A Context-Based Approach to the Identification of Hedging Devices and Features of Writer-Reader Relationship in Academic Publications

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Abstract Studies into stance-taking in scholarly publications remain inconclusive. Using software programs that employ predetermined lists of items to analyze data from large corpora fails to account for the role played by context in stance-taking and limits the possibility of discovering new items. Academic writers' experience and knowledge, as well as their attitudes towards their subject matter and readers have also tended to be ignored. This paper reports on the development and application of two instruments for identifying hedging devices and features of writer-reader relationship that adopt a broader, context-based approach to the analysis of these aspects of stance. We suggest that these tools enrich our understanding of stance-taking, thus making an innovative and valuable contribution to the field of academic discourse analysis.

Keywords Stance-taking · Hedging devices · Writer-reader relationship · Context

1 Introduction

Stance-taking plays a complex role in academic writing as it reflects not only how a writer's knowledge and experience shape the claims being made but also the writer's attitude towards both the content and the reader. While the notion of stance is often

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employed as a broad, umbrella term to cover numerous linguistic and interactional phenomena, this paper focuses on two of these phenomena: hedging and writer–reader relationship. Specifically, a case is made that identification of hedging devices and features of writer–reader relationship in academic publications needs to be approached from the perspective of writer strategy rather than by using a pre-defined list of items and that context must be taken into account. Two coding instruments are presented that utilize a list of criteria for singling out the different strategies that writers employ. It is shown how these instruments can be operationalized as a methodology for identifying how writers hedge claims and manage their relationship with their readers and that adopting such an approach allows for the possibility of discovering new items and strategies.

2 Background and Rationale

As a public documentation of research findings, conclusions and recommendations, an academic publication is an important channel for presenting knowledge-claims to the respective discourse community. It involves writers in a practice of "textualizing" their research work as a significant contribution to the community of practice (Hyland 2001b: 209). Accordingly, research writers must not only observe sensitivity to the rhetorical conventions and social understandings of the community but they must also portray themselves as credible members and display familiarity with the persuasive practices of their discipline in order to convince fellow colleagues and experts in the field to accept their claims (Hyland 2000, Hyland and Salager-Meyer 2008).

In short, stance-taking is a key feature of academic writing as it enables an academic writer to claim solidarity with readers, evaluate and critique the work of others, acknowledge alternative views, and argue for a position (Hyland 2004). Consequently, when it comes to identifying hedging and academic writer–reader relationship in academic publications the primary focus must be on ascertaining the strategies writers use to express these two aspects of stance.

Perhaps due ultimately to the fuzziness of the overarching concept of stance-taking and the areas of overlap between various aspects of this phenomena, the study of hedging and writer-reader relationship can be characterised as being limited both by the lack of a clear, all-encompassing definition of either phenomena and by a tendency to use a piecemeal approach to identification that focuses on specific features or devices (e.g. modal verbs, downtoners, first person pronouns and self-citation) rather than a comprehensive approach that lays out criteria for identifying all the different strategies that a writer employs within a particular academic publication to hedge claims and manage their relationship with their readers.

Hedging, for example, was first defined by Zadeh (1965) when dealing with the concept of fuzziness, with subsequent definitions being put forward from a variety of perspectives including logic (Lakoff 1973), language philosophy (Lakoff 1972),

pragmatics (Namsaraev 1997), conversation analysis (Nikula 1997), rhetoric and stylistics (Meyer 1997), semantics (Rosch 1978), and sociopragmatics (Hyland 2008). Definitions include among others, a communicative strategy to increase and reduce the strength of a claim (Hyland 1998a), an indicator of a writer's confidence in a proposition (Hyland 2000), interactive devices (Hyland and Salager-Meyer 2008), and a conflict management strategy between writer and readers (Vázquez and Giner 2008). However, over the development of the definition of hedging, two types of problems have emerged. First, clarity has been compromised as concepts such as modality, evidentiality, vagueness and mitigation have been shown to cut across the area of hedging. Second, when insights from a new perspective have been explored the resulting definition has not necessarily included the scope of previous definitions, leading to a number of partially overlapping definitions rather than a single more comprehensive one.

