Disciplinary interactions: metadiscourse in L2 postgraduate writing

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Abstract

Metadiscourse is self-reflective linguistic expressions referring to the evolving text, to the writer, and to the imagined readers of that text. It is based on a view of writing as a social engagement and, in academic contexts, reveals the ways writers project themselves into their discourse to signal their attitudes and commitments. In this paper, I explore how advanced second language writers deploy these resources in a high stakes research genre. The paper examines the purposes and distributions of metadiscourse in a corpus of 240 doctoral and masters dissertations totalling four million words written by Hong Kong students. The paper proposes a model of metadiscourse as the interpersonal resources required to present propositional material appropriately in different disciplinary and genre contexts. The analysis suggests how academic writers use language to offer a credible representation of themselves and their work in different fields, and thus how metadiscourse can be seen as a means of uncovering something of the rhetorical and social distinctiveness of disciplinary communities.

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In recent years there has been a growing interest in the interactive and rhetorical character of academic writing, expanding the focus of study beyond the ideational dimension of texts, or how they characterise the world, to the ways they function interpersonally. Such a view argues that academic writers do not simply produce texts that plausibly represent an external reality, but use language to offer a credible representation of themselves and their work, and to acknowledge and negotiate social relations with readers. The ability of writers to control the level of personality in their texts, claiming solidarity with readers, evaluating their material, and acknowledging alternative views, is

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now recognised as a key feature of successful academic writing. This perspective, however, has been slow to filter through to studies of the research writing of advanced second language students, and the L2 postgraduate dissertation/thesis remains something of a neglected genre.

In this paper, I intend to shed some light on both the genre and the ways L2 writers negotiate its interpersonal demands through a detailed analysis of 240 masters and doctoral dissertations totalling four million words written by Hong Kong Chinese students, together with interviews with student writers. The dissertation is a high stakes genre at the summit of a student’s academic accomplishment. It is perhaps the most significant piece of writing that any student will ever do, a formidable task of intimidating length and exacting expectations which represents what is potentially achievable by individuals writing in a language that is not their own. This study explores a key aspect of L2 writing at this advanced level, seeking to discover how writers perceive and engage with their disciplines through their deployment of interpersonal features of texts. To do this it employs a modified model of metadiscourse to focus attention on the ways writers project themselves into their writing to signal their attitudes towards both their content and their readers.

I believe that in addition to providing a better understanding of the ways second language writers control the resources of English, the study also offers insights into a crucial, and often overlooked, dimension of these resources. In contributing a theoretically more robust model of metadiscourse it suggests rhetorical features that teachers of second language writing might wish to incorporate into their classes.

1. The concept of metadiscourse

Metadiscourse is seen here as the interpersonal resources used to organise a discourse or the writer’s stance towards either its content or the reader (Hyland, 2000, p. 109). It refers to the linguistic devices writers employ to shape their arguments to the needs and expectations of their target readers. The term is not always defined and used in the same way, but it is typically employed as an umbrella term to include a heterogeneous array of features which help relate a text to its context by assisting readers to connect, organise, and interpret material in a way preferred by the writer and with regard to the understandings and values of a particular discourse community (Halliday, 1998a). While some analysts have narrowed the focus of metadiscourse to features of textual organisation (Bunton, 1998; Mauranen, 1993; Valero-Garces, 1996) or explicit illocutionary markers (Beauvais, 1989), metadiscourse is more generally seen as the author’s linguistic and rhetorical manifestation in the text in order to “bracket the discourse organisation and the expressive implications of what is being said” (Schiffrin, 1980, p. 231).

Metadiscourse has contributed to a range of recent work in text analysis. It has informed studies into the properties of texts, participant interactions, historical linguis-
tics, cross-cultural variations and writing pedagogy. Studies have suggested the importance of metadiscourse in casual conversation (Schiffrin, 1980), science popularisations (Crismore & Farnsworth, 1990), undergraduate textbooks (Hyland, 2000), postgraduate dissertations (Bunton, 1998), school textbooks (Crismore, 1989), and company annual reports (Hyland, 1998b). It appears to be a characteristic of a range of languages and genres and has been used to investigate rhetorical differences in the texts written by different first language groups (Crismore, Markkanen, & Steffensen, 1993; Mauranen, 1993; Valero-Garces, 1996). It has also been shown to be present in Early English medical writing (Taavitsainen, 1999), a feature of good ESL and native speaker student writing (Cheng & Steffensen, 1996; Intraprawat & Steffensen, 1995) and an essential element of persuasive and argumentative discourse (Crismore & Farnsworth, 1990; Hyland, 1998a).

In L2 classes metadiscourse is often familiar to teachers as an array of distinct devices which are helpful in assisting readers to process written texts. Thus, logical connectives (however, therefore, etc.), sequencing items (first, next, then, etc.), and hedges (might, perhaps, possibly, etc.) are, if EAP textbooks are any indication, widely taught in academic writing courses. But while the addition of these features can help writers to transform a dry, difficult text into coherent, reader-friendly prose, they are often taught in a rather piecemeal fashion, and little attention is given to how they function more widely to influence the interaction between writer, reader and text, or how they relate to the particular genre and discipline in which the student is working. This is perhaps because they are often seen as mainly linguistic aspects of writing. But as can be seen from these extracts from my postgraduate corpus, metadiscourse can be realised in a variety of ways, ranging from punctuation such as exclamations and scare quotes (1), to whole clauses (2), and even sequences of several sentences (3):

(1) This label identifies the “inferior” status of the migrant. (Public Administration PhD)

In 1998, the total debt to equity ratio of ASAT was as high as 134%! (Business Studies MA)

