

How do Arab Writers Interact With Their Readers? An Analysis of the Use of Metadiscourse Markers

Ahmed Yahya Almakrob

Department of English, College of Sciences and Humanities in Al-Kharj, Prince Sattam bin Abdulaziz University, Al-Kharj, Saudi Arabia

Abstract—A considerable body of research has investigated the use of metadiscourse in academic writing in different languages, and it is assumed in the literature that the use of metadiscourse is language- and culture-specific. However, little research has investigated how Arab writers interact with their readers in Arabic research articles (RAs). Thus, following Hyland's (2005) models, this study explores the use of the interactional metadiscourse in the introductions of 94 Arabic RAs totalling 88,350 words published between 2013-2022. Findings showed that Arab writers tend to establish a relationship with readers and involve them as discourse participants through the use of the inclusive pronoun *nahnu* نحن 'we' and the rhetorical forms. Arab writers used both grammatical and lexical items to express their views with confidence with a high degree of commitment. They were found to use reader-accuracy markers to mitigate their arguments. They, however, appeared not to evaluate what is presented through their personal feelings, and this might be due to sociocultural reasons, which requires further investigation.

Index Terms—Arabic writers, interactional metadiscourse, academic writing, writer-reader interaction

I. INTRODUCTION

As a way of communicating ideas and knowledge, academic writing should also carry the authors' stance and feelings towards the given information. In other words, writers should have the ability to establish a kind of interaction with both the content and its readers. This writing skill, writer-reader interaction, is considered one of the key indicators of successful academic writers. Establishing this kind of interaction in written communication can be achieved through the use of metadiscourse markers. This 'interactional aspect of texts' (Hyland, 2005) refers to the interaction between the writer and the reader, which can be governed by the form and structure of the text as well as the way the writers communicate their ideas and express their opinions (Herriman, 2014). Thus, metadiscourse "carries an important social meaning by revealing the author's personality and identity and by indicating how he expects his readers to respond to his propositions" (Toumi, 2009, p. 64).

Interactional metadiscourse, accordingly, plays a significant role in determining the interaction between the writer and the reader, and this is dependent on the writers' understanding of how to express claims and views as well as their ability to anticipate the readers' needs and reactions to those views (Hyland & Jiang, 2019). As a result, a considerable body of literature has been produced to investigate the employment of metadiscourse in academic writing. According to Hyland et al. (2022), over 600 articles have been published in Scopus, and a search in Google Scholar results in over 25000 papers on the topic. Metadiscourse, therefore, has been predominantly one of the means of evaluating and analysing written discourse since the 1980s (Hyland et al., 2022).

Like English and other languages, Arabic possesses metadiscourse features that can be used to govern the writer-reader relationship. However, Arabic has distinctive lexical means that can be used to establish the writer-reader relationship in academic discourse. Further, the complexity of the Arabic metadiscourse devices might be challenging for text writers and readers. For instance, the particle *qad* (قد) can be used as a booster (to mark certainty) and as a hedge marker (to mitigate the writer's commitment to a proposition). Another form of Arabic rhetorical complexity stems from its culture as the use of metadiscourse is language- and culture-oriented (Kim & Lim, 2013); communicating ideas with readers in written discourse thus varies from one culture to another. Few studies have been conducted to examine the employment of interactional metadiscourse in Arabic RAs.

Hyland's (2017) bibliometric data, for example, showed that metadiscourse has been most frequently studied in languages like Chinese, Persian and Spanish. Specifically, enormous studies have been conducted to examine metadiscourse in different languages by different writers (Al-Mudhaffari et al., 2020; Binmahboob, 2022; Hu & Cao, 2011; Hinkel, 2005, 2009; Hyland, 1998, 2017; Zaki, 2022; Park & Lee, 2022, among many others). However, studying metadiscourse in Arabic discourse has received little attention, particularly articles published in Arabic-medium venues. Here this research addresses this gap to offer what I hope a research-informed description of the use of the interactional metadiscourse devices in L1 Arabic academic writing for both native and non-native writers of Arabic. Using a corpus of leading Arabic-medium journals in the disciplines of linguistics and applied linguistics, this study attempts to explore

how L1 Arabic writers employ interactional metadiscourse in their academic discourse. I will show how Arab writers orient and guide their readers and present their views.

The focus of this research is on the introduction sections of the Arabic RAs. Thus, it provides a systematic analysis of some sociocultural aspects that may affect the usage of the metadiscourse system by native Arabic writers. Specifically, it explores the writer-oriented (i.e., hedges, boosters, attitude markers and self-mentions) and writer-reader (engagement markers) markers used in Arabic RAs. Two research questions guided the investigation of the use of interactional metadiscourse in Arabic RA introductions:

1. What are the most frequent interactional metadiscourse markers employed by Arabic writers in the introductions of RAs?
2. What are the most frequent sub-categories of interactional metadiscourse used by Arabic writers to interact with their readers?

II. LITERATURE REVIEW

A. The Concept of Metadiscourse

It was Harris who first coined the term metadiscourse in the 1950s (Hyland, 2014). Three decades later, attention was paid to this pragmatic feature by some researchers (e.g., Williams, 1981; Kopple, 1985; Crismore, 1989). It has been defined in different ways. For example, metadiscourse markers can refer to “the ways in which the writers and speakers interact through their use of language with readers and listeners” (Hyland, 2017, p. 16). Metadiscourse features are, according to Kopple (2012), “elements of texts that convey meanings other than those that are primarily referential” (p. 37). A more comprehensive definition was given by Hyland (2005, p. 37) in which “metadiscourse is the cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community”.