In terms of identifying hedging devices and features of writer-reader relationship, the research paradigm has tended to centre on deriving lists of specific lexico-syntactic items and typologies for categorising them. But while Wilss (1997) claims that it is justifiable to present a list of hedges, but he also notes that it "does not in itself fully reconstruct the systemic nature of the actual phenomena and accommodating them in a complete range of possible hedging strategies" (p. 141). Despite this limitation, there are now a sizeable number of corpus linguistic studies that employ predetermined lists of items to analyse data from large corpora (e.g., Millan 2008; Skorczynska 2005; Hyland 1998b). Using various available programs such as WordSmith Tools, SARA, TACT, Word Cruncher and WordPilot, the identified items are usually tagged and analyzed quantitatively.

One drawback of this methodological approach is that by using predetermined lists new items will never be identified as the identification is solely based on the existing list. Thus, it limits the potentiality of new relevant findings. Another drawback is that the validity of the items identified is disputable as the context and co-text of the items is not factored in. This creates several problems. Dahl (2008), for example, realized that her automated search of items for knowledge claim was not completely reliable. She had to go through the whole corpus of her research manually to look for claims. Some of her automated search was not relevant as words like 'findings' and 'paper' might refer to others' work instead of the research reported in the paper itself. As a result, some of the items returned were misinterpreted as claims while some were disregarded. A related problem stems from the fact that the majority of lexico-syntactic items featuring in hedging and management of the writer-reader relationship are not only multi-functional but they can also function simultaneously to convey different meanings (Clyne 1991). Accuracy of analysis thus requires each occurrence of an item to be carefully evaluated. A third drawback of this methodological approach is that it narrows the opportunity for identifying strategies at clausal and discourse levels. Salager-Meyer (2000:181) argues that the formation of meaning is beyond the linguistic items themselves and it is instead determined by "extralinguistic criteria like context, situation and the interlocutor". In other words, without introspection and contextual analysis, it is impossible, for instance, to discover the academic writer's

commitment to their proposition. As Salager-Meyer (2000) points out specific background knowledge of the research area is required to carry out such contextual analysis. In sum, while expedient, this methodological approach limits the possibility of discovering new items and fails to account for the role played by context in stance-taking.

Clearly, there is a need to refine previous approaches used in identifying hedging devices and features of writer–reader relationship. Based on the arguments presented here, two separate instruments have been developed with design features of being both context-driven, as identification is done manually, and data-driven (a bottom-up approach) as identification is approached from the perspective of writer strategy rather than by using a pre-defined list of items (a top-down approach). Manual identification allows for a careful consideration of context, which entails that only actual instances of stance act are identified. As well it allows for the recognition of items which are serving more than one function in a particular occurrence and the identification of strategies at clausal and discourse levels in addition to those at the word and phrase levels. The actual identification work is based on a list of criteria for singling out the different strategies that a writer employs within a particular academic publication to hedge claims and manage their relationship with their readers. This approach is comprehensive in that on the one hand it is derived from the various definitions, taxonomies and functions of these two aspects of stance-taking that are available in the literature, and on the other hand it allows for the discovery of new strategies.

In the following sections, we present the instruments that we have developed along with specific examples from our data.

3 Data and Methodology

The sources for the examples presented in this paper are four single-authored research articles written in English and published in Thomson-Reuters indexed journals as listed in the Arts and Humanities Citation Index and Social Sciences Citation Index for 2010:

- Evans, B. (2010). Chinese perceptions of Inner Circle varieties of English. *World Englishes*, *29*(2), 270–280.
- Mohd-Jan, J. (2006). On learning to be assertive: Women and public discourse. *Multilingua*, *25*, 43–58.
- Osman, H. (2008). Re-branding academic institutions with corporate advertising: a genre perspective. *Discourse and Communication*, *2*(1), 57–77.
- Rendle-Short, J. (2007). Neutralism and adversarial challenges in the political news interview. *Discourse and Communication*, *1*(4), 387–406.

