



**Modal Verbs as Means of Epistemic
Stance :A contrastive Study of English
and Arabic :Business Management
Research Articles**

**Dr. Tamer Hamed Mohamed
Lecturer of English Linguistics &
Translation
Department of Humanities, Al Obour High
Institutes
E-mail: tamerh@oi.edu.eg**





Abstract

The purpose of this work is to conduct an intercultural quantitative and qualitative study of the usage of modal verbs as epistemic stance indicators in the AERAC (Arabic-English Research Article Corpus), a corpus of research articles (RAs) from several fields. This study's corpus comprises of 48 Business Management research papers. Special attention is placed on the introduction and discussion portions of RAs, where stance devices are most commonly used to promote audience convergence. This type of intercultural analysis was accomplished using both a bottom-up and a top-down research strategy. The findings of this study indicate that there are significant disparities in the usage of modal verbs by native authors and the use of modal verbs by non-native authors. The most notable feature is that Arabic writers use hedges and boosters in unusual ways. As a result, they struggle to develop a suitable tone while writing in English.

Keywords: research articles, epistemic stance, modal verbs, hedges, boosters.



1. Introduction

The purpose of this work is to conduct an intercultural quantitative and qualitative study of the usage of modal verbs as epistemic stance indicators in the AERAC (Arabic-English Research Article Corpus), a corpus of research articles from several fields. Section 2 delves into the theoretical foundations of modality and stance, as well as the study's aims and research issues. Section 3 examines the corpus chosen for this study, which consists of 48 Business Management research papers, and how the type of intercultural analysis indicated above may be accomplished using either a bottom-up or a top-down research strategy. The corpus analysis occurs first in a bottom-up method, and the discourse unit types arise from the corpus patterns. The analytical framework is built from the start in a top-down approach: the discourse unit types are specified before commencing the corpus analysis, and the whole analysis is then carried out in those terms. This article employs both techniques. Sections 4 and 5 provide a description and discussion of the findings. Finally, in Section 6, some closing observations are provided.

2. Theoretical background

2.1. Modal verbs as means of epistemic stance

One of the most important and fundamental human behaviors achieved through language is stance-taking. Humans analyze their surroundings, communicate their feelings, views, and desires, and align or disalign with other humans in social interaction. The idea of "stance" is recognized by numerous labels that overlap to varying degrees. Stance is described as "personal sentiments, attitudes, value judgments, or assessments" (Biber et al., 1999: 966) that are added to the propositional content. Other terminology for language used by speakers/writers to communicate opinion include "modality" (Halliday, 1994), "evaluation" (Hun-



ston & Thompson (eds.), 2000), and “appraisal” (Hunston & Thompson (eds.), 2000). (White, 2001).

At the textual level, stance meanings can be achieved linguistically through various grammatical and lexical strategies. We imply affective or evaluative word choice that involves just one proposition when we talk about lexical stance marking. Value-laden words are utilized in lexical stance marking, which differs from grammatical stance devices in that they do not offer an attitudinal or evaluative framing for another proposition. The employment of an evaluative lexical item, generally an adjective, a primary verb, or a noun, indicates the presence of an attitude. Grammatical stance devices are made up of two separate language elements: One presents the stance, while the other presents the proposal framed by that stance. Because the modal verb (as stance marker) is included into the main clause (stating the framed proposition) as part of the verb phrase, it is viewed semantically as giving a stance frame for the entire sentence (see example 1): *Your team might have been beaten in the competition.*

Modal verbs reflect a writer's attitude by communicating either the degree of certainty of the claim (epistemic modality) or connotations such as permission, duty, or necessity (deontic modality). Most verb phrases, in the absence of a modal verb, have simply a marker of temporal orientation and no overt indication of posture. In most circumstances, the attitude marker comes before the structure that presents the proposal. Modal verbs appear before the primary lexical verb and, as a result, usually before the introduction of additional information in the phrase. This element ordering reflects the principal role of stance markers as a framing for interpreting propositional information. In most situations, writers identify their own point of view first, urging readers to digest the subsequent material from the same point of view.



