

# Code Glosses in Academic Writing: The Comparison of Iranian and Native Authors

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## Abstract

One of the challenges of academic writing is the creation of a structurally and communicatively well-organized and coherent text. Metadiscourse enables authors of journal articles to achieve this goal by raising the writers' awareness about discourse features which can contribute to a better academic content production. Also, L1 background has always been a hot topic in applied linguistics and native versus non-native comparisons have been of particular interest in this field. The purpose of this study was to see whether native English speakers and Iranians use code glosses as a sub-category of metadiscourse similarly in their academic writings. To this end, the introduction section of 30 journal articles written by native and Iranian non-native English authors were investigated and the number of code-glosses in each group was counted and analyzed. Both descriptive and inferential statistics were used to answer the research question of this study. The result of data analysis revealed that there was no significant difference between the frequency count of code glosses used by Iranian and native English authors. This study can have pedagogical implications for EAP course designers as well as academic writing instructors and students.

**Keywords:** Code gloss, Discourse Studies, EAP, L2 Writing, Metadiscourse

## I. Introduction

For academicians, researchers and postgraduate students, publication of research articles in their field of study is of crucial importance because their promotion and/or acceptance to higher education programs is somehow dependent on the number of research articles they can publish in prestigious journals related to their discipline. Therefore, university professors and students alike do their utmost to publish as many papers as they can.

In addition, according to Farrokhi and Ashrafi (2009), journal articles, as genuine signifiers of academic writing as well as resourceful communication tools, are playing a pivotal role in today's contacts of the members of different discourse communities all around the globe. It goes without saying that the textual, organizational and discourse features of articles play a decisive role in their acceptance or rejection as the articles are judged by reviewers.

According to Hyland and Tse (2004), meta discourse, sometimes wrongly described as discourse about discourse, is an area known to those who are involved in academic research and in teaching writing, reading, and text structure. This concept perceives writing as a social and communicative interaction between writer and reader, and draws our attention to ways writers project themselves into their discourse to show their attitude toward the content and the readers (Hyland & Tse, 2004). Basically, according to Hyland (2005), meta discourse talks about the idea that communication is more than just the exchange of information, goods or services, but also involves the characters, and attitudes of those who are communicating. He maintains that language is always an outcome of interaction, of the differences between people which are expressed through language, and meta discourse alternatives are the ways we verbalize and construct these interactions. This, based on Hyland's (2005) view, is a dynamic view of language as meta discourse emphasizes the fact that, as we speak or write, we negotiate with others, making decisions about the kind of effects we are having on our listeners or readers (Hyland, 2005).

Considering the significance of meta discourse elements in academic writing, this paper sought to explore code glosses, as a sub-category of meta discourse, in introduction section of applied linguistics articles written by Iranian and native English writers. The researchers were particularly interested in introduction section because usually the first step is the hardest in every endeavor and some writers find it difficult to begin a research article. Also, a cross-linguistic comparison between Iranian and native authors was opted for because, due to the importance of publishing research articles in journals for the academic future of applied linguistics professors and students, the majority of Iranians in this field of study have turned their attention to having

their papers published. So, the objective of this study was to investigate if Iranians use code glosses in the introduction sections of articles in the same way as native writers do.

## **2. Literature Review**

In this section, first an overview of the concept of meta discourse is presented. Then, different models of meta discourse are discussed very briefly. Later, Hyland's (2005) model, which forms the basis of this study, is explained along with its sub-categories. After that, some empirical studies conducted by both Iranian and native researchers will be reviewed.

### ***2.1. The Concept of Metadiscourse***

According to Hyland (2005), the term meta discourse was first introduced by Zellig Harris in 1959 to present a way of understanding language in use, representing a writer's or speaker's efforts to direct a receiver's understanding of a text. Generally speaking, it refers to the linguistic devices writers employ to shape their arguments to the needs and expectations of their target readers (Hyland, 2004).

As Chambliss and Garner (1996) state, meta discourse is considered as one of the significant rhetorical properties and strategies in the construction of any piece of discourse. Although a few scholars have limited the scope of meta discourse to characteristics of textual organization (Bunton, 1998) or explicit illocutionary predicates (Bueavais, 1989), meta discourse is more generally regarded as the writer's linguistic and rhetorical manifestation in the text in order to bracket the discourse structure and the expressive implications of what is being said (Schiffrin, 1980).