The articles have been drawn from the fields of linguistics and applied linguistics, reflecting our own areas of academic specialization. As discussed in the previous section, consideration of context is essential when evaluating potential hedging devices and features of writer-reader relationship and detailed analysis of

the context demands a high level of comprehension on the part of the researcher. Note also that while two of the articles are written by English as Additional Language researchers (Mohd-Jan 2006; Osman 2008) and two by English as First Language researchers (Evans 2010; Rendle-Short 2007), this aspect is not explored in the present paper.

In using the two instruments for identifying hedging devices and features of writer-reader relationship only the main texts were analyzed; abstracts, bibliography lists, biodata, captions, diagrams, examples, excerpts, figures, footnotes, headers and footers, headings, illustrations, lists, notes, quotations and tables were ignored. The two aspects of stance were analyzed concurrently and all items were identified in context. Most importantly, only claims made by the researcher were considered. While quotation and rephrasing of the work of others were ignored, evaluation and comment on the work of others were considered.

4 Identifying Hedging Devices

All together there are six criteria in the instrument for identifying hedging devices (Table 1).

Potential hedging devices are identified by asking the questions listed under the criteria; if the answer to any of the questions is in the affirmative, the item is analyzed as a hedging device. To get a feel for how this works, we briefly describe each criterion and provide specific examples identified through the application of the instrument to our set of four research articles.

The first criterion, expression of likelihood and prediction, includes instances where a writer uses items such as *tentatively, suggest, seem,* and *may* to evoke a sense of probability or tentativeness in order to cautiously state a claim. Writing, especially in the academic genre, is a face-threatening act (Brown and Levinson 1987). Although a suggestion of probability or tentativeness can be interpreted as genuine uncertainty, it can also reflect a writer's attempt to save face by protecting themselves from potentially critical responses—*positive face*. Such an attempt can

Table 1 Identification criteria for hedging devices

1.	Expression of likelihood and prediction
	Does it suggest probability or tentativeness?
2.	Generalization of claims
	Does it allow a writer to remain uncommitted to specific details?
3.	Qualification or quantification of claims
	Is it a careful attempt of committing to a claim?
4.	Anonymity
	Is it an attempt to disguise the writer's presence?
5.	Admission to a lack of knowledge
	Does it express honest admission to a lack of knowledge?
6.	Use of questions
	Is a question posed to get the reader to question an issue from the same perspective?

also be viewed as an effort to save the reader's face by writing without being impeded—*negative face*. Thus, writers are socially motivated to protect their own face as well as those of their potential readers in order to maintain rapport with their readers. Expressions of likelihood or prediction identified in our data include:

(1) … and so are the Malays, who are also **seemingly** polite and non-assertive in manner. (Mohd Jan 2006: 45)
(2) This is **probably** due to the fact that PR,… (Osman, 2008: 60)
(3) Very occasionally, it **looks as if** the IE does not **appear** to overtly orient to the adversarial nature of the prior turn. (Rendle-Short 2007: 400)

Each of the highlighted items in (1)–(3) can be interpreted as a writers' cautious attempt to avoid negative criticism from members of the discipline who may believe otherwise.

Generalization of claims, the second criterion used in the identification of hedging devices, takes in a writer's use of items such as *generally, largely, commonly* and *typically* to remain uncommitted to specific details by making a generalized claim. Again, employing such a strategy can be interpreted as expressing genuine uncertainty as readers may view such sweeping statements as expressing a lack of confidence on the part of the writer. However, it also suggests the subjectivity of a proposition. Since readers of academic genre are "sensitive to pragmalinguistic and politeness conventions" (Wishnoff 2000: 130), Chang (2010) explains that a writer needs to be able to balance between being humble and sounding authoritative. Some examples identified in our data are given in (4)–(6):

(4) **Stereotypically**, Indians are known to have a tendency to be vocal;… (Mohd Jan 2006: 45)
(5) Research on Chinese speakers' attitudes toward English **generally** has as its focus second language issues… (Evans 2010: 272)
(6) Adversarial challenges are particularly hostile in that they are **frequently** commenced before… (Rendle-Short 2007: 395)

Here, the highlighted items are all adverbs and their use could again be seen as potentially saving a writer's face from peer criticism.