2.2. Modals and modality

Modality should be regarded as a semantic category. Modal auxiliaries convey a wide range of meanings, including ideas like as capability, permission, need, and duty. Modal verbs are classified into three primary groups in the Longman Grammar of Spoken and Written English (Biber et al., 1999: 485-486) based on their meaning:

“Intrinsic” modality “Extrinsic” modality

1. Permission/ability/possibility: “can”, “could”, “may”, “might”
2. Obligation/necessity: “must”, “should”,
3. Volition/prediction: “will”, “would”, “shall”

The writer can analyze a certain circumstance in terms of possibility, probability, permission, volition, obligation, and necessity by using modal language. To put it another way, all of the aforementioned concepts cover the writer's subjective attitude or remark, which reflects his/her own view and relationship with reality. Modal verbs can convey two types of modal meanings, which are known as “epistemic” and “deontic” modality. The first reflects the degree of probability, which includes logical possibility, necessity, hypothetical meaning, beliefs, and predictability. The latter, deontic modality, conveys a degree of desirability through permission, obligation, and volition.

This nomenclature is consistent with the more modern category in the aforementioned Longman Grammar of Spoken and Written English. The former modality is concerned with acts and occurrences that are directly directed by people or other agents. On the other hand, there is another form of meaning known as “extrinsic,” which indicates a degree of certainty in terms of possibility, necessity, or prediction. Extrinsic modality is used to observe the logical state of occurrences. Downing and Locke (1999: 382-383) refer to these meanings as “fundamental modalities,” and they all cover the writer's subjective attitude or assertion, which reflects his or her personal view and relationship with reality. Areas of meaning such as “permission,” “obligation,” and “volition”



that involve some kind of intrinsic control over human events are classified as intrinsic (or deontic) modality, whereas extrinsic (or epistemic) modality "refers to the logical status of events or states, usually relating to assessments of likelihood: possibility, necessity, or predictability" (Biber et al., 1999: 485). Such a logical modality entails a human assessment of what is or is not likely to occur.

Biber and Finnegan's (1989) stance framework is the first effort to investigate the writer's attitude toward the text in academic discourse. They describe "stance" as the grammatical and lexical articulation of attitude, sentiments, judgments, or commitment towards the message's propositional content. This concept of posture has two components: "evidentiality" and "affect." Hyland (1999) suggested a stance model that is more extensive than the model presented by Biber and Finnegan (1989). He included three components rather than two: "evidentiality," "affect," and "relationship." "Evidentiality" refers to the writer's belief in the truth of the assertions presented. Epistemic remark (typically accomplished through the use of epistemic modal verbs) is a way for authors to signify their loyalty and communicate their point of view on a topic. The term "affect" refers to the writer's open exposition of a variety of personal viewpoints. The last category, "relationship," is described as "the degree to which authors choose to connect with their readers, their degree of intimacy or remoteness, and the ways they portray themselves in the discourse" (Hyland, 1999: 101). Hyland incorporates an element of participation into his concept with these phrases. Hyland (2005a) offered a more complete model of "stance and engagement" a few years later to account for all interpersonal resources employed in academic debate. As a result, when we consider the addressees of academic writing, attitude marking makes more sense. Academic writers intrude and comment on the information they deliver through their writings; they express judgments, connect themselves with readers, and demonstrate solidarity by anticipating objections and



reacting to an imagined dialogue with others, thereby co-constructing the text with their readers.

2.3. Research questions

The use of modal verbs as epistemic stance indicators in AERAC is described in this work as an investigation of intercultural features using both quantitative and qualitative methodologies. The sub-corpus used for this study includes 48 Business Management research publications. The involvement of functional vs. linguistic analysis is a significant distinction between the two techniques. The functional framework is the most important aspect of the top-down method. As a result, the first stage in the analysis is to identify the various discourse unit kinds (for example, move kinds) and offer an operational definition for each one. This functional framework is then used in order to divide them into discourse units. Linguistic analysis comes second in a top-down method, functioning as an interpretative function to study the extent to which discourse units contain systematic linguistic properties. The language description, on the other hand, takes precedence in the bottom-up method. That is why, in this study, the researcher used the bottom-up approach first, beginning with the linguistic description of English modal verbs as semantic markers of modality before shifting to the top-down approach and interpreting the results. The following questions are target topics across the current research:

1. What distinctions exist between the usage of modal verbs by native authors and the use of modal verbs by non-native authors?
2. To what extent do various groups of writers convey various epistemic stances?
3. Is the usage of modals by Arabic academics publishing papers in English influenced by their country culture's writing standards – that is, Arabic research writing practices?