B. Taxonomy of Interactional Metadiscourse and Their Sub-Categories in Arabic

Metadiscourse has been classified in different ways by different scholars (e.g., Crismore et al. 1993; Dafouz, 2003; Hyland, 1998, 2005; Mauranen, 1993; Kopple, 1985). However, Hyland’s (2005) classification, which is adopted in this study, appears to be the most inclusive scheme for the study of metadiscourse. Hyland classified metadiscourse into two major categories, interactive and interactional metadiscourse. These two dimensions are subdivided into different sub-categories. The interactional metadiscourse and its sub-categories are the focus of this study and are discussed below.

Interactional metadiscourse “concerns the ways writers conduct interaction by intruding and commenting on their message” (Hyland, 2005, p. 49). Accordingly, the purpose of the writer is to explicitly present his/her perspectives and to get the readers involved by allowing them to interact with the text. This type of interaction can be established through “the writer’s expression of a textual ‘voice’, or community-recognized personality, and includes the ways he or she conveys judgments and overtly aligns him- or herself with readers” (Hyland, 2005, p. 49). This metadiscourse dimension, as shown in Table 1 below, can be realized by some linguistic devices, namely hedges, boosters, attitude markers, self-mentions and engagement markers. Like English, Arabic possesses a number of linguistic means that can be used to mark interactional metadiscourse. The interactional markers in Table 1 are thus applicable to Arabic discourse.

TABLE 1
THE INTERACTIONAL MODEL OF METADISOURSE (BASED ON HYLAND, 2005, P. 49)

Category	Function	Arabic Examples
Hedges	withhold commitment and open dialogue	maybe (ربما، لعل، يمكن)، seem (يبدو)، <i>qad</i> + present simple (قد / يكون)، in general (بشكل عام)
Boosters	emphasize certainty or close dialogue	obviously (بوضوح)، known (من المعلوم)، certainly (بالتأكيد)، <i>qad</i> + past simple (قد جاء)
Attitude markers	express the writer's attitude to a proposition	Unsurprisingly (لا غرابة)، uncommon (من غير المألوف)، unfortunately (لحسن الحظ)
Self-mentions	explicit reference to author(s)	We (نحن)، us (نا)، the researcher(s) (الباحث/الباحثون)
Engagement markers	explicitly build relationship with reader	Inclusive pronoun we (نحن)، ought to (لا بد)، must (يجب / يتعين)

The classification of the Interactional sub-categories is, however, slightly different from their English encounters. Table 2 presents these markers, which are the focus of the current analysis.

TABLE 2
INTERACTIONAL SUB-CATEGORIES IN ARABIC (FATHI, 2019; HYLAND, 2005)

Hedges	Boosters	Attitude markers	Self-mentions	Engagement markers
Accuracy-oriented	Grammatical items	Prepositional phrases	First-person singular	Reader pronouns
Writer-oriented	Lexical items	Attitude verbs	first person plural	Questions
Reader-oriented		Attitude Adjectives	The researcher(s)	Directives imperatives

C. *Interactional Metadiscourse in Arabic RAs and L2 Academic Writing*

Although research on metadiscourse has centered on academic writing, especially RAs and abstracts, this line of research has different formats: cross-linguistic studies, undergraduate essays, cross-disciplinary studies, bibliometric studies, and non-academic registers (i.e., business, media, newspaper, etc) (Hyland, 2000, 2017). Research on Arabic metadiscourse in general and interactional metadiscourse in particular, however, is scarce.

Few studies have examined the use of metadiscourse in Arabic academic writing (e.g., Alharbi & Swales, 2011; Alotaibi & Arabi, 2020; Alotaibi, 2015; Zaki, 2022). Using Martin and White's (2005) model, Alotaibi and Arabi (2020) investigated the authorial stance in 20 research articles in the field of education, which is a different genre with a few articles. Findings revealed that Arabic writers preferred to use boosters to present their views regarding previous studies. Similarly, Zaki's (2022) comparative analysis, which focused on the use of interactive and interactional means in Arabic RA abstracts in the field of Humanities and Social Sciences, revealed that Arabic writers used assertive and self-mention markers more frequently than the other categories. Alotaibi (2015) also comparatively examined the use of interactive and interpersonal markers in 44 abstracts (English and Arabic) written by Arab authors. The findings revealed that Arabic abstracts highly included transition markers whereas the English ones included a higher number of frame markers and code-glosses. Likewise, interactive metadiscourse, namely move structure, pronoun use, and promotional features were studied by Alharbi and Swales (2011) in abstracts (Arabic and English) written by Arabic-speaking writers. The results showed that Arab authors slightly preferred using self-mentions.

The use of interactional metadiscourse by Arabic-speaking L2 writers of English was also studied by different authors. Al-Mudhaffari et al. (2020), for example, found that boosters were predominantly used by Yemeni L2 writers. More specifically, Yemeni L2 authors preferred to show a high degree of commitment when they highlight the research gaps and when they discuss their findings, which might be attributed to the influence of their primary language (Arabic). Binmahboob's (2022) study also comparatively investigated the use of both interactive and interactional metadiscourse markers used by British and Arabic-speaking (Saudi) L2 writers of English in applied linguistics articles. It was found that interactive metadiscourse devices were used more predominantly than interactional ones. Further, metadiscourse markers were more common in Articles written by Saudi writers. Unlike engagement markers, transitions were the most common markers in both non-native and native articles.

Another growing literature on metadiscourse research is bibliometric analysis (e.g., Hyland, 2017; Hyland & Jiang, 2018; Park & Lee, 2022). Park and Lee (2022), for example, traced changes in the use of interactional metadiscourse markers over the past 40 years in a corpus of 931 English research articles written by Korean L2 scholars. It was found that there was a universal decline in the use of interactional metadiscourse over the past four decades. Despite this decrease, the use of interactional categories (i.e., hedges, boosters, and attitude markers) by Korean L2 writers remained stable over this period. The findings also suggested that Korean L2 writers' preferences for using hedge devices were more than boosters or attitude markers compared to the employment of these linguistic categories by other worldwide writers.

