GENRE ANALYSIS OF CORPORATE ANNUAL REPORT NARRATIVES
A Corpus Linguistics-Based Approach

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The study reported on in this article analyzes the U.K. Operating and Financial Review (OFR) as a genre of accounting narrative, employing word frequencies to identify genre rules. Evidence is found of rhetorical ploys within the genre and of differences in word frequencies, suggesting the existence of subgenres, related to the exigencies of the rhetorical situation. The genre employs language biased toward the positive (the "Pollyanna effect"), despite authoritative guidance that the OFR should be expressed in neutral terms. Evidence of subgenres includes differential propensity to employ positive language and differences in the rhetorical ploys adopted in connection with marketing strategy, corporate recovery, self-reference, comparative analysis, and gearing (leverage). The study also demonstrates the value of a corpus linguistics approach in analyzing accounting narratives.

Keywords: genre analysis; corpus linguistics; corporate annual reports; accounting narratives; operating and financial review

Accounting narratives in corporate annual reports are composed and read within a dense and complex web of stakeholder communication, which includes interim reports, preliminary announcements, analyst presentations, corporate Web sites, media releases, direct contact with large investors, and, of course, the remainder of the annual report itself (see, for example, Argenti & Forman, 2002, chap. 7; Gibbins, Richardson, & Waterhouse, 1990; Rogers, 2000). Sophisticated users, such as analysts acting on behalf of large investors, draw on these sources to forecast future performance. Although direct contacts are a particularly and increasingly valuable source of information, corporate annual reports, including narratives, are used extensively in the forecasting process, which frequently builds explicitly on information about past performance and current position (Arnold & Moizer, 1984; Barker, 1998, 2001). Because analysts’ forecasts frequently include
a subjective element, the tone as well as the content of narrative descriptions may potentially influence the reader.

Companies manage their stakeholder communications, including accounting narratives, strategically while also reacting tactically to particular circumstances and making relatively mechanical responses to regulatory codes and similar stimuli (Gibbins et al., 1990). The context within which accounting narratives are produced thus provides both opportunities for, and constraints on, communication. For example, companies may choose to employ the narrative as part of a wider stakeholder communications strategy, as well as meeting narrow regulatory requirements. Notable among the constraints affecting corporate report narratives is the need to align the account offered in the narrative with that in the numerical financial statements, both to achieve credibility for the narrative with its readers and to satisfy regulatory requirements. Regularities in the conditions under which corporate annual report narratives are produced, combined with the pattern of opportunities and constraints faced by their authors, make it likely that such narratives will represent an identifiable genre of business communication.

In the United Kingdom, the general management commentary on the business accompanying the numerical financial statements in the corporate annual report is normally known as the Operating and Financial Review (OFR). This article examines certain lexical features of the OFR, employing genre theory as an analytical framework and corpus linguistics as the empirical method. Possible explanations for the features identified from the corpus are explored, treating the emergence, maintenance, and modification of the genre as a dynamic, socially embedded process.

The greatest research effort in exploring the stylistics of accounting narratives has hitherto been directed at the single dimension of syntactical complexity, that is, the readability of the narrative as measured by variables such as word and sentence length. A recent survey (Stanton & Stanton, 2002) reported more studies of this dimension of discourse management in accounting narratives than of all other aspects put together. Though easy and relatively economical to measure, and, of course, important in its own right, readability is only a limited component of the overall picture. Furthermore, most studies have examined syntactical complexity as a device for obscuring poor performance, when it is not the most obvious target for such manipulation and the evidence for this phenomenon is, to say the least, ambivalent (Rutherford, 2003).

Stylistic choices affecting the form of accounting narratives include both the strictly lexical, principally word choice and frequency of use, and more complex aspects of linguistic formation. An example of the latter is addressed by Thomas’s (1997) analysis of presidents’ letters to shareholders in a period of declining performance. The study found that “as the news becomes more negative, linguistic structures suggest a factual, ‘objective’, situation caused by circumstances not attributable to any persons who might otherwise be thought responsible” (p. 47). Studies of word choice are sometimes treated as an entirely separate category from those
dealing with more complex linguistic issues: Smith and Taffler (2000), for example, refer to them as “form-oriented” to contrast them with “meaning-oriented” studies. However, word choice, including questions of usage such as the frequency with which particular words are deployed, affects meaning and interpretation, so the difference is one of degree rather than kind.

The OFR is a relatively recent development in the United Kingdom. British companies publishing OFRs do so within a framework of guidance set down by the Accounting Standards Board that during the period under study, had been commended by a variety of authoritative bodies but was, “persuasive rather than mandatory” (Accounting Standards Board, 1993, p. ii). It thus provides a useful opportunity to compare the narratives of different companies because the degree of authoritative guidance means that all companies cover broadly similar ground (unlike, for example, the wholly free-form chair’s report) while at the same time not being so heavily regulated as to produce dense and uniform “boiler-plate” prose whatever the company’s circumstances. One feature of the guidance of particular relevance to this study is its statement that it is an “essential feature” of the OFR that “it should be balanced and objective, dealing even-handedly with both good and bad aspects” (Accounting Standards Board, 1993, para. 3).

An important factor in conducting the study reported on in this article is the development of a tool for genre analysis of accounting narratives by adopting an approach based on corpus linguistics. As an initial stage in the development, this article focuses on lexical choice—an approach that has been adopted in other disciplines such as political science and cultural studies. The statement chosen is produced in an environment influenced by the provision of authoritative guidance, unlike most of the reports on which previous research on accounting narratives has been conducted. The remainder of this article is organized as follows. The following two sections explore the theoretical framework within which the analysis is conducted and the use of corpus linguistics within this framework. The next section provides a survey of prior literature. The design of the current research is then described and the results are explained and discussed. Also included is a brief concluding section.
GENRE THEORY

The notion of genre is classical in origin and was first developed within the humanities as a tool of literary criticism. Genre has now been embraced by linguists and social theorists of communication, for whom

A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognised by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style. (Swales, 1990, p. 58)

More succinctly, Miller (1984) identifies genres as “typified rhetorical actions based in recurrent situations” (p. 159). As Yates and Orlikowski (1992, pp. 300-301) point out, this approach draws on Bitzer’s (1968) three-part model, composed of (a) the action needed (the exigence), (b) the audience, and (c) constraints (“persons, events, objects, and relations which are parts of the situation because they have the power to constrain decision and action needed to modify the exigence,” Bitzer [1968, p. 8]).

