Persuasion in earnings calls: A diachronic pragmalinguistic analysis

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This study investigates persuasive language in earnings calls. These are routine events organized by companies to report their quarterly financial results. The analysis is based on the earnings calls of 10 companies in the third quarter of 2009, when financial markets were still suffering from the global financial crisis, and the third quarter of 2013 when markets had largely recovered. Earnings call transcripts were compiled in two parallel corpora (Crisis Corpus and Recovery Corpus), thus providing a diachronic perspective. Semantic annotation software was used to extract pragmalinguistic resources of persuasion. The Crisis Corpus had a higher frequency of persuasive items, as executives often emphasized progress and future hopes. However, the types of items were largely the same across the corpora. This suggests a well-consolidated linguistic protocol within this discourse community that transcends financial performance. The findings offer insights into how earnings call participants use persuasive language strategically to achieve their distinct professional objectives as responsible providers of information (executives) vs. discerning seekers of information (analysts).

financial reporting, earnings calls, persuasion, corpus linguistics, discourse analysis
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Earnings conference calls (hereafter earnings calls) are events organized by companies to periodically report their financial results via teleconferencing. During earnings calls, teams of company executives present (usually) quarterly financial results to professional investment analysts participating via telephone. There is a question and answer session (hereafter Q&A) following the presentation, allowing analysts to interact directly with the executives. Earnings calls are now common events in the global financial community. They have become a routine form of quarterly oral financial reporting and have grown steadily in popularity since first coming on the scene in the late 1980s (Fox, 2015). According to a survey of member firms of the National Investor Relations Institute (NIRI, 2015), in 2014, 97% held earnings calls, a 17% increase over a 20-year period. Earnings calls are often webcast and are accessible to professional financial analysts, as well as an unlimited number of individual investors in the public at large (Skinner, 2003; Roelofsen, 2010).

With respect to mandatory quarterly and annual reports that companies are required to file with authorities in many countries, earnings calls are a voluntary form of financial disclosure.1 Voluntary financial reporting allows management to engage stakeholders proactively (Beattie, Dhanani, & Jones, 2008), while achieving greater visibility and enhancing the company’s perceived value (Williams, 2008). However, voluntary earnings calls are now so ingrained in investor relations practices that it would be problematic or even suspicious for listed companies not to hold them—or worse, suddenly stop holding them. In this sense, earnings calls may be perceived as mandatory by key stakeholders (Ryan & Jacobs, 2005).

Since the late 1990s, earnings calls have been a topic of research in accounting. Studies typically have been based on financial indicators (Frankel, Johnson, & Skinner, 1999; Brown, Hillegeist, & Lo, 2004; Bushee, Matsumoto, & Miller, 2003) and content analysis

However, accounting scholars have suggested a need to expand on these methodological approaches by delving more deeply into the linguistic nature of earnings calls (Beyer, Cohen, Lys, & Walther, 2010; Berger, 2011). Some recent research has followed that suggestion and has offered some interesting findings relating to how the participants have used language persuasively to achieve their goals. Larcker and Zakolyukina (2012, p. 495) compared unrehearsed Q&A sessions of earnings calls to subsequent financial restatements issued by companies. They found that “deceptive” Q&A sessions contained fewer self-references, more impersonal pronoun forms (e.g., anyone, everybody, indefinite you), and fewer negative and more positive emotion words than “truthful” ones. Burgoon et al. (2016, p. 129) identified differences in linguistic and vocal (e.g., voice quality, pitch, tempo) features in “truthful” vs. “fraud-relevant” utterances. In particular, the latter contained more language encoding hedging and uncertainty. The speech was also characterized by higher pitch and lower voice quality. Price, Doran, Peterson, and Bliss (2012, p. 992) revealed that a positive or negative “linguistic tone”—measured by the presence of words in earnings calls with positive connotations—was a significant predictor of stock returns and trading volume.

