

Interacting with Readers: Metadiscourse Features in National University of Lesotho Undergraduate Students' Academic Writing

Puleng Makholu Letsoela

National University of Lesotho, Department of English, PO Roma 180, Lesotho

Tel: 266-2234-0601 E-mail: mv.letsoela@nul.ls

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Abstract

This study examines the use of metadiscourse in National University of Lesotho [NUL] students' academic writing. Focusing on final year undergraduate students' research reports, the study identifies metadiscourse expressions used by the students and their apparent intentions in using such expressions. Data for this study were the discussion sections of the students' research projects. The analysis involved identifying and quantifying instances of metadiscourse, as well as interpreting the functions of the used metadiscourse expressions. The manual analysis was supported by a computerized text analysis program, Wordsmith Tools. The model used for the analysis was proposed by Hyland and Tse (2004) and further developed by Hyland (2005). Findings reveal that NUL students are more concerned with producing coherent texts than explicitly intruding into their texts and engaging the readers. This was seen in the high frequencies of interactive metadiscourse and considerably low frequencies of interactive metadiscourse (1688 as against 395). Students generally avoided self-mentions (typically first person pronouns) and engagement markers to directly address readers. This seems to have been a direct influence of the instruction they received in the compulsory first year course on Communication and Study Skills.

Keywords: Metadiscourse, Interactive metadiscourse, Interactional metadiscourse

1. Introduction

Most literature on metadiscourse describes it as the linguistic items that express meanings other than the ideational/propositional content. In simple terms, ideational or propositional content refers to the information itself, the message the writer wishes to communicate, and not how it is presented. For this reason metadiscourse has been defined as “discourse about discoursing” (Williams 1981: 47) or “discourse about discourse” (Vande Kopple (1985:83). Although there are variations with regard to the sub-categories of metadiscourse, researchers classify metadiscourse into two distinct functional macro categories. They explain that one macro category is used to organize propositional material in a coherent manner while another allows writers to express their perspectives towards the propositional information and engage readers in the ongoing discussion in the text.

Regarding the terminology for these macro categories, some researchers use the terms textual and interpersonal metadiscourse. The terminology and these functional categories are based on Systemic Functional Grammar’s textual and interpersonal metafunctions of language as explained by Halliday (1973). Thus, the text-organizing and interpretive aspects of metadiscourse are labeled textual metadiscourse while the evaluative, attitudinal and engagement aspects are labeled interpersonal metadiscourse. Other researchers use the terms interactive and interactional metadiscourse, following an interpersonal model which was first introduced by Hyland and Tse (2004) and further developed by Hyland (2005). Hyland and Tse (2004:161) explain that all metadiscourse is interpersonal because “it takes account of the reader’s knowledge, textual experiences, and processing needs and that it provides writers with an armory of rhetorical appeals to achieve this”. As such, the authors argue, there is no need to separate those aspects which help with the organization of material and those which convey the writer’s attitudes in the text.

While this model argues that all metadiscourse is interpersonal because of the ongoing dialogue between the writer and the reader, it still distinguishes those interpersonal features that guide the reader from those that address the reader or indicate the writer’s stance. The organizational choices are referred to as interactive resources while the evaluative and engagement features are referred to as interactional resources. As Hyland and Tse (2004: 167) explain:

Interactive resources...are concerned with ways of organizing discourse, rather than experience, 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....Interactional resources, on the other hand, involve readers in the argument by alerting them to the author’s perspective towards both propositional information and readers themselves. Metadiscourse here is essentially evaluative and engaging, influencing the degree of intimacy, the expression of attitude, epistemic judgments and commitments, and the degree of reader involvement.