Yates and Orlikowski (1992) employ Giddens’s structuration theory to locate the maintenance, elaboration, and modification of genres, and specifically genres of organizational communication, in their sociohistorical context. Genres are viewed as social institutions, produced and modified by human agents employing the rules of a genre to communicate within the world of organizations. This approach emphasizes the dynamic, recursive nature of the process:

By using (or not using) particular genre rules, individuals enact the established genres (or modified versions), thus reinforcing and reproducing (or challenging and changing) established genres over time. The enacted genres then inform future communicative action, and the recursive cycle begins anew. (p. 306, reference to a diagram omitted)

Traditionally, genre theorists were concerned to derive formal definitions of genres, which would identify all members of the class from a limited number of properties (see Berkenkotter & Huckin, 1995, p. 17; Harrell & Linkugel, 1978). Recent approaches fit better with Yates and Orlikowski’s (1992) model and argue for genres to be identified on the basis of “family resemblance,” a concept borrowed from Wittgenstein, according to which “exemplars or instances vary in their prototypicality” (Swales, 1990, p. 49), yielding a more open and fluid scheme.

Although Yates and Orlikowski’s (1992) model is developed in the context of communication inside an organization, it is equally applicable to communication within wider discourse communities in the organizational field. It has been employed for this purpose, for example, in Berkenkotter and Huckin’s (1995) analysis of communication within disciplines and professions and Crowston and
Williams’s (2000) study of World Wide Web sites. This is not to suggest that all groupings in the corporate world constitute discourse communities, because the members of a group may not all recognize the same set of communicative purposes. As a consequence, the notion of genre must be deployed with care in cases where communication is taking place within a complex social setting, such as the use of corporate annual reports to provide information to a variety of stakeholders.

Most theorists accept that genres can be identified at different levels of abstraction, depending on a discourse community’s “sense of recurrence of rhetorical situations” (Miller, 1984, p. 162). Although Miller (1984) held that genres can only sensibly be identified at one level for any specific time and place, Simons (1978) and others have argued for a hierarchical approach recognizing “that genres ‘exist’ at various levels of abstraction, from the very broad to the very specific” (p. 37). Thus, for example, the interoffice memorandum might be recognized as a broad genre of communication within the organization and the “new staff announcement” as a more specific genre within the broader class.

Yates and Orlikowski (1992) argue that the “genre phenomenon” requires “elaboration through further empirical study within particular contexts” (p. 322). They suggest that studies can be synchronic or diachronic:

Synchronic analyses would identify the existing genres influencing communication . . . within certain contexts, either by searching for the presence of well-established genres such as the memo or the meeting, or by identifying genres based on detailed analysis of communication form, substance, and the invoking situation. Such analyses also might examine the relationship between genres and other factors such as national culture, communication climates, or work practices. Although synchronic studies focus on a fixed period of time, such studies, nevertheless, must be sensitive to differences in genre dimensions due to diachronic factors such as emergence, maintenance, modification, and decay. (p. 322)

The present study treats the OFR as a middle-range genre of corporate communication between organizations and their stakeholders, regarding it as lying within the broader genre of accounting narration generally and identifying potential subgenres according to the exigencies to be responded to. It is synchronic in the empirical data on which it draws, but the results are analyzed with sensitivity to the diachronic factors to which Yates and Orlikowski (1992) refer, as well as to the tensions that may arise from ruptures within the discourse community encompassing the organization and its stakeholders. The specifics of OFR reporting provide a well-structured context for the communication act to be studied, in terms both of the process by which communication takes place and of the exigencies to be handled, for example, a loss to be explained. Although this study does not extend to observation of readers’ reactions to the OFR, the primary audience for the statement is sufficiently well delineated for it to be possible to offer some inferences about the role of the audience in the communicative act.
Corpus linguistics is an empirical methodology that employs a large, systematically organized body of natural texts (the corpus) to analyze actual patterns of language use (Biber, Conrad, & Reppen, 1998, pp. 4-5). Corpus-based methods were first employed within linguistics in the 1880s, but Chomsky’s attacks on the method in the middle of the 20th century interrupted its development for a period (McEnery & Wilson, 2001, pp. 2-13). Chomsky’s objections to corpus-based work were that (a) the proper object of the linguist is to develop cognitively plausible models of language competence and not to study actual performance, polluted as it will inevitably be by both defects in the application of models and contextually specific departures from them; (b) corpora, however large, are never comprehensive, and thus cannot fully embrace all possible usages; (c) frequency of use does not necessarily reflect linguistic importance; and (d) introspection is a faster and more efficient method of establishing language use.

To the first of these objections, corpus linguisticians were able to respond that the objective of their methodology was, indeed, to support the development of linguistic models, but by empirically grounded and validated, and thus more compelling, methods (Leech, 1992). Chomsky’s remaining, essentially practical, objections stimulated corpus linguisticians to improve the methodology. Several very large corpora have been constructed to capture the features of general linguistic usage, while smaller corpora remain, of course, appropriate for the examination of specific types and aspects of communication. A variety of methods have been developed to handle the possible existence within corpora of eccentric or context-bound usages and sampling bias, including the application of statistical tools (Biber et al., 1998, Part IV) and approaches that relate evidence from the corpus to external referents. Probably the most significant development was the emergence of computer-based corpora and specialist text-analysis software (Kennedy, 1998, pp. 259-267). Advanced computational approaches make those corpus-linguistic methods that can be undertaken using such approaches remarkably efficient compared to traditional methods and to some other forms of linguistic analysis. Corpus linguistics can no longer be accused of being excessively time-consuming or inefficient (Abercrombie, 1965). A final blow against Chomsky’s arguments was the observation that the results even of his own introspection could sometimes be demonstrated to be wrong by evidence from corpora (McEnery & Wilson, 2001, p. 11).

The increasing sophistication of corpus linguistic methods led to a rapid expansion in their use in the final decades of the past century (Aijmer & Altenberg, 1991a) and, indeed, to a “remarkable renaissance” (McEnery & Wilson, 2001, p. 1) for corpus linguistics. Expansion occurred initially within linguistics and associated disciplines (Leech, 1991) but rapidly spread across the social and psychological sciences (McEnery & Wilson, 2001, chap. 4). Corpus linguistics has been used in genre analysis, both to distinguish between genres (see Biber & Finegan, 1991, pp. 213-215) and to study characteristics of individual genres (see McEnery & Wilson, 2001, pp. 117-119). An interesting study of the latter kind is Johnson’s (2002)
examination of the pragmatics of "so-prefaced" questions in formal police interviews. For an example of a strictly lexical corpus-based study in linguistics, see Stenström’s (1991) study of expletives in spoken conversational English. Examples of corpus-based lexical studies in social sciences include those employed in Fairclough’s (2000) analysis of the political rhetoric of “New Labour” in the United Kingdom and Lakoff’s (2000) examination of the way use of language by the media can shape public attitudes and public policy.