Hyland (2004) maintains that meta discourse has been extensively exploited in recent discourse analysis and language education discussions. In the realm of academic writing, meta discourse, in the words of Toumi (2009), is of paramount significance and provides the writer with

useful tools to communicate with the reader in a very efficient way in which the realization of different phenomena related to this communication can be fostered greatly. Moreover, meta discourse deals with a fascinating, and rather novel, way of conceptualizing the interplay between text writers and their texts and between text writers and users (Hyland, 2005). Meta discourse also promotes critical thinking. Camiciottoli (2003) mentions that a beneficial function of meta discourse is increasing readers' critical thinking abilities where readers can analyze the text, make their own assumptions and ideas, and then compare them with those of the authors.

## 2.2 Different Views on Meta discourse

The concept of meta discourse has undergone changes in its theoretical foundations over time and different scholars have proposed different views about what constitutes meta discourse.

A functional classification of meta discourse was presented by VandeKopple (1985). He proposed two major sub-groups for meta discourse: textual and interpersonal. Textual meta discourse, sometimes called metatext (Bunton, 1998), organizes the text and directs the reader. Interpersonal meta discourse is utilized to establish the relationship between the reader and the writer and to include the personal opinions of text producers (Cheng & Steffensen, 1996).

Adel (2010) maintains that the research area of meta discourse is not unified; rather, two quite different strands can be discerned, as noted by Mauranen (1993) and Adel (2006): one adopting a narrow definition (referred to as "reflexive model") and another adopting a broad definition (referred to as 'interactive model'). In the reflexive model of meta discourse, reflexivity in language is stressed and is taken to be the starting point for the category. In the interactive model, by contrast, reflexivity is not a criterion but, instead, the concept is used to describe interaction—primarily in written text—between the writer and audience, conceived broadly.

But meta discourse has certainly outgrown its early characterization as simply "discourse about discourse" and come to be seen, in the "interactive model", as an umbrella term for the variety of strategies authors employ to unequivocally compose their texts, involve the audience, and express their attitudes to both their pieces of writing and their readers (Hyland, 2005). Although scholars such as Adel (2006), VandeKopple (1985), and Crismore (1989) contributed to a better understanding of metadiscourse, Hyland (2005) proposed an "*interpersonal model of metadiscourse*" (see Table 1) which is widely referred to in discourse studies and is used as the basis of the present study too.

**Table 1.** *An Interpersonal Model of Metadiscourse (Hyland, 2005)*

Category	Function	Examples
<b>Interactive</b>	<b>Help to guide the reader through the text</b>	<b>Resources</b>
Transitions	express relations between main clauses	in addition; but; thus; and
Frame markers	refer to discourse acts, sequences or stages	finally; to conclude; my purpose is
Endophoric markers	refer to information in other parts of the text	noted above; see Fig; in section 2
Evidentials	refer to information from other texts	according to X; Z states
Code glosses	elaborate prepositional meanings	namely; e.g.; such as; in other words
<b>Interactional</b>	<b>Involve the reader in the text</b>	<b>Resources</b>
Hedges	withhold commitment and open dialogue	might; perhaps; possible; about
Boosters	emphasize certainty or close dialogue	in fact; definitely; it is clear that
Attitude markers	express writer's attitude to proposition	unfortunately; I agree; surprisingly
Self mentions	explicit reference to author(s)	I; we; my; me; our
Engagement markers	explicitly build relationship with reader	consider; note; you can see that

As mentioned in Hyland (2005), according to this model, meta discourse contains two dimensions of interaction:

*1. The interactive dimension.* This is related to the author's conscious attention that an audience exists and to the ways he or she seeks to take into account the reader's probable knowledge, interests, rhetorical expectations and processing abilities. The author's intention here is to form a piece of writing to satisfy the needs of particular readers.

*2. The interactional dimension.* This aspect of metadiscourse deals with the ways text producers interact with the readers by intruding and commenting on their message. The author's final purpose here is to make his or her views clear and to engage readers by providing them with the opportunity to interact with the unfolding text.

As shown in Table 1, each category includes several subcategories, but the one which was the focus of this study was "code glosses".

### **2.3 What Are Code Glosses?**

Basically, code glosses are used to elaborate on what has just been said by the writer. Hyland (2007) states that these elaborations help the production of well-organized, reader-friendly texts while showing that the author has the reader in mind. They pinpoint where readers require guidance in interpreting points, where more elaboration or specificity is essential, where clarification or examples are needed, etc. In other words, according to Hyland (2007), writer's main points are accompanied by small acts of propositional embellishment that aim to improve perception, form meanings better, and connect sentences to the reader's experience, knowledge-base, and processing requirements. The function of elaboration is divided into two sub-functions: *reformulation* and *exemplification*.