The model is informed by work on management of interaction between the writer and the reader (for example, Thompson and Thetela 1995; Thompson 2001), and is a modified version of the models used in previous work on metadiscourse. This model is reproduced

below:

Table1. A model of metadiscourse in academic texts

Category	Function	Examples
Interactive resources	Help to guide the reader through the text	
Transitions	express semantic relation between main clauses	in addition/but/thus/ and
Frame markers	refer to discourse acts, sequences, or text stages	finally/to conclude/my purpose here is to
Endophoric markers	refer to information in other parts of the text	noted above/see Fig/in section 2
Evidentials	refer to source of information from other texts	according to X/(Y, 1990)/Z states
Code glosses	help readers grasp functions of ideational material	namely/e.g./such as/in other words
Interactive resources	Help to guide the reader through the text	
Hedges	withhold writer's full commitment to proposition	might/perhaps/possible/about
Boosters	emphasize force or writer's certainty in proposition	in fact/definitely/it is clear that
Attitude markers	express writer's attitude to proposition	unfortunately/I agree/surprisingly
Engagement markers	explicitly refer to or build relationship with reader	consider/note that/you can see that
Self-mentions	explicit reference to author(s)	I/we/my/our

Source: (Hyland and Tse 2004:169)

1.1 Statement of the Problem

Many studies on the importance of metadiscourse have been carried out. Of particular relevance for this study are studies on metadiscoursal features in academic writing. There are studies of the use of metadiscourse, for example, in school textbooks (Crismore 1989), undergraduate textbooks (Hyland 1999), postgraduate writing (Bunton 1999; Hyland 2004) and academic research articles (Harwood 2005; Hyland 2001; 2002; 2005; 2007). In addition, metadiscourse has also been recognized as a feature of good ESL and native speaker writing (Cheng and Steffensen 1996; Intaraprawat and Steffensen 1995) and an important aspect of good persuasive and argumentative discourse (Thompson 2001).

However, undergraduate writing has received little attention as there seem to be no studies carried out on the use of metadiscourse in the genre of undergraduate research reports. Where research has been carried out (e.g. Hyland 2005), focus was on specific sub-categories only.

This research seeks to address that gap in the existing literature. The importance of investigating the use of all sub-categories of metadiscourse in the genre of undergraduate research report lies in the fact that students' reports are a specialized form of writing in which novice students are introduced to methods of investigation in their home disciplines. It is for this reason that the students' research reports follow the research article formats in their disciplines.

1.2 Aim of the study

The aim of this paper is to find out how National University of Lesotho [NUL] final year undergraduate students use metadiscourse in their research projects. The study seeks to address the following questions:

- 1) Which metadiscourse sub categories do students use in their writing?
- 2) What are the students' apparent intentions in using such sub categories?

2. Metadiscourse in Academic Writing: Review of Related Studies

As the present study examines how NUL final year undergraduate students use metadiscourse in their research reports, it is important to review studies that are relevant to the current research so as to provide a basis for comparison. In this regard, the focus will be on expert academic writing and student academic writing. Although the present research will adopt the interactive/interactional model, it will also consider relevant studies which used the textual/interpersonal model. As already mentioned, the interactive/interactional model is relatively new. As such, there are not many studies based on it.

2.1 Metadiscourse in Expert Writing

One study that employed the model of metadiscourse suggested by Hyland and Tse (2004) was carried out by Zarei and Mansoori (2007). The corpus for their study was made from nineteen research articles from Applied Linguistics and Computer Engineering. Nine of the articles were written by native speakers of English and ten were written by native speakers of Persian. The results confirmed the view that metadiscourse is a feature of academic writing as the analysis of the total corpus indicated that there were 5,146 instances of metadiscourse. This translates to one occurrence every sixteen words.

Hyland (1998) carried out a study on academic research articles written in English. He points out that in order to gain respect and influence their fields, academics have to present information and do so in ways that are regarded as acceptable in their fields. This means that while academic writers organize their data into meaningful and coherent patterns, they must simultaneously interact with their audience. Since the readers of academic research articles are mostly academics, many of whom are equally or even more knowledgeable in the field than the author of the article, they are likely to adopt a critical approach to the author's statements. It is therefore important for the author to produce a well-written paper worthy of publication in terms of the content and observance of academic conventions, including tone and style. Authors of academic research articles are well aware that failure to observe these rules means that they will not get their papers published. And, if they do not publish, they

will not be regarded as authorities in their fields. Hyland's study was based on a 160,000 word corpus of 28 research articles written in English. Using Crismore et al's (1993) model, the researcher and two colleagues working independently performed the analysis. The findings indicate that on average there were 373 occurrences of metadiscourse per paper, which translates into about one metadiscourse marker every fifteen words.