(2) First, let us consider an oversaturated cross cut. (Computer Studies PhD)

In this chapter, a proposed programme on environmental education, with emphasis on public health will be suggested. (Biology MSc)

(3) This thesis is organised as follows. In Chapter 2, we will give a general background on Cellular Neural Network. We describe in Chapter 3 the approach of robustness analysis for parameter variations. Nonlinear nature of the circuit components and its effect on circuit performance will be detailed in Chapter 4. Chapter 5 extends the analysis to 2D, the rectangularly and hexagonally sampled networks. Chapter 6 summarises the results of this thesis. (Electronic Eng PhD)

There are, in other words, no simple linguistic criteria for identifying the ways that writers can refer to the unfolding argument or their attitude towards it. Not only is it an open category to which new items can be added to fit the writer’s needs, but the same items can
function as metadiscourse in some parts of the text and not in others. Consequently, metadiscourse studies begin with functional analyses of texts.

Metadiscourse is particularly important at advanced levels of academic writing as it represents writers’ attempts to present and negotiate propositional information in ways that are meaningful and appropriate to a particular disciplinary community. On one hand, metadiscourse enables readers to recover an interpretation consistent with their disciplinary knowledge and community-specific rhetorical expectations. Here the writer needs to make assumptions about the reader’s processing abilities, contextual resources, and intertextual experiences. On the other hand, metadiscourse focuses on the participants of the interaction, and the adoption of an acceptable academic persona. Here the writer makes choices to express a ‘voice’ consistent with disciplinary norms by revealing a suitable relationship to his or her data, arguments, and audience (Hyland, 1998a; Hyland & Tse, 2004). Metadiscourse thus provides a link between texts and disciplinary cultures, helping to define the rhetorical context by revealing some of the expectations and understandings of the audience for whom a text was written.

In sum, metadiscourse is recognised as an important means of facilitating communication, supporting a writer’s position, and building a relationship with an audience. Its significance lies in the role it plays in explicating a context for interpretation and suggesting one way which acts of communication define and maintain social groups. Yet despite this importance surprisingly little is known about the ways it is realised in key genres in which L2 writers participate. This paper seeks to address this gap.

2. Students, texts and procedures

The study employed both qualitative and quantitative approaches, comprising frequency counts and text analyses of a corpus of 240 dissertations by L2 postgraduate writers together with interviews with postgraduate students themselves. The students were overwhelmingly from Hong Kong with Cantonese as their first language, with a sprinkling of Chinese mainland students. The corpus consists of 20 masters and 20 doctoral dissertations from each of six academic disciplines: Electronic Engineering (EE), Computer Science (CS), Business Studies (BS), Biology (Bio), Applied Linguistics (AL), and Public Administration (PA). The dissertations were obtained with permission of the writers from the libraries or relevant departments at five Hong Kong universities and scanned to produce an electronic corpus of four million words, 2.6 million in the PhDs’ and 1.4 million in the Masters’ texts.

Given the highly contextual nature of metadiscourse and the fact that a particular form can serve either a propositional or metadiscoursal function, a sample of two texts from each discipline was initially coded manually to identify potential metadiscourse signals and to classify more delicate sub-categories. Once a framework had been established, the entire corpus was searched electronically for all these expressions using MonoConc Pro, a text analysis and concordance programme. A corpus of this size generates thousands of instances of high frequency devices, such as some modals and conjunctions, for example, which can run into the high hundreds. Therefore, 50 sentences containing each item in each discipline and degree corpus were randomly generated from the corpus. These 50 were then
carefully analysed in their contexts to ensure they were functioning as metadiscourse by my research assistant and myself, working independently. A final figure was calculated as a proportion of the sample size multiplied by the total number of words in that discipline and degree. These were then normed to occurrences per word to facilitate comparison across corpora of different sizes.

In addition, two MA students and two PhD students from each discipline were interviewed as a way of both gaining insights into the text data and of discovering something about their own preferences and thoughts on disciplinary practices. Each of the 24 students was interviewed once. These interviews employed a semi-structured format to allow peripheral topics to be followed-up if important and were conducted either in English or Cantonese as the interviewee preferred (see Appendix A for interview guide).

3. An interpersonal model of metadiscourse

Metadiscourse enables the analyst to see how writers choose to handle interpretive processes as opposed to statements relating to the world, but this can be understood in several ways and, the literature contains a number of metadiscourse taxonomies (Crismore, 1989; Hyland, 1998a, 2000; Mauranen, 1993; Vande Kopple, 2002). Most of these follow Crismore et al. (1993) in appealing to Halliday’s (1994) tripartite conception of metafunctions which distinguishes between the ideational elements of a text, that is the ways we encode our experiences of the world, and its textual and interpersonal functions. But while Halliday’s terminology lends a certain theoretical respectability to the division of metadiscourse into textual and interpersonal aspects, metadiscourse plays no part in his thinking and in practice there are serious difficulties in identifying two single, discrete functions of metadiscourse. This is because textual resources do not constitute a neatly separable set which can be clearly distinguished from either propositional or interpersonal aspects (Hyland & Tse, 2004).

Unlike propositional and interpersonal meanings, which orient to extra-linguistic phenomena, the textual function is intrinsic to language and exists to construe both propositional and interpersonal aspects into a linear and coherent whole. Textual elements, in other words, have an enabling role (Halliday, 1994), facilitating the creation of discourse by allowing writers to generate texts which make sense within their contexts. Like other features of ‘textual metadiscourse,’ the links that conjuncts (but, because, and) and adverbials (subsequently, first, therefore) signal between clauses can be oriented either towards the experiential or the interactional, referring to either propositional or interpersonal meanings. The tendency to see conjunctions as expressing connections between ideas is perhaps a result of our primarily ideational orientation to the world. But while academic texts may be expected to favour propositional functions, conjunctions are also interactionally motivated, contributing to the creation and maintenance of shifting interpersonal orientations.