**PRIOR STUDIES**

The survey used in the present study focuses specifically on studies of lexical choice in accounting narratives. For a much more wide-ranging survey, see Jones and Shoemaker’s (1994) review of 32 studies of syntactical complexity, including Subramanian, Insley, and Blackwell’s (1993) research; and 36 wider, meaning-oriented, analyses of thematic content. The systematic analysis of text-level rhetorical devices in accounting narratives is of relatively recent origin: See Hyland (1998) for a valuable contribution to this effort.

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Among the earliest studies of word frequency in accounting narratives to appear in the accounting literature were those by Ingram and Frazier (1983), Frazier, Ingram, and Tennyson (1984), and Tennyson, Ingram, and Dugan (1990). These were based on a computer program known as WORDS, which uses a sophisticated series of statistical maneuvers to identify relationships between clusters of words. Each cluster is then interpreted subjectively as a theme. Ingram and Frazier (1983), for example, identified eight themes (such as “increased levels of earnings and sales,” p. 56) for each industry and narrative type and related these to financial characteristics of the preparers. They found a “logical relationship” (p. 57) between themes and financial characteristics; for example, more profitable companies referred relatively frequently to future growth and less frequently to restructuring plans. Although these studies started out from word frequencies, the results were essentially employed to examine thematic content. In any event, the method was not widely taken up, possibly because of its complexity and the effort needed to perform the analytical procedures.

An important study by Hildebrandt and Snyder (1981) appeared before the work described above but received little attention in the finance literature, possibly
because it was published in a journal devoted to the discipline of communication studies rather than accounting. Their study extended a line of research from other areas of communication studies to inquire whether “the Pollyanna principle” (Matfin & Stang, 1978), that is, the phenomenon that “positive, affirmative words are used more often than negative words” (Hildebrandt & Snyder, 1981, p. 6) also applied in corporate annual report letters to shareholders. They established that it did: “Positive words occur more frequently than negative words in annual letters to stockholders regardless of the corporation’s financial position” (Hildebrandt & Snyder, 1981, p. 10).

Abrahamson and Amir tested the association between the proportion of “words with negative connotations” (1996, p. 1179) in the president’s letter and subsequent performance. They did not attempt to code words with positive connotations because of the volume of material involved. They performed their analysis for 2 years: In the 1st, coding was disambiguated, that is checked for meaning in context, so that, for example, failure would not be coded as negative in a sentence describing the successful development of a new drug to treat heart failure. Because of the labor-intensity of this process, disambiguation was not carried out for the 2nd-year’s analysis. The study found that high relative negativity is associated with poor performance both in the year of the report and as a predictor of future performance. These results hold for the undisambiguated as well as the disambiguated data.

Smith and Taffler’s (2000) U.K. study used both word- and theme-based counts applied to chairs’ statements and was directed specifically to the prediction of financial distress. Both word- and theme-based counts were successful. The authors were able to build a powerful model to predict corporate failure based on the presence in the chair’s statement of such words as overdraft, loans, borrowing, closure, disposal, and sale as well as phrases such as bank support, no dividend, chairman resigns, and managing director resigns.

Much thematically oriented research demonstrates significant levels of “impression management,” that is “the process by which individuals attempt to control the impressions others form of them” (Sydserff & Weetman, 2002, p. 526). Interestingly, the two purely lexical studies of Abrahamson and Amir (1996) and Smith and Taffler (2000) suggest that, if impression management occurs, it is not so successful that differences between good and poor performers are effectively camouflaged.

Abrahamson and Park’s (1994) study, which employed the same sample of presidents’ letters as Abrahamson and Amir (1996), established that preparers with a higher proportion of external directors tend to produce narratives with a greater degree of negativity (that is, external directors appear to restrain the Pollyanna effect), but that where the external directors have relatively large shareholdings, this reduces negativity. By looking at the directors’ subsequent patterns of share disposal, Abrahamson and Park (1994) also found some evidence that the impact of the latter factor was deliberate.
RESEARCH DESIGN

Sample Selection

Companies in the survey were drawn from the Times UK 1000 for 1998 (Barrow, 1998). Companies in the Financial Services and Property sectors were excluded because of the specialized nature of their operations and those for which a market capitalization was not given in the source listing were excluded because this generally meant that the company concerned was unquoted, government controlled, or a subsidiary, and would thus be likely to face a different reporting regime. A further 61 companies were identified at the time of the survey as delisted since the publication of the source; 1 company was excluded because its report was prepared under U.S. regulations; and 3 were excluded because their corporate structures made it impossible to apply the analysis used in this article. This left 455 U.K.-listed companies subject to the British financial reporting regime. They range in size and extent of multinational operation and some will, of course, have also been influenced by other reporting regimes.

Annual reports were requested from the 455 companies, and 419 (92.1%) were received: Some of the companies not supplying reports may have been delisted since the publication of the source listing. Of these 419 companies, 68 published combined OFRs, defined as a single narrative statement covering both operational and financial aspects and identified by the company by the use of a title including the terms operating, operations, or operational; finance or financial; and review, report, or statement. The analysis is based on seven groups of 10 companies drawn from those producing combined OFRs. The groups were chosen to reflect aspects of the rhetorical situation such as the performance to be accounted for and the complexity of the financial position to be described. The groups are loss-making companies; the least and most profitable; the largest and smallest (measured in terms of capital employed); and the highest and lowest geared or leveraged, that is, those with the highest and lowest proportions of debt finance. Five pairwise comparisons were then made: (a) loss-making versus least profitable, (b) least profitable versus most profitable, (c) loss-making versus most profitable, (d) smallest versus largest, and (e) lowest geared versus highest geared. Any one company within the 68 producing combined OFRs can, of course, appear in more than one group, for example, if it is loss-making and highly geared. Because some companies did appear in more than one group, the total number of companies drawn from the 68 featuring in the groups was in fact 44. More precise definitions and the companies in each group are given in Table 1.

Identification of the Text

Modern graphic design of documents such as corporate annual reports often bring together onto the page a number of different elements, some of which are not
Table 1. Composition of the Groups of Companies

Loss-making

Definition: negative profit for the year attributable to shareholders.

- Body Shop International*
- Brent International*
- Caradon
- Cookson Group
- Huntingdon Life Sciences*
- Laura Ashley Holdings*
- Liberty*
- Orange
- Rank Group
- Stylo

Total number of words: 30,972

Least profitable

Definition: lowest positive return on equity.

