A CONTRASTIVE STUDY OF METADISCOURSE MARKERS IN RESEARCH ARTICLE ABSTRACTS ACROSS DISCIPLINES

N. RASHIDI[1]   F. ALIHOSSEINI[2]

Abstract: *The present study aims to investigate the difference in the use and frequency of metadiscourse markers in the abstracts of 20 research articles authored by academic writers in the field of sociology and engineering. The abstracts were examined manually to find any occurrence of metadiscourse markers. Then a chi-square test was used to examine the significance of the frequency of distribution of these markers. The results revealed that there is no significant difference in the use and frequency of these markers in the selected disciplines.*

Key words: *metadiscourse, markers, academic, disciplines, writers.*

1. Introduction

Academic discourse is the common object of examination for distinct subfields of English studies. In most of the traditional studies academic discourse has been perceived as impersonal and objective. A great many of these studies are pedagogically oriented, focusing on student needs and competences. But this view has gradually been replaced by a perception of academic writing as social engagement, involving interactions between writers and readers (Hyland, 2004). Writers and readers negotiate their meanings, and they use interpersonal resources to organize texts coherently and to convey their personality, credibility, reader sensitivity and relationship to the message.

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 characterize 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 now recognized as a key feature of successful academic writing.

One of the most significant and revealing instances of institutional discourse features

---

[1] Shiraz University, Shiraz, Iran.
[2] Shiraz University, Shiraz, Iran.

including academic writing discourse is the speakers' use of metadiscourse, a term generally used to indicate a shift in discourse levels, by means of which the speaker's multilevel messages are being conveyed concurrently with the ongoing discourse, namely "alongside", "above" and/or "beyond" the unfolding discourse.

A lot of linguists have defined the term metadiscourse, among them Vande Copple (2002), Halliday (1973), and Hylland (1998) are the most significant ones. According to Vande Copple (2002) metadiscourse refers to elements in texts that convey meanings other than those that are primarily referential.

Halliday's concept of metafunctions of language use expresses three rather distinct and independent sets of underlying options which he calls macro-functions. The first function, the ideational function, concerns the content of language, its function as a means of the expression of our experience, both of the external world and of the inner world of our own consciousness. The second function, the interpersonal one, contains elements representing personality and personal feelings of the speaker/writer, and of his/her interaction with the other participants in the communicative event. The third function, the textual one is the component that enables the speaker to organize what he is saying in such a way that it makes sense in the context and fulfils its function as a message.

According to Hyland (1998), metadiscourse is self-reflective linguistic expressions referring to the evolving text per se or its linguistic form, including references to the writer persona and the imagined reader qua writer and reader of the current text. He defines two categories of metadiscourse markers: textual and interpersonal.

Textual metadiscourse is used to organize propositional information in ways that will be coherent for a particular audience and appropriate for a given purpose. Devices in this category represent the audience's presence in the text in terms of the writer's assessment of its processing difficulties, intertextual requirements and need for interpretative guidance.

Interpersonal metadiscourse, however, allows writers to express a perspective towards their propositional information and their readers. It is essentially an evaluative form of discourse and expresses the writer's individually defined, but disciplinary circumscribed, persona. Metadiscourse therefore relates to the level of personality, or tenor, of the discourse and influences such matters as the author's intimacy and remoteness, expression of attitude, commitment to propositions and degree of reader involvement.

In recent years, researchers have become aware of the fact that differences in the use of metadiscourse should be understood not only in relation to the national culture of the writer, but also in relation to the genre and the immediate discourse community to which the text is addressed. In this study the way of deploying metadiscourse markers by English advanced writers will be explored by using a contrastive procedure. Two types of texts will be considered: texts written in the field of sociology and texts written in the field of engineering. In order to account for the type and amount of metadiscourse employed by these two groups, the study concentrates on the following metadiscourse sub-types adapted from Hyland's 2004 model:

Textual metadiscourse comprises five sub-classes. The first is logical connectives, mainly conjunctions and adverbial and prepositional phrases, which link ideas in the text. The second is frame markers, which signal boundaries in the discourse or stages in the argument. These include items that: sequence material (*first, next, 1, 2, 3*); label text stages (*to conclude,*

in sum); announce discourse goals (*my purpose is, I propose that*); and indicate topic changes (*well, now*). The third is endophoric markers which refer to other parts of the text. The fourth is evidential markers; indicate the source of textual material. They concern *who* is responsible for the view cited and are distinguished here from the writer's stance towards the view, which is an interpersonal issue. Finally, code glosses explain or expand propositional information to assist interpretation and ensure the writer's intention is understood. They occur within parentheses or are introduced by phrases like *for instance* and *namely*.

