| Technology   | button, machine,<br>science, telephone   | corporate, innovate,<br>neural, sensor         | blog, fahrenheit,<br>oculus   |
| U.S. news    | center, concentrate,<br>drug, university | data, dean, mall,<br>passenger                 | anti                          |
| Arts         | music, piano,<br>television, gallery     | bass, media, lyrics,<br>rhythm                 | baritone, grammy,<br>libretto |
| All sections | cart, discipline,<br>experience, mail    | navigate, factory,<br>gulf, mall               |                               |

#### 2.6.4 Pedagogical implications

The present study provides some direction on how newspapers might be effectively used to learn English. The results suggest that for language learners, working with the technical vocabulary from a single section of a newspaper makes sense, and may result in more effective learning. Not only were there a greater number of technical words in each newspaper section (an average of 748 word families) than in the newspaper as a whole (405 word families), but their lexical coverage of their corresponding sections was far greater (18.81%-27.19%) than for the technical words in newspapers as a whole (9.76%). There were a total of 5,235 technical words



identified in the seven sections combined. The reason for this is that each section of a newspaper is likely to discuss different topics using a large number of different words. Thus, learning English through reading articles from all of the different sections would be extremely challenging, because it would require comprehension of a very large number of words. This illustrates the value of using a narrow reading approach when reading newspapers. Earlier research has shown that narrow reading could help to lower the lexical load for L2 because it requires knowledge of a smaller number of words, and provides a greater number of encounters with the words that are encountered (Hwang & Nation, 1989; Sutarsyah, Nation & Kennedy, 1994; Schmitt & Carter, 2000). Reading related texts can also improve learners' interest and confidence in reading (Cho, Ahn & Krashen, 2005), help learners to better understand the meanings of unfamiliar words, and become more aware of the appropriate use of these words (Kang, 2015), thus facilitating vocabulary learning. By focusing on reading the articles from only one section, learners are likely to have better comprehension and more effective vocabulary learning using a narrow reading approach.

The results also indicate that there is value in collecting and organizing newspaper texts purposefully before language learners start to learn with newspapers. In EAP contexts, it may be clearly apparent that there is value in concentrating on the articles from certain sections such as finance, politics, and technology, because these fall within academic subject matter. However, learners could also choose the newspaper articles from the section that is closest to their interests, thus making reading more motivating. Research has demonstrated that motivation plays an influential and positive role in the acquisition of vocabulary (Gardner & MacIntyre, 1991; Mizumoto & Takeuchi, 2009; Tseng & Schmitt, 2008; Tanaka, 2014). As for teachers who plan to use newspapers for language teaching, it may be more appropriate for them to use a principled narrow reading strategy when selecting articles for their students instead of choosing articles of interest from different sections. This may contrast what is often done in the classroom. For example, some teachers may see value in giving students newspaper articles about different topics in order to expose students to diverse information and knowledge. Although this may broaden knowledge, this study reveals that it would also likely increase the number of different words that students would need to know, and increase the lexical burden required to understand the texts.

It is also useful to note that the technical vocabulary that was identified in this study might be a meaningful learning tool. Knowing the technical vocabulary from a section might provide the lexical foundation that helps students to more easily understand newspaper articles. The lexical coverage of the technical vocabulary from each section ranged from 27.19% to 18.81%. Learning these words in advance could help readers gain lexical knowledge that may lighten the vocabulary load to some extent. Teachers could also use the lists as a testing tool to help choose the newspaper section that is most appropriate for learning. For example, teachers could choose technical words from each of the seven sections and test their students' vocabulary knowledge of that section. The section where learners know the most words might be used as the source of reading material, because the students might be mostly able (at least lexically) to understand that section. For students who are interested in more than one topic, it may be difficult for them to decide which section they should read. However, looking at the lists of technical vocabulary found in the appendix, may allow them to determine the section in which they know the most technical words, and might be able to have better understanding. Moreover, they could subsequently work to learn the remaining unknown words in that list.

## **2.7 Limitations and Directions for Further Research**

The present study may provide some indication of the vocabulary found in newspapers. The size of the corpus and sub corpora were much larger in this study than in Chung's (2009) earlier study. However, the corpus was created with only articles from *The New York Times*. Therefore, it is not clear whether the technical vocabulary is consistent with other newspapers such as *The Washington Post*, *The Wall Street Journal*, and *USA Today*. In future research, it would be useful to investigate the vocabulary from multiple newspapers. Because of the importance of having large corpora and sub corpora to ensure the occurrence of vocabulary was representative of a newspaper, it was beyond the scope of the present research to look at other newspapers. It would also be useful to investigate the vocabulary found in newspapers from other countries such as British newspapers (i.e. *Guardian* and *Daily Mirror*), Australian newspapers (i.e. *The Australian* and *Herald Sun*), and Canadian newspapers (i.e. *Toronto Star* and *The Globe and Mail*). This would indicate the extent to which the technical vocabulary in this research extended beyond the NYT. It would also be interesting to explore any differences in the technical vocabulary from different newspapers.

The NYT corpus in this research contained around 8,000 articles from 2015 and 2016 in order to ensure that it represented modern language. However, due to the ever changing content, the technical vocabulary in this research is likely to change through the years. For example, some words such as *hack*, *sensor*, and *web* that were identified as technical vocabulary of NYT were not common words as few as 30 years ago. This suggests that the technical vocabulary of newspapers may constantly change. Thus, there will be value in further examining the technical vocabulary in the same newspaper after a period of time to ensure that the research reflects the language of the time. A long term goal of studies of the vocabulary in newspapers would be to create a living database of newspaper articles that was updated periodically as new content became available to reflect the change in vocabulary over time.

Two non-newspaper corpora: The Corpus of English Novels (CEN), and Webb and Rodgers (2009a) movie corpus were used for the comparison in the validating test. The problem is that the two non-newspaper corpora used are both about fictional stories. Because both of these corpora consist entirely of fictional text, it might have also been useful to include a corpus made up of non-fictional text. Therefore, it would be useful to include a non-fiction comparison corpus such as a course book corpus or a spoken English corpus in further validation of the newspaper word lists.

## 2.8 Conclusion

The present study identified the technical vocabulary for *The New York Times* corpus as a whole and the technical vocabulary for seven newspaper sections. There are 405 word families in the technical vocabulary of the newspaper as a whole, which accounted for 9.76% of the running words in the NYT corpus. In terms of each newspaper section, on average there were 748 word families identified as technical vocabulary, and these words had an average lexical coverage of 23.82%. The results show that the coverage of technical vocabulary of the NYT as a whole was relatively small, while that of each newspaper section was much higher. The results also indicated that almost half of the technical words of newspapers are mid and low frequency words that are likely to be unknown to most EFL learners. Learning the technical vocabulary of one newspaper section before starting to read articles from that section could help to increase the lexical coverage of a newspaper article and lighten its vocabulary load to some extent.

## Chapter 3 Conclusion

This study aimed to determine the technical vocabulary of *The New York Times* corpus. The technical vocabulary of the whole corpus and the technical vocabulary of the seven newspaper sections were identified. The study aimed to answer four research questions: How many word families make up the technical vocabulary of a newspaper? What is the lexical coverage of the technical vocabulary from a newspaper? How many word families make up the technical vocabulary from different newspaper sections? What is the lexical coverage of the technical vocabulary from different newspaper sections?

### 3.1 Research findings

The study answered the four research questions. In answer to the first and second research questions, a total of 405 word families were extracted from the total newspaper corpus and identified as the technical vocabulary of *The New York Times*. They occurred for 696,176 times and accounted for 9.76% of the corpus. In answer to the third and fourth research questions, on average there were 748 word families that met the three criteria and were selected as technical vocabulary for each newspaper section. The average lexical coverage of the technical vocabulary of each section was 23.82%.

Through analyzing the technical vocabulary, there are three main findings. Firstly, the lexical coverage of the technical vocabulary in newspapers as a whole may be smaller than that of the technical vocabulary of other areas. The number of technical words in the NYT as a whole was also smaller than the number of technical words in each of the seven newspaper sections. Secondly, the number and proportion of technical words in the seven sections are different. Thirdly, almost half of the words in the technical vocabulary of the seven sections and the NYT as a whole are mid frequency words.

### 3.2 Research implications

The findings help to reveal the most appropriate method of reading newspapers by language learners. As the technical vocabulary in different sections is different, the narrow reading approach should be followed when reading newspapers. Reading related newspaper articles from the same section reduces the lexical load and may help to achieve better vocabulary

learning results. Therefore, when reading newspapers to learn language, learners should choose to read related articles from a single section.

The findings also suggest that the identified technical vocabulary might be a useful language learning tool. For learners, they can learn the technical vocabulary in advance before reading newspaper articles. It may help to lighten the vocabulary burden to some extent when reading. For teachers, they can make use of the technical vocabulary of different newspaper sections to test students' vocabulary level, in order to help them choose the section where they know the most vocabulary.

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## Appendices

### Appendix A. The technical vocabulary of the NYT as a whole

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|             |            |            |             |             |
|-------------|------------|------------|-------------|-------------|
| Academy     | Argue      | Block      | Concentrate | Critic      |
| According   | Around     | Broad      | Concern     | Crucial     |
| Achieve     | Article    | Broadcast  | Conclude    | Current     |
| Acknowledge | Assert     | Build      | Condition   | Damage      |
| Act         | Assess     | Cancel     | Conduct     | Date        |
| Active      | Assign     | Capture    | Confident   | Decade      |
| Actual      | Associate  | Caution    | Confirm     | December    |
| Add         | Attend     | Centre     | Consider    | Decide      |
| Adopt       | Attribute  | Challenge  | Consistent  | Decision    |
| Affect      | Avoid      | Change     | Construct   | Define      |
| Aggressive  | Background | Check      | Contact     | Degree      |
| Ago         | Bake       | Choice     | Contain     | Delay       |
| Agree       | Balance    | Cite       | Contrast    | Deliver     |
| Aim         | Bar        | Claim      | Contribute  | Demonstrate |
| Allow       | Base       | Class      | Control     | Describe    |
| Also        | Basic      | Comment    | Controversy | Designate   |
| Alternative | Basis      | Commission | Convert     | Despite     |
| Announce    | Battle     | Commit     | Correct     | Detail      |
| Appeal      | Beach      | Compare    | Counter     | Devastate   |
| Appoint     | Because    | Complain   | Counterpart | Different   |
| Appropriate | Become     | Complex    | Couple      | Direct      |
| April       | Birth      | Complicate | Crash       | Directed    |