- BG*
- British Airways*
- Capital Corporation
- Daniel Thwaites
- James Fisher & Sons
- John Laing
- Lands Improvement Holdings*
- Le Riches Stores*
- Paterson Zochonis*
- Swan Hill Group*

Total number of words: 29,518

Most profitable

Definition: highest positive return on equity.

- Airtours*
- Bass*
- Blagden Industries*
- British Aerospace*
- Go-Ahead Group
- Imperial Chemical Industries*
- London International Group
- Medeva
- NFC*
- WPP Group*

Total number of words: 48,563

Largest

Definition: highest total assets less current liabilities.

- Bass*
- BG*
- British Aerospace*
- British Airways*
- Cable and Wireless*
- Diageo
- Imperial Chemical Industries*

(continued)
Table 1 (continued)

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<thead>
<tr>
<th>Definition</th>
<th>Companies</th>
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<td>Smallest:</td>
<td>Brent International*&lt;br&gt;Brockhampton Holdings&lt;br&gt;Dorling Kindersley Holdings*&lt;br&gt;International Energy Group&lt;br&gt;Johnston Group&lt;br&gt;Lands Improvements Holdings*&lt;br&gt;Laura Ashley Holdings*&lt;br&gt;Le Riches Stores <em>&lt;br&gt;Liberty</em>&lt;br&gt;Time Products*</td>
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<td>Total number of words: 66,625</td>
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| Definition: highest proportion of debt finance (i.e., highest total assets less current liabilities minus shareholders’ funds as a percentage of total assets less current liabilities). Companies with negative shareholders’ funds are excluded. |
| Airtours*<br>British Aerospace*<br>British Airways*<br>Cable and Wireless*<br>Huntingdon Life Sciences*<br>Hyder<br>Imperial Chemical Industries*<br>NFC*<br>Tate & Lyle<br>WPP Group* |
| Total number of words: 18,577 |

| Definition: lowest proportion of debt finance (i.e., lowest total assets less current liabilities minus shareholders’ funds as a percentage of total assets less current liabilities). Companies with negative total assets less current liabilities are excluded. |
| Blagden Industries*<br>Body Shop International*<br>Dorling Kindersley Holdings*<br>Le Riches Stores*<br>Liberty*<br>Paterson Zochonis*<br>Psion<br>Scottish & Newcastle<br>Swan Hill Group*<br>Time Products* |
| Total number of words: 20,850 |

Note: Companies appearing in more than one group are indicated by an asterisk.
text whereas others, though textual in nature, are not part of the flow of the main narrative to which the page is devoted. A protocol, designed to distinguish between the narrative flow of the main textual statement and other matter appearing on the same pages, was prepared and used to identify the OFR proper. Among the material excluded were (a) prose within graphical material and captions; (b) tables standing alone from the main text; (c) pull quotes, slogans, and similar material displayed outside the main text area; and (d) repeated headings. The following were included: (a) headlines and standfirst material, and (b) tables, lists, and bullet-pointed material included within the grammatical structure of the continuous prose.

In content analysis it is normal to increase the efficiency of word searches by excluding from the text to be examined frequently occurring words and other language units of no significance to the analysis, and this procedure was adopted here. Excluded language units were (a) frequently occurring function words such as articles, conjunctions, pronouns, and common verbs; (b) days and months of the year; (c) numbers, including monetary amounts, in words and figures; (d) numerical denominations, for example, millions; (e) identifiable company and product names; and (f) punctuation marks.

Word Frequency

The use of word frequencies is described by Weber (1990) in his text on content analysis. Weber uses as an example the political programs of U.S. Presidents, as revealed in their speeches. Weber demonstrates that in the example he uses, a measure of disambiguation does not materially improve results. Weber himself uses ordered word-frequency lists to measure relative frequency. However, although this approach may be appropriate where differences in frequency are sufficiently marked to make individual rankings significant, and has the advantage of making it possible to ignore differences in the total volume of words in each group of texts, it is not appropriate where frequencies for individual words within a group of texts are so similar across a large number of words as to undermine the significance of the rankings. This was the case for the OFRs under examination, as can be seen from Table 2, which shows the 50 most frequently used eligible words across all companies in the sample.

Although the total number of words used was 235,367, frequencies start to converge very early in the rank order: For example, between the 20th and 30th ranking words, 8 out of the 10 words have a frequency that falls within 10 of that for at least 1 of the pair of words on either side; between the 30th and 40th ranking all words have a frequency that falls within 10 of the words on either side and there are three joint rankings. To overcome this problem, this study, like Abrahamson and Park (1994) and Abrahamson and Amir (1996), focuses on actual frequencies of word usage. It was first necessary to identify a manageable number of words for further examination. This was done by obtaining ordered frequency lists for each of the seven groups of texts. The 50 most frequently used words from each group were
then consolidated into single list, which was used to examine the frequencies of usage for each of the seven groups. An advantage of this approach, by comparison with examining only the words most frequently used across all seven groups, or across the whole sample, is that it can throw up significant differences between groups in the use of words that are used frequently only in some of the groups.

The ordered lists from each group were case sensitive and the consolidated list produced from these amounted to 103 words in total, of which 3 were duplicates caused by case sensitivity. The frequencies calculated from the list ignored case, so that the list was reduced to exactly 100 words: To these were added 6 words that did not appear on the original group lists but were of interest because of their relationship to words on those lists. A total of 16 words were combined with others where they were closely related, for example, the singular and plural, resulting in 90 instances to be tested.

Raw frequencies within the seven groups of OFRs are difficult to compare across groups because the length of individual OFRs varies and there are systematic differences in length of OFRs between the groups (for example, larger companies produce longer OFRs), so that the total number of occurrences of any word

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Note: The list is case sensitive.
reflects a combination of its relative frequency and the length of OFRs in the group. The effect of length can be eliminated by measuring frequency per 10,000 words and this is done here.

**Charged Words**

Two word-lists were identified in broadly the same way as in the studies by Abrahamson and Park (1994) and Abrahamson and Amir (1996). After discussing the general approach, two researchers independently coded all eligible words as carrying “negative connotations” (Abrahamson & Amir, 1996, p. 1179), that is, all other things being equal, as being likely to be taken to be “connoting bad news” (Abrahamson & Amir, 1996, p. 1160); or as carrying positive connotations. The researchers then arrived at an agreed classification of positively and negatively charged words. The total numbers of positively and negatively charged words in each text were used to construct two measures. The first is total charged words per 10,000 words and the second, the balance of charged words, is total positively charged words as a percentage of all charged words. Following Abrahamson and Park (1994) and Abrahamson and Amir (1996), the words *loss* and *losses* were coded as negatively charged and, consequently, the words *profit* and *profits* were coded as positively charged. To test whether simply referring to their results for the year was influencing companies’ scores for the use of charged words, the same analysis was performed for a restricted list excluding these words.