2.2 Metadiscourse in Students' Writing

Some studies focused specifically on the use of metadiscourse in students' academic writing. These are described below.

Crismore, Markkanen and Steffensen (1993) carried out a cross-linguistic study of metadiscourse in persuasive writing by upper level undergraduate and graduate American and Finnish university students. For each set of students, they selected twenty essays, ten written by male students and another ten by female students. The essays were analyzed by multiple raters using a modified model of Vande Kopple's (1985) sub-categories. In addition to linguistic expressions, the researchers also analyzed punctuation marks and typographical marks. Findings indicate the importance of metadiscourse in students' persuasive writing as there was an average of one metadiscourse item per line. The findings also indicate that interpersonal metadiscourse was used more frequently than textual metadiscourse at 62.5%. In descending order, students used textual markers, hedges, attitude markers, commentary, interpretive markers, certainty markers and lastly attributors.

Another relevant study is that of Intaraprawat and Steffensen (1995). They compared the use of metadiscourse in six good and six poor persuasive essays written by final year undergraduate and first year postgraduate ESL university students from French-speaking Canada. Using Vande Kopple's (1985) categories, the researchers analyzed the essays independently. They observed that good essays had more total metadiscourse than poor essays. Besides, good essays used more metadiscourse in every category and had a greater variety of forms for each category. Lastly, they observed that the poor essays used more incorrect metadiscourse than good essays (12% vs. 2%) and that the errors occurred most frequently in connectives. With regard to the distribution of the broad categories, good essays used more interpersonal features (54%) while the poor essays used more textual features (57%).

Bunton (1999) examined the use of *metatext*¹, or textual metadiscourse, in thirteen ESL PhD theses submitted for examination by Chinese L1 speakers at the University of Hong Kong. The corpus was 0.61 million words, comprising seven theses from faculties of Science and Engineering and six theses from faculties of Arts, Education and Social Sciences. Bunton's study focused on the use of previews, overviews and reviews, sub-categories within text reference. Results show that the majority of the students (12) provided a thesis scope preview and 8 previewed the scope of each chapter. A majority (11) also reviewed the thesis as a whole.

It is important to observe that although Bunton's terms have not been used in the

¹ Studies which examine only textual metadiscourse use the term *metatext*, rather than metadiscourse.

textual/interpersonal or interactive/interactional models of metadiscourse discussed earlier, they have the same interpretations as the other terms in the categories of textual or interactive metadiscourse. As overviews provide summaries, reviews remind the reader about the material presented earlier and previews announce the material to be presented, they could be equated to the category of frame markers.

Another study that examined the use of metadiscourse in students' theses was carried out by Hyland (2004). He examined the purposes and distributions of metadiscourse in a corpus of 4 million words from 20 Masters and 20 PhD dissertations written in English by Chinese students from five Hong Kong universities. He points out that in dissertation and thesis writing, metadiscourse is particularly important in that it represents the students' attempt to present their texts in ways that are acceptable to examiners as they represent the wider professional disciplinary community in the students' areas of study.