This is best illustrated in cases where conjunctions act as concessives, as these not only create a textually cohesive text, but also rhetorically acknowledge voices other than the writer’s own. Concessives demonstrate a sensitivity to audience understandings by monitoring the reader’s response to the discourse and marking what the writer anticipates will be unexpected (e.g., Barton, 1995). Tracking readers’ expectations is a key inter-
personal strategy in academic writing and conjunctions allow writers to manoeuvre themselves into line with what they expect readers may think to head off objections or counterclaims and to gain a more sympathetic hearing for their own views:

(4) Admittedly, the data collection of the present study may be classified as “opportunistic”, rendering the representativeness of the research findings very limited. (PA PhD)

It is, of course, possible to design tasks that contain more than one activity type—an information gap followed by a discussion for example, but in this case the task would be more correctly regarded as a composite type. (AL MA)

While it is true that some peasants may grow vegetables on these plots for family use, and that these plots do receive proportionally more organic fertilizer in the form of night soil, it must be understood that this has been a customary practice. (PA PhD)

These ‘textual’ devices are doing interpersonal work here, allowing the writer to display a degree of familiarity with disciplinary knowledge by expressing what he or she hopes will be a shared response.

In other words, the fact that functions overlap in academic arguments means that distinguishing a purely textual role for metadiscourse is rather more problematic than is often acknowledged in the literature. In fact, the explicit signalling of connections between elements in an argument (as opposed to showing relationships between activities in the real world) is always related to the writer’s awareness of self, the reader, and the reader’s likely response. What is commonly referred to as textual metadiscourse is therefore more usefully seen as an element of the writer’s interpersonal decisions to highlight certain relationships in the text to accommodate readers’ understandings and guide them towards the writer’s preferred interpretations.

Metadiscourse can therefore be regarded as a way of understanding how academic writers express their interpersonal understandings, how they shape their propositions to create convincing, coherent discourse in particular social and institutional contexts. An orientation to the reader is crucial in securing rhetorical objectives in research writing as writers have to anticipate and respond to the potential negation of their arguments. Metadiscourse is the way they do this by drawing on what I shall call, borrowing Thompson’s (2001) useful terms, interactive and interactional resources. These are elaborated below and summarised in Table 1.

Interactive resources allow the writer to manage the information flow to explicitly establish his or her preferred interpretations. They are concerned with ways of organising discourse to anticipate readers’ knowledge and reflect the writer’s assessment of what needs to be made explicit to constrain and guide what can be recovered from the text. These resources include the following:

- **Transitions**, comprise an array of devices, mainly conjunctions, used to mark additive, contrastive, and consequential steps in the discourse, as opposed to the external world.
- **Frame markers** are references to text boundaries or elements of schematic text structure, including items used to sequence, to label text stages, to announce discourse goals, and to indicate topic shifts.
Endophoric markers make additional material salient and available to the reader in recovering the writer’s intentions by referring to other parts of the text.

Evidentials indicate the source of textual information which originates outside the current text.

Code glosses signal the restatement of ideational information.

Interactional resources focus on the participants of the interaction and seek to display the writer’s persona and a tenor consistent with the norms of the disciplinary community. Metadiscourse here concerns the writer’s efforts to control the level of personality in a text and establish a suitable relationship to his or her data, arguments, and audience, marking the degree of intimacy, the expression of attitude, the communication of commitments, and the extent of reader involvement. They include:

- **Hedges** mark the writer’s reluctance to present propositional information categorically.
- **Boosters** express certainty and emphasise the force of propositions.
- **Attitude markers** express the writer’s appraisal of propositional information, conveying surprise obligation, agreement, importance, and so on.
- **Engagement markers** explicitly address readers, either by selectively focusing their attention or by including them as participants in the text through second person pronouns, imperatives, question forms and asides (Hyland, 2001a).

### Table 1
A model of metadiscourse in academic texts

<table>
<thead>
<tr>
<th>Category</th>
<th>Function</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interactive resources</td>
<td>Help to guide reader through the text</td>
<td>In addition/but/thus/and</td>
</tr>
<tr>
<td>Transitions</td>
<td>Express semantic relation between main clauses</td>
<td>Finally/to conclude/my purpose is to</td>
</tr>
<tr>
<td>Frame markers</td>
<td>Refer to discourse acts, sequences, or text stages</td>
<td>Noted above/see Fig./in Section 2</td>
</tr>
<tr>
<td>Endophoric markers</td>
<td>Refer to information in other parts of the text</td>
<td>According to X/(Y, 1990)/Z states</td>
</tr>
<tr>
<td>Evidentials</td>
<td>Refer to source of information from other texts</td>
<td>Name people/e.g./such as/in other words</td>
</tr>
<tr>
<td>Code glosses</td>
<td>Help readers grasp meanings of ideational material</td>
<td>Name people/e.g./such as/in other words</td>
</tr>
<tr>
<td>Interactional resources</td>
<td>Involve the reader in the argument</td>
<td>Might/perhaps/possible/about</td>
</tr>
<tr>
<td>Hedges</td>
<td>Withhold writer’s full commitment to proposition</td>
<td>In fact definitely/it is clear that</td>
</tr>
<tr>
<td>Boosters</td>
<td>Emphasise force or writer’s certainty in proposition</td>
<td>Unfortunately/I to agree/surprisingly</td>
</tr>
<tr>
<td>Attitude markers</td>
<td>Express writer’s attitude proposition</td>
<td>Consider note that/you can see that</td>
</tr>
<tr>
<td>Engagement markers</td>
<td>Explicitly refer to or build relationship with reader</td>
<td>Consider note that/you can see that</td>
</tr>
<tr>
<td>Self-mentions</td>
<td>Explicit reference to author(s)</td>
<td>I/we/my/our</td>
</tr>
</tbody>
</table>
Self-mentions suggest the extent of author presence in terms of first person pronouns and possessives.