**RESULTS AND DISCUSSION**

Table 3 (Panel A) shows the frequencies of individual words on the consolidated list for each of the seven groups of companies where there were statistically significant differences in frequency. Frequencies are quoted per 10,000 words for each corpus of texts. Individual words are marshaled into categories relevant to the purpose of the OFR. The table also shows, for each relevant pairwise comparison, which differences between frequencies were significant at the 5% level, using the Mann-Whitney U test. This is a powerful, noncategorical, nonparametric test of between-subjects differences that compares the number of times a score from one of the groups is ranked higher than a score from the other (Bryman & Cramer, 1999, pp. 136-137). Panel D gives the remaining words and the average frequency of each.

For many words, the pattern of usage across pairings suggests that there is a stability that both supports the contention that the narratives constitute an identifiable genre and implies that where differences do arise, significance can be attached to them. There is clear evidence that the Pollyanna effect is operating in the construction of OFRs. This confirms that this effect, widely observed in unregulated accounting narratives, is also apparent in narratives produced under the influence of authoritative guidance, and indeed, guidance that includes a requirement to
### Table 3. Word Frequencies Analyzed by Company Attribute

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<th>Most Profitable Companies</th>
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<th>Largest Geared Companies</th>
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PANEL A: Words with statistically significant differences in frequency

Financial performance

| loss or losses | 30.7 | 132 | 12.4 | 23.1 | 120 | 240 | 152 | 187 | * | * | * | * | * |
| margins | 3.6 | 4.4 | 150 | 4.8 | 62 | 9.6 | 11.4 | 7.9 | * | * | * | * | * |

(continued)
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**PANEL B: All comparison words**

| “Up” words     | a 113.6 | 82.1 | 133.8 | 89.3 | 115.8 | 116.0 | 126.0 | 110.9 | * | * |
| “Down” words b | 47.1 | 29.8 | 31.1 | 39.3 | 26.5 | 39.9 | 31.4 | 35.0 | * | * |
| Neutral words c| 67.8 | 75.6 | 72.7 | 58.1 | 78.6 | 67.6 | 746 | 70.7 | * | * |

**PANEL C: Charged words**

| All               | 6700 | 7433 | 865.5 | 7638 | 793 | 762.6 | 832.3 | 773.8 | * | * |
| Restricted        | 587.3 | 689.7 | 793.6 | 698.2 | 717.4 | 696.9 | 762.7 | 707.2 | * | * |
| Balance d         | 76.7 | 846 | 80.2 | 80.4 | 830 | 842 | 83.3 | — | * | * |

**PANEL D: Words with no statistically significant difference in frequency (average frequency in brackets).**

- **General words:** activities (10.8); aircraft (8.7); all (19.7); both (10.2); business or businesses (61.9); but (12.1); cent (9.8); customer or customers (19.1); due (13.6); exceptional (12.4); excluding (12.6); items (10.0); made (11.1); operating (32.6); operations (15.8); per (22.3); products (9.3); programme (17.4); retail (10.6); significantly (14.6); total (15.4); year or years (119.6).
- **Financial performance:** cost or costs (44.4); performance (10.9); profit or profits (48.0); result or results (26.2).
- **Financial position:** cash (21.5); liability or liabilities (3.0).
- **General financial terms:** capital (16.4); financial (21.7); share (19.5); tax (15.1).
- **Comparison:** compared (13.8); decrease or decreased (3.3); growth (21.2); higher (9.6); increase or increased (41.3); level (8.7); lower (11.4); more (10.1); over (16.3); than (15.1).
- **Self-reference:** group (77.5).

**Temporal:** before (13.7); during (23.7); end (17.1); last (14.7); now (32.1); now (11.4); previous (9.4).

a. Comprising: growth, higher, increase or increased, more, over, up.
b. Comprising: decrease or decreased, lower, reduced or reduction.
c. Comprising: compared, level, rate or rates, than.
d. Company averages.

* Significant at the 5% level using the Mann-Whitney U Test.
report neutrally. Evidence includes greater numbers of references to profits than to losses among all groups (including loss-makers), greater numbers of references to assets than liabilities across all groups, and greater use of positively charged words and “up” words across all groups.16

There is also evidence of greater strength of the Pollyanna effect in poorly performing companies. A number of striking examples can be identified. Loss-making companies refer to profits more frequently than to losses, make more references to profits than low-profit companies, and make more references to the “top line” of the income statement than all other groups. Companies with low profits refer to losses no more frequently than companies with high profits, despite the greater likelihood that they will need to discuss loss-making segments and activities. The balance between positively and negatively charged words is not significantly different between loss-making companies and high-profit companies, though references to losses would be likely to generate proportionately more negatively charged words. Finally, the balance of positively charged words over negatively charged words is no greater for high-profit companies than for low-profit companies.

These and other results will now be discussed in detail, following the order in Table 3. In interpreting the data, it is important to bear in mind that the usage of words has not been disambiguated. As noted already, several previous studies have suggested that employing undisambiguated counts, in contexts in which there is an obvious primary meaning, does not undermine the validity of results. Some terms in the list, for example capital and facilities have several meanings within accounting and it is difficult to be confident of which meaning is likely to predominate in an OFR. The discussion that follows recognizes the possibility of ambiguity: A potential development of the method used here would be to review words in context to disambiguate them as far as possible.

It is also necessary to bear in mind that the low incidence of all but the most popular words increases the scope for relatively large proportional differences to arise from small differences in absolute usage. There will also, of course, be potentially large differences in usage between companies within a group: These are taken into account in the measure of statistical significance employed here.

General Words

General word usages are listed in the first section of Panels A and D. Some patterns do suggest that more successful companies use the opportunity to employ more positive language, including the tendency of the most profitable companies to make significantly more use than one or other of the groups in the performance-based triad of development, major, and strong. In the opposite category, loss-makers use not more frequently than the most profitable companies, perhaps to explain what failed to happen or what will be prevented from happening in future.

The word market is used significantly more frequently by the most profitable and the largest companies, and this contrasts with customer or customers, for which
differences are not significant. Although no firm conclusion can be drawn from these observations alone, they do suggest that an investigation of the rhetoric of marketing policy in accounting narratives may show that small or poorly performing companies focus narrowly, for example, on existing customers or categories of customers; whereas larger or better performing companies engage in a wider, more strategically oriented, discussion. To establish whether this difference in focus is a cause or a consequence of the difference in size or performance would require much more extensive research.