Comparative studies on metadiscourse have also examined the use of particular metadiscourse markers, e.g., hedges, by native and non-native writers of English (e.g., Abdollahzadeh, 2019; Almakrob, 2020; Al-Mudhaffari et al., 2020; Akbas & Hardman, 2018; Bonyadi et al., 2012; Gomaa, 2019; Hu & Cao, 2011; ElMalik & Nesi, 2008; Kafe, 2017). Most of these studies revealed that native English authors used hedging strategies more frequently in their writing than non-native writers of English. Some studies (e.g., Akbas & Hardman, 2018; Bonyadi et al., 2012; Kafe, 2017), however, found that hedging devices were used similarly by L2 writers and English L1 writers.

Some metadiscourse research has focused on undergraduate and high school students' essays (Lee & Deakin, 2016; Chung et al., 2023; Hinkel, 2005; Ho & Li, 2018). For example, Lee and Deakin (2016) comparatively studied the use of interactional metadiscourse in three corpora of 75 argumentative essays (25 successful ESL essays, 25 less-successful ESL essays, and 25 successful L1 English papers) written by Chinese-speaking L2 learners of English and L1 English writers. Findings showed that the hedges in both L1 and L2 advanced essays were far higher than in less-successful papers. However, there was no difference in the use of boosters and attitude markers in the three corpora. It was also found that L2 essays contained fewer instances of self-mention markers compared to L2 essays.

To sum up, based on the studies reviewed above, there is a need to examine the use of metadiscourse in the introductions of Arabic RAs. It is hoped that this work would be a research starting point for native and non-native writers of Arabic to investigate this pragmatic issue. Previous studies (e.g., Alotaibi & Arabi, 2020; Alotaibi, 2015) are not sufficient for an in-depth analysis because the translated versions of those abstracts may not convey the exact meaning. Further, these studies included small corpora of abstracts, and this is another motive to conduct an independent study of the use of metadiscourse by Arabic writers. Furthermore, the studies that addressed this topic employed only quantitative analysis, focusing on the frequencies and spread of the general categories of metadiscourse markers. This study, as indicated later, employed both quantitative and qualitative analyses to provide an in-depth description of how Arabic authors interact with their readers, exploring the use of the sub-categories of interactional resources, and this in turn, provides a clearer picture of the employment of metadiscourse markers in the introductions of the Arabic RAs in the fields of linguistics and applied linguistics.

III. METHODOLOGY

A. Research Design

This study employed both quantitative and qualitative approaches. The quantitative analysis was used because the analysis of the different interactional metadiscourse forms, hedges, boosters, attitude markers, self-mentions and engagement markers, is dependent on the frequency of occurrences of these markers in the corpus. The qualitative was also used because investigating the use of metadiscourse markers is qualitative in nature (Hyland, 2005). Having both quantitative and qualitative analyses yield a clearer picture of how Arabic writers interact with the reader in their academic writing.

B. Corpus

The current study consisted of 94 RA introductions (total number of words in the corpus = 88,350) written by Arabic-speaking writers in the fields of linguistics and applied linguistics. These RAs were drawn from three leading Arabic journals, *Language Planning and Policy* (n=30), *Allisaniyat Al-Arabiah* (Arabic Linguistics) (n=31) and *Taaleem Al-Arabiah Lughatan Thaniyah (Teaching Arabic as a Second Language)* (n = 33), and they were published between 2013-2022. All the authors of these articles were native speakers of Arabic to ensure that they are pragmatically competent. The RAs were randomly selected by taking the third article from each issue. The reason for choosing these three journals is their high reputation as venues for publishing linguistics and applied linguistics research articles that are written by a variety of Arabic-speaking authors from different Arab regions. Second, perhaps the most important, these journals are the only journals that are specialized for publishing Arabic L1 (applied) linguistics articles.

Linguistics and applied linguistics articles were collected to be investigated because the writers of these disciplines are language experts, and thus pragmatically more competent than the other disciplines' writers. Therefore, this analysis provides a more accurate description of the use of the interactional metadiscourse features in Arabic RAs.

The RA introductions were analysed because writers in these sections vary in the way they use self-mention markers and reader-mention markers (Hyland, 2004). The length of articles was taken into consideration because it affects the findings. The length of the introductions ranges between 850 -1000 words, so short introductions were excluded. Books and dissertations reviews were excluded because the way they are introduced is completely different from RAs.

Hylands' (2005) model (see Table 1 in section 2.2) of interactional metadiscourse was adopted for the analysis of the use of Arabic interactional metadiscourse as it was on based a large-scale genre corpus, and many researchers (e.g., Ho & Li, 2018; Lee & Deakin, 2016) found it reliable (Mu et al., 2015). In addition, the sub-categories of the interactional metadiscourse (see Table 2) were also adopted. This analysis provides a deeper understanding of how Arabic writers interact with readers when they introduce their RAs.

C. Data Coding and Analysis

The corpora collection took place in three stages. First, Microsoft Word was used to track the number of words in each Article's introduction section. Second, only interactional metadiscourse (hedges, boosters, attitudes, self-mentions and engagement markers) were manually extracted. This traditional extraction was used for two reasons. First, I could not find software that extracts Arabic lexical markers. Second, perhaps the most important, in Arabic, some linguistic means have multiple meanings. For instance, the particle *qad* (قد) can be used as a booster marker or as a hedging marker. There are a lot of interactional markers that have more than one function, so due to this meaning complexity, using an electronic (if available) would be meaningless.

Third, all the extracted markers were then entered into an Excel sheet under their appropriate category. Descriptive statistics were run to calculate the occurrence frequencies of each metadiscourse marker. Qualitative analysis was employed to identify the functions of these linguistic forms in the RA introductions.