The third criterion, qualification or quantification of claims, covers a writer's use of items such as *almost* and *partially* or clause level approaches including fronted adverbial clauses and conditional clauses to temper their commitment to a claim. As Lewin (2005) observes, academic writers realize the remuneration of positioning their claims in a way that would weaken contrary claims. In anticipation of peer criticism, a writer has the option of carefully limiting their commitment to a claim which will consequently be face-saving for them. At the same time, a writer's careful choice of words can also portray them as a respectful researcher. In short, by carefully qualifying and quantifying the degree of commitment to a claim, writers are able to shield themselves from the risk of opposition from fellow members of the discipline as well as present themselves as cultured members of the discipline. Examples of such hedging devices are highlighted in (7)–(9) below:

(7) In fact, **some** of these logos have gone through… (Osman, 2008: 64)
(8) **Even though many successful women have learned to be assertive in the working world**, they carry that dominant behaviour… (Mohd Jan 2006: 44)
(9) Thus, UPM employs a **slightly** different approach of mentioning the fees. (Osman 2008: 69)

Instead of making sweeping statements that may invite peer criticism, in each of these examples the writer chooses to mitigate their commitment to the claim.

Writers also have the option of disguising their presence with respect to a claim. The fourth criterion, anonymity, deals with such approaches. Anonymity can be established by eluding a writer's direct personal attribution through the use of an impersonal pronoun or a construction with unspecified agency such as the passive. Martin–Martin (2003) argues that this is a highly favoured feature among academic writers as it allows for cautious presentation of claims. The commitment to a claim can also be placed on the research or part of it as in *The findings reveal…* or *This model predicts…* While this criterion reflects a writer's attempt to avoid commitment to a claim, we must also point out that using such a strategy conforms to the established style of the knowledge claim genre. Hyland (1998a), for example, interprets it as an effort to demonstrate familiarity with the disciplinary discourse by drawing on established practice. Through such practice writers may in turn gain respect from members of the discipline. Examples identified in our data include:

(10) **This article establishes** that any publications from universities,… (Osman 2008: 61)
(11) **These responses suggest**, contrary to what some scholars have claimed,… (Evans 2010: 277)
(12) However, although **one** could argue that the first 'but' in line 4… (Rendle-Short 2007: 392)

(10) and (11) illustrate attempts to shift commitment to the research (*this article*) or an aspect of it (*these responses*). In (12), on the other hand, *one* is used to avoid direct commitment to the claim.

The fifth criterion is admission to a lack of knowledge. In anticipation of peer criticism, some writers choose to admit that they lack the necessary knowledge to present a justified claim and embed their claims in statements such as *I do not know whether…* and *It is a predicament indeed as to the extent of…* Unfortunately, the use of such a hedging device may result in a loss of confidence by readers in the writer and accordingly a loss of authority on the part of the writer. On the contrary, such an attempt may also be positively valued by members of the discipline, which can be translated into the writer being regarded as trustworthy and reliable. Below are examples of the use of this type of strategy from our data:

(13)… (generally, as **we cannot make any conclusions from the data about the complex array of varieties of English in the UK**). (Evans 2010: 275)
(14)… (e.g. media or tourism, however**, language domains where casualness and modernism are valued need to be confirmed in future research**). (Evans 2010: 276)
(15) **Although it cannot be ascertained when the change exactly took place**, this is the first re-branding strategy. (Osman 2008: 64)

While each contains a writer's admission to a lack of knowledge, each use also reflects honesty toward the limitations of the research that is more likely to engender respect for the writer than an assessment of lacking confidence.