Focusing on the optimistic tone of managers during earnings calls, measured by the presence of positive words, Davis, Ge, Matsumoto, and Zhang (2015) determined that optimism tended to be manager-specific and that it was not influenced by a firm’s performance. It was also associated with managers’ “early career experiences and involvement in charitable organizations” (Davis et al., 2015, p. 639). An emphasis on optimism also emerged in Author’s (2011) analysis of executives’ speech during earnings calls. In this case, ethos-related words (e.g., strength, solid, prudent, commitment, discipline) appeared to be used strategically to inspire trust and pivot towards confidence for the future when reporting negative performance during an economic downturn.
On a discursive level, earnings calls are quite complex. They incorporate two distinctive types of discourse: largely formal, planned, and monologic language in executive presentations vs. relatively informal, unplanned, and dialogic language in the Q&A sessions (Author, 2013). Earnings calls are a type of reporting genre (Bhatia, 2005). They have a dual communicative purpose: to provide updates about financial performance (an informative purpose) and to persuade listeners, as potential investors, of the soundness of the company (a promotional purpose). With reference to participants, the executives and analysts have clearly distinctive objectives. On the one hand, executives aim to convince listeners of the investment-worthiness of the company, while also protecting the interests of shareholders (Budzynska, Rocci, & Yaskorska, 2014). On the other hand, analysts seek to critically extract as much information as possible so that they can write accurate reports and make ratings recommendations—while also maintaining a good rapport with executives (Budzynska et al., 2014; Author, 2009). In their study of earnings call Q&A sessions, Palmieri, Rocci, and Kudrautsava (2015) analyzed argumentative patterns throughout the content of the dialogues. They concluded that “both corporate representatives and analysts make systematic and relevant use of argumentation during conference calls” (Palmieri et al., 2015, p. 130). Thus, interaction during earnings calls appears to reflect a delicate balancing act between business professionals whose diverging goals challenge them to engage with each other in strategic ways.

Building on the prior reviewed research, I investigate earnings calls from a pragmalinguistic perspective, seeking to understand how the participants use language persuasively in this communicative context. According to Leech (1983, p. 11), pragmalinguistics is the study of “particular resources which a given language provides for conveying illocutions”. In this sense, pragmalinguistic resources can be described as the linguistic forms used to carry out specific language functions, or speech acts—such as
promising, requesting, directing, and asserting (Searle, 1975). Previous linguistic research has identified lexical items that perform a persuasive function by adding pragmatic meanings associated with evaluation and intensification to the assertions of speakers and writers (Hyland, 1998, 2005; Dafouz-Milne 2008; Vázquez Orta & Giner, 2008; Kozubíková Šandová 2012).

Drawing on this theoretical background, the present study focuses on lexical items in earnings calls that perform two different persuasive functions: first, an evaluative function to construct alignment with interlocutors by expressing attitudes toward propositions (Martin & White, 2005), e.g., outstanding and great; and second, an intensifying function to enhance the illocutionary force of speech acts by “expressing great certainty or conviction” (Holmes, 1984, p. 348), e.g., extremely, really. I refer to these items as evaluating boosters and intensifying boosters, respectively. Both are pragmalinguistic resources speakers use to persuade listeners by emphasizing their opinion with a view to influencing others. In the present study, I aim to understand how participants in earnings calls use evaluating and intensifying boosters by addressing the following research questions:

1. Which boosters are used by the participants in the earnings calls?
2. How are boosters used in earnings calls that take place in times of financial crisis vs. times of financial recovery?
3. How is the usage of boosters affected by the professional role/objectives of participants?

How executives and analysts use these persuasive features of language is revealing of their communicative strategies and intentions as they interact in a dynamic context that is strongly impacted by their individual professional goals and by changing economic scenarios. This knowledge is important not only for the business professionals who participate in these events to more effectively use and interpret persuasive language, but also for investors among
the lay public who follow earnings call webcasts to make more informed investment decisions.

**Method**

The analysis is based on the quarterly earnings calls of 10 U. S.-based companies. These took place in two different periods of time. The first period was the third quarter of 2009, when the financial markets were still suffering from the 2007-2008 global financial crisis (Helleiner, 2011). The second period was the third quarter of 2013, when the markets had recovered.

For each period, the transcripts of the 10 companies’ earnings calls were collected and compiled in two parallel corpora. The first is the Crisis Corpus. Earnings calls referred to Q3 2009 during which the companies experienced declining or (at best) stagnant performance. The second is the Recovery Corpus. This refers to Q3 2013 when the companies had recovered (to a greater or lesser extent). Thus, the comparison of the same companies over two different periods of time provides a diachronic perspective. Transcripts were collected from Seeking Alpha, an Internet platform that provides information and documentation for the global financial community, including some transcripts of earnings conference calls that can be accessed freely. Table 1 provides an overview of the two parallel corpora. (Table 1 here)

Across the two corpora, the number of participating executives ranged from one to five. The number of analysts connected via telephone ranged from two to 21. This variation is also reflected in the differences in the word counts of the transcripts. These corresponded to the relatively longer or shorter duration of the earnings calls which, in turn, depended largely on how many analysts were present in the Q&A sessions.