#### **2.3.1. Reformulation**

Hyland (2007) regards reformulation as a discourse function whereby the second part

is a restatement of the first using different wording. Reformulation in writing must be seen as part of a pre-meditated action and; as a result, goal-oriented, showing that the author is trying to get across particular meanings or achieve rhetorical effects. To be more specific, by reformulating, a text producer rewords an idea so that it is understood more easily.

Some reformulation markers include *parentheses, i.e., in particular, particularly, that is, especially, in other words, namely, specifically, which/that means, put another way, and or.*

#### **2.3.2. Exemplification**

According to Hyland (2007), by exemplification, the first part is supported by providing an example in the second part. It is an effort by the author to convey meanings that he believes are recoverable from the example: presenting an element of the writer's data or experience to make the abstract more concrete. Consequently, it indicates that the author has some presuppositions about the reader's familiarity with the topic and world knowledge.

Some exemplificatory markers include *an example of, like, for instance, say, e.g., for example, and such as.*

### **2.4 Empirical Studies on Metadiscourse**

The concept of meta discourse has been investigated in various empirical studies in different areas such as casual conversation (Schiffrin, 1980), science popularizations (Crismore & Farnsworth, 1990), undergraduate textbooks (Hyland, 2000), postgraduate dissertations (Bunton, 1998), school textbooks (Crismore, 1989), and company annual reports (Hyland, 1998). It also has been recorded in Early English medical writing (Taavitsainen, 1999), a feature of good ESL and native speaker student writing (Cheng & Steffensen, 1996) and in persuasive and argumentative discourse (Crismore & Farnsworth, 1990).

Beighmohammadi (2003) investigated the degree to which the utilization of intensity

markers differs in three areas: the hard sciences, social sciences, and TEFL. Seventy-five randomly-selected introductions from prestigious journals were selected. He employed Quirk, Greenbaum, Leech, and Svartvik's (1985) model for intensity markers. According to Beighmohammadi (2003), social science writers used twice as many intensity markers as hard science authors. The TEFL writers' performance was similar to that of hard science writers. He argued that social science writers depend more on discursive and rhetorical strategies in presenting their findings rather than on the mere reporting of facts.

Marandi (2002) examined the use of meta discourse in the introduction and discussion sections of 30 master's theses written after 1990 by Persian-speaking and English-speaking graduate students. She compared three sets of texts: (a) texts by British English writers, (b) texts written in Persian by Iranians, and (c) texts written in English by Iranians. Marandi (2002) analyzed the first 1,000 words in each introduction and discussion section of the master's theses to determine the amounts and the subtypes of meta discourse that the graduate students used. She used her own model of meta discourse developed from different established models. She found that textual meta discourse subtypes were used significantly more in the introductions but that interpersonal meta discourse subtypes were used more in the discussion sections. In addition, the results showed that, of all groups, the native speakers of Persian used text/logical connectors the most while the native speakers of English used them the least.

Dastgoshadeh (2001) investigated the question of whether there was positive impact of meta discourse use on the reading comprehension of EFL university students with high and low levels of English language proficiency. He selected his subjects from different genders, ages, and religions. In appropriate places, he inserted a variety of different subtypes of meta

discourse into a reading passage, on an unfamiliar topic. Dastgoshadeh (2001) found that students at both high and low levels of English language proficiency used meta discourse to comprehend the passage more effectively. English language proficiency was a powerful factor regarding the degree of comprehension achievement. An interesting implication of studies of this kind is the need for further research to examine the percentage contributions of textual and interpersonal types to reading comprehension across different language proficiency levels.

Parvaresh (2008) explored the effect of meta discourse on the comprehension of texts in both English and Persian. Hyland's (2005) model of meta discourse was utilized. The research attempted to discover whether there was a significant difference between the comprehension performance of Iranian EFL learners on the English texts and their translated Persian versions with and without meta discourse in them. Parvaresh (2008) also tried to examine the subjects' consciousness about the meta discourse used and their interactions with those texts in both languages by using a follow-up questionnaire. Using an English text, a series of true/false questions were given about both the English text and the translated Persian text. The EFL learners were limited to higher and lower intermediate learners in language institutes. The results indicated that both higher and lower level EFL learners performed significantly better on the texts with all the meta discourse items left in than on the texts with removed meta discourse items. Thus, lower proficiency EFL learners might benefit more from the presence of metadiscourse in texts. His questionnaire results also suggested that when Iranian EFL learners have problems understanding a text (whether English or Persian), it is the presence of metadiscourse which can help them both comprehend and remember the propositional content of the text more effectively.