The final criterion for identifying hedging devices concerns putting forward a rhetorical question or a question which the writer subsequently answers. Although such practice leaves a writer open to being judged as unknowledgeable about a subject, it can serve as a way of mitigating a claim. By posing the claim as a question the writer employs a subtle strategy to persuade readers to view a claim from the same perspective as the writer. This strategy presents an opportunity for readers to ponder the question before following the arguments presented; it provides a mental platform for readers to quickly respond to a question before being presented with the writer's assertions. Thus, it serves as a subtle means for posing an idea that might be challenged by members of the discipline if asserted directly. According to Hinkel (1997), writers use rhetorical questions to solicit solidarity by conforming to other members of the discipline. As such, they avoid imposition by insinuating indirectness through the use of questions. We also believe that it attaches to it a sense of authority as it promotes the credibility of a writer as an experienced and respectable researcher within a discourse community. In our set of four research articles, only one item was identified via this criterion:

(16) In other words, **what information does the second turn provide in order for us, as analysts, to be confident that we are examining the talk from the participants' perspective rather than from an analyst's perspective**. (Rendle-Short 2007: 393)

Here the writer uses a rhetorical question (albeit not marked with a question mark) to position the reader as a member of the discipline, specifically as an analyst (just like the writer). This subtle strategy of persuasion then leads the reader to view the issue from the writer's perspective.

5 Identifying Features of Writer–Reader Relationship

There are a total of four identification criteria for the features of writer-reader relationship (Table 2).

Similar to the identification criteria for hedging devices, an item must be considered within its context of use, with an affirmative answer to any of the questions resulting in the item being analyzed as a feature of writer-reader relationship.

The first criterion involves disciplinary membership. One way for a writer to signal disciplinary membership in single-authored texts is to present claims in such a way that they show community allegiance. Such an approach presupposes mutual disciplinary understandings by guiding the reader to position themselves in similar authorial positions while maintaining a writer's credibility as a researcher. Martin-Martin (2003) explains it as a presupposition of the writer's acceptance in the discourse community. Hyland (2001b) describes such uses as providing a temporary mandate for a writer to present a claim with authority. On the other

Table 2 Identification criteria for features of writer–reader relationship

1.	Disciplinary membership
	Does it display community allegiance?
2.	Authority and ownership with promotional purpose
	Does it display authorial presence that suggests disciplinary credentials?
3.	Invitation for reader involvement
	Does it provide opportunities for the readers to be 'dialogically' involved in the negotiation of claims?
4.	Anonymity of author identity
	Is it an attempt to disguise the writer's presence?

hand, it can also be interpreted as a way of claiming authority by alluding to their personal attribution to a claim as with the use of inclusive *we*, *our* and *us*. Therefore, writers can simultaneously reduce their personal imposition while accentuating the significance of a claim (Martin-Martin 2003). Some of the identified items from our data are listed below:

(17) Men and women in **our** culture have different socialisation experiences… (Mohd Jan 2006: 47)
(18) Thus, in terms of exploring the status of varieties of English as global languages, **we** must consider… (Evans 2010: 278)
(19)… behave more passively, though there are, **of course**, many differences within each gender. (Mohd Jan 2006: 48)

The highlighted items in (17)–(19) suggest community allegiance. They reflect disciplinary membership and communal agreement.

The second criterion, authority and ownership with promotional purpose, reflects a stronger degree of authorial presence due to its direct reference to the author. Hyland (2001b) explains that researchers have notable promotional and interactional purpose. They need to present their research as valid and contribute to the ongoing discussion in the discipline. In addition, there is a strong drive to develop their scholarly reputation and this demands them to be able to interact effectively with members of the discipline through their research writing. Apart from the use of first person reference *I*, this promotional intention can also be achieved through the use of self-citation. Self-citation highlights a writer's earlier contributions which suggest disciplinary credentials. Such interactional agenda emphasizes a researcher's contribution to the field and accordingly increases the likelihood of acceptance. Hyland (2001a) also points out that authority can be achieved through the use of directives which point readers to certain actions and interpretations. Directives can be achieved in three ways:

(a) By the presence of an imperative

- *Consider* now the simple conventional reflection effect in a magnetic interface. (Physics)

(b) By a modal of obligation addressed to the reader

- What we now *need to* examine is whether there is more to constancy than this. (Philosophy)

(c) What we now *need to* examine is whether there is more to constancy than this. (Philosophy)

• Hence it is *necessary* [to understand the capacitive coupling of the devices to the metal gates]. (Physics)

(Hyland 2001a: 563)

Such uses imply the authoritative position that a researcher holds, enabling them to instruct readers to act accordingly.