The analytical approach is grounded in corpus linguistics, specifically “corpus-assisted discourse analysis” (Baker et al., 2008, p. 277), where corpus tools retrieve features
of particular discourse types. The emerging features are then extensively analyzed in their context of usage to identify distinctive patterns and themes, thus integrating both quantitative and qualitative methods. On the quantitative side, text analysis software was implemented to extract pragmalinguistic features of persuasion. In particular, the corpora were processed using the semantic field annotation tool of Wmatrix (Rayson 2008). This tool automatically annotates or tags each lexical item in a corpus according to more than 200 pre-established conceptual domains, grouped under 21 major semantic fields (such as Money and commerce, Life and living things, and Substances, materials, object and equipment, as well as abstract concepts such as Knowledge, General Ethics, and Evaluation). The advantage of this procedure is that it allows for highly exhaustive analyses of lexical items compared to other types of corpus analysis based only on pre-determined lists of search items. More specifically, Wmatrix identifies all items whose meanings relate to a given semantic field, without the quantitative restrictions of pre-determined lists. Therefore, it offers an effective way to analyze evaluating and intensifying boosters as open-class linguistic categories that are unlimited in quantity and quality.

Recent studies of business discourse have demonstrated the usefulness of this approach for analyzing figures of speech, another open-class category that may involve any lexical item. Cheng and Ho (2015) utilized Wmatrix to extract key semantic fields from two corpora of financial analysts’ reports for the banking sector. They then identified numerous metaphors across a large range of source domains. Similarly, Author (forthcoming) used the same software to analyze the use of metaphor and metonymy in earnings conference calls. She found that both figures of speech were prominent in the discourse of the participants and that they were highly articulated within the large variety of conceptual domains from which they were derived.
The results of the semantic annotation of the Crisis Corpus and the Recovery Corpus were then displayed by Wmatrix in key domain clouds that illustrate all the semantic domains that occur with statistically higher frequencies in these corpora when compared to a larger reference corpus incorporated in Wmatrix. For illustrative purposes, Figure 1 reproduces the key domain cloud generated for the Recovery Corpus.

(Figure 1 here)

The different font sizes reflect the graduated differences in keyness scores which range from higher to lower. Keyness is calculated automatically by the software using the log likelihood statistical measure. This takes account of the word frequencies of the two datasets (observed values) and calculates expected values (see the Appendix). For example, within the cloud shown in Figure 1, the domain Business: Generally (larger font) has a relatively high keyness score of 802.59. The first item in the cloud Attentive (smaller font) has a lower keyness score of 120.09. Specifically, the larger the font, the higher the keyness score. Although all of the domains in the cloud occur with significantly higher frequencies with respect to the reference corpus, those that appear in larger fonts are particularly distinctive to the target corpus.

Each semantic domain in the cloud consists of a hypertext link that can then be opened to reveal all of the lexical items that were assigned to it by the software. I carefully reviewed the content of each semantic domain to identify those that contained elements encoding persuasive meanings. I then examined these qualitatively within the context of their usage. This was useful in identifying rhetorical patterns that were distinctive of the speech of earnings call participants, as well as possible variations in earnings calls that reported positive vs. negative financial performance.

Results and Discussion
Examination of the lexical items assigned to the key semantic domains of the Crisis Corpus and the Recovery Corpus led to the identification of three domain tags that could be interpreted as performing a persuasive function:

- Evaluation: good (e.g., good, great, well)
- Tough/strong (lemmas based on these two words)
- Degree: boosters (e.g., really, very, incredibly)

Because the lexical items tagged Evaluation:good and Tough/strong both performed an evaluative function, I combined the two domains to form the category of evaluating boosters. The items tagged Degree:booster formed the category of intensifying boosters.

Table 2 reports the overall frequencies of evaluating and intensifying boosters across the two corpora in both raw frequency counts and the normalized parameter of occurrences per 1000 words (ptw) for a more accurate representation of variation of the different word counts of the two corpora (96,647 in the Crisis Corpus vs. 107,384 in the Recovery Corpus).

As Table 2 shows, both categories of boosters were more frequent in the Crisis Corpus (18.03 occurrences ptw) than in the Recovery Corpus (15.94 occurrences ptw). The Chi square test compared these two proportions and returned a p-value of 0.1021. Most of the differences can be traced to variation in the use of evaluating boosters (10.07 ptw in the Crisis Corpus vs. 8.16 in the Recovery Corpus). There was very little difference in the use of intensifying boosters (7.96 ptw in the Crisis Corpus vs. 7.78 in the Recovery Corpus). This can be broadly interpreted as a higher persuasive effort by executives of the Crisis Corpus to offset less than positive performance during the quarter.