The reliability of the analysis was measured in two phases. First, all extracted means were validated by two experts in Arabic discourse analysis to measure the accurate function of each marker. After that, another rater (an expert in Arabic discourse analysis) was recruited to code the instances of interactive markers in the corpora in order to establish reliability. The instances that were disputable were excluded.

IV. RESULTS AND DISCUSSION

A. The Overall Use of Interactional Metadiscourse

Table 3 presents the overall use of interactional metadiscourse categories (hedges, boosters, self-mentions, attitude markers and engagement markers) in Arabic RA introductions. Dissimilar to previous research on Arabic academic writing (e.g., Alotaibi & Arabi, 2020; Zaki, 2022), engagement markers, which constituted 3.23 per 1000 words, were the most frequently employed items by writers. This demonstrates that Arabic-speaking writers prefer to overtly engage readers and address them in their communication. These linguistic devices, according to Hyland (2005), are crucial features for sharing thoughts and ideas with readers, addressing them as discourse participants. Interestingly, a closer look at the writers' regional backgrounds reveals that some of them come from Arab regions like Algeria, Morocco and Tunisia, which belong to Maghrib, the region of North Africa. It was observed that those authors' use of engagement

items was far greater than other authors who come from other regions like Saudi Arabia or Yemen. This regional variation in the use of these elements requires a further investigation, however.

Congruent with Alotaibi and Arabi (2020) and Zaki (2022), boosters were found to be the second most frequent interactional category, with 3.07 per 1000 words, indicating that Arabic writers expressed their views and arguments assertively and certainly. Having this confidence in the truth of the proposition could be a cultural preference (Scollon & Scollon, 1995) of the writers because Arabs tend to be direct when expressing their opinions. The high frequency of boosters in the corpus, compared to hedges (2.30 per 1000 words), explains that Arabic writers more likely tend to present their information as facts not as opinions. This also shows that Arabic writers prefer to be committed to the content proposition, marking solidarity with their readers. These findings are not congruent with previous studies of different languages (e.g., Hyland, 2005) and genres (e.g., Shen & Tao, 2021).

Self-mentions constituted 2.83 per thousand words, and this is another indicator that native Arabic writers have the tendency to present their identities in their academic discourse. The employment of self-mention features can also consolidate the shared interests of the writer and the reader (Hyland, 2005). This finding supports previous studies (e.g., Alharbi & Swales, 2011; Alotaibi, 2015) that examined the use of interactional items in RA written by Arabic writers, but in a different register, i.e., RA abstracts.

Finally, unlike Zaki (2022), Arabic writers appeared not to evaluate what is presented through their personal feelings as they rarely used the attitude markers (only 0.26 per thousand words) in their academic writing. However, this finding is similar to findings of previous studies of different languages and genres (e.g., Gillaerts & Velde, 2010; Kawase, 2015; Kim & Lim, 2013; Shen & Tao, 2021). The scarcity of attitude makers in the Arabic RA introductions might be due to two reasons. First, because the use of metadiscourse is language- and culture-oriented (Crismore et al., 1993; Kim & Lim, 2013), so Arabic-speaking writers prefer to give the reader the opportunity to analyse the parts of the texts. Second, the focus of the current analysis was on the introduction sections, which does not require the writers to offer their assessment and evaluation of the information they convey; instead, in academic writing, authors strive to ascertain and rationalize their arguments (this also explains why boosters were used more frequently in this corpus) and the originality of their research (Mu et al., 2015). Comparing this finding to other studies that focused on other genres like technical writing (e.g., Herriman, 2022), it was found to be inconsistent whereby attitude markers occurred predominantly in the instruction manuals.

TABLE 3
INTERACTIONAL METADISOURSE IN ARABIC RESEARCH ARTICLES

Category	Token	Per 1000 words
Hedges	203	2.30
Boosters	271	3.07
Self-mentions	250	2.83
Engagement	294	3.23
Attitude markers	23	0.26
Total	1,041	11.78

The predominance of the engagement markers and boosters in the Arabic-speaking writers' corpus indicates that Arabic native writers address the reader as a discourse participant and demonstrate commitment to the statements they present. These writer-oriented, i.e., the boosters, and the reader-oriented marker, the engagement markers, reflect the pragmatic competence of the Arabic native writers.

B. The Writers' Use of Metadiscourse Sub-Categories

(a). Engagement Markers

Table 4 shows, dissimilar to Alotaibi (2015), the use of the engagement markers in the Arabic RA introductions, which were the most frequent items among the five categories. Similar to other studies of different languages and strands (e.g., Hyland & Jiang, 2022a; Hyland, 2005), Arabic writers predominately used reader pronouns, with 1.89 per thousand words, to involve the reader in their writing. Questions were also frequently used, followed by directives (0.79 and 0.60 per thousand words, respectively). Imperatives were the least frequent engagement markers.

TABLE 4
ENGAGEMENT MARKERS SUB-CATEGORIES IN ARABIC RAS

Engagement Markers	Freq.	Per 1000 words
Reader pronouns	167	1.89
Questions	70	0.79
Directives	53	0.60
imperatives	4	0.05
Total	294	3.23

Similar to Jian and Hyland (2022b), of all the engagement markers, it was found that the Arabic inclusive first-person plural pronoun *nahnu* نحن 'we' was the most common reader-mention item in the corpus, indicating that Arabic-speaking writers tend to explicitly refer to their readers as active text participants through the employment of this

marker. Specifically, it was found that Arabic writers prefer to bring the reader into their discourse as in examples (1-3), whereby Arabic writers interact with the reader through the use of the inclusive pronoun *we*.

(1) ألم نسال أنفسنا مع من نتواصل؟

Didn't *we* ask *ourselves* with whom do *we* communicate?

(2) وإنا في سعينا لمعالجة هذه المسألة نتوخى منهج الاستقراء الاستنباطي، فنقدم به في نقطة أولى الأمم الحية ونبين ما تمتاز به على غيرها من مواصفات.