3. Corpus and methodology

Out of the 48 publications, 24 were produced by native English-speaking scholars (coded ENGBM) and the other 24 by native



Arabic-speaking academics (coded ARAB) (coded ARABM). The first sub-corpus contains 24 RAs from high-impact American journals published by English native speakers, while the second has 24 RAs by high-impact Arabic native speakers. The analysis was done by using a combination of concordance software and human analysis. The overall corpus size is 390,468 words, with ENGBM accounting for 197,922 and ARABM accounting for 192,546. Both sets of writers met the comparability criterion since they were affiliated with a university, ensuring that they were familiar with academic writing methods, especially research article writing. WordSmith Tools 4.0 concordance software was utilized for quantitative analysis (Scott, 1999). This was complemented with a qualitative study of the instances by hand.

Special focus has been placed on the introduction and discussion parts, where stance techniques are most commonly used to seek readership convergence. Even while epistemic and affective meanings overlap, they will be examined separately in this study for practical reasons, because every epistemic judgment conveys attitudinal values but not vice versa. Because modal verbs seldom reflect attitudinal attitude, the current study focuses on them as indicators of epistemic stance. In this study, the bottom-up approach is used to analyze modal usage frequency in terms of semantic modality indicators. The exact study questions were as follows:

- o Do RA modals express epistemic (extrinsic) or deontic (intrinsic) modality?
- o If so, is this persistent between the two sub-corpora?

4. Results

4.1. Bottom-up Results: Modals as means of epistemic stance

In ENGBM, modal verbs appear at a rate of 7.0 per thousand words, but in ARABM, they occur at a rate of 5.3 verbs per thousand words. Figures 1 and 2 show the overall distribution of

modals in the two sub-corpora in percentages. According to the pie chart in figure 1, the modals "may," "can," and "will" are often used in ENGBM. On the other hand, the modals "must" and "should" are quite infrequent. With the exception of "shall"/"should," the tentative/past time component is less common than its companion in all pairs of core modals. In English, modal verbs are the most common kind of hedges and boosters. The following modal verbs communicate epistemic meaning: "may," "can," "could," "would," and "might." In this sub-corpus, the most common modal verb expressing epistemic meaning is "may." It's fairly frequent, and it's usually followed by "could," "can," "would," or "could." According to the frequency rates provided in figure 2 for ARABM, "can" is followed by "will", "may", "would", "could", and "might".

Figure (1): Percentage of modal verbs in ENGBM.

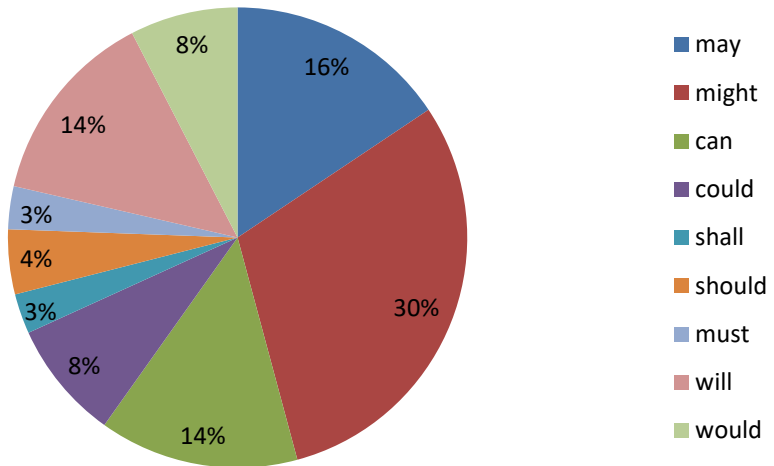
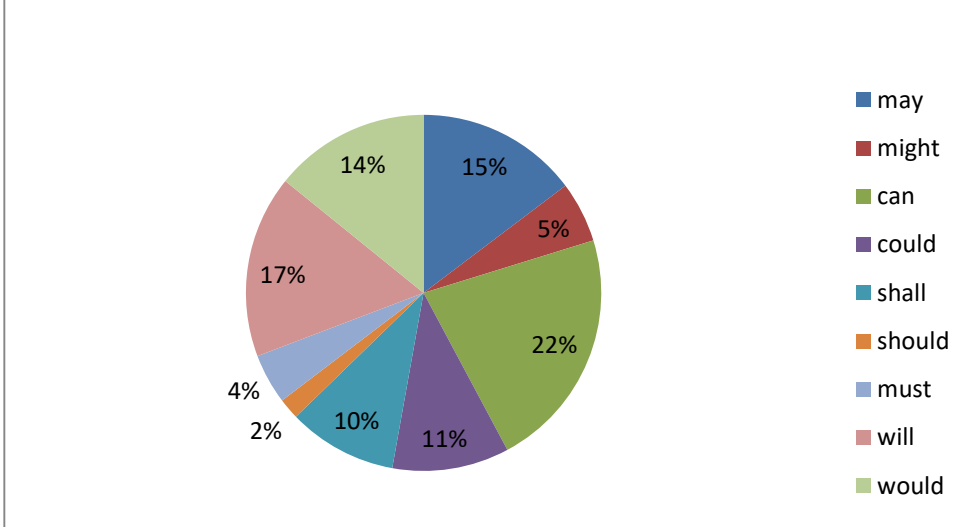