The findings indicate that metadiscourse is a feature of academic writing and is important in postgraduate student writing. There were 184,000 instances of metadiscourse and this translates to one marker per 21 words. There was a balance between interactive (organizational) and interactional (evaluative) forms (239.8 vs. 225 per 10,000 words). The most frequent sub-categories were hedges, transitions, evidential and engagement markers. Hedges constituted 41% of all interactional uses and were used to reflect the importance of distinguishing facts from opinion in academic writing and the need to evaluate assertions in ways that are acceptable to supervisors and examiners. As the students were aware that the decision of examiners and supervisors was final, they were careful to present their arguments with caution and deference to the views of examiners/supervisors. Transitions were used to ensure examiners/supervisors correctly recovered the links between arguments presented in the theses. Evidentials (citations) were used for persuasion as they helped students provide justification for arguments by showing what other researchers have done in the subject. Engagement markers were used to manipulate examiners/supervisors into agreeing with arguments made.

When the two corpora were compared, there was variation in the use and distribution of metadiscourse. For instance, there were more evidential in PhD writing, not only to provide justification for claims made but also to display knowledge of the relevant literature. This way the student writers established academic credentials. The MA students, on the contrary, used citations mainly for background information. It was suggested that since they were not usually interested in pursuing academic careers, there was no need to establish academic credibility. Another variation concerned text organization. Since the PhD theses were longer than the MA dissertations, doctoral students used more transitions, code glosses and frame markers in an attempt to organize the information in ways that would make their theses easy to follow.

To conclude this section, the following matters are highlighted. First, the various studies reported here indicate how metadiscourse is used in different genres to accomplish specific functions. Secondly, as regards the models of metadiscourse, it was observed that, except for terminology and emphasis on metadiscourse being all interpersonal, the

interactive/interactional metadiscourse model is an improvement of the existing textual/interpersonal models.

3. Methods

Data were collected from copies of research projects written by fourth and final year undergraduate NUL students in the following faculties: Faculty of Agriculture [FOA], Faculty of Education [FOE], Faculty of Health Sciences [FHS], Faculty of Humanities [FOH], Faculty of Social Sciences [FSS] and Faculty of Science and Technology [FOST]. The projects were photocopied and scanned to produce a corpus of texts. A simple random sampling technique was used to select the sample. A sample of sixty (60) texts was drawn, ten from each of the identified faculties. The sample produced a corpus of 108,653 words. The choice for this type of sampling was based on the observation that the methods used are generally free of bias since the sample is chosen randomly. Choosing randomly ensures that every unit in the population has an equal chance of being included in the sample. Using the list of potential search items from Hyland (2005) and grammar books (e.g. Biber et al 1999; Quirk et al 1985), but excluding paralinguistic markers of metadiscourse (for example, emoticons, exclamation marks, underlining, italics, bold, font size and type), an electronic search of metadiscourse expressions was made using Wordsmith Tools Version 5, a text analysis and concordance program. This was followed by an in-depth manual analysis.

These two methods of analysis, the computer-assisted search and the manual analysis for interpreting the functions of the used expressions, complement each other. While the software enables the researcher to conveniently and quickly identify potential metadiscourse expressions, it can only present them as concordance lines. Their interpretation depends on human judgment and it is imperative for the researcher to go through the texts to determine the functions of the expressions used and judge their appropriateness in the contexts of use.

As this study deals with only the metadiscoursal uses of words, it is important to highlight how the non-metadiscourse uses were identified. The following example illustrates the non-metadiscourse use of *I*, which belongs to the sub-category of self-mentions:

- 1) The Alloxan that was initially used to induce diabetes had expired and could not induce diabetes in rats. **I** had to wait for a new one which arrived a week late. By the time **I** thought my problems were over, the first years were somehow given access to my experimental animals which they unfortunately used for their experiment. **I** encountered another problem of rats dying after induction of diabetes thus reducing the number of experimental animals. [FOST-2]

In this example, the writer describes what he/she did as part of the actual research. The writer here narrates how the events unfolded in the world outside the text. And, as metadiscourse relates to text-internal relations and not relations outside the current text, this use of the first person pronouns is not metadiscoursal. When used as metadiscourse, the first person pronouns indicate the writer's intrusion into the current text to mark interpersonal relations such as evaluating the propositional material (as in *I do not believe this*) or to guide the reader as to how the material will be organized (as in *In chapter four I will discuss...*). Hyland and

Tse (2004) provide useful criteria for what should count as metadiscourse.