Further examination of the items assigned to the three domains described above provided insights into the different types of evaluating and intensifying boosters used by the participants. These are discussed in the following three subsections, dedicated to each of the
previously identified key semantic domains, as well as a final subsection that provides an in-depth analysis of a complete exchange between an executive and a financial analyst.

**Evaluation: good**

Table 3 lists the items extracted from the two corpora for the domain Evaluation:good, for a total of 698 items in the Crisis Corpus vs. 642 items in the Recovery Corpus.\(^9\) The individual items are listed according to frequency of occurrence shown in parentheses. (Table 3 here)

In terms of the range of different item types, the two corpora were quite similar (31 vs. 29). There was a high degree of overlap among the top 10 items in each corpus, with 8 out of 10 matching items. As could be expected, there was somewhat more emphasis on *improvement* in the Crisis Corpus, where it ranked as the most frequent evaluating booster as compared to second-most frequent in the Recovery Corpus. Among the less frequent items, there were also several others in common: *pickup, get*_better, *dependable, reliabl*, *terrific, capitaliz*, *upgrading, wholesome, looks_great, super*, and *move_ahead*. The high degree of convergence between the two corpora is quite interesting given the considerable turnover of speakers over the four-year timeframe. Six out of 10 companies underwent changes in leadership. Analysts who participated in the earnings calls were not always the same in the Crisis Corpus vs. the Recovery Corpus. The strong similarity in use of evaluating boosters suggests the existence of a consolidated repertoire of persuasive expressions that are distinctive to the earnings call genre itself, and independent from positive vs. negative financial performance. This accords with Davis et al.’s study (2015) in which managers’ optimistic tone was not influenced by their companies’ financial performance.

Examples 1-3 and 4-6 show how evaluating boosters were used by executives in the Crisis Corpus and the Recovery Corpus, respectively. What emerges is a very nuanced usage.
The same forms were used by the executives, but in subtly different ways. In the Crisis Corpus, persuasion is projected towards the future by means of co-present items (will see, progress, plan). In contrast, in the Recovery Corpus it refers to success in the quarter to which earnings calls referred, encoded by present and past tense verb forms (enjoyed, is doing, did).

(1) I’m confident that as the economy gets better we will see improvements in our results. (Crisis/C9)

(2) We’re trying to get that expanded to many more devices and we’re making great progress on that. (Crisis/C8)

(3) That plan is up and operating. It’s doing a terrific job […] (Crisis/C4)

(4) We enjoyed broad access […] and continuing improved results […] (Recovery/C1)

(5) And that program is doing great with a very high return […] (Recovery/C2)

(6) We, I think, did a terrific job in terms of […] (Recovery/C10)

The analysts in the Crisis Corpus often used evaluating boosters in an interactional way during their exchanges with executives. They seemed to serve as an upbeat and informal substitution for thank you that normally functions as the acknowledgement token in a question-answer-acknowledgement sequence during an information-seeking conversation (Biber, Johansson, Leech, Conrad, & Finegan, 1999; Hutchby & Wooffitt, 2008), (see examples 7 and 9). Evaluating boosters were also used to evaluate company performance (see examples 8 and 10). In the Recovery Corpus, the analysts used evaluating boosters to evaluate company performance positively in an emphatic way (example 9), seen in great pipeline and super well in examples 9-10 vs. good transaction in example 8.

(7) Okay, great. Then one final question, just on sort of more of a Xerox business question (Crisis/10)
(8) Looks like a *good* transaction [...] but can you help us understand the impact of [...] (Crisis/C7)

(9) *Great.* And then just a quick question on the overall environment. I mean, obviously, you’ve had a *great* pipeline of products (Recovery/C4)

(10) Just an observation. One of the things you did really *super* well[…]  
(Recovery/C6)

Overall, the analysts’ use of evaluating boosters reflects an effort to maintain a positive rapport with executives. A similar attitude emerged in Budzynska et al.’s (2014) and Author’s (2009) research focusing on analysts’ speech in earnings calls.