In *our quest* to address this issue, *we carefully adopt* the inductive approach. Thus, *we present* such a method in the first point of living nations and (*we*) *show* its distinguishing characteristics, in comparison to other nations.

Example (1) shows that the writer raised a question on behalf of both him/herself and the reader, using the inclusive pronoun *we* in “*we ask*”, and “*we communicate*”, to engage the reader in this discourse. Similarly, the use of the exclusive pronoun *we* and the possessive adjective pronoun *ourselves* is another indication of the strong connection to the shared argument with the reader.

Unlike other authors of research articles (e.g., Jian & Hyland, 2022b), the Arabic writers used questions reasonably in their writing to “invite readers into the text by addressing them as having an interest in an issue and the good sense to follow the writer’s response to it” (Hyland & Jiang, 2022b, p. 7). Examples (4) through (7) show how Arabic writers used questions in their academic writing.

(3) هل نحن أمام مسألة الكتابة أم إننا أمام مرحلة مهمة في مجرى تطور اللغة العربية؟

Are we facing the issue of writing, or are we facing an important stage in the course of the development of the Arabic language?

(4) ثم هل القدرة الكامنة فطرية أم مكتسبة؟ وإذا كانت مكتسبة فكيف تكتسب؟

Then, is the underlying ability innate or acquired? And if it is acquired, how is it acquired?

The above rhetorical questions directly engage the readers into the writers’ views, drawing their attention to the importance of the points conveyed. Interestingly, Arabic writers, as in (3) sometimes combined both the interrogative forms and the inclusive pronoun *we* to emphasize the important role of the reader in their arguments and opinions.

Another feature of the reader engagement in the Arabic texts is the relative use of directives. Necessity modals (e.g., must / يجب / لا بد، يتعين، لا بد، يجب) as in (5) and (6) were commonly used in the corpus whereby the authors attempt to tell the reader what should be done towards the content proposition.

(5) ينبغي نشر مبادرات الممارسات الجيدة...

Good practice initiatives should be disseminated...

(6) لا بد من الإشارة إلى أن الاتجاه المنهجي السائد في اللسانيات...

We ought to point out that the common methodological trend in linguistics...

Imperatives, dissimilar to Jian and Hyland (2022), were far less common in the Arabic writers’ academic discourse, and this might be due to the socio-cultural factors of the Arabic-speaking writers. Arabs do not prefer to give commands and orders to others, especially in formal situations.

(b). Boosters

Unlike other languages (e.g., English), boosters are realized in Arabic by different certainty markers. These linguistic means can be classified into grammatical and lexical items (Fathi, 2019). The former refers to markers, such as *قد، إن، أن*، *قد، إن، أن*. The latter includes devices like *أفعال اليقين* (certainty verbs) such as *أعتقد، أجزم، أعلم، أؤمن* (believe, assure, know).

As indicated above, boosters were the second most common metadiscourse items in the Arabic RA introductions. This indicates that Arabic-speaking writers tend to express their views with confidence and a high degree of commitment. More specifically, Table 5 shows that Arabic writers used grammatical and lexical items, with a similar frequency rate, to mark conviction in their content propositions.

TABLE 5
BOOSTERS MARKERS SUB-CATEGORIES IN ARABIC RAS

Boosters	Freq.	Per 1000 words
Grammatical items	136	1.54
Lexical items	135	1.53
Total	271	3.07

Extract (7) shows that Arabic writers used the assertive grammatical items (known, *من المعلوم*) and (*qad+* the past, *قد، إن، أن*) to express the certainty of their views and mark their involvement in the conveyed information, having an influence of the solidarity of the readers through the use the particle ‘*qad + past*’.

(7) ... من المعروف أن اللغة العربية من أغنى اللغات تراثا وحضارة فقد كانت لغة لشعوب كثيرة

Arabic is known to be one of the richest languages in terms of heritage and civilization. It was a language for many nations...

In (8), the lexical item (known/*المعلوم*) was used to assert the shared knowledge, showing their commitment in their arguments. Furthermore, the authors use the grammatical item (rather/*إن*) to place more emphasis on their views, establishing a strong interpersonal relationship with readers.

والمعلوم أن مفهوم نسق القواعد مفهوم رئيسي ضمن النظرية التوليدية، بل إن هدف هذه النظرية تحديد الطبيعة الصورية للقواعد وبيان العلاقات (8) فيما بينها بهدف...

It is known that the concept of grammar pattern is a major concept within the generative theory. Rather, this theory aims to determine the formal nature of the grammar clarifying the relationships among them with the aim of...

(c). Hedges

As can be seen in Table 3 above, hedges are the fourth most frequent interactional items in the Arabic RA introductions. The relative employment of hedges reflects that Arabic writers express their claims and views quite surely. Specifically, Table 6 shows that, like other studies (Almakrob, 2020; Al-Mudhaffari et al., 2020), accuracy-oriented hedges, devices that can be used to cautiously express the accuracy and precision of the proposition (Hyland, 1996), dominate the expression of hedges in Arabic writers' RA introductions.

TABLE 6
HEDGES SUB-CATEGORIES IN ARABIC RAS

Hedges	Freq.	Per 1000 words
Accuracy-oriented	89	1.01
Writer-oriented	57	0.65
Reader-oriented	57	0.65
Total	203	2.30

In (9) and (10), the writers used the hedging items (might ربما, in general عام بشكل) to decrease the degree of accuracy of their propositions. In Arabic, these words indicate that the speaker tends not to be fully committed to the truth of his/her arguments or views.

وبشكل عام، تتقاطع التحاليل التي عالجت هذه القضية في التركيز على الإجابة عن (9) ثلاثة أسئلة.

In general, the analyses that have addressed this issue intersect in focusing on answering three questions.

ربما تعود الأهمية الأولى لهذا البحث إلى كونه يؤسس لمرحلة لسانية جديدة ... (10)

The importance of this research might be because it establishes a new linguistic stage...