Almost all the words with no obvious thematic implication exhibit no significant differences in frequency within any of the pairings. This is true of *activities, all, both, business or businesses, but, cert, due, exceptional, including, items, made, operating, operations, per, products, programme, significant, total, and year or years*. Some substantial differences in frequency have what Ingram and Frazier (1983) describe as a logical relationship with the industries within which companies in each group are operating. Significant differences in usage of *network, property*, and *store or stores* are associated with the presence in groups of communication and utility companies, an agricultural development company, and retailers, respectively. Some differences have lexical explanations. For example, differences in the use of *British* are associated with the presence of companies using this word in their name.

Thus, over a substantial range of general words, patterns of usage are similar between groups or have a logical relationship with the characteristics of the group, or are likely to have lexical explanations. This suggests that there is stability within the genre, so that, where differences arise, significance can be attached to them.

**Financial Performance**

As might be expected, evidence for the Pollyanna effect is strongest in the area of financial performance. A case in which an a priori expectation of a difference would be justified is between loss-making and profitable companies in relation to the use of *loss or losses* and such a difference, in the direction to be expected, is indeed, observable. OFRs should discuss the performance of segments of the business as well as the business as a whole (Accounting Standards Board, 1993, para. 9). Because it is likely that at least some of the least profitable companies found themselves in this position because some of their segments were actually making losses, it might be expected that the least profitable companies would refer to *loss or losses* significantly more frequently than the most profitable. In fact there was no significant difference in this frequency and the difference in usage was less than one instance per 10,000 words. This suggests that the Pollyanna effect is implicated in a focus by the least profitable companies on their overall results and on their profitable segments. Also remarkable is the tendency of loss-making companies to employ *profit or profits* more frequently than they use *loss or losses* and, indeed, more frequently than the least profitable companies used *profit or profits*. Although it is understandable that they would want to refer both to the prospect of profits in
future and to the profitable segments of their operations in the current period, this does provide clear support for the Pollyanna hypothesis.

There is no difference between loss-making and profitable companies in the use of result or results or performance, which suggests that loss-making companies are not avoiding references to losses by employing neutral references to the bottom line. There is, however, a difference between the loss-making and the least profitable companies in the use of revenue or sales or turnover, suggesting that the Pollyanna effect is manifesting itself in a shift in the focus of discussion from the bottom line to higher up the profit and loss account. The most profitable companies make more use of margins, suggesting that in the rhetoric of performance analysis, sensitive topics receive more attention when the overall position is favorable.

All companies use cost or costs with similar frequencies. If loss-making and the least profitable companies have strategies for corporate recovery that include cutting the cost base, either they are not describing them in the OFR, or their descriptions do not actually use cost or costs, or their descriptions are so brief they do not significantly affect relative frequencies. Further research on the rhetoric of corporate recovery might yield interesting information about the deployment of technical language in narrative reports. There are no significant differences in the use of words describing financial performance between small and large or low- and high-g geared companies, and, because there is no reason for expecting differences within these categories, this again suggests stability within the genre.

Financial Position

A clear example of the tendency to accentuate the warmer, stronger, more attractive side of operations is that all groups used asset or assets a great deal more frequently than liability or liabilities—at least three and a half times as frequently, in fact, with the highest ratio occurring in the case of the most profitable companies, at 14:1. The most profitable companies talked less about assets than the least profitable.

A clear example of the tendency to accentuate the warmer, stronger, more attractive side of operations is that all groups used asset or assets a great deal more frequently than liability or liabilities.
It might be expected that the most highly geared (leveraged) companies would spend proportionately more time explaining the state of their indebtedness and thus make more use of the terms *debt* and *borrowings*. In fact, although the difference in the use of *debt* was significant and in the expected direction, that in the case of *borrowings* was not significant. Though there may be a functional explanation for this pattern (that is, a reason relating to the technical character of the events and circumstances to be described), it does suggest that in the rhetoric of gearing, there is a perception by preparers that some technical synonyms are more acceptable than others. The apparent attractiveness of *debt* compared to *borrowings* is also supported by the significantly greater use of *debt* but not *borrowings* by large companies, given the likelihood that larger companies employ communications specialists in constructing accounting narratives and thus make more sophisticated rhetorical choices (see Courtis, 1995; Rutherford, 2002).

Word frequencies suggest that companies devote substantially less coverage to discussing financial position and cash flow than to financial performance. There are no differences between companies in their use of *cash*.

**General Financial Terms**

Many individual words associated with general financial terms can be used in a variety of contexts, for example *financial*; or are ambiguous, including *fixed* (interest rate, asset, costs) and *interest* (return on capital, shareholding) so that it is difficult to attach significance to differences in usage without further exploration. Some significant differences can be identified as being likely to be associated with underlying characteristics of the group: Large companies use *currency* more often, for example, presumably because they are likely to have more significant foreign operations. Highly geared companies use *risk* more often, which again would be a functionally appropriate response to the need to address the greater financial risk associated with higher gearing (Palepu, Healy, & Bernard, 2004, chap. 12). Large companies also make more use of *risk*, though it will require further work to establish whether this is a functionally appropriate response to characteristics such as greater treasury activity or indicates a greater willingness to discuss this dimension of their operations generally.

**Comparison**

Comparative analysis should be an important feature of OFRs (Accounting Standards Board, 1993, para. 3) and Table 3 indicates that heavy use is made of words likely to be associated with such analysis, suggesting that companies are responding to the Accounting Standards Board’s guidance. Though there are only a small number of significant differences within the pairings for individual words, some interesting patterns emerge. There is a significant tendency for the largest companies to use *reduced* or *reduction* less than the smallest, which may reflect larger companies’ use of greater professional communications resources leading to
the avoidance of downbeat prose (another example of the Pollyanna effect). The largest companies use *up* substantially more frequently than the smallest, although the difference here is not significant. The most profitable companies use *up* more than twice as frequently as the least profitable and this difference is significant. This might result functionally from a balanced discussion of trends in performance by companies in both groups, with the most profitable companies having achieved their presence in this category by increasing profits, described using *up*, although further investigation might reveal Pollyannish tendencies in the deployment of *up* contrasted with words connoting decline.

The tendency for the highest geared companies to use *rate* or *rates* more frequently than the lowest geared companies might have a functional explanation. Specifically, debt finance, and therefore interest *rates*, could be of greater significance for the highest geared companies, but it is not obvious that the significant difference between the largest and smallest companies has such a rationale: It may be that large companies provide more discussion of trends, and therefore *rates* of change, or there may be a rhetorical explanation.