**Tough/strong**

Table 4 lists the items contained in the Tough/strong semantic domain across the two corpora. There were 276 items in the Crisis Corpus and 234 items in the Recovery Corpus. The item types were largely overlapping, with the exception of two single-occurrence unique items in the Recovery Corpus (*fortify* and *looking_robust*).  
(Table 4 here)

In the Crisis Corpus, the items *strong* and *strength* were slightly more numerous (n=201) than in the Recovery Corpus (n=175). They rank at the top two positions in terms of frequency, rather than the first and third positions as in the Recovery Corpus. One possible explanation could be a tendency to highlight strengths and downplay weaknesses to offset negative performance. Not surprisingly, *tough* was used more frequently by executives in the Crisis Corpus to emphasize the difficult economic scenario, whereas *strong* projects towards the future, as shown in examples 11 and 12. In the Recovery Corpus, *strong* refers to the results of the reported quarter, whereas *tough* was used in a cautionary way in terms of the future (examples 13 and 14).
(11) We are performing well in the operational areas of our business which mitigates these tough economic challenges. (Crisis/C10)

(12) In Canada, <product name> is off to a strong start. (Crisis/C1)

(13) We had continued strong demand for our video and broadband. (Recovery/C9)

(14) We actually did improve our position on a share basis, in a market that’s looking pretty tough. (Recovery/C5)

Across both corpora, the vast majority of the items (487 out of 510) contained in the Tough/strong semantic domain were used by executives. In the few instances where they were used by analysts (examples 15 and 16), they did not present any noticeably distinctive rhetorical trends. Essentially, executives and analysts tended to use items with negative connotations (e.g., tough, weak) to evaluate external phenomena beyond the direct control of the company, and items with positive connotations (e.g., strong, robust) to evaluate entities and phenomena that were directly linked to the company, corroborating the similar discursive patterns found by Thomas (1997), Clatworthy & Jones (2003), and Budzynska et al. (2014).

(15) Why, given the strong progress that you’re seeing […] do you actually foresee the operating margin to take a step back in the short term?(Crisis/C5)

(16) And how much of that is due to the tough competition to year-ago Summer Olympics? (Recovery/C6)

**Degree:booster**

Table 5 lists the items found in the semantic domain Degree:booster. There were 769 items in the Crisis Corpus and 835 items in the Recovery Corpus. Again, there was a high level of convergence in the range of different items (25 types in the Crisis Corpus vs 24 types in the Recovery Corpus). Additionally, there was a large number of common items between the two corpora (18 out of 24/25).

(Table 5 here)
In terms of usage, we see the same temporal nuances. The Crisis Corpus projects towards the future and the Recovery Corpus highlights success in the reported quarter, as illustrated in the speech of the executives in examples 17-18 and 19-20.

(17) We think once employment *really* comes back in a bigger way we will do *extremely* well […] (Crisis/C9)

(18) We believe *strongly* that we should achieve even better results as the economy and the consumer spending environment improves. (Crisis/C4)

(19) We are *extremely* pleased with document outsourcing. (Recovery/C10)

(20) That part of our business has been performing *incredibly* well. (Recovery/C6)

A similar pattern emerged for analysts who tended to strengthen intensifying boosters in the Recovery Corpus (examples 21-22), as compared to less forceful options in the Crisis Corpus (examples 23-24).

(21) It seems that ARPU growth is *really, really* positive for the longer term trend (Recovery/C9)

(22) A *remarkably* strong quarter really especially looking at the U.S. counterparts (Recovery/C7)

(23) That’s *very* helpful. Thanks very much, Colm. (Crisis/C7)

(24) It seems like there’s a *really* sizeable tailwind. (Crisis/C6)

**Dialogic exchange analysis**

In example 25, I present a complete dialogic exchange between two participants that illustrates how an executive in the Crisis Corpus (C4) engages in artful persuasion to respond to an analyst’s question about negative performance, reflecting what Burgoon et al. (2016, p. 147) describe as “a desire to put a positive spin on what is being reported”. The executive resorts to a combination of evaluating and intensifying boosters: *strongly, terrific, very, tough*. In the first sentence of the executive’s response, he partially refutes the premise of the
analyst’s question. In the second and third sentences, he partially concedes the poor performance, but is careful to attribute it external sources. This particular strategy has been identified also in previous research on management communication, where poor performance was attributed to the external environment (Thomas, 1997; Clatworthy & Jones, 2003; Budzynska et al., 2014). The executive also attempts to mitigate the negative performance by pointing out that other retail companies are not performing any better. In the final part of the exchange, the analyst simply replies with the standard acknowledgment form, Thank you, preceded by the neutral Okay.

(25) AN: Thank you. Couple of questions. The company store performance that is lagging behind the franchisees - is that still a function of geography more than anything else in your view?

EX: Interestingly enough, Joe, we have corporate markets where we are strongly outperforming our franchisees and doing a terrific job. But we have certain strategic concentrations in terms of market positions in places like Las Vegas and Phoenix and southern Florida that are having a such a significant impact on the overall performance. Those are just very, very tough markets and I think they are for everybody in the retail industry.