Writer- and reader-oriented hedges were equally employed in the Arabic RA introductions. In Arabic, writer-oriented linguistic means like (يبدو، نشكك، لا ندعي) are used to lessen the degree of the writer's commitment to the truth of the proposition. Examples (11) and (12) show how Arabic writers express detachment in their opinions.

يبدو أن الاختلاف في تحديد ماهية اللغة هو أصل التنازع بين الدلالة والتركيب ... (11)

It seems that the difference in defining the nature of language is the main source of the syntax-semantics interface ...

ولا ندعي أننا نقدم في هذا العمل تصوّرًا نهائيًا لآليات اشتغال (12)

We do not claim that we present here a complete proposal of the mechanisms of operation...

Similarly, Arabic writers hedged their propositions from the readers' perspective where they tend to give them a chance to react toward the possibility of the information conveyed through the use of reader-oriented hedges (في نظر...، وبحسب، وبناء على، في منظور...).

وبناء على هذا التصور، فإن التوقعات العالية للوصول إلى درجة مرتفعة... (13)

According to this perspective, the high expectations to reach a high degree are...

ودراسة هذا النوع من الإبداع، في نظر تشومسكي، ينبغي أن يكون... (14)

And the study of this kind of creativity, according to Chomsky's view, should be...

The above examples show that the writers seek the readers' participation in confirming their opinions and views, as in (13). In (14), the writer attributed the truth of the content proposition to Chomsky, leaving a room for the reader to dis/confirm the knowledge conveyed.

(d). Self-Mentions

Because self-mention and reader-mention are realized by the pronoun *we*, a distinction was made between them. The inclusive pronoun *we* is used as a reader-mention marker (as in 15) whereas the exclusive one is used to describe the research objectives (as in 16 and 17). However, it was noticed that Arabic writers used the exclusive pronoun *we* in both co-authored and single-authored articles, and this might be due to regional cultural variations.

(reader-mention) مما يجعلنا نؤكد باطمئنان أن إفريقيا ستكون القارة الأولى للغة العربية (15)

That makes us reassuringly affirm that Africa will be the first continent for Arabic...

(Self-mentions) نتناول في هذه الورقة «أن» وعلاقتها بالمراقبة في العربية... (16)

In this paper, we discuss the Arabic particle "a'nn" (that) and its relationship to monitoring in Arabic...

(Self-mentions) ونروم في هذا البحث القيام باستصفاة جملة من المبادئ والمسلمات البحثية... (17)

In this research, we aim to select a number of principles and postulates of research...

Of all the self-mentions markers, the exclusive first-person plural pronoun *we* was the most commonly used item, as shown in Table 7 below. The possessive adjective *our* was rarely used in this corpus. As mentioned earlier, Arabic writers used self-mention devices to present the purpose of their studies. The authors explicitly refer to themselves to present their authorial identity, discursive selves and role in the study (Ivanic, 1998).

TABLE 7
SELF-MENTIONS SUB-CATEGORIES IN ARABIC RAS

Self-mentions	Freq.	Per 1000 words
First-person singular	27	0.31
First-person plural	203	2.30
The researcher(s)	20	0.23
Total	250	2.83

For example, in (18), the author used the first-person plural pronoun *we* to represent her/his role in the study. In (19), the author used the first-person plural pronoun *we* and the possessive adjective *our* to establish her authorial presence and voice.

(18) ...ولتحقيق ذلك نقسم البحث إلى قسمين كبيرين

To this end, we divide the research into two major parts...

(19) ...ونعتمد في تحليلنا على نموذج هو الفعل

We depend in our analysis on the verb model...

Arabic writers appeared not to rely on the self-mention markers, i.e., first-person singular pronoun and the researcher(s), to project themselves in the text as these devices occurred far less frequently in the corpus. Arabic researchers appear to have a misunderstanding of using the first-person singular pronoun to indicate their presence in the text, which is a common misconception in Arabic research in that the pronouns *I* and *we* should be avoided when writing RAs.

(e). Attitudes

As indicated earlier, Arab writers did not express attitude markers very frequently (0.26 per 1000 words), indicating that they tend not to consider their stance in their writing. These markers were underused because the introduction features do not require writers to evaluate the knowledge conveyed. The register might determine the type of interaction sources writers use with their writers (Hyland, 2005). Further, the Arabic rhetoric might have influenced the appearances of these items; Arabic-speaking writers are inclined towards certainty and amplifications (Hinkel, 2005). Table 8 shows that the writers used prepositional phrases far more frequently than attitude verbs (only 6 instances) and adjectives (3 instances only) to express their stance in the Arabic RA introductions.

TABLE 8
ATTITUDES SUB-CATEGORIES IN ARABIC RAS

Attitudes	Freq.	Per 1000 words
Prepositional phrases	14	0.16
Attitude verbs	6	0.07
Attitude Adjectives	3	0.03
Total	23	0.26

In (20), the authors used the adverb (مهم 'important') to persuade the reader to accept their argument. However, in (21), the authors used the attitude marker, *which is uncommon*, to assess the truth value of the proposition. It is noticeable that the authors collocated these expressions, i.e., the attitude markers, with the inclusive pronoun *we* to involve the reader in their evaluation of the proposition, and this establishes the reliability of their arguments (Hyland, 2005).

(20) ولعل من المهم الإشارة هنا إلى أن الطريقة السمعية الشفوية التي تركز على تدريب الدارسين على السيطرة على الشكل اللغوي أكثر من المحتوى... كانت تهدف إلى

Perhaps, it is important to point out here that the audiolingual method, which focuses on training students to control the linguistic form more than the content, was intended to...

(21) لكن، في مقابل ذلك، نجد من غير المؤلف أن تتجه هذه الدراسة نحو وضع تفسيرات لبعض الظواهر المصاحبة التي توتت للفضاء اللغوي تركيبيا واستعمالا.