We conclude this section by giving examples of metadiscourse. These have been extracted from the corpus:

- 1) Findings revealed that children who were fed 3 to 4 times per day were thirty-four (77.3%). [FHS-4]
- 2) **According to Hill (1992)**, the amount of fecal coli forms is 200-1000 per 100ml is acceptable if used in crops for human consumption.[FOA-3]
- 3) The phytochemical classes compounds also showed different colors that are unique upon the stipulated treatments explained **in section 4.3**. [FOST-10]
- 4) **To conclude**, some of the impacts of LHDA, on the resettled households really raise more questions than they answer.[FOH-1]
- 5) Over and above, **I personally believe** that LHDA tried their best to improve the standard of living of the affected households, but in reality they could not satisfy everyone. [FOH-10]
- 6) It is also **evident** that financial constraints and political will becomes a problem when the issue of protection of medicinal has to be addressed. [FOH-3]
- 7) The toxicity of saponins is **presumably** a result of their ability to disrupt membranes and cause hemolysis of cells. [FOST-7]
- 8) I **disagree** with the above statements because the houses are much better than the ones they lived in before.[FOH-10]
- 9) (10)The nature of the active compounds responsible for the oxytocic activity is, to **our**
- 10) **knowledge** as per Khan et. Al., the Z- venusol which is a phenyl propanoid glycoside. [FOST-1]

4. Findings and Discussion

This section presents the findings as well as a discussion of those findings. The section focuses on the distribution of metadiscourse categories and the functions of used sub-categories.

4.1 Distribution of Metadiscourse

Frequency counts indicate that there were 2083 instances of metadiscourse distributed among the

ten sub-categories of metadiscourse. The following table shows the ranking for the metadiscourse sub-categories NUL students used:

Table 2. Ranked metadiscourse sub-categories

	Interactive Metadiscourse	Frequency	Percentage	Per 1000 words
	Interactive Metadiscourse	1688	81.04%	15.54
	Interactional Metadiscourse	395	18.96%	3.64
	Sub-category			
1.	Transitions	790	37.93%	7.27
2.	Evidentials	374	17.95%	3.44
3.	Hedges	330	15.84%	3.04
4.	Code glosses	290	13.92%	2.67
5.	Endophoric markers	189	9.07%	1.74
6.	Boosters	46	2.21%	0.42
7.	Frame markers	45	2.16%	0.41
8.	Self- mentions	11	0.53%	0.10
9.	Attitude markers	5	0.24%	0.05
10.	Engagement markers	3	0.14%	0.03
	GRAND TOTAL	2083	100.00%	19.17

As can be seen from the table, there is a high use of interactive metadiscourse. The dominance of interactive metadiscourse indicates the students' awareness of their own writing as they organized their texts into coherent pieces. With regard to the low frequencies in the use of interactional metadiscourse, it can be argued that these indicate the students' reluctance to explicitly intrude into their texts and make explicit self-references (by using self-mentions) or engage their readers as participants in the ongoing discussion.

It can also be observed that transitions, evidential and code glosses were ranked among the most frequent categories, thereby indicating the students' concern for clarity and support of points made. Clarity was achieved through the use of transitions and code glosses. With transitions, students made the semantic relations explicit so as to avoid any possible misinterpretations. With code glosses, students clarified by reformulating their statements and providing examples where needed. Students were also aware that the claims they made with regard to their findings were most likely to be accepted if they were backed up by findings from similar studies. This is why students used evidential to compare and contrast their findings with those in other studies.

Hedges were the only interactional metadiscourse category that ranked amongst the most frequent categories. The high use of hedges (which was comparable to that of evidential and code glosses) is an indication that students took care against making overstatements. The observed balance between evidential and hedges seems to suggest that students were aware that, much as they had evidence to support their claims, they had to use an appropriate tone.