Figure (2): Percentage of modal verbs in ARABM



The modal verb “can” is most commonly utilized by non-native English authors while producing articles in English. The next words are "will," "may," "would," and "shall." The tentative member (“should”) is the least common of all modal verbs in this sub-corpus. To appropriately assess the general distribution of the modals in both sub-corpora, we must differentiate between their use with intrinsic and extrinsic meanings. Modals in ENGBM that indicate permission/possibility/ability are described more below (Fig. 3).

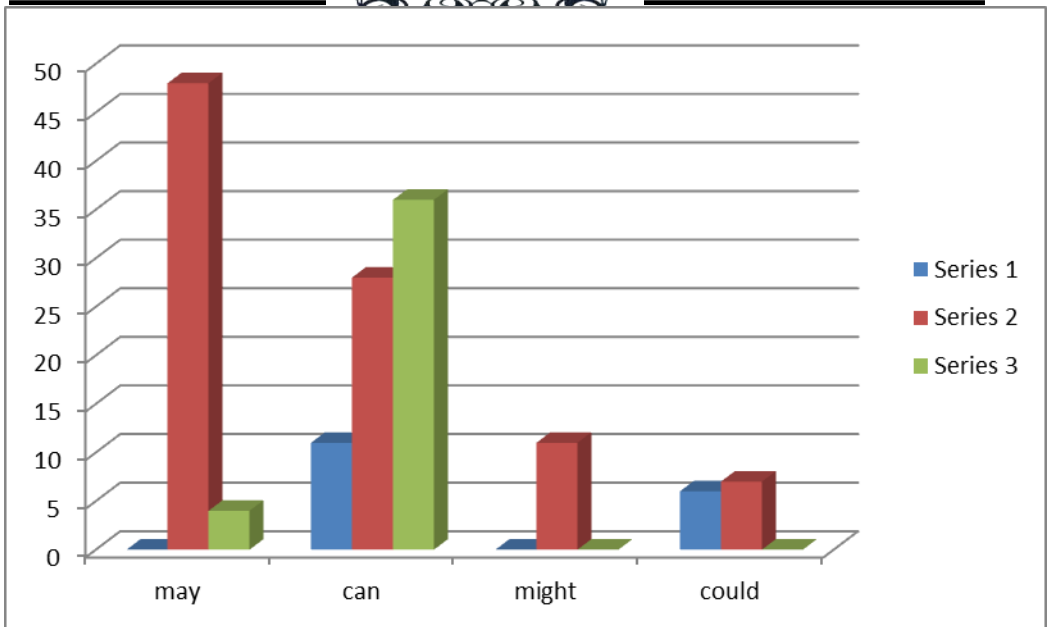


Figure (3): "can", "could", "may", "might" in ENGBM

The permission/ability/possibility modals ("can," "could," "may," and "might") function as epistemic stance markers and are used to offer writer remarks on the state of information in a proposition. To varying degrees, the meaning and application of these four modal verbs are multifunctional. At one extreme, "might" is used exclusively to indicate logical possibility; at the other extreme, "can" is widely used to indicate permission, ability, and logical possibility. The words "may" and "could" can represent varying degrees of possibility. Three of the permission/possibility modals ("could", "may", and "might") are exclusively utilized in the RAs to indicate logical possibility. In this function, the modal verb "may" is frequently used. In scholarly writing, permission is rarely expressed. When conveying logical possibility, the words "could" and "may" are far more prevalent than "permission" or "ability."