Some of the features identified through the application of this criterion to the data include:

(20) … talking in overlap **(Rendle-Short, in press)**, by the time,… (Rendle-Short 2007: 399)
(21) … it is best maintained through intimacy **(Jariah Mohd Jan, 1999)**. (Mohd Jan 2006: 58)
(22) … about Australian English (**see Table 4**). (Evans 2010: 276)

In (20)–(21) the authority of the researcher is established through self-citation, while in (22) it is established through the use of an imperative.

An invitation for reader involvement, the third criterion, is concerned with 'dialogical' strategies for engaging readers in the negotiation of claims. Clearly, the strongest acknowledgements of a reader's presence is the use of the second person pronouns *you* and *your*. However, the use of this approach is not favoured as it suggests a complete detachment of the writer from the reader. Another way of addressing a reader directly is by interrupting the main discourse with a comment on a claim. This is referred to by Hyland (2001a) as a 'personal aside' and is usually placed within brackets or set off with m-dashes. Readers are drawn into a personal dialogue with the writer. As discussed in the final criterion in the instrument for identifying hedges, questions can also be employed to provide opportunities for readers to be dialogically involved in the knowledge making process. Prior to presenting a claim, a writer may choose to invite readers to respond to a question. This question and answer sequence provides an opportunity for readers to play a more active role as they are invited to communicate with the writer. Below are some examples from our data:

(23) … (e.g. media or tourism, however, **language domains where casualness and modernism are valued need to be confirmed in future research**). (Evans 2010: 276)
(24) … especially given that there were a number of respondents who gave 'pleasantness' responses for both varieties **(although considerably more for US English)**. (Evans 2010: 277).
(25) However, such challenges run the risk of being interpreted **(by politicians, or by the overhearing audience)** as adversarial, and… (Rendle-Short 2007: 388)

In each of these examples, the information appearing within the brackets is a brief interruption from the main text, providing a means for the writer to have a quick dialogue with the reader.

The final criterion for the identification of features of writer-reader relationship, anonymity of author identity, is also the fourth criterion for identifying hedging

devices. As we saw in the previous section, depersonalization is a way of eluding a writer's commitment to a claim. While the use of the passive construction and impersonal pronouns such as *one* are considered solely as hedges in some studies (e.g., Luukka & Markkanen's (1997) study on impersonalization and Crismore & Kopple's (1997) work on personal voice), they also play a role in the writer-reader relationship. Commitment, according to Martin-Martin (2008) does not only involve the writer and the proposition but also the writer and the reader. Thus, he explains that the scale of commitment–detachment is also a scale of interpersonal relations between a researcher and his or her discourse community: "the higher the degree of detachment, the higher the degree of deference to the community, and therefore, the higher the degree of protection" (p. 147). (Indeed, the listing of this criterion in the identification of both aspects of stance-taking confirms the notion that there is some degree of overlap between the two and it also supports applying both instruments concurrently when analysing data.)

Writers are presented with a number of options to manage their relationship with potential readers. Apart from displaying both their authority and their community allegiance, they may also opt for anonymity by detaching themselves completely from their claims. Their ability to balance the options available in their writing reflects their familiarity with and acculturation to the discourse and genre. The goal is to be a humble authority. Some of the examples identified with respect to writer-reader relationship are given in (26)–(28):

(26) **It** appears that while women may need to be less aggressive, men, especially… (Mohd Jan 2006:44)
(27) **This suggests that** the majority of these respondents have a positive perception of UK English,… (Evans 2010:275)
(28) **The above analysis has demonstrated** the adversarial nature of the IR's turn,… (Rendle-Short 2007:393)

These examples reflect the writers' attempt to detach themselves from their claims, which corresponds to the established style of the research genre. The options include using the impersonal *it* construction, as in (26), as well as placing the commitment on the research and other aspects of the research, as in (27)–(28).