AN: Okay. Thank you.

Concluding remarks

This analysis has explored the persuasive strategies of the participants in earnings calls from a pragmalinguistic perspective. Pragmalinguistics focuses on understanding how certain linguistic expressions convey specific functions of language. Therefore, the pragmalinguistic approach has proved useful to distinguish and analyze the language executives and analysts use to persuade their interlocutors by attributing and emphasizing
positive/negative meanings. In other words, the study has shown how evaluating and intensifying boosters can become rhetorical tools used by earnings call participants to influence others and encourage alignment with their own ideas. At the same time, they help to foster a collaborative and positive atmosphere conducive to effective information-oriented interactions. Regarding the first research question, the participants used largely the same types of evaluating and intensifying boosters across the two corpora, regardless of positive (Recovery Corpus) vs. negative (Crisis Corpus) performance. This points to the existence of a sort of *earnings callee* that reflects a close-knit professional community of practice that has established preferred linguistic forms of interaction. However, the frequency of evaluating and intensifying boosters combined was considerably higher in the Crisis Corpus compared to the Recovery Corpus. This suggests an effort on the part of executives to offset overall negative performance by highlighting positive future trends, thus corroborating Author’s (2011) analysis of how executives used ethos-inspiring language during earnings calls for similar reasons. Previous research on management tone in written corporate filings by Li (2010) found that a positive tone was associated with future financial performance. This seemed to occur in a similar way in the Crisis Corpus.

In response to the second research question, there were subtle differences in the usage of boosters between the two corpora. As anticipated, executives tended to shift the focus towards future performance in the Crisis Corpus (e.g., *We think once employment really comes back in a bigger way we will do extremely well*) vs. the performance of the quarter in question in the Recovery Corpus (e.g., *That part of our business has been performing incredibly well*). In contrast, analysts used boosters to acknowledge an answer, e.g., *Okay, great. Then one final question* (Biber et al., 1999; Hutchby & Wooffit, 2008), and to evaluate actual performance even if evaluating boosters were more emphatic in the Recovery Corpus (e.g., *super, great*) compared to the Crisis Corpus.
Concerning the third research question, the nuanced usage described above corresponds to the distinct professional roles and objectives of the participants. Executives’ usage of evaluating and intensifying boosters made them appear as responsible *information providers* capable of putting the company in the best light possible, in good times and bad. Instead, analysts portrayed themselves as critical, yet encouraging, *information seekers* who need to strike a balance between pressing the executives for information, while seeking to maintain good relations and keep the dialogue open in a setting where interaction is constrained artificially by technology. The analysts’ apparent concern for politeness during this virtual interaction corroborates Halbe (2012). She found that business communication via teleconferencing is characterized by negative politeness strategies with respect to face-to-face interaction, possibly due to the lack of other communicative channels, such as body language.

This study is based on the speech of 27 executives and 115 analysts across 10 U. S.-based companies, which necessarily limits the generalizability of the findings. To address this issue, the corpora could be expanded to include a larger sample of companies/speakers. This would also help to distinguish clear trends from idiosyncrasies that may play a role in the language choices of individual speakers. Despite this limitation, the findings are nonetheless able to signal potential patterns of usage that warrant further investigation. For example, researchers could analyze evaluating and intensifying boosters in mergers and acquisitions (M&As) conference calls, which have been shown to be highly argumentative in nature (Palmieri, 2008). This would be useful to determine whether such features are distinctive of earnings calls or perhaps transferable to other dialogic oral financial genres.

In addition, further insights into the generalizability of the findings could be gained by isolating certain contextual and interactional variables of earnings calls. For instance, frequency and type of evaluating and intensifying boosters used during earnings calls may be affected by business sector. Specifically, participants in earnings calls in one particular sector
may have established certain preferred forms, also through repeated engagement with others in the same sector. Analysts tend to specialize in business sectors (e.g., financial, technology, retail) and participate in the earnings calls of multiple companies. Thus, perhaps they contribute to a recycling effect of linguistic choices among the professionals of a particular sector. A greater understanding of this issue could be acquired by analyzing boosters in sector-specific earnings call data from a comparative perspective. Moreover, it would be interesting to look at cultural aspects. Companies represented in the two corpora were all based in the United States. However, it is not possible to assume that the participants represented a culturally or linguistically homogeneous group. Indeed, in today’s globalized corporate world, English is often used as a *lingua franca* among speakers of various language backgrounds. Earnings calls are no exception (cf. Author, 2014). Because of their lack of temporal and geographical constraints, professionals from anywhere in the world can participate. To investigate this type of cultural variation, it would be necessary to verify language and cultural backgrounds of earnings call speakers, perhaps using a case study approach.