Legumes' conversion efficiencies may be lower than cereals'. (6, ENGBM)

- We also investigate the impact that SPB productivity, flexibility, and cost-effectiveness success might act among design attributes, supervisor/employee support, and facility features. (12, ENGBM)
- Such drawbacks could outweigh the advantages of SBP. (12, ENGBM)

The modal verb “can” is particularly ambiguous in the ENGBM sub-corpus, since it may be read as indicating either logical possibility or ability:

- Despite the fact that many employees are exhausted, the SBP plan can be considered as a success in many aspects since it produces a highly skilled, well compensated workforce. (12, ENGBM)

Similarly, while the modal verbs "can" and "may" are infrequently employed in the corpus to indicate permission, the majority of these cases may alternatively be understood as indicating logical possibility (example 6) or ability (example 7):

- A close supervision of SPB employees can lead to alienation. (14, ENGBM)
- SPB Multiskilled employees can use their full talents without supervision. (14, ENGBM)

The modal verbs "could" and "may" are also employed to establish an implicit attribution of position to the writer, which is easily deduced from the text:

- These costs could counterbalance SPB benefits. (12, ENGBM)
- Thus, it is more likely that such exchanges might have produced a resentful demoralization effect. (13, ENGBM)



Figure 4 reflects the results of the use of “can”, “could”, “may” and “might” in ARABM.

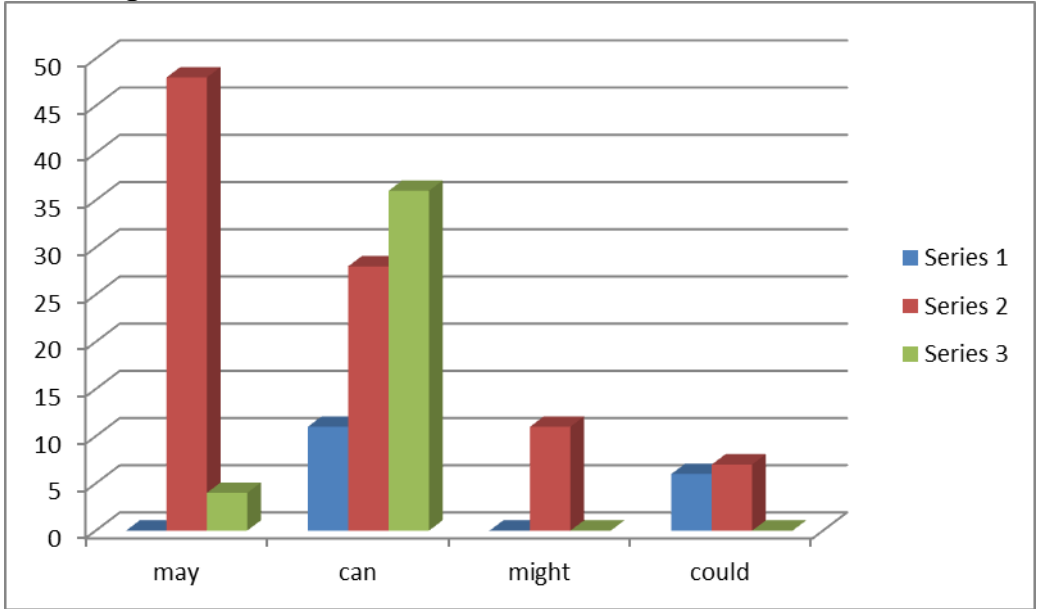


Figure (4): “can”, “could”, “may” and “might” in ARABM

The modal repertoire of non-native writers (Arabic writers) clearly shows a similar use of “may” in both sub-corpora, which contradicts its expected higher frequency of use in RAs written by native English speakers (Biber et al., 1999) – this appears to suggest that Arabic writers' use of modal verbs properly adapted to the use of their English counterparts. The ARABM corpus also contains a higher frequency of usage of the word "can" to convey epistemic modality. There are few occurrences of “might,” which not only suggests that Arabic writers' modalisation of potential nuances is weak, but also has pragmatic consequences. “Might” implies a variety of options (as opposed to the unilateral and less distant possibility represented by “could”) that aid in the development of a “reader-in-the-text” method. Finally, there appears to be a misalignment in the expression of epistemic meanings



among several modal verbs: “can” absorbs some of the potential uses of “may” and “could.”