On the other hand, we find that it is uncommon for this study to go towards providing explanations for some of the accompanying phenomena that come to the linguistic space in terms of its structure and use.

V. CONCLUSION

The current study has sought to provide a comprehensive description of how Arab writers interact with their readers when they introduce their RAs in the disciplines of linguistics and applied linguistics. Findings revealed that Arabic writers tend to explicitly involve readers in their communication as discourse participants through the use of the inclusive pronoun *we* (نحن) and the rhetorical questions. Arabic writers were found to express their views and arguments with confidence, which could be a cultural preference. That is, it was found that boosters were used more frequently than hedges, and this shows that Arabic writers more likely tend to present their information as facts not as opinions. This also shows that Arabic writers prefer to be committed to the content proposition, marking solidarity with their readers. More specifically, when mitigating the degree of their claims, Arabic writers appeared to be inclined towards the use of accuracy-oriented hedges. Arabic authors explicitly refer to themselves to present their authorial identity and discursal selves through the employment of the exclusive first-person plural pronoun *we*. Finally, Arabic writers

appeared not to evaluate what is presented through their personal feelings as they rarely used attitude markers in their academic writing.

Despite the fact that this study would be a starting point for future research in Arabic metadiscourse, some limitations should be addressed. First, gender difference should have been examined because gender has an impact on the writer-reader interaction in writing (Tardy, 2006). Second, interactive markers were not included in the current analysis to explore how Arabic writers employ structure moves in their academic writing. Further analysis thus should examine the employment of these resources in Arabic RAs to have a complete picture of the use of metadiscourse in Arabic academic writing. Third, it was observed that the writers' regional background might have an influence on the use of the interpersonal items, so this regional variety requires further investigation, too.

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REFERENCES

- [1] Abdollahzadeh, E. (2019). A cross-cultural study of hedging in discussion sections by junior and senior academic writers. *Ibérica*, 38, 177-202.
- [2] Akbas, E. & Hardman, J. (2018). Strengthening or Weakening Claims in Academic Knowledge Construction: A Comparative Study of Hedges and Boosters in Postgraduate Academic Writing. *Educational Sciences: Theory & Practice*, 18(4), 831-859.
- [3] Alharbi, L. M., & Swales, J. M. (2011). Arabic and English abstracts in bilingual language science journals: Same or different? *Languages in Contrast*, 11(1), 70-86.
- [4] Almakrob, A.Y. (2020). Native versus Nonnative English writers' use of hedging in Linguistics Dissertations. *The Asian EFL Journal*, 27, 360-381.
- [5] Al-Mudhaffari, M., Hussin, S. & Abdullah, I. H. (2020). Interactional Strategies in L2 Writing: An Exploration of Hedging and Boosting Strategies in Applied Linguistics Research Articles. *IJAES*, 20, 171- 186.
- [6] Al-Mudhaffari, M., Hussin, S. & Abdullah, I. H. (2020). Interaction in Academic L2 writing: An analysis of Interactional Metadiscourse Strategies in Applied Linguistics Research Articles. *3L: The Southeast Asian Journal of English Language Studies*, 25(3), 16 – 32.
- [7] Alotaibi, H. (2015). Metadiscourse in Arabic and English Research Article Abstracts. *World Journal of English Language*, 5 (2), 1-8.
- [8] Alotabi, H. & Arabi, H. (2020). Taking authorial stance in Arabic research articles introductions. (2020). *International Journal of Arabic-English Studies*, 20(2), 41-62. <https://doi.org/10.33806/ijaes2000.20.2.2>
- [9] Binmahboob, T. (2022). The Use of Metadiscourse by Saudi and British Authors: A Focus on Applied Linguistics Discipline. *English Language Teaching*, 15(2), 78-89.
- [10] Bonyadi, A., Gholami, J. & Nasiri, S., (2012). A Contrastive Study of Hedging in Environmental Sciences Research Articles. *Journal of Language Teaching and Research*, 3(6), 1186-1193.
- [11] Chung, E., Crosthwaite, P. R., & Lee, C. (2023). The use of metadiscourse by secondary-level Chinese learners of English in examination scripts: Insights from a corpus-based study. *IRAL*, 1-32 <https://doi.org/10.1515/iral-2022-0155>
- [12] Crismore, A. (1989). *Talking with readers: Metadiscourse as rhetorical act*. Peter Lang.
- [13] Crismore, A., Markkanen, R., & Steffensen, M. S. (1993). Metadiscourse in persuasive writing: A study of texts written by American and Finnish university students. *Written Communication*, 10(1), 39-71. <https://doi.org/10.1177/0741088393010001002>
- [14] Dafouz, E. (2003). Metadiscourse revisited: A contrastive study of persuasive writing in professional discourse. *Estudios Ingleses de la Universidad Complutense*, 11, 29-52.
- [15] ElMalik, A. T. & Nesi, H. (2008). Publishing research in a second language: The Case of Sudanese Contributors to International Medical Journals. *Journal of English for Academic Purposes*, 7, 87-96.
- [16] Fathi, S. (2019). The Translation of Arabic Metadiscourse in “A handful of dates” into English. *Adab Al-Rafidayn*, 77, 17-41.
- [17] Gillaerts, P., & Van de Velde, F. (2010). Interactional metadiscourse in research article abstracts. *Journal of English for Academic Purposes*, 9, 128-139.
- [18] Gomaa, Y.A. (2019). A Corpus-Based Pragmatic Analysis of Hedging in Linguistic Master Theses Abstracts Written by Saudi Students. *Hermes*, 8(1), 9-31.
- [19] Herriman, J. (2014). Metadiscourse in English and Swedish non-fiction texts and their translations. *Nordic Journal of English Studies*, 3(1), 1–32.
- [20] Herriman, J. (2022). Metadiscourse in English instruction manuals. *English for Specific Purposes*, 65, 120-132.
- [21] Hinkel, E. (2005). Hedging, inflating and persuading in L2 academic writing. *Applied Language Learning*, 15, 29–53.
- [22] Hinkel, E. (2009). The effects of essay topics on modal verb uses in L1 and L2 academic writing. *Journal of Pragmatics*, 41, 667–683.
- [23] Ho, V. & Li, C. (2018). The use of metadiscourse and persuasion: An analysis of first-year university students' timed argumentative essays. *Journal of English for Academic Purposes*, 33, 53-68.
- [24] Hu, G. & Cao, F. (2011). Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English and Chinese-medium journals. *Journal of Pragmatics*, 43, 2795–2809.
- [25] Hyland, K. (1998). Persuasion and context: The pragmatics of academic discourse. *Journal of Pragmatics*, 30, 437-455. [https://doi.org/10.1016/S0378-2166\(98\)00009-5](https://doi.org/10.1016/S0378-2166(98)00009-5)
- [26] Hyland, K. (2000). *Disciplinary discourses: social interactions in academic writing*. London: Longman.