Robin Lakoff (1982, p. 28), a pioneer in the study of the language of persuasion, defined persuasive discourse as the “attempt or intention of one party to change the behavior, feelings, intentions, or viewpoint of another by communicative means.” The subtle type of persuasion that emerged from this analysis seems oriented more towards influencing rather than changing, reflecting a more nuanced approach in this context. The study thus contributes to helping professionals who participate in earnings calls become more aware of how to make strategic use of persuasive language in these high-stakes interactions where they are under pressure to achieve distinct and challenging goals. An enhanced understanding of how persuasive language is used during earnings calls can also benefit lay investors who follow earnings calls for their own investment decisions. On a pedagogical level, the findings can be
applied to teach aspiring executives/analysts in financial communication courses how to use pragmalinguistic resources when finely tuned forms of persuasion are required.

References

Author. (2009).
Author. (2013).
Author. (2014).
Author. (forthcoming).


Table 1

Crisis Corpus vs. Recovery Corpus

<table>
<thead>
<tr>
<th>Company</th>
<th>Crisis Corpus (Q3 2009)</th>
<th>Recovery Corpus (Q3 2013)</th>
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Table 2

Evaluating and Intensifying Boosters in Crisis Corpus vs. Recovery Corpus

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<td>974</td>
<td>10.07</td>
<td>769</td>
</tr>
<tr>
<td>Recovery Corpus</td>
<td>876</td>
<td>8.16</td>
<td>835</td>
</tr>
</tbody>
</table>
Table 3
Items Assigned to Evaluation: good in Crisis Corpus vs. Recovery Corpus

<table>
<thead>
<tr>
<th>Crisis Corpus</th>
<th>Recovery Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. improv* (180)</td>
<td>17. light_at_the_end_of_the_tunnel (3)</td>
</tr>
<tr>
<td>2. good (173)</td>
<td>18. wholesome (2)</td>
</tr>
<tr>
<td>3. great (93)</td>
<td>19. uplift (2)</td>
</tr>
<tr>
<td>4. well (92)</td>
<td>20. upgrading (2)</td>
</tr>
<tr>
<td>5. positive (45)</td>
<td>21. pickup (2)</td>
</tr>
<tr>
<td>6. progress (25)</td>
<td>22. dependable (2)</td>
</tr>
<tr>
<td>7. enhance (16)</td>
<td>23. world_class (1)</td>
</tr>
<tr>
<td>8. advantage (13)</td>
<td>24. progress_based (1)</td>
</tr>
<tr>
<td>9. favorab* (12)</td>
<td>25. okay (1)</td>
</tr>
<tr>
<td>10. pickup (6)</td>
<td>26. moveAhead (1)</td>
</tr>
<tr>
<td>11. get*_better (5)</td>
<td>27. looking_great (1)</td>
</tr>
<tr>
<td>12. dependable (4)</td>
<td>28. look_good (1)</td>
</tr>
<tr>
<td>13. reliabl* (4)</td>
<td>29. capitalize (1)</td>
</tr>
<tr>
<td>14. terrific (4)</td>
<td>30. super (3)</td>
</tr>
<tr>
<td>15. capitaliz* (3)</td>
<td>31. developed (3)</td>
</tr>
<tr>
<td>16. fine (3)</td>
<td></td>
</tr>
</tbody>
</table>

Table 4
Items Assigned to Tough/strong in Crisis Corpus vs. Recovery Corpus

<table>
<thead>
<tr>
<th>Crisis Corpus</th>
<th>Recovery Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. strong* (162)</td>
<td>1. strong*(154)</td>
</tr>
<tr>
<td>2. strength* (39)</td>
<td>2. weak* (36)</td>
</tr>
<tr>
<td>3. tough* (30)</td>
<td>3. strength* (21)</td>
</tr>
<tr>
<td>4. weak* (30)</td>
<td>4. tough (9)</td>
</tr>
<tr>
<td>5. robust (5)</td>
<td>5. robust (6)</td>
</tr>
<tr>
<td>6. resilienc* (3)</td>
<td>6. attrition (4)</td>
</tr>
<tr>
<td>7. attrition (6)</td>
<td>7. resilient (1)</td>
</tr>
<tr>
<td>8. look_strong (1)</td>
<td>8. fortify (1)</td>
</tr>
<tr>
<td>9. looking_robust (1)</td>
<td>9. looking_robust (1)</td>
</tr>
<tr>
<td>10. looks_strong (1)</td>
<td>10. looks_strong (1)</td>
</tr>
</tbody>
</table>
Table 5