Based on what was mentioned above, the following research question was formed for this study:

Is there any significant difference between the number of code glosses used by Iranian and native authors in introduction sections of applied linguistics articles?

### 3. Methodology

#### 3.1. Corpus Description

The corpus used in this study was comprised of 30 research articles written by native authors that had been published in applied linguistics journals and 30 research articles written by Iranian authors. The articles were randomly selected and the introduction section of each article was chosen as the corpus of the study. The articles were taken from journals such as *Journal of Second Language Writing*, *English for Specific Purposes*, and *System* published since 2007 to 2013. To classify the authors based on native/nonnative, the universities affiliation and the names of the authors were examined.

#### 3.2. Data Collection

To collect the data, all the introduction sections were read line by line and whenever an example of a code gloss was spotted, it was recorded in a code gloss table. As it was mentioned, Hyland's (2005) model of meta discourse and his classification of code glosses were used as the framework

in this study. The code gloss table was divided into two parts: reformulation and exemplification, so that each instance of code gloss could be placed in its relevant cell. After finishing each section and recording the number of code glosses, in order to ensure that the frequency counts were accurate, the introduction sections were double-checked and the instances of code glosses were reexamined. Whenever there were differences, the researchers discussed to have an agreement on the selected code gloss.

#### 3.3. Data Analysis Procedure

After data collection was finished, the data were analyzed using both descriptive and inferential statistics by SPSS. To answer the research question of the study, a Chi-square test was run because the collected data were frequency counts. Also, frequency tables and charts were used to display the data.

### 4. Results

First, descriptive statistics were used to tabulate the data. As shown in Table 2, the total number of code glosses used by Iranian writers was 85 ones. Less than half of them (43.5% of the code glosses) belonged to the *exemplification category* and 56.5% belonged to *reformulation category*.

**Table 2.** *Frequency Table for Code Glosses Used by Iranian Writers*

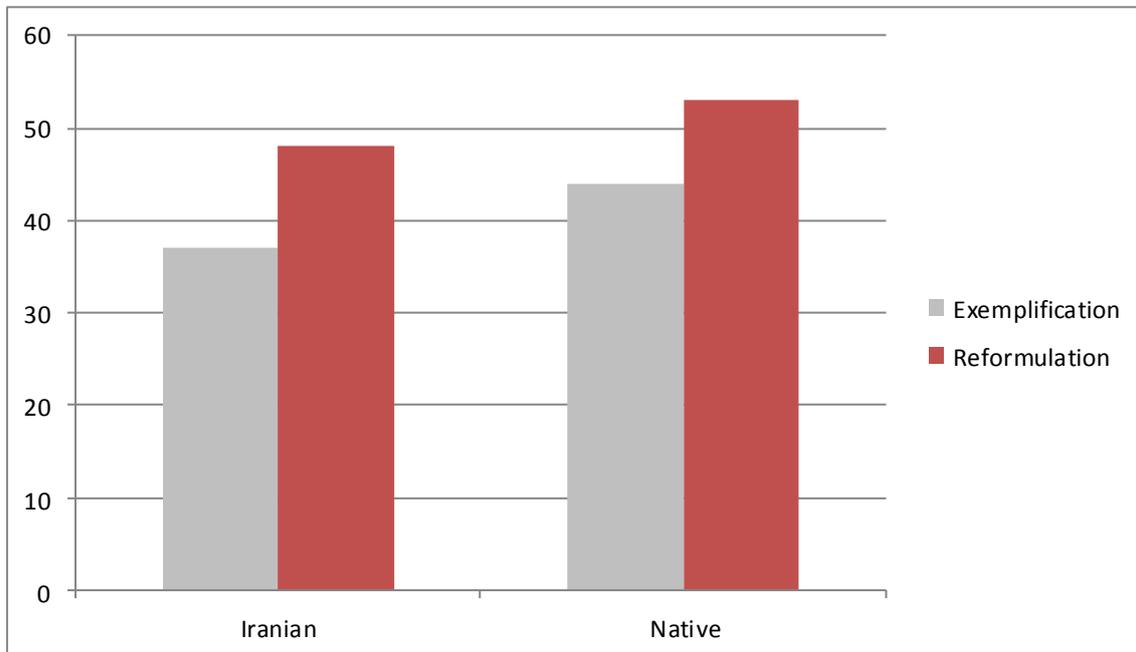
		Frequency	Percent	Valid Percent	Cumulative Percent
Iranian Writers	Exemplification	37	43.5	43.5	43.5
	Reformulation	48	56.5	56.5	100.0
	Total	85	100.0	100.0	

**Table 3.** *Frequency Table for Code Glosses Used by Native Writers*

		Frequency	Percent	Valid Percent	Cumulative Percent
Native Writers	Exemplification	44	45.4	45.4	45.4
	Reformulation	53	54.6	54.6	100.0
	Total	97	100.0	100.0	

Native writers used a total of 97 code glosses. 45.4% of the code glosses were exemplificatory markers and 54.6% of them were reformulatory markers (see Table 3).