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|            |            |             |            |            |
|------------|------------|-------------|------------|------------|
| Discuss    | Error      | Forum       | Indicate   | Level      |
| Dismiss    | Especially | Free        | Individual | Likely     |
| Disrupt    | Essential  | Friday      | Influence  | Likeness   |
| Diverse    | Establish  | Frustrate   | Initial    | Limit      |
| Domestic   | Event      | Future      | Initiate   | List       |
| Dominate   | Eventually | Gap         | Inside     | Locate     |
| Dozen      | Example    | General     | Instead    | Lot        |
| Drill      | Exception  | Generation  | Interpret  | Lower      |
| During     | Exclusive  | Globe       | Interview  | Main       |
| Early      | Expand     | Grade       | Involve    | Maintain   |
| Edit       | Expect     | Grant       | Island     | Major      |
| Educate    | Experience | Group       | January    | Manipulate |
| Effective  | Exploit    | Guarantee   | Join       | Many       |
| Effort     | Expose     | Handle      | Joint      | March      |
| Elevate    | Extend     | High        | July       | Margin     |
| Eliminate  | Extensive  | Highlight   | June       | Massive    |
| Embrace    | Factor     | Holiday     | Key        | Maximum    |
| Emerge     | Fail       | Huge        | Lack       | Maybe      |
| Emphasise  | Failure    | Ignore      | Language   | Media      |
| Encourage  | Favour     | Impact      | Large      | Member     |
| Enhance    | February   | Important   | Last       | Mess       |
| Ensure     | Female     | Impose      | Late       | Mid        |
| Entry      | Focus      | Include     | Lead       | Middle     |
| Equivalent | Formal     | Incredible  | Leak       | Million    |
| Era        | Former     | Independent | Legacy     | Minor      |

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|             |           |           |            |             |
|-------------|-----------|-----------|------------|-------------|
| Monday      | Past      | Promote   | Remove     | Sensitive   |
| Month       | Peak      | Prompt    | Repair     | Separate    |
| Most        | People    | Prospect  | Replace    | Session     |
| Motive      | Period    | Protect   | Report     | Several     |
| Multiple    | Phase     | Provide   | Represent  | Shift       |
| Nation      | Plan      | Public    | Reputation | Shortly     |
| Need        | Plastic   | Push      | Require    | Sign        |
| Negative    | Popular   | Quote     | Respond    | Significant |
| New         | Pose      | Radio     | Response   | Similar     |
| News        | Positive  | Range     | Restaurant | Single      |
| Non         | Post      | Rare      | Restore    | Soar        |
| Normal      | Power     | React     | Restrict   | Social      |
| November    | Practise  | Real      | Result     | Source      |
| Number      | Pre       | Recall    | Retain     | Special     |
| Numerous    | Precede   | Receive   | Reveal     | Specific    |
| Obvious     | Predict   | Recent    | Reverse    | Speculate   |
| Offer       | Preserve  | Recommend | Review     | Split       |
| Opportunity | Pressure  | Record    | Role       | Sponsor     |
| Organize    | Previous  | Recruit   | Routine    | Staff       |
| Outcome     | Problem   | Refer     | Rule       | States      |
| Oversee     | Process   | Relate    | Scare      | Status      |
| Panel       | Profile   | Relative  | Schedule   | Stem        |
| Participant | Programme | Release   | Scrutiny   | Stress      |
| Participate | Progress  | Rely      | Self       | Strict      |
| Particular  | Prominent | Remain    | Senior     | Strip       |

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|            |            |
|------------|------------|
| Stun       | Tuesday    |
| Subsequent | Typical    |
| Success    | Ultimate   |
| Summer     | Underscore |
| Surge      | Unique     |
| Survive    | Unite      |
| Sustain    | Urgent     |
| Tactic     | Vacation   |
| Tank       | Via        |
| Target     | Video      |
| Technical  | View       |
| Television | Vulnerable |
| Temporary  | Wednesday  |
| Tend       | Week       |
| Term       | Weigh      |
| Thursday   | Whether    |
| Today      | Work       |
| Topic      | Worry      |
| Total      | Write      |
| Tradition  | Year       |
| Transfer   |            |
| Transform  |            |
| Transition |            |
| Treat      |            |
| Trip       |            |

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## Appendix B. The technical vocabulary of world news

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|             |             |           |               |           |
|-------------|-------------|-----------|---------------|-----------|
| Abroad      | Ago         | Appeal    | August        | Border    |
| Abuse       | Agree       | Apply     | Authorise     | Breach    |
| Accelerate  | Agriculture | Appoint   | Authoritarian | Broadcast |
| Accept      | Aim         | Approve   | Authority     | Budget    |
| Access      | Alert       | Area      | Average       | Build     |
| Accord      | Alien       | Argue     | Avoid         | Buy       |
| According   | Allow       | Armed     | Balance       | Cafe      |
| Account     | Ally        | Army      | Base          | Call      |
| Accountable | Alongside   | Around    | Basic         | Camera    |
| Accuse      | Also        | Arrest    | Because       | Campaign  |
| Achieve     | Alternative | Arrive    | Become        | Candidate |
| Acknowledge | Ambassador  | Assail    | Behalf        | Capable   |
| Active      | Ambition    | Assassin  | Behaviour     | Capital   |
| Add         | Ambitious   | Assault   | Belief        | Capture   |
| Adopt       | Amid        | Assembly  | Benefit       | Car       |
| Advertise   | Amnesty     | Assert    | Billion       | Case      |
| Advise      | Amount      | Assist    | Blame         | Cash      |
| Advocate    | Analyst     | Associate | Blast         | Cement    |
| Against     | Announce    | Asylum    | Block         | Centre    |
| Agency      | Annual      | Attack    | Boast         | Century   |
| Agent       | Anti        | Attempt   | Bolster       | Ceremony  |
| Aggressive  | Apart       | Attend    | Bomb          | Chairman  |

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|             |             |              |           |             |
|-------------|-------------|--------------|-----------|-------------|
| Challenge   | Collect     | Confident    | Country   | Define      |
| Chancellor  | Column      | Confirm      | Create    | Delegate    |
| Change      | Command     | Conflict     | Credit    | Demand      |
| Channel     | Comment     | Confront     | Crime     | Democracy   |
| Chaos       | Commentator | Connect      | Criminal  | Democrat    |
| Charge      | Commerce    | Conservative | Crisis    | Demonstrate |
| Charity     | Commission  | Consider     | Critic    | Deny        |
| Check       | Commit      | Construct    | Criticise | Department  |
| Chief       | Committee   | Contact      | Criticism | Depend      |
| Choice      | Communicate | Contain      | Culture   | Deputy      |
| Circulate   | Community   | Contend      | Current   | Describe    |
| Cite        | Compare     | Contentious  | Customer  | Design      |
| Citizen     | Compete     | Continent    | Damage    | Despite     |
| City        | Complain    | Contract     | Deal      | Destination |
| Civil       | Complete    | Contribute   | Debate    | Detail      |
| Civilian    | Complicate  | Control      | Decade    | Detention   |
| Claim       | Compromise  | Controversy  | December  | Deter       |
| Clash       | Concern     | Convert      | Decide    | Develop     |
| Class       | Concession  | Convict      | Decision  | Device      |
| Coalition   | Conclude    | Cooperate    | Declare   | Difference  |
| Coast       | Concrete    | Coordinate   | Decline   | Diminish    |
| Code        | Condemn     | Core         | Deem      | Diplomat    |
| Collaborate | Condition   | Cost         | Defeat    | Direct      |
| Collapse    | Conduct     | Council      | Defence   | Directed    |
| Colleague   | Confer      | Counter      | Defend    | Disaster    |

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|              |             |            |            |              |
|--------------|-------------|------------|------------|--------------|
| Discipline   | Effort      | Event      | Fence      | Fundamental  |
| Disclose     | Elect       | Eventually | Field      | Future       |
| Discriminate | Element     | Evidence   | Fight      | Gain         |
| Discuss      | Eliminate   | Example    | Final      | Gap          |
| Dismiss      | Elite       | Excess     | Finance    | Gather       |
| Display      | Embrace     | Exchange   | Flee       | General      |
| Dispute      | Emerge      | Executive  | Flood      | Generals     |
| Dissent      | Emergency   | Exercise   | Flow       | Generation   |
| Distribute   | Empire      | Expand     | Focus      | Giant        |
| District     | Employ      | Expansion  | Food       | Global       |
| Diverse      | Encourage   | Expensive  | Force      | Goal         |
| Divide       | Endorse     | Experiment | Foreign    | Goods        |
| Division     | Enforce     | Expert     | Forge      | Govern       |
| Domestic     | Engineer    | Exploit    | Formal     | Grant        |
| Donor        | Environment | Explosion  | Former     | Grapple      |
| Dozen        | Envoy       | Export     | Foundation | Group        |
| During       | Episode     | Extend     | Founded    | Guard        |
| Early        | Equipment   | Extreme    | Fragile    | Gun          |
| Earn         | Era         | Facility   | Free       | Halt         |
| East         | Escalate    | Faction    | Friday     | Handle       |
| Eastern      | Especially  | Fail       | Frustrate  | Harsh        |
| Economy      | Essential   | Failure    | Fuel       | Headquarters |
| Edit         | Establish   | Family     | Fulfil     | Health       |
| Educate      | Estimate    | Federal    | Function   | Highlight    |
| Effective    | Ethnic      | Feed       | Fund       | History      |

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|                |               |            |          |          |
|----------------|---------------|------------|----------|----------|
| Hit            | Initial       | January    | Lever    | Measure  |
| Holy           | Initiate      | Job        | Liberal  | Media    |
| Hospital       | Inside        | Join       | Liberate | Meet     |
| Host           | Insist        | Joint      | Licence  | Member   |
| Hostile        | Inspect       | Journal    | Likely   | Message  |
| Human          | Install       | Journalist | Limit    | Metal    |
| Identify       | Instead       | Judicial   | Line     | Middle   |
| Ignore         | Institute     | Judiciary  | Link     | Migrate  |
| Image          | Institution   | Justice    | List     | Mile     |
| Immigrate      | Integrate     | Kid        | Lobby    | Militant |
| Import         | Intelligence  | Kidnap     | Local    | Military |
| Important      | Intense       | Kill       | Locate   | Militia  |
| Impose         | Interior      | Lack       | Loss     | Million  |
| In             | Internal      | Language   | Lot      | Minister |
| Include        | International | Large      | Machine  | Ministry |
| Increase       | Interpret     | Late       | Main     | Minor    |
| Independence   | Interrogate   | Law        | Maintain | Mission  |
| Independent    | Intervene     | Lawyer     | Major    | Mister   |
| Indicate       | Interview     | Lead       | Majority | Mix      |
| Individual     | Intimidate    | Lecture    | Manage   | Mobilise |
| Industry       | Invest        | Legacy     | Mandate  | Modern   |
| Influence      | Involve       | Legal      | Many     | Monday   |
| Influx         | Isolate       | Legislate  | Market   | Monitor  |
| Inform         | Issue         | Legitimate | Massive  | Month    |
| Infrastructure | Jail          | Level      | Maximum  | Most     |