The second approach yielded the following results: meta-discourse as a pragmatic-rhetorical standpoint. In the second part of this research, I took a top-down approach. I progressed from a merely textual to a pragmatic/rhetorical level, where the selection of modal verbs is intimately connected to the context in which they function and the writer's communicative goal. I used Hyland's taxonomy of interactional metadiscourse for this purpose (Hyland & Tsé, 2004; Hyland, 2005b). Interactional meta-discourse is classified into five types: hedges, boosters, attitude markers, engagement markers, and self-mentions. I chose to research hedges and boosters since academic authors primarily utilize modal verbs to carry out these two complimentary rhetorical tactics. Hedges and boosters are the most often used interactional metadiscourse markers. These are the primary methods through which writers might utilize English to take a flexible posture toward both their ideas and their audience.

Hedges and boosters are analogous to two sides of the same coin. They are communicative methods used to increase or decrease the power of messages. Their contribution to a relevant rhetorical and interactive tone, communicating both epistemic and affective meaning, is important in academic discourse (Hyland, 2004 & 2005a; Hyland & Tsé, 2004). The frequency and distribution of hedges in the two sub-corpora are shown in Table 1. Overall, the data suggest that international Business Management scholars who write in English in the American environment hedge their speech more strongly than their Arabic counterparts who publish in English worldwide. These outcomes are quite similar to what is obtained in the previous studies: Vassileva (1997 & 2001), Ventola (1997), Martin Martin (2002 & 2005), and Mur (2007). They illustrate that various cultures exhibit varying degrees of hedging. The percentages show that the Discussion has the most hedges in the ENGBM corpus. This is not as



high in the ARABM, where the statistics for the Discussion and Introduction parts are almost identical. The highest frequency of usage of hedges in the Discussion part of ENGBM is owing to the fact that American Business Management academics appear to be more careful when conveying the implications and inferences from their findings, as well as when noting the limits of their research.

	ENGBM		ARABM	
	Total	Percentage	Total	Percentage
Hedges	3.174 (16.04/1000)	100%	1.868 (9.70/1000)	100%
Introduction	1.308	41.21%	596	31.91%
Methods	202	6.36%	250	13.38%
Results	386	12.16%	356	19.06%
Discussion	1.278	40.26%	666	35.65%

Table (1): Frequency and distribution of hedges.

It is now time to point out how hedging modal verbs are favoured in certain portions of the two sub-corpora. However, “no linguistic elements are fundamentally hedgy but can acquire this feature depending on the communicative context or the co-text” (Markkanen & Schröder, 1997: 4). The following modal verbs convey hedges: “may,” “would,” “can,” “might,” and “could.” In both sub-corpora, the most common modal verb is “may.” It is particularly prevalent in scholarly prose. In ENGBM, it is followed by “would,” “can,” “might,” and “could.” In ARABM, “may” is followed by “can,” “could,” and “might.” The frequency and distribution of hedging modal verbs in ENGBM and ARABM are clearly represented in table 2, where the frequency of occurrence of modal verbs in ENGBM is 5.58 per thousand words, whereas



in ARABM it is 4.22 per thousand words. The Business Management RAs in the ENGBM sub-corpus use more modal verbs to attenuate the impact of the arguments than the Business Management RAs in the ARABM sub-corpus. American Business Management experts seem to be more cautious in their assertions and to use modal verbs to insulate themselves from potential criticism. They may be more conscious of the need of having their assertions verified and affirmed by their readers.

	ENGBM		ARABM	
	Total	Percentage	Total	Percentage
Hedging modal verbs	1.104 (5.58/1000)	100%	836 (4.22/1000)	100%
Introduction	474	42.93%	392	46.89%
Methods	58	5.25%	48	5.74%
Results	44	3.98%	40	4.79%
Discussion	528	47.83%	356	42.58%

Table (2): Frequency and distribution of hedging modal verbs in ENGBM and ARABM.