The rankings of metadiscourse categories in this study are somewhat similar to those observed in other studies, especially those that analyzed academic writing. For instance, Hyland (1998) analyzed research articles in four disciplines and observed that the four most frequent categories were, in rank order, hedges, transitions, code glosses and evidential. In a

study of the use of metadiscourse in PhD theses and MA dissertations, Hyland (2004) observed hedges and transitions were the most frequent categories, followed by evidential and engagement markers. Code glosses were ranked fifth.

Taking into account the size of the corpus (108 635 words) and the distribution of metadiscourse, it can be observed that there was one instance of metadiscourse every 52 words. Other studies on student writing, however, reported more counts of metadiscourse. For instance, Crismore et al (1993) reported more than one instance of metadiscourse per line, Intaraprawat and Steffensen (1995) reported one instance in 15 words, and Hyland (2004) reported one instance every 21 words. These differences could be explained by the fact that the data sets are not directly comparable. While this study analyzed only the discussion section of the students' research projects, Crismore et al (1993), for instance, analyzed persuasive essays (which by nature require a lot of metadiscourse) and these are quite different from research reports, both in terms of focus and length. With regard to the results from a closely related genre where Hyland (2004) studied Masters dissertations and PhD theses, it could be observed that while the dissertations and theses are closer to research reports in that they also deal with the students reporting on their research, they are substantially different from undergraduate research reports. The writers of dissertations and theses are much more skilled in writing than undergraduate students and their use of metadiscourse cannot therefore be directly compared to the use by relatively novice academic writers.

In conclusion, it should be noted that, these differences are not meant to judge whether NUL students can use the same amount of metadiscourse as students elsewhere, but to establish if they too can employ metadiscourse appropriately, which, as has been established, is a feature of successful academic writing. By using both interactive and interactional metadiscourse, NUL students have proved that they are aware of the need to produce reader-friendly and persuasive texts. To write effective discussion sections, students needed, among other things, to frequently refer to their data in order to support the claims they made, summarize or remind readers about some key points, refer to previous studies that confirmed or contradicted theirs, and indicate how they viewed the results or arguments presented. Referring to material presented elsewhere in the texts requires the use of endophoric markers, summarizing or reminding readers about key points requires the use of frame markers, referring to previous studies requires the use of evidential, and indicating the writer's views requires the use of hedges and boosters. As students used all these categories, it can be said that they were able to produce reader-friendly and effective texts.

4.2 Functions of Sub-Categories of Interactive Metadiscourse

Interactive metadiscourse is concerned with organizing the text in ways that will make the reading process easy. As the writer presents his/her material, he/she has to ensure that readers can easily follow the arguments. The writer, being conscious of his/her desire to ensure that whatever he/she is writing is interpreted in the way he/she prefers, is aware of the reader and makes decisions on how to lead the reader towards his/her preferred interpretation. This way, the writer controls both the information and the reader.

As seen earlier, transitions were by far the most frequently used devices. They accounted for 47% of all interactive metadiscourse and 38% of all metadiscourse sub-categories. Through them the writers ensured that readers correctly interpreted the relations between arguments. It is important to observe that a clause or a sentence does not need a transition to express its relation with a preceding or following clause or sentence. That relation already exists but it may not be so obvious to the reader. So, by using transitions, the writer guards against any misinterpretations by expressing this relation explicitly. As students' texts are mainly written for assessment, making relations explicit goes beyond making sure that readers can interpret the relations as intended. By using transitions therefore, NUL students did not anticipate that their supervisors might have problems interpreting the semantic relations expressed. It was a way of demonstrating to the supervisors that they understood what they were talking about.