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|           |             |            |             |            |
|-----------|-------------|------------|-------------|------------|
| Move      | Oil         | Patients   | Pose        | Professor  |
| Movie     | On          | Pay        | Post        | Profile    |
| Ms        | Operate     | Peace      | Potential   | Profit     |
| Multiple  | Opponent    | Penalty    | Poverty     | Programme  |
| Nation    | Oppose      | Peninsula  | Power       | Progress   |
| Need      | Option      | People     | Practise    | Prohibit   |
| Negative  | Organize    | Per        | Pre         | Project    |
| Negotiate | Origin      | Percent    | Precede     | Prominent  |
| Neighbour | Oust        | Perform    | Predecessor | Promote    |
| Network   | Outcome     | Period     | Predict     | Prompt     |
| New       | Overseas    | Permanent  | President   | Propaganda |
| News      | Oversee     | Perpetrate | Press       | Property   |
| Newspaper | Overwhelm   | Persist    | Pressure    | Propose    |
| Non       | Owned       | Personnel  | Prevent     | Prosper    |
| Normal    | Pack        | Petition   | Previous    | Protect    |
| Northern  | Page        | Photograph | Price       | Protest    |
| Notorious | Panel       | Plague     | Prime       | Provide    |
| November  | Parent      | Plan       | Principle   | Province   |
| Nuclear   | Park        | Pledge     | Priority    | Provoke    |
| Number    | Parliament  | Police     | Prison      | Public     |
| Numerous  | Participate | Policy     | Private     | Publish    |
| October   | Particular  | Politics   | Problem     | Push       |
| Office    | Partner     | Popular    | Process     | Qualify    |
| Officer   | Party       | Population | Product     | Quote      |
| Official  | Past        | Portray    | Profession  | Racial     |

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|           |             |            |            |             |
|-----------|-------------|------------|------------|-------------|
| Radio     | Rely        | Result     | Screen     | Sign        |
| Rally     | Remain      | Retain     | Seal       | Significant |
| Rank      | Remote      | Reveal     | Search     | Similar     |
| Rate      | Remove      | Reverse    | Secretary  | Since       |
| React     | Repair      | Review     | Sector     | Site        |
| Rebel     | Replace     | Revive     | Secure     | Situation   |
| Recall    | Report      | Revolution | Seek       | Size        |
| Receive   | Represent   | Rights     | Select     | Slogan      |
| Recent    | Repress     | Risk       | Self       | Social      |
| Record    | Republic    | Rival      | Sell       | Socialist   |
| Reduce    | Request     | Role       | Senior     | Society     |
| Refer     | Require     | Root       | Sentence   | Soldier     |
| Refuge    | Research    | Route      | Sentencing | Solution    |
| Regime    | Reserve     | Routine    | Separate   | Solve       |
| Region    | Reside      | Rule       | September  | Source      |
| Regular   | Resist      | Rural      | Series     | South       |
| Regulate  | Resolve     | Salary     | Service    | Southern    |
| Reinforce | Resort      | Sale       | Session    | Special     |
| Reject    | Resource    | Saturday   | Several    | Specific    |
| Relate    | Respond     | Scale      | Sex        | Speculate   |
| Relative  | Response    | Schedule   | Share      | Spend       |
| Relatives | Responsible | Scholar    | Shift      | Sponsor     |
| Release   | Restaurant  | School     | Shop       | Spread      |
| Religious | Restore     | Science    | Shortly    | Square      |
| Reluctant | Restrict    | Scramble   | Show       | Stable      |

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|             |            |           |              |            |
|-------------|------------|-----------|--------------|------------|
| Stadium     | Supply     | Territory | Transparency | Violate    |
| Staff       | Support    | Terror    | Travel       | Violence   |
| Stake       | Supreme    | Test      | Treat        | Virtual    |
| Stall       | Surge      | Theory    | Treaty       | Visit      |
| Stance      | Survey     | Thousand  | Trial        | Vote       |
| Standard    | Survive    | Threat    | Trip         | Vow        |
| Start       | Suspect    | Thursday  | Tuesday      | Vulnerable |
| State       | Suspend    | Tie       | Typical      | War        |
| States      | Sustain    | Tight     | Ultimate     | Warn       |
| Station     | Symbol     | Tiny      | Underway     | Wary       |
| Status      | System     | Today     | Unify        | Weapon     |
| Strategy    | Tackle     | Toll      | Union        | Wednesday  |
| Stress      | Tactic     | Ton       | Unit         | Week       |
| Strict      | Tangle     | Tool      | Unite        | Western    |
| Strip       | Target     | Top       | University   | Whether    |
| Student     | Task       | Total     | Urge         | Wide       |
| Study       | Teach      | Tough     | Urgent       | Win        |
| Style       | Team       | Tour      | Use          | Wing       |
| Substantial | Technology | Town      | Value        | Work       |
| Success     | Telephone  | Track     | Vehicle      | World      |
| Succession  | Television | Trade     | Verify       | Worry      |
| Suggest     | Temporary  | Tradition | Version      | Write      |
| Suicide     | Tend       | Traffic   | Victim       | Year       |
| Summer      | Tense      | Train     | Video        | Zone       |
| Sunday      | Term       | Transform | Village      |            |

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## Appendix C. The technical vocabulary of business news

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|                |             |             |           |           |
|----------------|-------------|-------------|-----------|-----------|
| Abandon        | Affiliate   | Anonymity   | Author    | Bill      |
| Able           | Afford      | Anticipate  | Authorise | Billion   |
| About          | Agency      | Apart       | Authority | Block     |
| Access         | Agenda      | Appeal      | Automate  | Board     |
| According      | Agent       | Apply       | Available | Bonus     |
| Account        | Aggressive  | Approach    | Average   | Boom      |
| Accurate       | Ago         | Appropriate | Avoid     | Borrow    |
| Accuse         | Agree       | Approve     | Balance   | Brand     |
| Achieve        | Ahead       | Area        | Ban       | Broad     |
| Acknowledge    | Aim         | Argue       | Bank      | Bubble    |
| Acquire        | Allocate    | Around      | Bar       | Budget    |
| Acquisition    | Allow       | Article     | Base      | Build     |
| Acre           | Also        | Assert      | Basic     | Bulk      |
| Active         | Alternative | Assess      | Basis     | Business  |
| Actual         | Ambition    | Asset       | Battery   | Buy       |
| Add            | Ambitious   | Assign      | Because   | Calculate |
| Adjust         | Amend       | Associate   | Become    | Campaign  |
| Administration | Amount      | Attract     | Behalf    | Candidate |
| Adopt          | Analyse     | Attribute   | Benchmark | Capital   |
| Advise         | Analyst     | Auction     | Benefit   | Capture   |
| Advocacy       | Announce    | Audience    | Bet       | Car       |
| Affect         | Annual      | Audit       | Big       | Career    |

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|            |             |              |           |             |
|------------|-------------|--------------|-----------|-------------|
| Case       | College     | Confidence   | Cost      | Decide      |
| Cash       | Combine     | Confirm      | Council   | Decision    |
| Category   | Comment     | Confront     | Counsel   | Decline     |
| Celebrity  | Commerce    | Congress     | Country   | Deem        |
| Centre     | Commission  | Connect      | Court     | Defeat      |
| Chain      | Commit      | Consensus    | Cover     | Defence     |
| Chairman   | Committee   | Conservative | Create    | Defend      |
| Challenge  | Communicate | Consider     | Credit    | Define      |
| Change     | Community   | Consistent   | Criminal  | Definite    |
| Charge     | Company     | Construct    | Crisis    | Degree      |
| Charitable | Compare     | Consult      | Critic    | Delay       |
| Chase      | Compensate  | Consume      | Criticise | Deliver     |
| Cheap      | Compete     | Consumption  | Criticism | Demand      |
| Check      | Complain    | Contact      | Crucial   | Democrat    |
| Chief      | Complete    | Contend      | Culture   | Demonstrate |
| Choice     | Complicate  | Content      | Currency  | Deny        |
| Circulate  | Component   | Contest      | Current   | Department  |
| Cite       | Compromise  | Contract     | Customer  | Depend      |
| City       | Computer    | Contribute   | Cut       | Depress     |
| Civil      | Concentrate | Control      | Damage    | Deputy      |
| Claim      | Concern     | Cooperate    | Data      | Describe    |
| Class      | Conclude    | Copy         | Database  | Design      |
| Collapse   | Condition   | Core         | Deadline  | Despite     |
| Colleague  | Conduct     | Corporate    | Deal      | Detail      |
| Collect    | Confer      | Correct      | Decade    | Develop     |

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|            |           |              |            |            |
|------------|-----------|--------------|------------|------------|
| Devise     | Draft     | Encourage    | Executive  | Flexible   |
| Diesel     | Drive     | Energy       | Exist      | Flight     |
| Difference | Drug      | Engine       | Expand     | Focus      |
| Digital    | Due       | Engineer     | Expect     | Food       |
| Diminish   | During    | Enormous     | Expensive  | Force      |
| Direct     | Early     | Ensure       | Experience | Foreclose  |
| Directed   | Earn      | Entrepreneur | Experiment | Former     |
| Disclose   | Eastern   | Environment  | Expert     | Foundation |
| Disclosure | Economy   | Equipment    | Explicit   | Founded    |
| Discount   | Edit      | Equity       | Explore    | Fraction   |
| Discuss    | Educate   | Era          | Export     | Free       |
| Dismiss    | Effect    | Error        | Expose     | Frequent   |
| Display    | Effective | Especially   | Extra      | Friday     |
| Distribute | Efficient | Essential    | Fail       | Frustrate  |
| District   | Effort    | Establish    | Failure    | Fuel       |
| Diverse    | Elect     | Estate       | Family     | Fulfil     |
| Diversify  | Electric  | Estimate     | Federal    | Function   |
| Division   | Element   | Evaluate     | Fee        | Fund       |
| Document   | Eligible  | Event        | Feed       | Future     |
| Dollar     | Elite     | Eventually   | Field      | Gain       |
| Domestic   | Email     | Evidence     | File       | Gap        |
| Dominate   | Emerge    | Evolve       | Final      | Gas        |
| Donate     | Emphasise | Example      | Finance    | General    |
| Double     | Employ    | Excess       | Firm       | Generate   |
| Dozen      | Enable    | Exchange     | Firms      | Giant      |

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|           |              |               |             |          |
|-----------|--------------|---------------|-------------|----------|
| Global    | Important    | International | Legislate   | Many     |
| Goal      | Impose       | Internet      | Less        | Margin   |
| Goods     | Improve      | Interview     | Level       | Market   |
| Govern    | Include      | Introduce     | Lever       | Material |
| Graduate  | Increase     | Invest        | Likely      | Maybe    |
| Grant     | Independence | Investigate   | Limit       | Measure  |
| Group     | Independent  | Involve       | Link        | Media    |
| Grow      | Indicate     | Issue         | List        | Median   |
| Guideline | Individual   | Item          | Litigate    | Meet     |
| Guy       | Industry     | Job           | Loan        | Member   |
| Handle    | Influence    | Join          | Local       | Mental   |
| Health    | Inform       | Junior        | Locate      | Merit    |
| Help      | Initial      | Jury          | Loom        | Message  |
| High      | Initiate     | Justice       | Loss        | Method   |
| Highlight | Innovate     | Justify       | Lot         | Mid      |
| Hire      | Innovative   | Labour        | Low         | Million  |
| History   | Instance     | Lack          | Lower       | Mission  |
| Hit       | Instead      | Large         | Loyal       | Mister   |
| Host      | Institute    | Last          | Luxury      | Mix      |
| Huge      | Institution  | Late          | Main        | Mobile   |
| Identify  | Insure       | Law           | Maintain    | Model    |
| Ignore    | Integrate    | Lawyer        | Major       | Modern   |
| Image     | Intense      | Lead          | Majority    | Modest   |
| Impact    | Interest     | Legacy        | Manage      | Modify   |
| Implicate | Internal     | Legal         | Manufacture | Monday   |