Another interesting feature of the use of comparative words is revealed by grouping the words according to their directional connotation (Panel B). Words generally connoting growth or elevation ("up" words) include *growth*, *higher*, *increase* or *increased*, *more*, *over*, and *up*; "down" words include *decrease* or *decreased*, *lower*, and *reduced* or *reduction*. The remaining comparative words are classified as neutral. There is a very substantial imbalance between up words and down words, with the former used more than three times as frequently as the latter. Because price levels globally continue to rise, whereas historical cost remains the predominant measurement system, and many economies were in an expansionary condition at the time of the survey, some tendency toward “upness” is to be expected. However, the size of the imbalance does suggest that the Pollyanna effect may be in play, with a preference for expansionary rhetoric. The usage of neutral comparative words is stable across all groups.

The group using down words more frequently than all others is the loss-makers; the difference is significant when compared with the most profitable companies and they also have the lowest ratio of “upness” to “downness” within the triad based on performance. This pattern appears to be consistent with the character of the group, in that it is likely to be necessary to explain that sales and profits have come down and that costs are to be brought down in the future. The biggest gap within pairs in the ratio of upness to downness arises in the case of company size: Because there is no obvious a priori reason for large companies to need to use up words nearly four and a half times more frequently than down words, when for small companies the ratio is two and a quarter, this suggests that in this particular area, large companies are more susceptible to the Pollyanna effect, perhaps as a result of greater use of corporate communications specialists.

Although there may be functional reasons for the differences identified here, the results suggest that further investigation of upness and downness may reveal aspects of a rhetoric of expansionism in accounting narratives.
Self-Reference

Although the words included in this section can, clearly, be used to comment about third parties, the nature of the OFR means that it is likely that most uses involve self-reference. The least profitable companies make most use of company, which would have a functional explanation in terms of the need to refer to the entity as a whole in discussing strategic responses to underperformance such as restructuring. However, interestingly, in the rhetoric of self-reference, loss-making companies resemble the most profitable, actually making least use of company of any group. Small companies are more likely to refer to a division, perhaps because they have not yet grown to a size at which they feel comfortable about employing terms like business for this purpose, as some large companies do. A study of the stylistics of corporate self-reference might reveal complex patterns of word use, reflecting both functionally appropriate responses to characteristics such as size and rhetorical ploys.

Temporal Words

This classification includes words referring broadly to the passage of time (such as during and continued) and the location of events in time (for example, completed, now, and last). The large majority of such words exhibit stable patterns of use across all pairings, suggesting that all companies make temporal references with approximately the same frequency. The tendency of the least profitable companies to make most use of completed and least use of continued suggests a decision to emphasize discontinuity, change, and a fresh start. As with the rhetoric of self-reference, loss-making companies resemble the most profitable more closely than they resemble the least profitable and this interesting result deserves further research: Are there functional reasons for the pattern or are behavioral influences implicated in the stylistics of loss-making companies’ narratives, with, for example, a reluctance to focus on the discontinuities in operations that might be expected?

Charged Words

Use of charged words is reported in Panel C. There were no significant differences in frequency or balance within the pairings based on size and gearing. Approximately 80% of all the charged language used in OFRs carries a positive charge, clear evidence that the Pollyanna effect occurs even in an environment subject to authoritative guidance.

There were no significant differences in frequency in the use of words from the list of all charged words between companies in the triad based on performance, but, of course, this list includes profit or profits and loss or losses and the tendency of loss-making companies to offset their need to use loss or losses frequently by making even more frequent references to profit or profits has already been noted.
Removing these words from the list yields a difference between loss-making and the most profitable companies, with loss-making companies making less use of charged words, perhaps to avoid employing negatively charged language or, by employing neutral language, to foster the impression of objectivity.

There are significant differences between loss-making and the least profitable companies in the balance of charged words with, as would be expected, loss-making companies using more negatively charged words. This is the case for both the full and the restricted list and is consistent with the results of Abrahamson and Amir (1996). It might be expected that a similar difference would be observed between loss-making and the most profitable companies because this functional explanation is based simply on the distinction between making profits and making losses. Indeed, because the least profitable companies are more likely to have loss-making segments, the difference between loss making and the most profitable companies should arguably be greater than that between loss making and the least profitable companies. In fact the difference between loss making and the most profitable companies is not significant because the most profitable companies are less “positive” in their language than the least profitable, suggesting that the least profitable display more Pollyannish tendencies than the most profitable.

CONCLUSION

This study examined one form of accounting narrative, the OFR, as a genre of accounting writing and uses word frequencies as the tool of analysis. It finds sufficient stability in patterns of usage to support the definition of the OFR as a genre but identifies a number of interesting variations in patterns of usage. Word frequencies in the genre are consistent with the well-documented Pollyanna effect. This finding is itself of interest because the context, an accounting narrative produced under the influence of authoritative guidance requiring neutrality, has hitherto been little researched. Furthermore, the study extends previous research by demonstrating that the effect can be identified for individual words and classes of words as well as for charged words generally. The study also finds evidence of the greater strength of the Pollyanna effect in poorly performing companies, again extending to individual words and classes of words as well as to charged words generally.

The study also finds evidence of the greater strength of the Pollyanna effect in poorly performing companies.
The Pollyanna effect can be interpreted as a form of impression management, that is, “the process by which individuals attempt to control the impressions others form of them” (Sydserff & Weetman, 2002, p. 526). The incentives for managers to engage in impression management are well established (see, for example, Watts & Zimmerman, 1978) and evidence of apparent impression management in accounting narratives has been found in several thematic studies: For recent evidence relating to the United Kingdom and references to other studies, see Sydserff and Weetman (2002) and Clatworthy and Jones (2003). However, whether word frequencies or, indeed, some forms of meaning-oriented textual choice, such as devoting greater length to “good” news than “bad,” would be likely to fool sophisticated users such as financial analysts, reading narratives as part of the complex web of stakeholder communication referred to earlier, is questionable. Whether sophisticated preparers would expect users to respond naively to efforts to manage impressions is equally open to question.

The framework of genre theory allows a more nuanced approach to the working out of the Pollyanna effect and to the understanding of impression management generally. Suppose there was an initial tendency, in the reporting of some individual companies, to put a more positive construction on circumstances than a strictly neutral interpretation would allow? Some preparers might, indeed, believe that a degree of impression management could be achieved, at least with some users. Others might believe that stakeholders would expect the company to show a robust attitude by employing positive language. The possibility that some preparers might employ language more negative than the situation would warrant, for example to accentuate the effect of a subsequent recovery, is not ruled out.