In the interpersonal category, hedges and emphatics indicate the degree of commitment, certainty and collegial deference a writer wishes to convey, signalled by items such as *possible, may* and *clearly*. Attitude markers indicate the writer's affective, rather than epistemic, attitude to textual information, expressing surprise, importance, obligation, and so on. Relational markers are devices that explicitly address readers, either to focus their attention or include them as discourse participants. Because affective devices can also have interpersonal implications, attitude and relational markers are often difficult to distinguish in practice. Cases of affect, however, are typically writer-oriented and are signalled by attitude verbs, necessity modals and sentence adverbs. Relational markers focus more on reader participation and include second person pronouns, imperatives, question forms and asides that interrupt the ongoing discourse. Finally person markers refer to the degree of author presence in the text measured by the frequency of first person pronouns. These features are, once again, intimately related to the writer's attention to context and the need to address readers appropriately in constructing an effective and persuasive discourse.

In sum, metadiscourse is recognized 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.

According to Hyland (2004), the importance of metadiscourse lies in its underlying rhetorical dynamics which relate it to the contexts in which it occurs. It is intimately linked to the norms and expectations of particular cultural and professional communities through the writer's need to supply as many cues as are needed to secure the reader's understanding and acceptance of the propositional context. Despite the large number of studies examining the contribution, distribution and use of metadiscourse markers in English, there are not considerable studies investigating their roles in Persian context.

So this study attempts to bridge this gap. Also the results of this study will have obvious importance in increasing students' awareness of the way native speakers of English and Persian organize their writing. Teachers can also provide sample texts for their students and ask them to count the metadiscoursal devices they find and discuss them in class in order to help them write different text genres and make them familiar with writing conventions. Once students know about metadiscourse, they will probably become more skilled at judging when they use too much or too little in their own writing. Additionally, studying metadiscourse should make student writers more sensitive to the kinds of help that their readers need in order to achieve coherent readings of their texts and to how they as writers can supply that help. Finally, exploring the kinds of metadiscourse can reveal much about how

writers from different cultural and social groups see themselves, the acts of writing, their texts and their readers.

1.1. The objective of the study

The aim of this study is to examine the use and frequency of metadiscourse markers in the abstracts of research articles authored by academic writers in the field of sociology and engineering. In general this study will answer the questions presented below.

1.2. Research questions

1. Do articles written in sociology and engineering differ in the use of metadiscourse markers?

2. To what extent are metadiscourse markers different or similar in the articles written in sociology and engineering?

1.3. Review of literature

Metadiscourse has been a concern in a range of recent works in text analysis. It has informed studies into the properties of texts, participant interactions, historical linguistics, cross cultural variations, and writing pedagogy. The following studies all directly and indirectly show one or more aspects of metadiscourse markers and their functions.

Hyland (1998), in a study on research articles in four academic disciplines, sought to show how the appropriate use of metadiscourse crucially depends on rhetorical context. The study identified taxonomy of metadiscourse functions and suggested that metadiscourse reflects one way in which context and linguistic meaning are integrated to allow readers to derive intended interpretations, also metadiscourse provided writers with a means of constructing appropriate contexts and alluding to shared disciplinary assumptions.

Hyland (1998) explored the possible role of university textbooks in students' acquisition of a specialized disciplinary literacy, focusing on the use of metadiscourse as a manifestation of the writer's linguistic and rhetorical presence in a text. Extracts from 21 textbooks in microbiology, marketing and applied linguistics with a similar corpus of research articles were analyzed. The results showed that the ways textbook authors represent themselves, organize their arguments, and signal their attitudes to both their statements and their readers differ markedly in the two corpora. It is suggested that these differences mean that textbooks provide limited rhetorical guidance to students seeking information from research sources or learning appropriate forms of written argument.

Olivera et al. (2001) investigated metadiscourse devices used by copywriters to construct their slogans and headlines in selected women's magazines. The results showed that both textual and interpersonal metadiscourse help copywriters to convey a persuasive message under an informative mask.