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|             |             |                |            |             |
|-------------|-------------|----------------|------------|-------------|
| Money       | Oppose      | Percent        | President  | Prosper     |
| Month       | Option      | Perception     | Pressure   | Protect     |
| Most        | Organize    | Perform        | Prevent    | Provide     |
| Motive      | Outcome     | Period         | Previous   | Provision   |
| Motor       | Outlet      | Permanent      | Price      | Proxy       |
| Move        | Overall     | Perspective    | Primary    | Public      |
| Ms          | Overhaul    | Pharmaceutical | Priority   | Publication |
| Multiple    | Oversee     | Photograph     | Private    | Publish     |
| Nation      | Owned       | Pickup         | Problem    | Pump        |
| Need        | Pack        | Pilot          | Process    | Purchase    |
| Negative    | Page        | Pioneer        | Produce    | Push        |
| Negotiate   | Panel       | Plan           | Product    | Quality     |
| Net         | Parent      | Plane          | Profession | Raise       |
| New         | Park        | Pledge         | Professor  | Rally       |
| Nominee     | Participate | Plummet        | Profile    | Range       |
| Note        | Particular  | Policy         | Profit     | Rank        |
| Number      | Partner     | Politics       | Programme  | Rate        |
| Numerous    | Passenger   | Popular        | Progress   | React       |
| Offer       | Pattern     | Pose           | Project    | Real        |
| Office      | Pay         | Positive       | Prominent  | Receive     |
| Officer     | Peak        | Post           | Promote    | Recent      |
| Official    | Penalty     | Potential      | Prompt     | Recommend   |
| Operate     | Pending     | Power          | Property   | Record      |
| Opponent    | People      | Practise       | Propose    | Reduce      |
| Opportunity | Per         | Predict        | Prospect   | Refer       |

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|            |             |           |               |             |
|------------|-------------|-----------|---------------|-------------|
| Region     | Responsible | Science   | Sign          | Square      |
| Regular    | Restore     | Scramble  | Significant   | Squeeze     |
| Regulate   | Restrict    | Screen    | Similar       | Stable      |
| Relate     | Result      | Scrutiny  | Since         | Staff       |
| Relative   | Retain      | Secretary | Site          | Stake       |
| Release    | Retire      | Section   | Size          | Standard    |
| Relevant   | Revenue     | Sector    | Skill         | Start       |
| Rely       | Reverse     | Secure    | Slide         | State       |
| Remain     | Revive      | Seek      | Small         | States      |
| Remove     | Rights      | Select    | Soar          | Statistic   |
| Repair     | Risk        | Sell      | Social        | Status      |
| Replace    | Rival       | Senior    | Sole          | Stock       |
| Report     | Robust      | Sensitive | Solicit       | Store       |
| Represent  | Role        | Separate  | Solution      | Strategy    |
| Republic   | Rule        | September | Sophisticated | Street      |
| Reputation | Salary      | Series    | Source        | Stress      |
| Request    | Sale        | Service   | South         | Strict      |
| Require    | Sample      | Settle    | Space         | Structure   |
| Research   | Sanction    | Several   | Special       | Study       |
| Reside     | Saturday    | Share     | Specific      | Style       |
| Resign     | Scale       | Shell     | Speculate     | Subsidy     |
| Resolve    | Scandal     | Shift     | Spend         | Substantial |
| Resource   | Sceptic     | Shop      | Spin          | Success     |
| Respond    | Schedule    | Shortly   | Sport         | Succession  |
| Response   | Scheme      | Show      | Spur          | Suger       |

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|            |              |            |           |
|------------|--------------|------------|-----------|
| Suggest    | Tight        | Underscore | Want      |
| Suit       | Title        | Underwrite | Warn      |
| Summer     | Today        | Union      | Wealth    |
| Supervise  | Top          | Unique     | Wednesday |
| Supply     | Topic        | Unit       | Week      |
| Support    | Total        | Unite      | Whether   |
| Surge      | Tough        | University | Work      |
| Survive    | Track        | Update     | World     |
| Sustain    | Trade        | Urge       | Worry     |
| Symbol     | Tradition    | Use        | Write     |
| System     | Traffic      | Utility    | Year      |
| Tactic     | Transact     | Valley     | Zero      |
| Target     | Transform    | Value      |           |
| Team       | Transition   | Variety    |           |
| Technical  | Transparency | Various    |           |
| Technology | Treasure     | Version    |           |
| Telephone  | Treat        | Via        |           |
| Temporary  | Trend        | Vice       |           |
| Tend       | Trial        | View       |           |
| Term       | Tuesday      | Violate    |           |
| Test       | Type         | Virtual    |           |
| Theme      | Typical      | Vision     |           |
| Threat     | Ultimate     | Volume     |           |
| Thursday   | Underlie     | Wage       |           |
| Tie        | Undermine    | Wall       |           |

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## Appendix D. The technical vocabulary of sports news

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|             |             |            |           |             |
|-------------|-------------|------------|-----------|-------------|
| Able        | Also        | Ball       | Career    | Coach       |
| Accomplish  | Ankle       | Base       | Case      | Coast       |
| According   | Announce    | Basic      | Celebrate | Collapse    |
| Accuse      | Appreciate  | Basketball | Celebrity | Collect     |
| Achieve     | Approach    | Beat       | Centre    | Combine     |
| Acknowledge | Appropriate | Because    | Chairman  | Commerce    |
| Acquire     | April       | Become     | Challenge | Commit      |
| Active      | Area        | Behaviour  | Champion  | Compare     |
| Actual      | Around      | Benefit    | Chance    | Compete     |
| Add         | Article     | Best       | Chant     | Complete    |
| Adjust      | Assault     | Big        | Charge    | Complex     |
| Adopt       | Assign      | Block      | Chase     | Complicate  |
| After       | Associate   | Boo        | Check     | Concede     |
| Against     | Atop        | Bowl       | Chief     | Concuss     |
| Agent       | Attack      | Brand      | Choice    | Confidence  |
| Aggressive  | Attempt     | Brief      | Circuit   | Confident   |
| Ago         | Attend      | Broadcast  | Cite      | Confirm     |
| Agree       | August      | Budget     | City      | Connect     |
| Ahead       | Available   | Build      | Claim     | Consecutive |
| Aim         | Average     | Campaign   | Class     | Consistent  |
| Allow       | Award       | Car        | Classic   | Construct   |
| Alongside   | Balance     | Card       | Club      | Consume     |

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|             |             |            |            |            |
|-------------|-------------|------------|------------|------------|
| Contact     | Debut       | Drive      | Exception  | Friday     |
| Contend     | Decade      | Drought    | Executive  | Frustrate  |
| Contest     | December    | During     | Expand     | Fun        |
| Contract    | Decision    | Early      | Expect     | Future     |
| Contribute  | Decline     | Earn       | Experience | Game       |
| Control     | Defence     | East       | Extend     | Gap        |
| Controversy | Defend      | Edge       | Extra      | Generate   |
| Core        | Definite    | Effective  | Factor     | Generation |
| Cost        | Deliver     | Eight      | Fame       | Get        |
| Country     | Demonstrate | Eligible   | Family     | Global     |
| Couple      | Deny        | Elite      | Fan        | Golf       |
| Court       | Describe    | Embrace    | Favourite  | Grab       |
| Crazy       | Deserve     | Emerge     | Feed       | Graduate   |
| Create      | Despite     | Emphasise  | Field      | Group      |
| Credit      | Develop     | End        | Fight      | Guarantee  |
| Critic      | Difference  | Energy     | Film       | Guy        |
| Criticise   | Different   | Enhance    | Finish     | Handle     |
| Crowd       | Directed    | Era        | First      | Happen     |
| Cup         | Discuss     | Especially | Five       | Hard       |
| Current     | Display     | Essential  | Focus      | Health     |
| Cycle       | Division    | Establish  | Former     | Heat       |
| Dad         | Dominant    | Evaluate   | Foul       | High       |
| Damage      | Dominate    | Event      | Four       | Hire       |
| Deal        | Double      | Eventually | Franchise  | History    |
| Debate      | Draft       | Example    | Free       | Hit        |

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|               |           |          |             |             |
|---------------|-----------|----------|-------------|-------------|
| Hockey        | June      | Major    | Negotiate   | Physical    |
| Home          | Junior    | Majors   | Network     | Pick        |
| Host          | Just      | Male     | New         | Pinch       |
| Identify      | Kick      | Manage   | News        | Pitch       |
| Image         | Kid       | Market   | Next        | Plan        |
| Impact        | Lack      | Match    | Nine        | Play        |
| Important     | Last      | Mature   | Normal      | Plenty      |
| Impose        | Late      | Maximum  | Number      | Plus        |
| Impress       | Lead      | Maybe    | Obvious     | Pole        |
| Improve       | League    | Media    | Off         | Politics    |
| Include       | Legend    | Member   | Opponent    | Pop         |
| Increase      | Level     | Mental   | Opportunity | Popular     |
| Initial       | Likely    | Mess     | Organize    | Positive    |
| Injure        | Limit     | Mid      | Original    | Post        |
| Inside        | Line      | Million  | Overall     | Potential   |
| Instead       | List      | Minor    | Oversee     | Practise    |
| Intense       | Local     | Mission  | Owned       | Praise      |
| International | Locate    | Mix      | Park        | Predecessor |
| Intrigue      | Locker    | Monday   | Participate | Predict     |
| Invest        | Lose      | Month    | Past        | Premier     |
| Involve       | Loss      | Most     | Pay         | Pressure    |
| Job           | Lot       | Motive   | Penalty     | Previous    |
| Join          | Lucrative | Nation   | Percent     | Price       |
| July          | Magnet    | Need     | Perform     | Primary     |
| Jump          | Main      | Negative | Personality | Prize       |