Figure 1 shows the comparison of Iranian and native writers in terms of the number of reformulations and exemplifications used by each group.



**Figure 1.** The number of exemplifications and reformulations used by Iranian and native writers

Finally, a Chi-square test was run. As it is shown in Table 4, the p-value was greater than 05; as a result, there was no significant difference between Iranian and native writers in using code glosses in introduction sections of journal articles.

**Table 4.** Chi-square Test Result

Test Statistics	group
Chi-Square	.791 <sup>a</sup>
df	1
Asymp. Sig.	.374

## 5. Discussion and Conclusion

The present study attempted to investigate the number of code glosses used by Iranians and native speakers of English in introduction sections of applied linguistics articles. The data analysis showed no

significant difference between the frequency counts of code glosses in these two groups. Marandi (2002) found that, compared to Iranians, native speakers of English used less text/logical metadiscourse connectors in introduction and conclusion sections of master's theses. Also, Faghih and Rahimpour (2009) suggested that code glosses were used more by Iranians than native speakers of English in applied linguistics articles. However, the findings of the current study do not support such cross-linguistic works.

In this study, both native and Iranian writers used more reformulations than exemplifications. A possible explanation for this might be that both groups preferred to make sure the readers fully grasp the complex ideas presented in introductions by elaborating, or even adhering to less complicated language, than by making the abstract concepts more concrete through

exemplification. It might mean that the writers in both groups considered achieving rhetorical effects through restatement much more conducive to producing reader-friendly prose, as compared to relying on their predictions about the readers' familiarity with the topic and world knowledge. In addition, no significant difference was found between native and Iranian writers in their use of code glosses. An interpretation for this might be the Iranians' command of academic writing. It is likely that the Iranians who were studied in this research had achieved an acceptable level of mastery over the use of meta discourse in writing.

Meta discourse is teachable, and it seems that Iranians who were chosen for this study, motivated by the current importance of having publications for promotion in their field of study, had managed to learn when and how to use such features. But, a note of caution is due here since the researchers had no information about the background of Iranian participants in terms of their language proficiency or their language learning experience.

We write essays to be read. The pedagogical implication of using meta discourse is the fact that when writers use meta discourse, their readers can have an easier job decoding their messages. Previous studies such as Dastgoshadeh (2001) and Parvaresh (2008) show that if a text includes meta discourse elements, it will help students read more effectively and when learners have problems understanding a text, it is the presence of meta discourse which can help them both comprehend and remember the propositional content of the text better. So, if academic writers utilize such features, their articles will be understandable for a broader range of audience.

EAP textbook developers can incorporate meta discourse markers in the academic passages to make them more easily understood. Also, EFL teachers can teach meta discourse markers, including codeglosses,

explicitly in the classroom because, as Cheng and Steffensen (1996) found out, students not only can learn metadiscourse features in terms of its rhetorical features, but also may benefit from the global effects of such explicit instruction by changing their understanding of what composition is about. Having knowledge of metadiscourse in writing classes can also lead to better text revisions, because it creates "... a certain hold on the organization and tone of the emerging text by making structure and tone explicit, by capturing them on paper. Writers can then consider what they are saying more easily and make appropriate changes and improvements." (Cheng & Steffensen, 1996, p.178). Also, Vande Kopple (1985) emphasizes the pedagogical utility of metadiscourse by highlighting the effect it can have on making authors more sensitive to the needs of the readers and the role it can play in training more ethical writers who pay more attention to reflecting any doubts they may have rather than simply asserting that their statements are true.

There is abundant room for further progress in determining the role of metadiscourse in academic writing. Further research can be done using different populations, different genres, or different settings. For example, academic writing of EFL students versus EFL teachers can be explored, or meta discourse features in computer-mediated communication (CMC), conference proceedings, different sections of dissertations, book chapters, and distance learning could be investigated. Moreover, the role of L1, gender, language proficiency, implicit/explicit teaching, academic degree, and exposure to authentic input could be the focus of future studies.

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