4. Metadiscourse in postgraduate writing

The frequency counts indicate the importance of metadiscourse to students writing in this genre, with 184,000 cases in the four million words, or one signal every 21 words. Table 2 shows that writers used slightly more interactive than interactional forms, and that hedges and transitions were by far the most frequent devices overall, followed by evidentials and engagement markers.

The most frequent sub-category in the corpus is hedges, which constitute 41% of all interactional uses, reflecting the critical importance of distinguishing fact from opinion in academic writing and the need for writers to evaluate their assertions in ways that are likely to be acceptable and persuasive to their examiners and supervisors. In fact, may, could and would, used epistemically to present claims with both appropriate caution and deference to the views of reader/examiners were among the highest frequency items in the corpus. In general, then, these students’ use of metadiscourse demonstrates a principal concern with expressing arguments explicitly and with due circumspection.

There is also a large number of transitions in the corpus. I noted above that transitions, principally conjunctions, are central to academic writing as they represent writers’ attempts to ensure readers are able to correctly recover their intentions. It is important, however, to distinguish conjunctions which are used metadiscoursally, that is, to mark transitions in the argument, from those which link experiences in the world beyond the text. Metadiscourse is concerned with unpacking the decisions writers make in creating a discourse itself rather than the events and processes they have participated in outside it. This means identifying as metadiscourse those cases where transitions or frame markers are being used to link sequences in the argument (as in 5 below) and discounting those cases where they are being used to express relations between processes (as in 6):

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Table 2
Metadiscourse in postgraduate dissertations (per 10,000 words)

<table>
<thead>
<tr>
<th>Category</th>
<th>Masters</th>
<th>Doctoral</th>
<th>All</th>
<th>Category</th>
<th>Masters</th>
<th>Doctoral</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitions</td>
<td>75.8</td>
<td>95.6</td>
<td>89.0</td>
<td>Hedges</td>
<td>86.1</td>
<td>95.6</td>
<td>92.4</td>
</tr>
<tr>
<td>Evidentials</td>
<td>40.0</td>
<td>76.2</td>
<td>64.1</td>
<td>Engagement markers</td>
<td>39.7</td>
<td>51.9</td>
<td>47.8</td>
</tr>
<tr>
<td>Code glosses</td>
<td>27.4</td>
<td>40.6</td>
<td>36.2</td>
<td>Boosters</td>
<td>31.7</td>
<td>35.3</td>
<td>34.1</td>
</tr>
<tr>
<td>Frame markers</td>
<td>20.7</td>
<td>30.3</td>
<td>27.1</td>
<td>Attitude markers</td>
<td>20.4</td>
<td>18.5</td>
<td>19.2</td>
</tr>
<tr>
<td>Endophorics</td>
<td>22.3</td>
<td>24.0</td>
<td>23.4</td>
<td>Self-mentions</td>
<td>14.2</td>
<td>40.2</td>
<td>31.5</td>
</tr>
<tr>
<td>Interactive</td>
<td>186.1</td>
<td>266.7</td>
<td>239.8</td>
<td>Interactional</td>
<td>192.2</td>
<td>241.5</td>
<td>225.0</td>
</tr>
</tbody>
</table>

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2 The fact that metadiscourse often has clause or sentence length realisation means that my standardised figures are not meant to convey the overall amount of metadiscourse in the corpus, but simply compare different patterns of occurrence of metadiscourse in corpora of unequal sizes.
The findings further supported that social workers were sympathetic towards the abused wives. (PA MA)

The next question I want to examine is the relationship between the teacher’s language proficiency and teaching effectiveness. (AL MA)

Crops accounted for a significant proportion of heavy metals dietary intake. The reasons are two fold. Firstly, crops are the bottom positions of many food chains and food webs. Secondly, vegetables are one of the major dietary components of Hong Kong people. (Bio PhD)

Ye Jian-ying and Deng Xiao-ping further raised nine-point and six-point proposals in 1981 and 1983, respectively. (PA PhD)

In the next step, this residual signal is reconstructed by adding the same prediction as was subtracted earlier in the encoding process. (C PhD)

For the boric acid indicator, firstly, 5 g of boric acid crystals was dissolved in 200 ml of warm distilled water, secondly, 40 ml of methyl red indicator [0.02% (w/v) in 60% ethanol] and 1.5 ml of bromocresol green indicator [0.1% (w/v) in 60% ethanol] were added to the boric acid solution. (Bio PhD)

In other words, metadiscourse is concerned with interpersonal, not experiential relations, as it is these which reveal the ways writers seek to support their theses and relate their texts to their readers.

4.1. Differences of degree

Since the use of metadiscourse is closely related to its socio-rhetorical contexts, it is not surprising to find variations across the two degree corpora. Referring back to Table 2 shows that the Master’s students used slightly more interactional metadiscourse and the doctoral writers substantially (10%) more interactive forms. The PhD dissertations also contained far more metadiscourse overall, with 73% of all cases in the study in terms of raw numbers and 35% more when normed for text length. These variations can perhaps partly be explained by the fact that the PhD corpus was twice the length of the masters corpus, making more interactive devices necessary to structure more discursively elaborate arguments. However, the greater use of metadiscourse in the PhDs can also be seen as representing a more sophisticated approach to language as these advanced students sought to craft more “academic” reader-friendly prose and make more concerted attempts to engage with their readers. Metadiscourse represents a reflective awareness of self, text, and audience, and its use here suggests writers’ attempts to present themselves as competent academics immersed in the ideologies and practices of their fields.