According to the observed percentages, Discussion has the greatest frequency of hedging modal verbs in the ENGBM corpus. Also, Introduction portion of the ARABM has the greatest occurrence. The usage of modal verbs in the Discussion part of ENGBM is owing to the fact that American Business Management academics seem to be more careful when articulating the implications and inferences from their findings, as well as when noting the limits of their research. The final results for hedging modal verbs in ENGBM and ARABM are shown in table 3.

	ENGBM		ARABM	
	Total	Percentage	Total	Percentage
May	536	48.72%	412	49.28%
Would	178	16.12%	144	17.22%

Can	198	18.07%	210	25.11%
Might	118	10.60%	22	2.64%
Could	74	6.49%	48	5.75%
Total	1.104	100%	836	100%

Table (3): Types of hedging modal verbs.

In terms of boosters, data show that Arabic Business Management academics utilize a broader spectrum of boosters and contain somewhat more boosters per 1,000 words than their American counterparts, which is clearly represented in table 4. In the ENGBM corpus, modal verbs are also the most prevalent realizations of boosting (together with hedging, as previously shown). After lexical verbs, modal verbs are the second most common way of boosting in ARABM. Boosting modal verbs are ones that help communicate meaning with conviction or a fair degree of certainty. In accordance with this, the words "will" and "should" were investigated.

	ENGBM		ARABM	
	Total	Percentage	Total	Percentage
Boosters	1.200 (6.06/1000)	100%	1.368 (7.10/1000)	100%
Introduction	459	38.25%	496	36.26%
Methods	141	11.75%	250	18.28%
Results	152	12.67%	254	18.57%
Discussion	448	37.33%	368	26.90%

Table (4): Frequency and distribution of boosters in the two sub-corpora.

In both corpora, the most prevalent boosting modal verb is "will." Those symbols of "will" indicating future time were not counted since they lack modal, epistemic significance. In English RAs, the use of the modal "will" in the formulation of hypotheses is quite prevalent. The modal verb is commonly used in the follow-



ing confirmation or denial of those assumptions as well. The other boosting modal word in Business Management RAs in English is “should,” which expresses “extreme probability, or a plausible assumption or conclusion” (Palmer, 1986: 49). Both corpora contain examples of “should” conveying the deontic sense of obligation (Quirk et al., 1985), but they do not add to demonstrating the writers' confidence or conviction. The findings are comparable to those of earlier research (Vassileva (1997 & 2001) for Bulgarian). They suggest that various cultures have varying degrees of boosting.

Although the differences are minor, modal verbs indicating the writers' conviction are more prevalent in the Business Management RAs in the ARABM than in the RAs in the ENGBM (see Table 5). In both sub-corpora, boosting modal verbs are most commonly seen in the Introduction sections. This increased usage of modal verbs conveying conviction in the Introduction part might be attributed to the presence of hypotheses in this section, the statement of which usually necessitates the use of “will.”

	ENGBM		ARABM	
	Total	Percentage	Total	Percentage
Boosters modal verbs	316 (1.60/1000)	100%	338 (1.75/1000)	100%
Introduction	204	64.56%	218	64.50%
Methods	36	11.39%	38	11.24%
Results	14	4.43%	20	5.92%
Discussion	62	19.62%	62	18.34%

Table (5): Frequency of distribution of boosting modal verbs in ENGBM and ARABM.

Consequently, in both sub-corpora, the Discussion section comes second in terms of proportional high incidence of use of boosting modal verbs, followed by the sections of Results and Methods.

Table 6 summarizes the final results for boosting modal verbs in both ENGBM and ARABM.

	ENGBM		ARABM	
	Total	Percentage	Total	Percentage
Will	240	76.52%	250	76.57%
Should	76	23.48%	78	23.43%
Total	316	100%	328	100%

Table (6): Types of boosting modal verbs.