Items Assigned to Degree: booster in Crisis Corpus vs. Recovery Corpus

<table>
<thead>
<tr>
<th>Crisis Corpus</th>
<th>Recovery Corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. very (237)</td>
<td>14. highly (3)</td>
</tr>
<tr>
<td>2. really (181)</td>
<td>15. hugely (2)</td>
</tr>
<tr>
<td>3. more (178)</td>
<td>16. far (2)</td>
</tr>
<tr>
<td>4. particularly (36)</td>
<td>17. enormously (1)</td>
</tr>
<tr>
<td>5. much (26)</td>
<td>18. exceptionally (1)</td>
</tr>
<tr>
<td></td>
<td>6. so (23)</td>
</tr>
<tr>
<td></td>
<td>7. a_lot (23)</td>
</tr>
<tr>
<td>8. very_much (13)</td>
<td>21. long_way (1)</td>
</tr>
<tr>
<td>9. extremely (11)</td>
<td>22. greatly (1)</td>
</tr>
<tr>
<td>10. strongly (9)</td>
<td>23. overly (1)</td>
</tr>
<tr>
<td>11. heavily (8)</td>
<td>24. by_far (1)</td>
</tr>
<tr>
<td>12. more_and_more (5)</td>
<td>25. singularly (1)</td>
</tr>
<tr>
<td>13. increasingly (3)</td>
<td></td>
</tr>
</tbody>
</table>

1. very (239) 13. strongly (7)
2. more (205) 14. increasingly (5)
3. really (187) 15. heavily (4)
4. so (42) 16. indeed (3)
5. particularly (31) 17. remarkably (3)
6. much (30) 18. long_way (3)
7. a_lot (21) 19. more_and_more (2)
8. very_much (15) 20. by_far (1)
9. such_a (9) 21. more_oriented (1)
10. extremely (8) 22. awfully (1)
11. highly (8) 23. deeply (1)
12. incredibly (8) 24. vastly (1)

Figure 1. Screenshot of key semantic domains in the Recovery Corpus. Source: Wmatrix (Rayson, 2008)
Appendix A

Log-likelihood calculation formula

\[ E_i = \frac{N_i \sum_i O_i}{\sum_i N_i} \]

\[ -2\ln \hat{\lambda} = 2 \sum_i O_i \ln \left( \frac{O_i}{E_i} \right) \]

Legend. N: number of words in the datasets, O: observed values, E: expected values. Further details about the calculation of log-likelihood by *WMatrix* can be found at [http://ucrel.lancs.ac.uk/llwizard.html](http://ucrel.lancs.ac.uk/llwizard.html)

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1 See Ettredge, Richardson, and Scholz (2002) for a categorization of voluntary vs. required financial disclosure.

2 According to Bhatia (2005), the communicative purpose of *reporting genres* in business contexts is to disclose financial information. Typical examples are annual reports, audit reports, and sales reports.

3 For a theoretical discussion of argumentative patterns within the context of argumentation theory, see van Eemeren, Grootendorst, and Henkemans (1996) and van Eemeren (2016).

4 In linguistic pragmatics, the term *illocution* refers to an utterance that in itself performs a speaker’s intended action (e.g., requesting, promising, asserting). For example, the utterance “John is good at sports” performs the illocutionary act of asserting, where the *illocutionary force* of the act is the speaker’s intention for the hearer to believe the same.

5 Company, brand, and product names have been removed throughout the text for reasons of privacy.
Wmatrix was developed at UCREL (University Centre for Computer Corpus Research on Language) at Lancaster University, a pioneer in the areas of natural language processing and computer-assisted text analysis for more than four decades (http://ucrel.lancs.ac.uk/). According to its developers, the Wmatrix semantic tagger has a 92% accuracy rate (Rayson, 2009).

Among the various reference corpora provided by the software, I selected the AME06 (American English 2006 - 966,609 words from published general written American English), as the most suitable for comparison with my corpora.

Chi square tests run to compare the proportions of evaluating boosters and intensifying boosters individually did not return any p values close to significance. Although statistical significance is a useful parameter to interpret results, in an analysis that aims primarily to identify trends and patterning in the use of rhetorical features, the presence of strict statistical significance is not imperative.

In Tables 3, 4 and 5, (*) indicates cases in which the total number of items included other related forms, e.g., improv* comprises improve, improvement, improving, and improved.