In the interactive categories, for instance, these doctoral writers made far more use of evidentials, with over four times the number of intertextual references. Citation is central to the social context of persuasion in academic writing as it helps provide justification for arguments and demonstrates the novelty of the writer’s position. For PhD students however it is much more than this. It also allows them to display their knowledge of the field’s
literature and to establish a credible ethos that values a disciplinary research tradition. PhD interviewees showed a clear grasp of the rhetorical importance of evidentials:

References are important not only for showing readers that I’ve read a lot, but also evaluating others’ work and to justify my own perceptions. Unlike in writing undergraduate thesis when we cited others’ work as background information, in doing a PhD we need to be more critical and be able to evaluate what others have done so to make our own opinions prominent. (CS PhD interview)

It is important to give references, especially in describing the project design. I have to justify the reasons why I do the project, so I need to point out what other people have done and the need of the general market; this requires references to others’ work. (BS PhD interview)

While the use of evidentials is important to these doctoral students in building a skilled writer identity and a disciplinary informed text, the masters students were less concerned about establishing their academic credentials. The experience of many tutors in Hong Kong is that there is considerably less investment by the Masters students in their studies. Not only are their texts much shorter, but they are also completed fairly quickly and in addition to substantial coursework. Their writers, moreover, are normally studying part time and are looking forward to returning to their professional workplaces rather than a career in academia. Consequently, their reading of the literature, and their desire to demonstrate their familiarity with it, may be less pressing.

Transitions, code glosses, and frame markers were also far more heavily employed in the interactive metadiscourse of PhD students, suggesting a clear audience orientation and greater attempts to organise their discourse in ways that readers are most likely to understand. The PhD students raised the issue of audience repeatedly in the interviews, stressing how this might influence their writing:

I expect my main audience would be my two supervisors, examiners, perhaps some future students, but mainly people in the same field. These audiences would affect my organisation as I may need to write in similar flow as my audience would expect. (Bio PhD interview)

I suppose my thesis does not appeal to the general audience. However, I consider this group of general audience in organising my thesis, as it is my goal to write in a way that even outsiders could understand. When I’m writing the thesis, I consider people outside my field and imagine they will read it, so I write it in a simple way with all the jargons explained. (CS PhD interview)

As I don’t know who exactly would be my examiners, so I’ve to take all possibilities into account, and this definitely affects my writing. I’d avoid using jargons, because my examiners, should be in the same discipline, but there are still many different areas of studies. I’d also include some classic literature as examiners would ask why I didn’t. If I were to publish my paper, I’d have a totally different approach. (PA PhD interview)

Similarly, doctoral students employed far more interactional metadiscourse markers, with much higher use of engagement markers and self-mentions. While students are often
taught to avoid the use of first person, in many cases it is a key way in which professional academics are able to promote competent scholarly identity and gain credit for their research claims (Hyland, 2001b). Self-mention plays a crucial role in mediating the relationship between writers’ arguments and the expectations of their readers, and the decision to adopt an impersonal rhetorical style or to represent oneself explicitly can influence the impression student writers make on their readers and have significant consequences for how their message is received. While there are considerable disciplinary variations, PhD writers made far more use of this resource, with the doctoral dissertations containing four times more cases. The points at which these writers chose to metadiscoursally announce their presence in the discourse, moreover, often tended to be where they were best able to promote themselves and their individual contributions:

(7) I will demonstrate how these identity talks denoted changes in the way public housing tenants defined their own identities. (PA PhD)

Using Y chromosome sequences from male fetuses as a marker and the highly sensitive and specific real-time quantitative PCR assay as a tool, I show that circulating fetal DNA is cleared rapidly from maternal plasma, with a half-life of the order of minutes. (Bio PhD)

By comparing the results of the Hodrick Prescott filter with those of the high pass and band pass filters as they apply to the Hong Kong QDP, I will establish that the latter two are more useful. (BS PhD)

In spite of the individual differences among the instructors in their evaluation, my analyses revealed certain commonalities among the instructors. (AL PhD)

Generally however, there was a certain amount of confusion about the use of self-mention, particularly among the Masters students, who often said in the interviews that they would avoid it:

In our discipline, it is ok to use “I”, but only for established scholars. It is not appropriate to use “I” for students as “I” sounds like you are teaching the readers something. That you are powerful. (BS MA interview)

I don’t think the use of “I” is appropriate as it gives personal opinions. (CS MA interview)

Though I’m not sure if “I” is acceptable, I’d avoid using it because it gives some kind of self opinion while most of the content in a thesis needs to be objective I think, my supervisor would also cross out instances of “I”. (EF PhD interview)

So, while the more advanced students may have been slightly more comfortable using self-mentions, many saw it as inappropriate for novices, believing that it conflicted with the requirement of objectivity and formality in academic writing.

Engagement features were also more heavily represented in the doctoral corpus. These comprise a range of devices which bring readers into the text as participants in an unfolding dialogue (Hyland, 2001a). These are mainly imperatives and obligation modals which direct the reader to some action or understanding and so function to
position readers by setting up premises (8) or emphasising what they should attend to in the argument (9):

(8) Finally, *suppose* both individuals spend zero amount with positive probability. (BS PhD)

First, *let us consider* the stereotypical notion of ‘Chinese indirectness’. (AL PhD)

_Imagine_ an object-oriented database that is based on C++ or Smalltalk. (CS PhD)

(9) *Note* that the bit rate is maintained at 4,000 bps although frame rates are different and the unused bits can be used for future expansion. (EE PhD)

*It is important to recognise* that respect and a personal touch will go a long way in overcoming their possible resistance to supervision. (PA PhD)

However, *it should be borne in mind* that the real reader is a heterogeneous group. (AL PhD)

By leading readers to a particular interpretation, these metadiscoursal directives are the mark of self-assured writers in control of their readers. This may help explain their relative underuse by the Master’s students, as they are collectively less likely to be willing to assert their confidence in their arguments.