Evidentials were also frequently used, constituting 22% of all interactive metadiscourse and 18% of all metadiscourse sub-categories. Citing other people's work is a convention in academic writing. By reporting on previous research, writers not only display their knowledge of the literature but also provide a context for their research, either confirming or negating previous research or even creating their own research space by pointing to gaps in the existing literature. This is why evidentials are very important in both professional academic writing (Hyland 1999, Harwood 2009) and in student writing (e.g. Petrić 2007). It was observed that NUL students used evidentials mainly for attribution, that is, reporting what the cited authors said or did. Out of a total of 374 citations, 325 were used for this purpose. By reporting on what the authors had said or done, the students wanted to display their knowledge of literature. They wanted to demonstrate to their supervisors that they had done some background reading, and this is something they knew would earn them marks. This finding is consistent with Hyland's (2004) and Petrić's (2007) studies of Masters dissertations where they observed that using citations for background information was the students' main concern.

The next most frequent category was code glosses. Code glosses are devices that elaborate the propositional material. Writers use them to help readers recover their intended meanings. Writers can, for instance, explain difficult terms or concepts and also provide examples to illustrate their point. This is to help readers follow the arguments with ease. In short, through the use of code glosses, the student writers were able to organize their texts into easy-to-follow material by anticipating where readers might have problems understanding terms or arguments. They therefore assisted them by using reformulations and examples. As students were writing mainly for supervisors, they also used code glosses to demonstrate their knowledge of the content. For instance, when students defined terms, they knew very well that their lecturers knew what the terms meant. They provided definitions and explanations mostly to demonstrate that they knew what they were talking about.

As regards the use of endophoric markers, which are expressions that refer to other parts of the texts, it was realized that they were mostly references to tables and figures. This could be expected, because in research reports, tables and figures are very common, for they are probably the best way to summarize material which would otherwise be too bulky to include as part of the linear text. And to make sure that readers could quickly locate that supporting

material, writers frequently used double endophorics (e.g. *table 2 below*). Using double endophorics was necessary especially if we consider that the projects were relatively long. If the writers were to use structures such as *table 2* only, the supervisors could take time trying to locate the material, especially if there was a considerable distance (e.g. several paragraphs or even pages) between the material and the point at which such a reference was made. To make things easier, the writers told their readers whether the additional material was in the preceding or later parts of the texts.

The least frequently used devices in interactive metadiscourse were frame markers, accounting for 3% of all interactive metadiscourse. Frame markers are expressions that signpost how the text is organized, including markers indicating what the writer is doing at a particular point in the text, what he/she has done in an earlier part of the text or what he/she will do later in the text, when he/she changes the subject or when he/she sequences the points. Used appropriately, they make the text flow easily. Their use, especially to indicate topic shift, becomes even more important in such long texts as research reports where the reader has to go through a series of topics. It was observed that instead of explicit markers for topic shift (e.g. *concerning...*, *with regard to...*) students used headings. Headings are signposts that make longer texts easier to read. They provide framing information about what the reader can expect in the following text.

4.3 Functions of Sub-Categories of Interactional Metadiscourse

The function of interactional metadiscourse is to show the writers' stance towards the information they are presenting, as well as engaging the reader as a participant in the ongoing dialogue.

The low frequencies in interactional metadiscourse (395 instances; 19%) might be a good reflection of how students understand their relationship with readers, especially supervisors. Students, particularly undergraduate students, who might perceive themselves as of low academic status, could be reluctant to express their views in front of their lecturers. It is that perceived status, and the fact that their work is graded, that might prevent them from coming out boldly and making categorical claims (boosters), indicating how they feel (attitude markers), using first person pronouns (self-mentions) or even addressing readers directly (engagement markers).

Studies on self-mentions have revealed that these explicit references to the authors are rhetorical strategies that are used by academics to present themselves as authorities in their fields, as they promote themselves and outline their novel contributions in their disciplines (e.g. Hyland 2001; Harwood 2005). As this research did not use interviews, it is not clear whether NUL students are aware that self-mentions can be used in academic writing. But research into students' writing suggests that while students are aware that self-mentions can be used in academic writing, they are still reluctant to explore the repertoire of functions associated with this category. In Hyland's study of undergraduate students' writing, for instance, the students he interviewed indicated that they preferred to be invisible in their writing as they associated the use of first person pronouns with assertiveness. The students felt that they were too inferior to intrude into their texts so assertively (Hyland

2002:1105).