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|            |             |          |             |            |
|------------|-------------|----------|-------------|------------|
| Problem    | Record      | Review   | Significant | State      |
| Process    | Reduce      | Rival    | Similar     | States     |
| Product    | Refer       | Role     | Since       | Statistic  |
| Profession | Regular     | Rookie   | Situation   | Status     |
| Profile    | Reign       | Roster   | Six         | Straight   |
| Programme  | Relate      | Route    | Size        | Strategy   |
| Progress   | Relative    | Row      | Skill       | Stress     |
| Project    | Rely        | Run      | Smart       | Stretch    |
| Promote    | Remain      | Salary   | Snap        | Stuff      |
| Prospect   | Replace     | Sale     | Soccer      | Stun       |
| Provide    | Report      | Saturday | Social      | Style      |
| Public     | Represent   | Schedule | Solid       | Substitute |
| Punch      | Require     | Season   | Southern    | Success    |
| Push       | Reserve     | Second   | Special     | Succession |
| Qualify    | Reside      | Secure   | Spend       | Summer     |
| Race       | Resource    | Self     | Spin        | Sunday     |
| Rank       | Respond     | Sell     | Split       | Super      |
| Rare       | Response    | Senior   | Spot        | Support    |
| Rate       | Responsible | Session  | Sprain      | Surgery    |
| React      | Restrict    | Several  | Squad       | Sustain    |
| Real       | Result      | Share    | Stadium     | Switch     |
| Really     | Retire      | Shift    | Staff       | System     |
| Recall     | Reveal      | Shortly  | Stake       | Tackle     |
| Receive    | Revenue     | Sideline | Star        | Tag        |
| Recent     | Reverse     | Sign     | Start       | Talent     |

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|            |           |
|------------|-----------|
| Tax        | Trick     |
| Team       | Trip      |
| Technical  | Tuesday   |
| Teenage    | Two       |
| Telephone  | Type      |
| Television | Typical   |
| Tense      | Ultimate  |
| Term       | Union     |
| Test       | Unit      |
| Three      | Unite     |
| Throw      | Value     |
| Thursday   | Veteran   |
| Tier       | Victor    |
| Tip        | Victory   |
| Title      | Video     |
| Today      | Want      |
| Tomorrow   | Wednesday |
| Top        | Week      |
| Total      | Win       |
| Tough      | Work      |
| Tour       | World     |
| Tradition  | Worry     |
| Train      | Year      |
| Transition | Zone      |
| Treat      |           |

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## Appendix E. The technical vocabulary of politics news

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|                |             |              |             |           |
|----------------|-------------|--------------|-------------|-----------|
| About          | Ago         | Approach     | Avoid       | Brand     |
| Abroad         | Agree       | Appropriate  | Award       | Brief     |
| Accept         | Ahead       | Appropriated | Ballot      | Broad     |
| Access         | Aide        | Approve      | Base        | Build     |
| According      | Aim         | April        | Basic       | Bureau    |
| Account        | Align       | Argue        | Basis       | Business  |
| Accuse         | Allow       | Around       | Battle      | Buy       |
| Acknowledge    | Ally        | Article      | Because     | Call      |
| Active         | Also        | Aspect       | Become      | Campaign  |
| Add            | Alternative | Assemble     | Behalf      | Capture   |
| Address        | Ambassador  | Assert       | Belief      | Car       |
| Adjust         | Amid        | Assess       | Benefit     | Career    |
| Administration | Among       | Associate    | Big         | Case      |
| Adopt          | Amount      | Attack       | Bill        | Caution   |
| Adult          | Announce    | Attempt      | Billion     | Centre    |
| Advise         | Annual      | Attend       | Billionaire | Century   |
| Advocacy       | Anonymity   | Attorney     | Birth       | Chairman  |
| Afford         | Anti        | Audience     | Block       | Challenge |
| Against        | Anticipate  | Authorise    | Blunt       | Change    |
| Agency         | Apology     | Authority    | Boast       | Channel   |
| Agenda         | Appeal      | Available    | Border      | Charge    |
| Aggressive     | Apply       | Average      | Boss        | Check     |

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|             |               |            |              |           |
|-------------|---------------|------------|--------------|-----------|
| Chief       | Comprehensive | Coordinate | Define       | Display   |
| Chuck       | Compromise    | Core       | Deliver      | Dispute   |
| Cite        | Computer      | Cost       | Demand       | District  |
| Citizen     | Concede       | Council    | Democrat     | Divide    |
| City        | Concern       | Country    | Demography   | Document  |
| Civil       | Conclude      | Court      | Denounce     | Dollar    |
| Claim       | Condition     | Create     | Department   | Domestic  |
| Clarify     | Conduct       | Credit     | Deploy       | Dozen     |
| Class       | Confer        | Crisis     | Deputy       | Draft     |
| College     | Confident     | Critic     | Describe     | During    |
| Combat      | Confirm       | Criticise  | Designate    | Early     |
| Comment     | Confront      | Criticism  | Despite      | Economy   |
| Commission  | Congress      | Crucial    | Detail       | Edit      |
| Commit      | Connect       | Culture    | Devastate    | Effective |
| Committee   | Conservative  | Current    | Develop      | Effort    |
| Communicate | Consider      | Damage     | Difference   | Elect     |
| Community   | Consistent    | Date       | Digital      | Element   |
| Company     | Constitution  | Deal       | Direct       | Elevate   |
| Compare     | Construct     | Decade     | Directed     | Email     |
| Compel      | Consult       | Decide     | Disclose     | Embrace   |
| Compete     | Consume       | Decision   | Disclosure   | Emerge    |
| Competition | Contact       | Declare    | Discriminate | Emphasise |
| Complain    | Contribute    | Decline    | Discuss      | Employ    |
| Complex     | Control       | Defence    | Disease      | Encourage |
| Complicate  | Convict       | Defend     | Dismiss      | Energy    |

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|             |             |            |             |               |
|-------------|-------------|------------|-------------|---------------|
| Engineer    | Factor      | Future     | Immigrant   | Internal      |
| Ensure      | Fail        | Gain       | Immigrate   | International |
| Environment | Failure     | Gap        | Implicate   | Interview     |
| Equal       | Family      | General    | Import      | Introduce     |
| Era         | Favour      | Generals   | Important   | Invasion      |
| Escalate    | Federal     | Generation | Impose      | Invest        |
| Especially  | Fee         | Giant      | Improve     | Investigate   |
| Essential   | Fight       | Global     | Include     | Invoke        |
| Establish   | File        | Goal       | Increase    | Involve       |
| Estate      | Final       | Govern     | Independent | Issue         |
| Ethics      | Finance     | Grant      | Indicate    | Jail          |
| Event       | Firm        | Group      | Individual  | January       |
| Eventually  | Flag        | Guy        | Influence   | Jet           |
| Evidence    | Focus       | Handle     | Inform      | Job           |
| Example     | Force       | Health     | Initial     | Join          |
| Exclusive   | Foreign     | Help       | Initiate    | Joint         |
| Executive   | Former      | Highlight  | Inside      | Journal       |
| Expand      | Founded     | Hispanic   | Insist      | Journalist    |
| Expensive   | Free        | History    | Inspire     | July          |
| Experience  | Friday      | Hit        | Instead     | June          |
| Expert      | Frustrate   | Host       | Institute   | Junior        |
| Exploit     | Fuel        | House      | Institution | Justice       |
| Expose      | Function    | Identify   | Insurgent   | Lack          |
| Extend      | Fund        | Ignore     | Intend      | Language      |
| Extensive   | Fundamental | Image      | Intense     | Large         |

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|            |            |           |             |            |
|------------|------------|-----------|-------------|------------|
| Late       | Major      | Mix       | Offer       | Particular |
| Law        | Majority   | Moderate  | Office      | Partisan   |
| Lawyer     | Manage     | Modern    | Official    | Party      |
| Lead       | Manipulate | Momentum  | On          | Past       |
| League     | Many       | Money     | Operate     | Pay        |
| Legislate  | Margin     | Month     | Opponent    | People     |
| Legitimate | Market     | Most      | Opportunity | Per        |
| Level      | Material   | Motive    | Oppose      | Percent    |
| Lever      | Maybe      | Mrs       | Option      | Perception |
| Liberal    | Measure    | Ms        | Organize    | Period     |
| Licence    | Media      | Multiple  | Outcome     | Person     |
| Likely     | Medical    | Nation    | Outlet      | Personnel  |
| Likeness   | Meet       | Need      | Outline     | Plan       |
| Limit      | Member     | Negative  | Outrage     | Point      |
| Line       | Mention    | Negotiate | Outspoken   | Policy     |
| Litigate   | Mess       | Net       | Overall     | Politics   |
| Lobby      | Message    | Network   | Oversee     | Poll       |
| Local      | Mid        | New       | Oversight   | Pollster   |
| Loss       | Middle     | News      | Overwhelm   | Popular    |
| Lot        | Military   | Normal    | Owned       | Population |
| Lunch      | Mill       | Note      | Pact        | Populist   |
| Machine    | Million    | Number    | Page        | Portray    |
| Magazine   | Minimum    | Obtain    | Panel       | Pose       |
| Main       | Minor      | October   | Participant | Position   |
| Maintain   | Mister     | Offence   | Participate | Positive   |

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|            |           |             |           |             |
|------------|-----------|-------------|-----------|-------------|
| Post       | Propose   | Regular     | Reveal    | Senate      |
| Potential  | Prosecute | Regulate    | Revenue   | Senator     |
| Power      | Prosper   | Reject      | Reverse   | Senior      |
| Practise   | Protect   | Relate      | Review    | Sensitive   |
| Praise     | Provide   | Relative    | Rhetoric  | Separate    |
| Precede    | Provoke   | Release     | Rights    | Series      |
| Predict    | Public    | Reluctant   | Risk      | Serve       |
| Presidency | Push      | Rely        | Role      | Service     |
| President  | Question  | Replace     | Root      | Several     |
| Press      | Quote     | Report      | Routine   | Share       |
| Pressure   | Race      | Represent   | Rule      | Shift       |
| Prevent    | Racial    | Republic    | Run       | Shoot       |
| Previous   | Radical   | Request     | Saturday  | Show        |
| Priority   | Range     | Require     | Scandal   | Sign        |
| Private    | Rank      | Research    | Sceptic   | Significant |
| Problem    | React     | Reside      | Schedule  | Similar     |
| Procedure  | Real      | Resort      | Scholar   | Single      |
| Process    | Recall    | Respond     | Science   | Site        |
| Profession | Receive   | Response    | Screen    | Size        |
| Professor  | Recent    | Responsible | Scrutiny  | Social      |
| Profit     | Recommend | Restaurant  | Secretary | Solution    |
| Progress   | Record    | Restore     | Secure    | Source      |
| Prominent  | Reduce    | Restrict    | Seek      | South       |
| Promote    | Refer     | Result      | Self      | Southern    |
| Prompt     | Reform    | Retire      | Sell      | Special     |

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|          |            |            |           |
|----------|------------|------------|-----------|
| Specific | Tactic     | Trail      | Want      |
| Speech   | Target     | Transform  | War       |
| Spend    | Task       | Treat      | Warn      |
| Sponsor  | Team       | Tremendous | Wary      |
| Staff    | Technology | Trend      | Wealth    |
| Stake    | Television | Type       | Weapon    |
| Stance   | Temporary  | Typical    | Wednesday |
| Standard | Tend       | Ultimate   | Week      |
| Stark    | Tense      | Undermine  | Weigh     |
| Start    | Term       | Underscore | Western   |
| State    | Territory  | Unite      | Whether   |
| Status   | Test       | University | White     |
| Strategy | Testify    | Urgent     | Who       |
| Stress   | Testimony  | Use        | Win       |
| Strict   | Threat     | Value      | Withhold  |
| Strip    | Thursday   | Veteran    | Work      |
| Style    | Tie        | Victory    | Worry     |
| Sued     | Today      | Video      | Write     |
| Suggest  | Top        | View       | Year      |
| Support  | Topic      | Violate    |           |
| Supreme  | Total      | Virtual    |           |
| Survive  | Tough      | Volunteer  |           |
| Sustain  | Track      | Vote       |           |
| Symbol   | Trade      | Vulnerable |           |
| System   | Tradition  | Wage       |           |