5. Discussion of the results

Arabic writers demonstrate a deviant management of hedging and boosting resources, and therefore the construction of a suitable tone. This is connected to the mismatch noticed in the representation of epistemic meaning between some modal verbs: “can” is used instead of “may” to convey possibility. Part of this epistemic mismatch may be explained by the Arabic writers' dual inclination to misuse the word "can," on the one hand, and a lack of modalisation, on the other. In the two sub-corpora under consideration, “can” embodies three basic meanings: certainty, possibility, and politeness/solidarity, with all three accounting for the overwhelming percentage of this verb within their modal repertory (virtually half of the tokens) and the little variety of the latter in comparison to native English writers. While the certainty use is an empty modal meaning equivalent to the absence of modalisation (examples 10 and 11 below), the possibility use, as previously commented, fills the slots that should be occupied by “may” (example 12), and the politeness/solidarity meaning appears to derive from a transfer of pragmatic norms from a first to a second language.

This transfer of sociolinguistic norms from Arabic into English follows the politeness scheme (-distance, -power) (Neff et al., 2004) and results in “I/we” embeddings (I/we + CAN+ verb of perception or mental verbal activity) that native English authors seldom employ. As a positive politeness approach, their goal is to



create a common ground between the reader and the writer. According to Hernández-Flores (1999), modal verbs played a similar convergent function in unrequested counsel as methods of requesting feedback or participation in Arabic discourse. In contrast to this tendency, the politeness pattern (+ distance, - power) is shown to dominate the majority of the pieces examined by native English writers. The following examples may assist to explain the above point:

10. This can be achieved by applying the required equation. ["can be" may be replaced by "is" above, because the equation is really solved in the article].

11. This can be due to...[Native English authors would use the word "may" instead of "can"]

12. As we can see...[The word "can" might be removed here. Indeed, native English authors frequently use impersonal phrases such as "It can/will be observed that..." or "As seen/shown in figure (A)..."].

Aside from these pragmatic considerations, the usage of "can" by Arabic writers appears to be intimately related to additional typological and instructional factors:

The equivalent Arabic word "poder" is intrinsically ambiguous and polysemous (Silva-Corvalán, 1995), since it agglutinates deontic and epistemic meanings (e.g. ability, permission, and possibility), as well as Palmer's dynamic applications (1990: 35-38). As a result, it's not unexpected that Arabic authors avoid more specific alternatives like "may" or "might" in favor of a symmetrical correspondence of usage with the past word "could."

b. Moreover, Arabic writers experience a phenomenon of adapting their scant modal repertoire is accommodated to their actual expressive needs: "can" is the first modal verb learned in Arabic EFL classrooms, and high-school syllabi in general introduce the rest of modal resources sparingly and superficially, embedded in topical units and without much emphasis on the various shades of meaning conveyed.



Another intriguing finding of this study is the hazy modalisation found in the Arabic articles, which supports Holmes' (1988) notion that hedge use differs between cultures. It is also consistent with Hoye's (1997) finding that native Arabic speakers tend to underuse attitude markers in L1 and have particular difficulty with those related to idiomatic collocations ("may"/"might" + "well"). It should be noted that, most likely as a result of the aforementioned educational conditions, Arabic authors have a poor management of hedging and enhancing resources.

Lack of modalisation appears to be a natural inclination for Arabic authors and can be used as a kind of boosting method. This would explain in part the prominence of this rhetorical function in Arabic RAs, with the logical result of making defensible, hazardous, or even threatening statements. This implies that Arabic authors have a significant lack of knowledge and are unaware of rhetorical genre norms.

Arabic writers convey certainty primarily via the usage of "can" and "will," with a much lower proportion of probability and potential meanings expressed through "would", "should", and "may" (see Figure 2). Native English academic authors, on the other hand, utilize the words "would," "should," and "might" more frequently in their articles. To soften the brusqueness of the imposition, native English authors would use the word "should." However, in the first two situations (the usage of "can" and "will"), Arabic writers mix deontic modality with the passive voice, which functions as a milder

6. Conclusion

The findings of this study indicate that there are significant disparities in the usage of modal verbs by native English authors and the use of modal verbs by non-native Arabic writers. The most notable feature is that Arabic writers use hedges and boosters in unusual ways. As a result, they struggle to develop a correct tone while writing in English. This is associated with a mismatch in the representation of epistemic meaning seen between



some modal verbs: “can” is employed to convey possibility rather than “may.” Different epistemic stances are expressed by Arabic writers. This erroneous usage of modals by Arabic academics writing in English is influenced by their native writing traditions.

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