Camiciottoli (2003) investigated the effect of metadiscourse on ESP reading comprehension. Two groups of students read selected extracts from two versions of the same text differing according to quantity and type of metadiscourse. Each group then took a reading comprehension test and their mean scores were compared. The findings suggested that a more pronounced use of metadiscourse may be associated with improved comprehension in some cases.

Hyland (2004) explored the use and distributions of metadiscourse in doctoral and masters dissertations written by Hong Kong students. The study proposed a model of metadiscourse as the interpersonal resources required to present propositional material appropriately in different disciplinary and genre contexts. The analysis

suggested 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.

Dahl (2004) investigated writer manifestation in three languages, English, French and Norwegian, and three disciplines, economics, linguistics and medicine, in research articles, to see whether language or discipline is the most important variable governing the pattern of metatext in academic discourse. The findings suggested that the language variable is the most important one within economics and linguistics, where English and Norwegian show very similar patterns, using much more metatext than French; within medicine, all three languages display a uniform pattern of little metatext.

Duen (2007) analyzed the use and distribution of self-mentions in 24 English and Spanish business management research articles. The results revealed greater use of self-mentions in English. The different results also suggested that the use of self-mentions in research articles is not only conditioned by the discipline to which the authors belong but also by the specific cultural context in which research articles are produced and distributed.

Dafouz-Milne (2007) explored the role of metadiscourse markers in the construction and attainment of persuasion. 40 opinion columns, 20 in English and 20 in Spanish extracted from two elite newspapers, the British The Times and the Spanish El Paıs. Findings suggested that both textual and interpersonal metadiscourse markers are present in English and Spanish newspaper columns, but that there are variations as to the distribution and composition of such markers, specifically in the case of certain textual categories (i.e. logical markers and code glosses).

Hempel and Degand (2008) analyzed the actual use and distribution of sequencers among three text genres: academic writing,

journalese and fiction. The results indicated that the three text genres did not show a very big difference in the use of sequencers. More specifically, academic writing proved to be the genre the most structured by sequencers, fiction was the genre the least structured by these items. Journalese can be situated in between academic writing and fiction.

Afros and Schryer (2009) investigated strategies and exponents of the promotional (meta) discourse in natural and social science articles. The inquiry demonstrated that the distribution of promotional elements across article sections and moves in the two disciplines differed. On the whole, the study reconfirmed the advantage of specificity in teaching academic literacy advocated by many applied linguists and provided actual patterns that can be incorporated into the writing curriculum.

2. Method

2.1. Materials

The corpus consists of 10 abstracts in sociology and 10 abstracts in engineering written in English by native English speakers. Abstracts are chosen to be analyzed partly because of their manageable length and compact presentation of argument, but mainly because this is a high stakes genre where writers must foreground both the main claims of the paper and their importance (Hyland, 2000).

The corpus consists of 10 abstracts in sociology and 10 abstracts in engineering written in English by native English speakers. Abstracts are chosen to be analyzed partly because of their manageable length and compact presentation of argument, but mainly because this is a high stakes genre where writers must foreground both the main claims of the paper and their importance (Hyland, 2000).

2.2. Procedures

In order to reveal the discursive effect of the distribution of metadiscourse markers in research article abstracts, first a manual corpus analysis was used to give a qualitative detailed picture of how metadiscourse markers are used in the specific genre of academic writing by native authors of English. To this end, the corpus was searched for all instances of metadiscourse markers listed by Hyland (2004) in his model of academic metadiscourse: logical connectives, which express semantic relation between main clauses, (e.g. in addition/ but/ therefore/ thus), frame markers, which explicitly refer to discourse shifts or text stages (e.g. first/ finally/ to repeat/ to clarify), endophoric markers, which refer to information in other parts of the text (e.g. noted above/ see Fig. 1/ section 2), evidential markers, which refer to the source of information from other texts (e.g. according to X/ Y, 1990/ Z states), code glosses, which help readers grasp meanings of ideational material (e.g. namely/ e.g./ in other words/ i.e./ say), hedges, which withhold writer's full commitment to statements (e.g. might/ perhaps/ it is possible), emphatics, which emphasize force or writer's certainty in message(e.g. in fact/ definitely/ it is clear), attitude markers, which express writer's attitude to propositional content (e.g. surprisingly/ I agree/ X claims), relational markers, which explicitly refer to or build relationship with reader (e.g. consider/ recall/ imagine/ you see), and person markers, which are explicit reference to author(s) (e.g. I/ we/ my/ mine/ our) .The first five comprise textual metadiscourse, the rest comprise interpersonal metadiscourse. Second, the quantitative analysis was done using the SPSS software. In other words, a chi-square test was used to examine the frequency of distribution of metadiscourse markers.