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## Appendix F. The technical vocabulary of technology news

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|                |             |             |            |            |
|----------------|-------------|-------------|------------|------------|
| Able           | Age         | Approach    | Available  | Bulk       |
| Academy        | Aggressive  | April       | Average    | Bunch      |
| Accelerate     | Ago         | Archaeology | Avoid      | Bureau     |
| Access         | Agree       | Area        | Background | Business   |
| Accessory      | Ahead       | Argue       | Balance    | Button     |
| According      | Aid         | Around      | Ban        | Buy        |
| Account        | Aim         | Aspect      | Base       | Calculate  |
| Accurate       | Alliance    | Assemble    | Basic      | Call       |
| Accuse         | Allow       | Assert      | Basis      | Can        |
| Achieve        | Also        | Assess      | Bay        | Candidate  |
| Acknowledge    | Alternative | Asset       | Because    | Capable    |
| Acquire        | Amount      | Associate   | Become     | Capital    |
| Active         | Analyse     | Attach      | Behaviour  | Capitalist |
| Actual         | Analyst     | Attack      | Bet        | Capture    |
| Add            | Ancient     | Attract     | Big        | Card       |
| Adjust         | Animal      | Attribute   | Billion    | Category   |
| Administration | Announce    | Audience    | Block      | Cause      |
| Adopt          | Annual      | Audio       | Blog       | Celebrate  |
| Advance        | Anonymity   | Author      | Board      | Cent       |
| Advise         | Anti        | Authority   | Box        | Centre     |
| Advocate       | Appeal      | Automate    | Brand      | Century    |
| Affect         | Apply       | Automobile  | Build      | Chairman   |

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|             |             |            |           |             |
|-------------|-------------|------------|-----------|-------------|
| Challenge   | Comment     | Congress   | Create    | Delete      |
| Champion    | Commerce    | Connect    | Credit    | Deliver     |
| Change      | Commission  | Consider   | Crisis    | Demand      |
| Charge      | Commit      | Consistent | Critic    | Democrat    |
| Cheap       | Committee   | Construct  | Criticise | Demonstrate |
| Check       | Communicate | Consume    | Criticism | Depend      |
| Chief       | Community   | Contain    | Crucial   | Deploy      |
| Choice      | Company     | Contend    | Culture   | Deputy      |
| Chrome      | Compare     | Content    | Current   | Describe    |
| Cite        | Compete     | Context    | Customer  | Design      |
| City        | Complain    | Continent  | Cycle     | Despite     |
| Claim       | Complete    | Contract   | Damage    | Detail      |
| Class       | Complex     | Contribute | Data      | Detect      |
| Classify    | Complicate  | Control    | Database  | Develop     |
| Client      | Component   | Convention | Date      | Device      |
| Cloud       | Compromise  | Convert    | Deal      | Difference  |
| Clue        | Computer    | Cook       | Debate    | Different   |
| Coast       | Concept     | Coordinate | Decade    | Digital     |
| Code        | Concern     | Core       | Decide    | Dioxide     |
| Collaborate | Conclude    | Corporate  | Decision  | Direct      |
| Colleague   | Condition   | Correct    | Decline   | Directed    |
| Collect     | Conduct     | Cost       | Dedicate  | Disclose    |
| College     | Confer      | Country    | Defence   | Discount    |
| Com         | Conflict    | Craft      | Defend    | Discover    |
| Combine     | Confront    | Crazy      | Define    | Discuss     |

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|            |              |            |          |             |
|------------|--------------|------------|----------|-------------|
| Display    | Element      | Eventually | Federal  | Fundamental |
| Distribute | Eliminate    | Evidence   | Fee      | Future      |
| Divide     | Email        | Evolve     | Female   | Gadget      |
| Doctor     | Embed        | Example    | Field    | Gain        |
| Document   | Emerge       | Executive  | Final    | Galaxy      |
| Domestic   | Emit         | Exist      | Finance  | Game        |
| Dominant   | Emphasise    | Expand     | Fined    | Gas         |
| Dominate   | Employ       | Expect     | Firm     | Gender      |
| Dozen      | Enable       | Expense    | Firms    | General     |
| Draft      | Encourage    | Expensive  | Fish     | Generate    |
| Drive      | Engine       | Experience | Flight   | Generation  |
| During     | Engineer     | Experiment | Flip     | Genetic     |
| Early      | Enormous     | Expert     | Flow     | Giant       |
| Earth      | Ensure       | Expertise  | Focus    | Global      |
| East       | Enthusiastic | Explore    | Food     | Goal        |
| Easy       | Entity       | Expose     | Forecast | Goods       |
| Economy    | Entrepreneur | Extend     | Former   | Govern      |
| Edit       | Environment  | Extensive  | Fossil   | Grant       |
| Educate    | Equipment    | Extra      | Founded  | Grapple     |
| Effect     | Equivalent   | Facility   | Free     | Group       |
| Effective  | Era          | Fahrenheit | Friday   | Grow        |
| Efficient  | Especially   | Family     | Fuel     | Guide       |
| Effort     | Establish    | Fast       | Fun      | Guy         |
| Egg        | Estimate     | Feature    | Function | Hack        |
| Electronic | Event        | February   | Fund     | Handle      |

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|              |              |               |             |          |
|--------------|--------------|---------------|-------------|----------|
| Hardware     | Include      | Interface     | Lead        | Margin   |
| Headquarters | Incorporate  | Internal      | Learn       | Market   |
| Help         | Increase     | International | Less        | Massive  |
| High         | Incredible   | Internet      | Level       | Material |
| Highlight    | Independent  | Intervene     | Likely      | Maybe    |
| Hire         | Indicate     | Interview     | Likeness    | Measure  |
| History      | Individual   | Intrigue      | Limit       | Mechanic |
| Hit          | Industry     | Introduce     | Link        | Media    |
| Hook         | Influence    | Invest        | Literal     | Member   |
| Host         | Inform       | Investigate   | Load        | Message  |
| Household    | Ingredient   | Involve       | Lobby       | Microbe  |
| Huge         | Initial      | Issue         | Local       | Mid      |
| Human        | Innovate     | January       | Log         | Mill     |
| Hypothesis   | Innovative   | Join          | Loss        | Million  |
| Ice          | Insert       | July          | Lot         | Minor    |
| Idea         | Inside       | Junior        | Lower       | Mister   |
| Identify     | Inspire      | Key           | Machine     | Mix      |
| Illustrate   | Instance     | Knowledge     | Main        | Mobile   |
| Image        | Instead      | Label         | Maintain    | Model    |
| Impact       | Institute    | Laboratory    | Major       | Modern   |
| Implicate    | Instruct     | Language      | Majority    | Modify   |
| Important    | Integrate    | Large         | Manage      | Monday   |
| Improve      | Intelligence | Late          | Manufacture | Money    |
| Incentive    | Intense      | Launch        | Many        | Monitor  |
| Inch         | Interact     | Law           | March       | Month    |

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|          |             |             |            |          |
|----------|-------------|-------------|------------|----------|
| More     | Office      | Period      | Precede    | Prompt   |
| Most     | Officer     | Permanent   | Precise    | Property |
| Motive   | Official    | Persist     | Predict    | Propose  |
| Move     | Often       | Perspective | President  | Protect  |
| Movie    | Operate     | Phenomenon  | Pressure   | Provide  |
| Ms       | Opportunity | Photograph  | Previous   | Public   |
| Multiple | Option      | Physical    | Price      | Publish  |
| Museum   | Organize    | Pioneer     | Primary    | Pump     |
| Music    | Original    | Plan        | Prime      | Purchase |
| Nation   | Other       | Plant       | Priority   | Push     |
| Need     | Overall     | Platform    | Privacy    | Quality  |
| Net      | Overseas    | Plenty      | Private    | Quarter  |
| Network  | Oversight   | Plug        | Probably   | Query    |
| Neural   | Page        | Plus        | Problem    | Raise    |
| New      | Parent      | Policy      | Process    | Range    |
| News     | Participate | Pop         | Produce    | React    |
| Northern | Particular  | Popular     | Product    | Real     |
| Note     | Partner     | Population  | Profession | Recent   |
| November | Pay         | Pose        | Professor  | Record   |
| Nuclear  | Peer        | Positive    | Profile    | Reduce   |
| Number   | People      | Post        | Profit     | Refer    |
| Numerous | Per         | Potential   | Programme  | Region   |
| Ocean    | Percent     | Power       | Progress   | Regular  |
| Oculus   | Perception  | Practical   | Project    | Regulate |
| Offer    | Perform     | Practise    | Promote    | Reject   |

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|             |           |             |               |           |
|-------------|-----------|-------------|---------------|-----------|
| Relate      | Robot     | Sequence    | Solar         | Strategy  |
| Relative    | Robust    | Series      | Solution      | Stress    |
| Release     | Role      | Service     | Solve         | Strict    |
| Relevant    | Root      | Set         | Sophisticated | Structure |
| Rely        | Routine   | Several     | Source        | Student   |
| Remove      | Sale      | Shape       | South         | Study     |
| Rent        | Sample    | Share       | Southern      | Stuff     |
| Replace     | Satellite | Shift       | Space         | Submit    |
| Replicate   | Scale     | Shop        | Span          | Subscribe |
| Report      | Scare     | Shortly     | Special       | Success   |
| Represent   | Sceptic   | Show        | Specific      | Suggest   |
| Require     | Schedule  | Shrink      | Spend         | Summer    |
| Research    | School    | Sign        | Spread        | Supply    |
| Reside      | Science   | Signal      | Spur          | Support   |
| Resource    | Screen    | Significant | Staff         | Surge     |
| Respond     | Search    | Silicon     | Stake         | Survey    |
| Response    | Sector    | Similar     | Standard      | Survive   |
| Responsible | Segment   | Simple      | Star          | Sustain   |
| Restrict    | Select    | Single      | Start         | Switch    |
| Result      | Sell      | Site        | State         | System    |
| Reveal      | Senator   | Size        | States        | Tablet    |
| Revenue     | Senior    | Small       | Statistic     | Tag       |
| Reverse     | Sensor    | Smart       | Status        | Tank      |
| Rights      | Separate  | Social      | Stock         | Target    |
| Risk        | September | Software    | Store         | Team      |