Such departures from strict neutrality would potentially form an impetus to the establishment or modification of genre rules for the construction of accounting narratives. If the generality of departures was toward the positive, preparers would come to regard positive charging as the appropriate style in which to construct narratives. Users would come to expect a degree of positive charging and might “discount” the contents of narratives accordingly: Narratives without a positive charge would thus be misinterpreted and preparers would see that they needed to incorporate an “excess balance” of positives, out of proportion to the underlying situation, in order to communicate the appropriate message effectively. Any preparers whose initial tendency was in the negative direction would have to adapt their behavior or face the consequences of even more extensive misunderstanding. Over time the accounting narrative—like the real estate agent’s property description—would include in its genre rules an imperative to incorporate a degree of positive bias. Such a dynamic would be sufficient in itself to explain the Pollyanna effect without there necessarily being any systematic intention or expectation to deceive. Of course, not all users would necessarily fully understand the genre rules; classically, small investors acting without expert advice are regarded as likely to read financial statements naively. Thus there remains scope for genres to act as, as Yates and
Orlikowski (1992) put it, "instruments of impression management at the individual level" (p. 321).

The evidence of this study supports the existence of subgenres of the OFR, related to the exigencies of the rhetorical situation, such as accounting for poor performance. The analytical framework presented earlier argues that these subgenres have emerged in response to the same forces that are responsible for the maintenance and modification of the genre itself. The evidence suggests that subgenres differ in the degree to which they exhibit the Pollyanna effect, generally and in relation to individual words. It also suggests that they differ in the rhetorical ploys adopted in areas such as marketing strategy, corporate recovery, self-reference, comparative analysis, and gearing.

The findings of this research remind managers of the need to understand and work within the genre if effective communication is to be achieved. They also serve to alert users of corporate financial statements to the need to appreciate the rules of the genre in order to determine what preparers intend to communicate and to achieve a more sophisticated reading of the report’s contents: It is not only the numbers that need to be analyzed with care. The existence of subgenres, as suggested by the findings of this research, necessitates an even closer and more careful appreciation of the rhetorical frame within which accounting narratives are produced. Those in the discourse community, preparers and users alike, who understand that the narrative of a poorly performing entity has to be written so as to “accentuate the positive” more strongly than if the exigencies were more favorable, because that is what is expected, do not regard the outcome as misleading. The same is true of descriptions of corporate recovery or gearing that employ certain rhetorical ploys rather than others used when the exigencies are different. But members of the discourse community who do not understand the rules of the genre may interpret the narrative in a naı́ve way and be misled.

The nature of the method used here is such that evidence is inevitably coarse-grained and suggestive. However, because it is straightforward, objective, and economical to use (in contrast to many other content-analytic methods), it is valuable as a means of raising issues and pointing to areas suitable for further investigation. Further applications of the method might include the following: (a) comparing the characteristics of different genres of accounting writing, including contrasting regulated and unregulated narratives, (b) diachronic studies tracing the emergence and modification of genre rules, and (c) detailed analysis of aspects of the genre and its rules. An illustration of the last of these examples would be a longitudinal study of the frequency of use of risk and similar terms (and, indeed euphemisms) to analyze responses to increasing pressures to discuss risk in annual reports (Steering Group on the Financial Reporting of Risk, 1999). Other areas of interest, identified earlier in the article, include the rhetoric of marketing strategy, performance analysis, corporate recovery, and gearing.

A suitably large-scale study might be able to identify differential degrees of “Pollyannishness” against the norm of the genre rules. Identifying tendencies to depart from the norm might be helpful in understanding management behavior and
in forecasting future company performance. It would also begin the task of isolat-
ing potentially effective impression management, that is, a level of positive charg-
ing that users might not be expecting and thus might not allow for appropriately.

Refinements of the method employed in this study might include testing the effect
of disambiguating words and examining combinations of words and proximity of
word usage: For example do poorly performing companies use “profit words” near
to “loss words”?

Work in genre analysis of accounting narratives could be extended to exam-
ine the perceptions and behavior of members of the discourse community,
including preparers and users of corporate reports.

NOTES

1. For descriptions of the latter, see Wilson, Davies, Curtis, and Wilkinson-Riddle (2001) for the
2. The statement became a statutory requirement in 2005 (see Maslen, 2002).
3. For examples of such studies, see the section on Corpus Linguistics.
4. For an archetypal theory of genres within literary criticism, see Frye (1957). For surveys of
   the literature of genre analysis within linguistics and the social theory of communication respec-
tively, see Swales (1990, chap. 3) and Miller (1984).
5. Chomsky’s demonstration of this point is that the sentence, “I live in New York” is likely to
   occur more often in the corpus than the sentence, “I live in Dayton, Ohio,” purely because the former
city is more populous (McEnery & Wilson, 2001, p. 10).
6. The term corpus can in principle be applied to any collection of more than one text (McEnery
   & Wilson, 2001, p. 29). Although occasionally reserved in practice for very large collections, the
term is widely applied to any study of multiple texts treated in aggregate, especially when, in the case of a relatively small number of texts, they are drawn, actually or potentially, from a larger population. Aijmer and Altenberg’s (1991b) volume of studies in English corpus linguistics, for example, includes at least three featuring fewer than 40 texts (not all papers specify the number), of which one covers only 3.

7. For a brief history of the development of the methodology, see McEnery (2001, chap. 1) or Leech (1992).

8. Where a company appears in two groups and the groups vary in word frequency, its presence will diminish the strength of the variance but the general tendency will remain apparent in the corpora as a whole.

9. Many company names cannot be fully identified as such on the basis of individual words, for example, the word British is frequently used in company names.

10. Where an overall word count for a group of narratives is given it includes all words, that is, the count is performed before excluding the word types listed here.

11. All word counts were performed using the Textpack program and text files obtained by scanning original documents. The resulting output was proofread.

12. In some cases slightly more than 50 words appeared in the individual lists because of ties in 50th place.

13. Further cases of close similarity in words on the consolidated list arose from the inclusion of singular and plural nouns (8 cases) and two tenses of a verb (1 case).

14. The words added at this stage were asset, liability and liabilities (because assets feature on the lists); decrease and decreased (increase and increased feature on the lists); and losses (loss features on the lists, as do both profit and profits).

15. The full list is shown in Table 3.

16. “Up” words are defined later in this section. Frequencies by group for profit or profits and liability or liabilities are not given in Panel A because pairwise differences are not significant. The frequencies for the seven groups, following the order of Table 3, were, for profit or profits, 52.0, 40.3, 59.5, 42.5, 49.8, 41.7, and 49.9, and for liability or liabilities, 3.9, 3.0, 0.6, 4.3, 2.4, 3.8, and 2.9.

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