Students in this study were no exception in that they did not use many self-mentions. It would seem that they are still of the view that academic writing should be impersonal and that using self-mentions would mean their writing is not as formal as required. A related issue concerns the use of second person pronouns or features that directly address the reader. The students were so concerned with being impersonal that they even avoided constructions such as *see table 1* which are, in fact, quite common in academic writing.

The avoidance of first person and second person pronouns in students' writing could be a direct result of the instruction given in the compulsory first year Communication and Study Skills [CSS] course. The CSS study package, which is produced in-house, devotes a whole chapter to academic style. The aim of this chapter is to make students aware of the style that is acceptable in academic texts. In one section, the package makes it clear that first and second person pronouns should not be used in an academic essay. The course reader (CSS Package 2010/11: 52) explains that

Two of the most noticeable characteristics of an academic essay are that the style is impersonal and the passive is to be preferred to the active. When one refers to an impersonal style, one means that the **First and Second Person Pronouns** ...are not normally used.

Given this background, and the observed low frequencies of self-mentions and reader pronouns, it can be concluded that students had internalized what they learnt from CSS.

As regards the use of attitude markers, it was observed that they were rarely used as there were only five counts. This was not surprising, if we consider that students generally seemed to regard academic writing as impersonal. We could not expect students to use many attitude markers if they still think their views are not important.

Hedges constituted the majority of instances of interactional metadiscourse, accounting for 84% of all interactional metadiscourse. Hedges enhanced the writers' attempts at producing reader friendly texts in that they enabled the writers to present their information as accurate while also not showing overconfidence. The hedged claims were actually what the students wanted the readers to take as accurate information. By using hedges, writers wanted to highlight that their claims were based on plausible reasoning and readers were therefore expected to understand that the propositions were true as far as could be determined. The inverse relationship between hedges and boosters suggests that there should be clear preference for one rather than the other in one's writing. This is because, if the writer's wish is to give the impression that he/she is not fully committed to the truth of the proposition, then he/she would avoid using boosters. In the same manner, if the writer wants to give the impression that he/she is fully committed to the truth of the proposition, hedging would not be appropriate. The high frequencies for hedges and lower frequencies for boosters were consistent with this view and the general impression that students would prefer not to sound assertive lest their assertiveness be misinterpreted for undue overconfidence. This is in line with the assumption that academic writers should display solidarity by observing rhetorical

conventions of their disciplines in terms of how to present claims with due confidence or politely deny claims (Myers 1989).

5. Conclusions

Two conclusions can be derived from these findings. The first, which relates to the heavy use of interactive metadiscourse, is that students seemed to be more concerned with aiding the reading process. Precision, explicitness and providing evidence for claims made were the students' main concerns. This could be seen in the heavy use of code glosses, transitions and vidential.

The second conclusion derived from the findings, especially those on interactional metadiscourse, is that students seemed to have had a clear sense of audience and this affected their use of metadiscourse. This supports the view that metadiscourse is not an individual stylistic choice but its use depends on considerations of audience and disciplinary communities in terms of their needs and expectations. For these students, there were two types of audience, the lecturer and the general audience (usually other students who might want to research on similar topics). The students had to worry more about the primary reader who is also an expert. This is the lecturer because he/she has a final say in the awarding of marks and since students were more concerned about marks, their writing was influenced mainly by what they knew or thought their lecturers expected.

6. Suggestions for Further Research

This study has focused on one genre of academic writing, that is, the student research report. The study focused on the discussion section, mainly because it was thought to be a rich context for metadiscourse features. Further research on other sections of reports, or even whole projects, which can be classified into good and poor according to the grades they obtained, might also reveal some interesting observations. It might also be interesting to examine the use of metadiscourse in NUL postgraduate students' writing so as to see how similar or different their use of metadiscourse is, compared to the use in undergraduate research reports.

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