- [27] Hyland, K. (2005). *Metadiscourse: exploring interaction in writing*. London; New York: Continuum.
- [28] Hyland, K. (2014). *Disciplinary discourses: writer stance in research articles*. Routledge.
- [29] Hyland, K. (2017). Metadiscourse: What is it and where is it going? *Journal of Pragmatics*, 113, 16–29. <https://doi.org/10.1016/j>
- [30] Hyland, K., & Jiang, F. (2018). “In this paper we suggest”: Changing patterns of disciplinary metadiscourse. *English for Specific Purposes*, 51, 18-30.
- [31] Hyland, K. & Jiang, F. K. (2019). *Academic Discourse and global publishing: Disciplinary persuasion in changing times*. London: Routledge.
- [32] Hyland, K., & Jiang, F. K. (2022a). Metadiscourse choices in EAP: An intra-journal study of JEAP. *Journal of English for Academic Purposes*, 60, 101-165. <https://doi.org/10.1016/j.jeap.2022.101165>
- [33] Hyland, K., & Jiang, F. K. (2022b). Interaction in written texts: A bibliometric study of published research. *Studies in Second Language Learning and Teaching*, 13, 1-24.
- [34] Hyland, K., Wang, W., & Jiang, F. K. (2022). Metadiscourse across languages and genres: An overview. *Lingua*, 265, [103205]. <https://doi.org/10.1016/j.lingua.2021.103205>
- [35] Kafe, H. (2017). An Intercultural Investigation of Metadiscourse Features in Research Articles by American and Turkish Academic Writers. *International Journal of Languages Education and Teaching*, 5(3), 373-391.
- [36] Kawase, T. (2015). Metadiscourse in the introductions of PhD theses and research articles. *Journal of English for Academic Purposes*, 20, 114-124.
- [37] Kim, L. C., & Lim, J. M.-H. (2013). Metadiscourse in English and Chinese research article introductions. *Discourse Studies*, 15(2), 129–146. <https://doi.org/10.1177/1461445612471476>
- [38] Lee, J. J., & Deakin, L. (2016). Interactions in L1 and L2 undergraduate student writing: Interactional metadiscourse in successful and less-successful argumentative essays. *Journal of Second Language Writing*, 33, 21-34.
- [39] Mauranen, A. (1993). Contrastive ESP rhetoric: Metatext in Finnish-English economics texts. *English for Specific Purposes*, 13, 149-170.
- [40] Mu, C., Zhang, L. J., Ehrich, J. & Hong, H. (2015). The use of metadiscourse for knowledge construction in Chinese and English research articles. *Journal of English for Academic Purposes*, 20, 135–148. <https://doi.org/10.1016/j.jeap.2015.09.003>
- [41] Park, H. I., & Lee, S. (2022). Interactional metadiscourse in English Teaching articles: A diachronic perspective (1980-2021). *English Teaching*, 77(2), 3-23.
- [42] Shen, Q., & Tao, Y. (2021). Stance markers in English medical research articles and newspaper opinion columns: A comparative corpus-based study. *PLOS One*, 16(3), 1-22. <https://doi.org/10.1371/journal.pone.0247981>
- [43] Tardy, C. M. (2006). Researching first and second language genre learning: A comparative review and look ahead. *Journal of Second Language Writing*, 15, 79-101.
- [44] Toumi, N. A. (2009). A Model for the investigation of reflexive metadiscourse in research articles. *Language Studies Working Papers*, 1, 64-73.
- [45] Kopple, W. J.V. (1985). Some exploratory discourse on metadiscourse. *College Composition and Communication*, 36, 82–93.
- [46] Kopple, W. J. V. (2012). The importance of studying metadiscourse. *Applied Research in English*, 1(2), 37–44.
- [47] Williams, J. (1981). *Style: Ten lessons in clarity and grace* (3rd ed.). Scott Foresman.
- [48] Zaki, M. (2022). The metadiscourse of Arabic academic abstracts: A corpus-based study. *Research in Corpus Linguistics*, 10(2), 113–146. <https://doi.org/10.32714/ricl.10.02.06>



Ahmed Yahya Almakrob is an Assistant Professor of Applied Linguistics at the Department of English, College of Sciences and Humanities in Al-Kharj, Prince Sattam bin Abdulaziz University, Al-Kharj, Saudi Arabia. He received the IMSIU Award for Excellence in Research for his Ph.D. dissertation. Dr. Almakrob worked for five years at King Saud University as a Language Instructor of English at the Department of English Language and Literature and the Center for Excellence in Learning and Teaching. He has published several articles in peer-reviewed journals. His research interests fall into L1/L2 acquisition of the tense-aspect system, discourse analysis and language testing.