3. Results and Discussions

To illustrate the model and show how metadiscourse markers are used to facilitate effective, disciplinary specific, interpersonal relationships in academic writing, 20 articles in sociology and engineering were analyzed. Tables 1 and 2 illustrate the results. As it is shown in the tables, as the context determines their applications, some of the metadiscourse markers listed by Hyland (2004) are not used in any of the disciplines. The use of other markers differs but, as it is shown in Table 2, the results are not significant. In other words there is not much difference in the use of metadiscourse markers across disciplines. The most frequent subcategories are logical connectives and person markers which indicates the importance of interpersonal relationships. The reason for the application of these metadiscourse markers could be attributed to the nature of these disciplines.

Table 1: Frequency of metadiscourse markers

discipline * metadiscoursemarkers Crosstabulation

Count

		metadiscoursemarkers						Total
		logical conective	frame marker	evidentia markers	ode glosse	hedge	person markers	
discipl	sociolo	20	9	8	7	9	14	67
	enginee	19	4	1	5	6	7	42
Total		39	13	9	12	15	21	109

Table 2: chi –square test

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.199[a]	5	.392
Likelihood Ratio	5.729	5	.333
Linear-by-Linear Association	.834	1	.361
N of Valid Cases	109		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.47.

4. Conclusions

According to the results of the study it can be concluded that there is not any difference in the use of metadiscourse markers across the selected disciplines. To be more specific and to answer the research questions:

1. Do articles written in sociology and engineering differ in the use of metadiscourse markers? and

2. To what extent do they differ?, it can be said that there is no significant difference in the use of metadiscourse markers in these two disciplines. But it is obvious that metadiscourse is an aspect of language which provides a link between texts and disciplines, helping to define the rhetorical context by revealing some of the expectations and understandings of the audience for whom a text was written. Differences in metadiscourse patterns can offer an important means of distinguishing discourse communities and accounting for the ways writers specify the inferences they would like their readers to make. Put simply, the significance of metadiscourse lies in its role in explicating a context for interpretation, and suggesting one way in which acts of communication define and maintain social groups.

References

1. Afros, E. & C.F. Schryer,. "Promotional (meta) discourse in research articles in language and literary studies". *English for Specific Purposes 28* (2009): 58-68.

2. Camiciottoli, B.C. "Metadiscourse and ESP reading comprehension: An exploratory study". *Reading in a Foreign Language15*.1(2003): 28-44.

3. Dahl, T. "Textual metadiscourse in research articles: a marker of national culture or of academic discipline?" *Journal of Pragmatics 36*(2004): 1807-1825.

4. Dafouz-Mil, E. "The pragmatic role of textual and interpersonal metadiscourse markers in the construction and attainment of persuasion: A cross-linguistic study of newspaper discourse". *Journal of Pragmatics 40*(2008): 95-113.

5. Duen˜as, P.M. "I/we focus on…: A cross-cultural analysis of self-mentions in business management research articles". *Journal of English for Academic Purposes* 6(2007): 143-162.

6. Fuertes-Olivera, P. et.al. "Persuasion and advertising English: Metadiscourse in slogans and headlines". *Journal of Pragmatics* 33(2001): 1291-1307.

7. Halliday, M.A.K. *Explorations in the Functions of Language*. Edward Arnold, London,1973.

8. Hempel, S. & L. Degand. "Sequencers in different text genres: Academic writing, journals and fiction". *Journal of Pragmatics* 40(2008): 676-693.

9. Hyland, K. "Persuasion and context: The pragmatics of academic metadiscourse". *Journal of Pragmatics* 30(1998): 437-455.

10. Hyland, K. *Disciplinary discourses: Social interactions in academic writing*. London: Longman, 2000.

11. Hyland, K. "Metadiscourse in academic writing: a reappraisal". *Applied Linguistics 25*.2 (2004): 156-177.

12. Vande Kopple, W. J. Metadiscourse, discourse, and issues in composition and rhetoric. In E. Barton and G. Stygall (Eds.), *Discourse studies in composition* (pp. 91- 113). NY: Hampton Press, 2002.