### 4.2. Differences of discipline

Not only did metadiscourse use vary in the two degree corpora, but there were also substantial variations across disciplinary communities. In particular, the more “soft knowledge” social science disciplines employed the more metadiscourse overall (56% of the normed count) and, as Table 3 shows, over 60% of the interactional features.

The greatest differences were in the use of hedges, attitude markers, and self-mentions, reflecting the greater role that explicit personal interpretation plays in the humanities and social sciences where interpretations are typically more explicit and the criteria for establishing proof less reliable. (e.g., Hyland, 2000). Because the writer is unable to draw to the same extent on empirical demonstration or trusted quantitative methods in the

<table>
<thead>
<tr>
<th>Category</th>
<th>Applied Linguistics</th>
<th>Public Administration</th>
<th>Business Studies</th>
<th>Computer Science</th>
<th>Electronic Engineering</th>
<th>Biology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedges</td>
<td>111.4</td>
<td>109.7</td>
<td>93.3</td>
<td>55.8</td>
<td>61.5</td>
<td>82.1</td>
</tr>
<tr>
<td>Boosters</td>
<td>37.9</td>
<td>39.5</td>
<td>29.8</td>
<td>29.4</td>
<td>28.0</td>
<td>30.5</td>
</tr>
<tr>
<td>Attitude markers</td>
<td>20.3</td>
<td>26.1</td>
<td>20.7</td>
<td>16.2</td>
<td>10.6</td>
<td>15.5</td>
</tr>
<tr>
<td>Engagement markers</td>
<td>66.1</td>
<td>42.0</td>
<td>35.8</td>
<td>59.2</td>
<td>32.7</td>
<td>15.4</td>
</tr>
<tr>
<td>Self-mentions</td>
<td>50.0</td>
<td>22.4</td>
<td>31.6</td>
<td>29.3</td>
<td>18.1</td>
<td>5.7</td>
</tr>
<tr>
<td>Total interactional</td>
<td>285.7</td>
<td>239.8</td>
<td>211.1</td>
<td>190.0</td>
<td>150.9</td>
<td>149.2</td>
</tr>
<tr>
<td>Totals</td>
<td>551.6</td>
<td>474.9</td>
<td>435.8</td>
<td>389.0</td>
<td>346.5</td>
<td>416.8</td>
</tr>
</tbody>
</table>
soft fields, he or she must work harder to build up a relationship with readers to engage and persuade them to turn them from alternative interpretations. Evaluative and epistemic judgements are therefore important metadiscoursal features for these writers as they seek to negotiate shifting certainties and opinions towards what they discuss.

The use of hedges to soften categorical assertions, for example, is a feature of all academic writing, but is particularly important in the more discursive soft fields, here represented by the social science disciplines of Business Studies, Public Administration, and Applied Linguistics, which contained over 60% more cases. These fields all deal with human subjects and rely on qualitative analyses or statistical probabilities to construct and represent knowledge. For these reasons, they require elaborate exposition and considerable tentativeness in expressing claims:

(9) *This might also indicate* that the enthusiasm and goodwill factors were effects of this type of enrichment programs. (AL PhD)

*It is possible* that the significance of the NOISE parameter is caused by the nonzero qt-l variable that produces some adverse selection cost which is inversely related to the noise of stocks. (BS PhD)

These findings *tended to suggest* that on average the nurse’s perceptions towards CQI programme regarding these four aspects are *quite* neutral. (PA MA)

The sciences, on the other hand, are prepared to trust the results of more quantitative methods and express their arguments as proofs based on these, at least at the postgraduate level of academic writing:

*The findings are certain as they are based on facts. There can be more than one interpretation, but I’d present the one that I think is the most appropriate in a certain way as it is deducted from statistical profile. Even if I were not sure, I will try and express it in a definite way.* (Bio MSc interview)

*In fact in our field it is very practical, statistics is everything, there is no such case as uncertain about the findings. If you ask me, we can’t say we are 100% sure about anything, so sometimes I’d be careful, but again in our field we only value sure ideas, you cannot say you are uncertain all the times or your research would not be valuable no matter how many references you use to support yourself.* (EE MSc interview)

*I’d only write those findings or analysis which I am confident with. When I’m uncertain about something, I ask help from my supervisor, but we will sort out these uncertainties before we write them down. We will disguise any uncertainty in the presentation.* (EE PhD interview)

Self-mention also plays a far more visible role in the soft disciplines. In the humanities and social sciences students are often exhorted by departmental style guides and supervisors to present their own ‘voice’ and display a personal perspective (unpublished supervisor questionnaire data). While this needs to be adequately supported with data and intertextual evidence, these writers generally seek to display a disciplinary situated stance towards the issues they discuss by weaving different kinds of support into a coherent and individual contribution to the field. In the hard fields, and particularly in the more ‘pure’ sciences, the
community tends to value competence in research practices, minimising the role of the individual to imply that the results would be the same whoever produced them. A personal voice is thus subsumed by community knowledge and routines. Biology students, for instance, employed only one tenth of the stance markers used by applied linguists.