6 Discussion and Conclusion

Our analysis reveals that while the items identified in this study include those in the literature (despite being sometimes labelled and categorized differently), we have in addition, been able to identify new items. This supports the value of developing instruments that are context-based (Salager-Meyer 2000) and socio-pragmatic in orientation (Hyland 2008). This study also highlights the limitations of using commercially available software programs that encourage analysis of

academic discourse utilizing predetermined lists of items, often determined at word-level. The coding instruments for this research were designed to move beyond the single word as the primary unit of analysis, as discussed in (29) and (30) below:

(29) looks as if (Rendle-Short 2007: 400)
(30) less than positive (Mohd Jan 2006: 44)

In (29), *looks as if* can be replaced with the verb *appears* and therefore can be marked as a hedge cue since it suggests prediction or likelihood. (30) is particularly interesting since *less than positive* could be replaced with the adjective *unsatisfactory*, which suggests inadequacy. However, if this phrase is interpreted as a reduction in writer commitment and is viewed as a face-saving strategy, it can then be considered as a move to reduce the level of imposition placed on the reader, thus, marking it as a hedging device.

In addition, a context-based approach to coding allows for a deeper understanding not only of the different ways in which writers employ hedges, but also of how they manage their relationship with their readers. Most importantly, our study demonstrates that hedges and features of writer–reader relationship cannot be reduced to a set of pre-determined items that repeatedly perform the same functions at all times, as discussed in (31)–(32) below:

(31) Statements invoking 'politeness' also **appeared** with regularity and comprise the fourth category of responses (24 responses). (Evans 2010: 275)
(32) There **appears** to be solidarity between F(C) and F(M) in their discussion of matters pertaining to women and their progress. (Mohd Jan 2006: 55)

The verb *appeared* in (31) merely reflects the frequency of such statements in the text and was therefore not classified as a hedge. Although the verb is being employed to make a claim, it does not function as a hedge. In (32) however, *appears* was coded as a hedging device as it expresses prediction or likelihood in relation to the claim put forward based on an analysis of a dialogue between two female speakers.

The relevance of context for deepening our understanding of how the writer–reader relationship is realized is further exemplified in (33)–(34) below:

(33) Although the current shape of UPSI's logo is round, it once had the shape of a shield (Fig. 3, **see** Appendix). (Osman 2008: 64)
(34) So when we **see** in these results that Chinese students believe that British English is 'gentlemanly', we must understand that… (Evans 2010: 271)

In (33), the verb *see* was coded as a feature of writer-reader relationship as it exemplifies the writer's authority to instruct her readers to act accordingly; in (34) however, *see* was not coded in this way as it implies the act of observing or noticing.

In conclusion, we understand that the analysis of large sets of corpora of academic discourse from multiple disciplines requires researchers and coders to possess sophisticated levels of knowledge of specific epistemological traditions and disciplinary fields. This is necessarily difficult to achieve and is the reason why many pre-programmed text analysis software packages are appealing.

Unfortunately, the desire for pragmatism may come at a price. As our study indicates, if context is ignored, then our interpretations of data and their implications may be compromised and limited.

While it is clearly important to develop effective data analysis instruments, ultimately the success of their application is dependent on the ways in which they are adopted (and adapted) in the field by researchers and their coders. Developing the tools outlined in this paper was time consuming and required careful coder training to ensure inter-coder reliability. The data presented in this paper were selected from a larger study that compares stance-taking moves by writers of English as a first language, with those for whom English is an additional language. Our corpus consists of scholarly publications from the field of Linguistics and Applied Linguistics. We plan to analyse further sets of data from this corpus using these instruments in due course. Meanwhile, we hope that the tools and findings we have discussed here will be useful to other researchers interested in hedging and features of writer-reader relationship as aspects of stance.

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