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|            |            |            |          |
|------------|------------|------------|----------|
| Technical  | Transact   | Value      | Whether  |
| Technique  | Transition | Variety    | Wide     |
| Technology | Translate  | Various    | Win      |
| Teenage    | Transport  | Vary       | Wire     |
| Telephone  | Trend      | Vast       | Wireless |
| Temporary  | Trick      | Venture    | Work     |
| Tend       | Trillion   | Version    | World    |
| Term       | Trip       | Versus     | Worry    |
| Test       | Tuesday    | Via        | Write    |
| Threat     | Tweet      | Viable     | Year     |
| Thrive     | Twitter    | Vice       |          |
| Thursday   | Type       | Video      |          |
| Tiny       | Typical    | View       |          |
| Title      | Ultimate   | Violate    |          |
| Today      | Underlie   | Virtual    |          |
| Tool       | Undermine  | Visual     |          |
| Top        | Underscore | Vulnerable |          |
| Topic      | Unique     | Warn       |          |
| Total      | Unite      | Wealth     |          |
| Tough      | Universe   | Web        |          |
| Track      | University | Wednesday  |          |
| Trade      | Upgrade    | Week       |          |
| Tradition  | Use        | Weigh      |          |
| Traffic    | Vacation   | West       |          |
| Train      | Valley     | Western    |          |

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## Appendix G. The technical vocabulary of U.S. news

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|                |             |           |           |           |
|----------------|-------------|-----------|-----------|-----------|
| Abuse          | Advocate    | Appeal    | Authority | Bus       |
| Accept         | Affect      | Apply     | Available | Buy       |
| Access         | After       | Appoint   | Avoid     | Call      |
| Accident       | Agency      | Approach  | Award     | Camera    |
| Accommodate    | Aggressive  | Approve   | Balance   | Campus    |
| According      | Ago         | April     | Bar       | Candidate |
| Account        | Agree       | Area      | Base      | Capital   |
| Accountable    | Agriculture | Argue     | Basic     | Capture   |
| Accuse         | Ahead       | Army      | Because   | Car       |
| Acknowledge    | Aid         | Around    | Become    | Case      |
| Acre           | Aide        | Arrest    | Behalf    | Cash      |
| Active         | Aim         | Article   | Behaviour | Cause     |
| Actual         | Alcohol     | Assess    | Benefit   | Celebrate |
| Add            | Allege      | Assist    | Billion   | Celebrity |
| Address        | Allow       | Associate | Birth     | Centre    |
| Adequate       | Also        | Attack    | Black     | Century   |
| Administration | Alternative | Attempt   | Block     | Ceremony  |
| Administrative | Amount      | Attend    | Board     | Chairman  |
| Administrator  | Analyse     | Attorney  | Born      | Challenge |
| Adult          | Announce    | Attribute | Brand     | Champion  |
| Advise         | Annual      | Author    | Budget    | Change    |
| Advocacy       | Anti        | Authorise | Build     | Charge    |

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|             |              |            |           |              |
|-------------|--------------|------------|-----------|--------------|
| Check       | Company      | Control    | Culture   | Denounce     |
| Chemical    | Compare      | Convert    | Current   | Deny         |
| Chief       | Compete      | Convict    | Dad       | Department   |
| Child       | Complain     | Cooperate  | Damage    | Deploy       |
| Choice      | Complaint    | Coordinate | Data      | Deputy       |
| Cite        | Complex      | Corporate  | Date      | Describe     |
| City        | Complicate   | Corps      | Death     | Design       |
| Civil       | Computer     | Cost       | Debate    | Despatch     |
| Claim       | Concentrate  | Council    | Decade    | Despite      |
| Class       | Concern      | Counter    | Decide    | Destruction  |
| Client      | Conclude     | Country    | Decision  | Detail       |
| Club        | Condition    | County     | Decline   | Detect       |
| Coalition   | Conduct      | Couple     | Dedicate  | Devastate    |
| Collaborate | Confer       | Court      | Deem      | Develop      |
| Collapse    | Confirm      | Cover      | Defeat    | Directed     |
| College     | Conflict     | Create     | Defence   | Disaster     |
| Combine     | Confront     | Credible   | Defend    | Disclose     |
| Comment     | Congress     | Credit     | Defendant | Discriminate |
| Commerce    | Connect      | Crew       | Define    | Discuss      |
| Commission  | Consider     | Crime      | Definite  | Disease      |
| Commit      | Constitute   | Criminal   | Defy      | Dismiss      |
| Committee   | Constitution | Critic     | Degree    | Display      |
| Communicate | Consult      | Criticise  | Delay     | Dispute      |
| Community   | Contact      | Criticism  | Demand    | Disrupt      |
| Commute     | Contract     | Crucial    | Democrat  | District     |

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|            |             |            |            |              |
|------------|-------------|------------|------------|--------------|
| Divide     | Emerge      | Example    | Firearm    | Guard        |
| Division   | Emergency   | Excess     | Focus      | Guilty       |
| Document   | Emphasise   | Executive  | Food       | Gun          |
| Dozen      | Employ      | Exempt     | Force      | Guy          |
| Drive      | Encounter   | Exist      | Former     | Handle       |
| Drug       | Encourage   | Expand     | Founded    | Happen       |
| Dump       | Energy      | Expensive  | Four       | Harsh        |
| During     | Enforce     | Experience | Free       | Headquarters |
| Early      | Engineer    | Expert     | Friday     | Help         |
| Earn       | Enlist      | Extension  | Frustrate  | High         |
| East       | Ensure      | Extensive  | Fuel       | Highlight    |
| Eastern    | Environment | Extreme    | Fund       | Hire         |
| Economy    | Episode     | Facility   | Gender     | History      |
| Edit       | Equal       | Factor     | General    | Home         |
| Educate    | Era         | Fail       | Generate   | Homicide     |
| Effect     | Error       | Failure    | Generation | Hospital     |
| Effective  | Especially  | Family     | Giant      | Human        |
| Efficient  | Essential   | Fatal      | Gift       | Identify     |
| Effort     | Establish   | Federal    | Goal       | Image        |
| Eight      | Estimate    | Female     | Govern     | Impact       |
| Elect      | Evaluate    | Field      | Grade      | Important    |
| Electric   | Event       | Fight      | Grand      | Impose       |
| Electronic | Eventually  | File       | Grant      | Improve      |
| Element    | Evidence    | Final      | Group      | Incarcerate  |
| Eligible   | Examine     | Finance    | Guarantee  | Incident     |

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|             |              |             |          |           |
|-------------|--------------|-------------|----------|-----------|
| Include     | Island       | Lesbian     | Marine   | Multiple  |
| Income      | Issue        | Level       | Market   | Murder    |
| Incorporate | Job          | Liable      | Mass     | Nation    |
| Increase    | Join         | Lieutenant  | Material | Need      |
| Independent | Joint        | Likely      | Maybe    | Neighbour |
| Indicate    | Journal      | Limit       | Mayor    | Network   |
| Indict      | Journalist   | Link        | Measure  | New       |
| Individual  | Judge        | List        | Medal    | News      |
| Industry    | June         | Literal     | Medical  | Newspaper |
| Inform      | Junior       | Lobby       | Member   | Nine      |
| Initial     | Jurisdiction | Local       | Memo     | Nominate  |
| Injure      | Justice      | Lot         | Message  | Normal    |
| Inmate      | Kill         | Magazine    | Method   | North     |
| Inside      | Label        | Main        | Mile     | Northern  |
| Inspect     | Lack         | Maintain    | Militant | November  |
| Install     | Large        | Major       | Military | Nowhere   |
| Instance    | Late         | Majority    | Million  | Number    |
| Institute   | Law          | Male        | Minor    | Numerous  |
| Institution | Lawyer       | Mall        | Mister   | Obtain    |
| Intense     | Lead         | Manage      | Mix      | October   |
| Internal    | League       | Mandatory   | Model    | Offence   |
| Internet    | Legacy       | Manufacture | Modern   | Offend    |
| Interview   | Legal        | Many        | Monitor  | Office    |
| Investigate | Legislate    | March       | Month    | Officer   |
| Involve     | Legislature  | Margin      | Ms       | Official  |

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|             |            |            |           |           |
|-------------|------------|------------|-----------|-----------|
| Operate     | Pattern    | Pose       | Prompt    | Reduce    |
| Opponent    | Pay        | Positive   | Property  | Refer     |
| Opportunity | Pending    | Post       | Propose   | Reform    |
| Oppose      | Pentagon   | Potential  | Prosecute | Region    |
| Option      | People     | Practise   | Protect   | Register  |
| Order       | Per        | Predict    | Protest   | Regulate  |
| Organize    | Percent    | President  | Provide   | Reject    |
| Original    | Perform    | Press      | Provoke   | Relate    |
| Overall     | Period     | Pressure   | Public    | Relative  |
| Overhaul    | Persist    | Prevent    | Publish   | Relatives |
| Oversee     | Photograph | Previous   | Punish    | Release   |
| Overwhelm   | Physician  | Price      | Purchase  | Rely      |
| Owned       | Plan       | Priority   | Qualify   | Remain    |
| Pack        | Plea       | Prison     | Race      | Remove    |
| Page        | Plead      | Privacy    | Racial    | Repair    |
| Paint       | Pledge     | Private    | Radio     | Replace   |
| Parent      | Plot       | Privilege  | Range     | Report    |
| Parish      | Police     | Problem    | Rank      | Represent |
| Park        | Policy     | Process    | Rate      | Republic  |
| Particular  | Politics   | Profession | React     | Request   |
| Partisan    | Poll       | Professor  | Recall    | Require   |
| Partner     | Pop        | Profit     | Receive   | Research  |
| Passenger   | Popular    | Programme  | Recent    | Reside    |
| Past        | Population | Progress   | Recommend | Resign    |
| Pat         | Portray    | Prohibit   | Record    | Resource  |

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|             |            |             |                |             |
|-------------|------------|-------------|----------------|-------------|
| Respond     | Sceptic    | Shirt       | Store          | Task        |
| Response    | Schedule   | Shoot       | Strategy       | Tax         |
| Responsible | School     | Show        | Street         | Teach       |
| Restaurant  | Science    | Sign        | Stress         | Team        |
| Restore     | Scramble   | Significant | Strict         | Technical   |
| Restrict    | Screen     | Similar     | Structure      | Technique   |
| Result      | Search     | Sister      | Study          | Telephone   |
| Retire      | Secretary  | Site        | Stun           | Temperature |
| Reveal      | Sector     | Six         | Style          | Temporary   |
| Revenue     | Secure     | Social      | Submit         | Tend        |
| Review      | Seek       | Sole        | Substantial    | Term        |
| Rifle       | Select     | Solve       | Suburb         | Test        |
| Rights      | Self       | Son         | Suggest        | Testify     |
| Risk        | Sell       | South       | Summer         | Testimony   |
| River       | Senator    | Southern    | Sunday         | Theory      |
| Role        | Senior     | Special     | Superintendent | Threat      |
| Root        | Sentencing | Specific    | Supervise      | Thursday    |
| Routine     | Separate   | Spend       | Supply         | Ticket      |
| Rule        | Series     | Split       | Support        | Tie         |
| Rural       | Service    | Staff       | Surveillance   | Tip         |
| Safe        | Session    | Standard    | Survive        | Today       |
| Sale        | Several    | Start       | Suspect        | Top         |
| Saturday    | Sex        | State       | Sustain        | Total       |
| Say         | Share      | States      | System         | Tough       |
| Scare       | Shift      | Statute     | Target         | Tour        |