My supervisor gave me a lot of ideas on this. His comment was that my own opinions did not stand out in my thesis, it is ok in the literature review section in which you are reporting others’ work and though you may have your ideas, you make it hidden. However, he suggested, in later chapters like the theoretical framework and discussion, I should be more prominent and this helps to show that you are not only parroting others. (PA PhD interview)

We are taught to use passive voice in writing thesis and avoid “I” as it shows subjectivity, because the focus of the thesis should be on the experiments instead of the student who did them. I expect my supervisor would not agree the use of “I” too. (Bio PhD interview)

I think it’s not necessary to emphasize “self” in the report, “self” is not important. What is important is what I did in the research. After all, I think the study of science is not a human-oriented thing. (EE MA Interview)

Computer Science tended to differ from this general picture of impersonality in scientific discourse, displaying relatively high frequencies of both self-mentions and engagement markers. While essentially a hard knowledge field, largely concerned with impersonal computational calculations and software development, computer science is also very much an applied discipline, practical in its orientation and concerned with its relevance to operations in a range of disciplines, including internet marketing, machine translation and e-business. Thus, unlike the other two hard-fields in our corpus where emphasis is often directed to the development of discipline-internal theories, techniques, and applications, research in computer science perhaps tends more to the everyday world and as a result its metadiscourse may have evolved, like those in the soft applied fields, to speak to both academics within the discipline and to practitioners outside it.

The broad disciplinary ‘hard and soft’ groupings were relatively more balanced overall in their use of interactive metadiscourse, although as can be seen in Table 4, frequencies showed considerable variation between disciplines.

Table 4
Interactive metadiscourse in postgraduate dissertations by discipline per 10,000 words

<table>
<thead>
<tr>
<th>Category</th>
<th>Applied Linguistics</th>
<th>Public Administration</th>
<th>Business Studies</th>
<th>Computer Science</th>
<th>Electronic Engineering</th>
<th>Biology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitions</td>
<td>95.1</td>
<td>97.8</td>
<td>89.1</td>
<td>74.3</td>
<td>76.9</td>
<td>86.6</td>
</tr>
<tr>
<td>Frame markers</td>
<td>25.5</td>
<td>29.5</td>
<td>25.3</td>
<td>35.4</td>
<td>24.7</td>
<td>22.5</td>
</tr>
<tr>
<td>Endophorics</td>
<td>22.0</td>
<td>15.5</td>
<td>19.6</td>
<td>25.9</td>
<td>43.1</td>
<td>23.0</td>
</tr>
<tr>
<td>Evidentials</td>
<td>82.2</td>
<td>55.6</td>
<td>60.7</td>
<td>31.1</td>
<td>20.1</td>
<td>99.5</td>
</tr>
<tr>
<td>Code glosses</td>
<td>41.1</td>
<td>36.6</td>
<td>30.0</td>
<td>32.3</td>
<td>30.7</td>
<td>36.0</td>
</tr>
<tr>
<td>Total interactive</td>
<td>265.9</td>
<td>240.5</td>
<td>224.7</td>
<td>199.0</td>
<td>195.5</td>
<td>267.6</td>
</tr>
</tbody>
</table>
Transitions tended to be more extensively and carefully marked in the soft fields, perhaps reflecting the more discursive nature of these disciplines and the need to rely more on the careful crafting of a coherent and persuasive discourse. Students in the hard disciplines, on the other hand, employed relatively more endophorics, especially those in engineering, emphasising their greater reliance on the multi-modal nature of scientific discourse and the use of arguments which require frequent reference to tables, figures, photographs, examples, and so on, as in these examples:

(10) Reader is reminded to refer to Figure 2.11 on the applicability of various frameworks in this research. (CS MSc)

Multi-stage space division switches are proposed to overcome the problem of hardware complexity in crossbar switches (see e.g. 20). (EE PhD)

The architecture is rearranged as shown in Fig. 3.2. (EE MSc)

The C code of the MAE function is listed in Table 3.1. (Bio PhD)

One striking aspect of the frequency counts is the very high use of evidentials in the biology dissertations. There were four times more here than the average for the hard disciplines, and they exceeded those of all other disciplines. Evidentials are metadiscoursal features which provide intertextual support for the writer’s position, a frame within which new arguments can be both anchored and projected. As such, they tend to play a more prominent part in the discourse of the soft disciplines where issues are more detached from immediately prior developments and less dependent on a single line of development (Becher, 1989). Because new knowledge follows more varied routes in the soft fields, there can be less assurance of shared understandings and less clear-cut criteria for establishing claims. As a result, writers often have to pay greater attention to elaborating a context through citation to demonstrate a plausible basis for their claims.

Biology however, although a ‘hard’ science, had the greatest density of citations in the corpus. Interestingly, this reliance on the literature is also a feature of research articles in biology (Hyland, 2000), making it unusual among the sciences in giving significant weight to the originators of claims. This emphasis on giving recognition to the ownership of ideas and showing how current research relates to, and builds on, the work of others is also clear in the biology style guides (e.g., Council of Biology Editors, 1994; Davis & Schmidt, 1995; McMillan, 1997). The biology students in the study were also conscious of this disciplinary ethos and stressed both the proprietary rights to claims and an interest in how particular research contributes to a bigger scientific picture in their interviews:

References are important to support my own ideas. I’d think that more references are better as it may show that you are familiar with the field and that your ideas are common consent with support from other’s work. The age of the references doesn’t matter, and I don’t suppose more recent references are better. For example, some theories dated back to the 1940s but they are still considered as important today; time doesn’t change their truth. (Bio PhD interview)
I used about 30-50 references in my project. More recent references are better because they are more updated. However, my supervisor’s idea is that we should quote the original paper in which the technique was first mentioned or the problem was first addressed. These references may be in the 1950s, but although they are aged they are important as first studies. (Bio PhD interview)

References are important to justify the approach I used, in showing what people in different countries have done, and as basics for arguments in the Discussion section. (Bio MSc interview)

There were, then, considerable variations in the ways that these advanced L2 postgraduate writers used metadiscourse to present their research and interact with their readers. Exploring the patterns of language use employed by these writers across degrees and disciplines has, I believe, helped to show that context plays an important part in writers’ decisions and that the ways they choose to frame, scaffold, and present their arguments and research findings, can be as important as the information they present.