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|            |           |       |
|------------|-----------|-------|
| Track      | Urban     | Work  |
| Trade      | Urge      | Worry |
| Tradition  | Urgent    | Write |
| Tragedy    | Use       | Year  |
| Train      | Value     | Zone  |
| Transform  | Via       |       |
| Transport  | Victim    |       |
| Trauma     | Victory   |       |
| Treat      | View      |       |
| Trend      | Violate   |       |
| Trial      | Violence  |       |
| Trigger    | Violent   |       |
| Trip       | Visit     |       |
| Truck      | Vote      |       |
| Tuesday    | Vow       |       |
| Twitter    | War       |       |
| Type       | Warn      |       |
| Ultimate   | Water     |       |
| Undermine  | Wednesday |       |
| Uniform    | Week      |       |
| Union      | Weigh     |       |
| Unique     | Western   |       |
| Unit       | Whether   |       |
| University | Who       |       |
| Update     | Witness   |       |

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## Appendix H. The technical vocabulary of arts news

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|             |              |            |           |           |
|-------------|--------------|------------|-----------|-----------|
| Abandon     | Ambition     | Attach     | Big       | Card      |
| Absorb      | Ambitious    | Attend     | Birth     | Career    |
| Access      | Ancient      | Audience   | Blend     | Carve     |
| Acclaim     | Animal       | Author     | Block     | Cash      |
| Achieve     | Annual       | Available  | Blue      | Cast      |
| Acoustic    | Anti         | Award      | Book      | Celebrate |
| Acquire     | Apart        | Background | Booth     | Celebrity |
| Active      | Apply        | Balance    | Born      | Centre    |
| Add         | Appreciate   | Ban        | Borrow    | Century   |
| Adopt       | Approach     | Band       | Boundary  | Challenge |
| Adult       | Appropriate  | Bang       | Bowl      | Choice    |
| Advise      | April        | Baritone   | Brass     | Chronicle |
| Aesthetic   | Architect    | Baroque    | Brief     | Cinema    |
| Age         | Architecture | Base       | Brilliant | Circle    |
| Ago         | Area         | Basement   | Broadcast | Citizen   |
| Ahead       | Around       | Basic      | Build     | City      |
| Aim         | Array        | Basis      | Buy       | Claim     |
| Album       | Art          | Bass       | Buzz      | Clarify   |
| Alongside   | Aspect       | Beam       | By        | Clarinet  |
| Also        | Aspire       | Become     | Canvas    | Class     |
| Alternate   | Assign       | Benefit    | Capture   | Classic   |
| Alternative | Associate    | Bible      | Car       | Clay      |

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|             |              |             |             |            |
|-------------|--------------|-------------|-------------|------------|
| Clip        | Concrete     | Dance       | Division    | Emerge     |
| Club        | Conduct      | Date        | Document    | Emphasise  |
| Coast       | Conflict     | Dazzle      | Documentary | Encounter  |
| Collaborate | Connect      | Debate      | Donate      | Encourage  |
| Colleague   | Construct    | Debut       | Double      | Energy     |
| Collect     | Contain      | Decade      | Dozen       | Ensemble   |
| College     | Contemporary | Dedicate    | Drama       | Entertain  |
| Colour      | Context      | Define      | Drone       | Epic       |
| Combine     | Contribute   | Deliver     | Drum        | Equal      |
| Comic       | Control      | Demonstrate | Duet        | Era        |
| Commerce    | Convert      | Depict      | Duo         | Especially |
| Commit      | Convey       | Describe    | During      | Essential  |
| Community   | Corporate    | Despite     | Dynamic     | Establish  |
| Company     | Cost         | Detail      | Early       | Estate     |
| Compare     | Costume      | Develop     | Earn        | Event      |
| Compel      | Cover        | Devote      | Economy     | Evolution  |
| Compete     | Create       | Different   | Edit        | Evolve     |
| Competition | Credit       | Digital     | Edition     | Example    |
| Complete    | Critic       | Directed    | Educate     | Exception  |
| Complex     | Criticism    | Discipline  | Eight       | Excerpt    |
| Complicate  | Critique     | Discuss     | Elaborate   | Exchange   |
| Compose     | Crucial      | Display     | Elect       | Execute    |
| Concentrate | Culture      | Distribute  | Element     | Exhibit    |
| Concept     | Curator      | Diverse     | Elite       | Exist      |
| Concert     | Current      | Divide      | Embrace     | Expand     |

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|             |            |          |               |             |
|-------------|------------|----------|---------------|-------------|
| Expanse     | Film       | Genre    | Illustrate    | Interpret   |
| Experience  | Final      | Giant    | Image         | Interview   |
| Experiment  | Finale     | Gift     | Imitate       | Intrigue    |
| Expose      | Finance    | Global   | Immigrant     | Introduce   |
| Extend      | Five       | Goal     | Impact        | Investigate |
| Extra       | Floor      | Govern   | Important     | Invite      |
| Extravagant | Flute      | Graduate | Improvise     | Involve     |
| Fabric      | Focus      | Grammy   | Include       | Issue       |
| Factory     | Football   | Grand    | Increase      | Jay         |
| Fairs       | Form       | Grant    | Incredible    | Jazz        |
| Familiar    | Former     | Groove   | Independent   | Join        |
| Family      | Foster     | Group    | Industry      | Joint       |
| Famous      | Founded    | Guest    | Influence     | Juxtapose   |
| Fan         | Four       | Guitar   | Inform        | Kick        |
| Fantastic   | Fox        | Hall     | Initial       | Label       |
| Fantasy     | Frame      | Handle   | Initiate      | Lake        |
| Fascinate   | Frustrate  | Harmony  | Inside        | Landscape   |
| Fashion     | Fun        | Heritage | Inspire       | Language    |
| Favourite   | Fund       | Hero     | Install       | Large       |
| Feature     | Funk       | Hip      | Institution   | Late        |
| Female      | Fuse       | History  | Instrument    | Lead        |
| Feminist    | Future     | Host     | Integrate     | Lecture     |
| Festival    | Gallery    | Human    | Intense       | Legacy      |
| Field       | Game       | Ideal    | International | Level       |
| Figure      | Generation | Identify | Internet      | Libretto    |

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|             |           |          |             |              |
|-------------|-----------|----------|-------------|--------------|
| Likeness    | Media     | Music    | Operate     | Phenomenon   |
| Limit       | Meditate  | Myth     | Opportunity | Philharmonic |
| Line        | Melody    | Naked    | Optimist    | Photograph   |
| List        | Member    | Narrate  | Orchestra   | Physical     |
| Literal     | Memorable | Nation   | Organize    | Piano        |
| Lively      | Memory    | Navigate | Origin      | Picture      |
| Loan        | Mentor    | Negative | Original    | Piece        |
| Local       | Metal     | Network  | Orthodox    | Pioneer      |
| Locate      | Mid       | New      | Outfit      | Plan         |
| Lot         | Mill      | News     | Oversee     | Platform     |
| Loyal       | Mini      | Normal   | Owned       | Play         |
| Lyric       | Mission   | North    | Pack        | Plenty       |
| Magazine    | Mister    | Note     | Panorama    | Poem         |
| Magic       | Mix       | Novel    | Parent      | Poet         |
| Main        | Mode      | Number   | Part        | Poignant     |
| Maintain    | Model     | Numerous | Particular  | Police       |
| Major       | Modern    | Obscure  | Partner     | Polish       |
| Male        | Monster   | Obsess   | Past        | Politics     |
| Manipulate  | Month     | Ocean    | Peer        | Pop          |
| Mark        | Most      | Offer    | People      | Popular      |
| Market      | Motive    | Office   | Percussion  | Portrait     |
| Masterpiece | Move      | Official | Perform     | Pose         |
| Material    | Movie     | Often    | Period      | Post         |
| Maximum     | Ms        | Oil      | Personality | Power        |
| Mayor       | Multiple  | Opera    | Perspective | Practise     |

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|            |           |             |           |               |
|------------|-----------|-------------|-----------|---------------|
| Pre        | Public    | Renaissance | Royal     | Signature     |
| Precede    | Publish   | Render      | Rule      | Significant   |
| Precise    | Purchase  | Renown      | Sample    | Similar       |
| Predict    | Quality   | Repertory   | Saxophone | Sing          |
| Premiere   | Quote     | Replace     | Scare     | Single        |
| Premise    | Race      | Represent   | Scene     | Site          |
| Present    | Racial    | Republic    | Schedule  | Size          |
| Pressure   | Radical   | Reputation  | School    | Smart         |
| Preview    | Radio     | Resemble    | Science   | Social        |
| Price      | Range     | Reside      | Score     | Solo          |
| Primary    | Rare      | Resource    | Second    | Song          |
| Print      | Raw       | Respond     | Section   | Sophisticated |
| Problem    | React     | Restaurant  | Self      | Soprano       |
| Process    | Real      | Restore     | Sell      | Sound         |
| Produce    | Recall    | Result      | Sensible  | Source        |
| Product    | Recent    | Reveal      | Sequence  | Southern      |
| Profession | Recite    | Review      | Series    | Space         |
| Profit     | Refer     | Revolution  | Session   | Special       |
| Programme  | Region    | Rhythm      | Set       | Specific      |
| Progress   | Regular   | Rigour      | Seven     | Spend         |
| Project    | Rehearse  | Rock        | Several   | Spin          |
| Prominent  | Relate    | Role        | Shape     | Split         |
| Promote    | Relative  | Romantic    | Share     | Sprawl        |
| Provide    | Release   | Root        | Shift     | Staff         |
| Provoke    | Religious | Route       | Show      | Stage         |

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|------------|------------|------------|----------|
| Stain      | Survive    | Title      | Version  |
| Stake      | Sustain    | Today      | Veteran  |
| Standard   | Symbol     | Tool       | Via      |
| Staple     | Symphony   | Top        | Video    |
| Star       | System     | Topic      | View     |
| Start      | Talent     | Track      | Violence |
| State      | Target     | Trade      | Virtuoso |
| States     | Teach      | Tradition  | Visible  |
| Status     | Team       | Transform  | Vision   |
| Stock      | Technique  | Treat      | Visit    |
| Story      | Technology | Tribute    | Visual   |
| Strategy   | Teenage    | Trick      | Vivid    |
| String     | Television | Tune       | Vocal    |
| Strip      | Tend       | Ultimate   | Wall     |
| Structure  | Tenor      | Unique     | War      |
| Student    | Term       | Unite      | Wealth   |
| Studio     | Text       | Universe   | Week     |
| Study      | Theatre    | University | Win      |
| Style      | Theme      | Update     | Work     |
| Subject    | Theory     | Urban      | World    |
| Succession | Thrill     | Use        | Write    |
| Suggest    | Thrive     | Value      | Year     |
| Support    | Ticket     | Van        |          |
| Surface    | Tiny       | Various    |          |
| Surreal    | Tip        | Vary       |          |

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## Curriculum Vitae

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