5. Conclusions

The fact that advanced students write as incipient members of professional groups is often overlooked in academic writing classes for second language students, but this discussion suggests one way which this connection is realised. The analysis shows that there is an intimate relationship between discourse practices and the social organisation of disciplinary communities, and that these communities crucially influence the ways that writers typically argue and engage with their readers. While it is true that rhetorical decisions may sometimes reflect either conscious choices or unreflective practices, the analysis of metadiscourse patterns in a large corpus such as this indicates that effective argument involves a community-oriented deployment of appropriate linguistic resources to represent writers, their texts, and their readers.

The importance of metadiscourse as an analytical tool therefore lies in its close association with the contexts in which it occurs. That is, the ways that writers present themselves, negotiate an argument, and engage with their readers is closely linked to the norms and expectations of particular cultural and professional communities. It is a response to the writer’s evaluation of his or her readers’ need for elaboration and involvement, ensuring that he or she supplies sufficient cues to secure an understanding and acceptance of propositional content. Metadiscoursal analysis is therefore a valuable means of exploring academic writing and of comparing the rhetorical preferences of different discourse communities.

In addition to this, metadiscourse offers teachers a useful way of assisting students towards control over disciplinary-sensitive writing practices. Because it shows how writers engage with their topic and their readers, exploration by students of metadiscourse in their own and published writing can offer useful assistance for learning about appropriate ways to convey attitude, mark structure, and engage with readers. Consciousness raising is crucial in L2 writing instruction and for teachers this means helping students to move beyond the conservative prescriptions of the style guides and into the rhetorical contexts of
their disciplines, investigating the preferred patterns of expression in different communities. Students can be helped to read rhetorically and to reflect, perhaps through diaries, on the practices they observe and use themselves (e.g., Johns, 1990). What, for example, is an author’s purpose in using a personal pronoun here? Why has she chosen to summarise or explicitly mark a topic shift at this point? What is achieved by including a citation here? When do writers typically express their doubt and certainty?

Teachers can also allow sample texts to drive learning more directly by helping students’ to explore ‘expert’ models, asking small groups to count the forms they find and discuss typical collocations in a computer corpus, perhaps comparing those found in articles and theses. Students can also interview faculty experts on their own writing practices or on their reactions to the practices of others in the discipline. These findings are likely to provide a useful basis for group feedback discussions and further consideration on the decisions behind certain forms and the impressions one can make in employing them. Finally, and most importantly, students need opportunities to employ these forms and to experiment with their academic writing. Only by employing these interpersonal features in their texts will students be able to get feedback on their practices to evaluate the impact of their decisions more clearly. In all these ways, introducing students to an awareness of metadiscourse can provide students with important rhetorical knowledge and equip them with ways of making discourse decisions that are socially grounded in the inquiry patterns and knowledge structures of their disciplines.

References


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Appendix A. Thesis and dissertation study interview schedule

Preamble

We are conducting a large study of thesis writing by postgraduate students in HK. This will mainly look at texts, but we want to get an idea of how students and supervisors see the process. We want to ask you about your views on research writing. It will take about 50 min.

General

What do you think makes a good thesis?

Do you have any worries about writing up your thesis? What worries you most?

Are you writing your dissertation as you do your research or will you leave it until the end? Why?

What sequence will you write it in? What will you write first and what last?

Why will you write it like that? Did you get the idea from anyone?

Do you talk to anyone about writing your thesis? What kinds of thing do you discuss? (content, organisation, language)

Have you seen a dissertation in your field before? Where do your ideas about dissertation writing come from? (books, journal articles, supervisor friends?)

Audience

Who is going to read your dissertation? Just your supervisor?
Do you think about these readers when you are writing?
Do you think this influences your writing? In what ways? (Do you change anything?)

Language support
Do you think the standard of English is important in a dissertation?
Are you worried about your own standard of English when writing at this level?
Does your supervisor give you any help with your English when you discuss your thesis? Do you get any language feedback from him or her?
Do you know if there is any help you can get when writing—such as Language Centre, Websites, or self-access centre? Do you use any of these?

Organisation
Is it important that you tell your reader how the dissertation is organised? How will you do this?
Can you use lists, bullet points, boxes, or other ways to highlight information?
Do you have to give references? Where do they mainly go in the thesis, which section?
How many references are typical in dissertations in your discipline?
Is the age of the reference important at all? Will you have many that are more than 5-years-old?

Attitude
Do you think it is important to give your attitude to what you are writing about or should you be neutral?
Is it OK for you to express your opinion? Can you express emotions? What kind of emotions?
What can you say if you are not sure if something is correct or not? If you are uncertain about an idea or about a result?
What can you say if you are definite or very confident about an idea or result?
Can you use “I” in your dissertation? Will your examiner/supervisor approve of this?
What kinds of things can you talk about “I” with? (e.g., your method? your ideas?
Your results?)
As you know who will read your dissertation, can you talk to them directly by saying “you”?
Can you talk directly to your reader by asking questions, telling them where to look or how to understand your meaning or results?

Thank you for your help with the study.