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الأسلوب في اللغة العربية: نحو تحليل متعدد الطبقات

د. عبدربه عبدالعالي جادالله
محاضر بقسم اللغة الانجليزية، كلية الآداب، جامعة طبرق. طبرق- ليبيا.

البريد الإلكتروني للمؤلف المكلف بالتواصل: abd77abd@hotmail.com

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الملخص:
تتناول هذه الورقة النظام المعقّد للموداليّة (Modality) في اللغة العربية، من خلال تحليل الأشكال، والوظائف المختلفة للعناصر الإتجاهية، وعلاقتها المتشابكة بزمن الفعل، والجهة (الجانب الاستمراري أو التام للفعل)، والبنية الصرفية. وتبين أنه بالرغم من أن الأطر التصنيفية المعروفة، مثل إطار بالمر(Palmer) تُشكّل نقطة انطلاق مفيدة في تصنيف الموداليّة العربية إلا أنها لا تفي بالغرض في تفسير النطاق الكامل للتعبيرات، والاستخدامات الموداليّة في العربية.

فالغرض من الدراسة هو معالجة هذه القيود من خلال التأكيد على الحاجة إلى إطار تحليلي أكثر شمولية، يقوم على اللغة نفسها، ويعكس التعقيد البنيوي، والوظيفي للموداليّة في العربية. ومن خلال تحليل مفصّل تُبيّن الورقة أن الموداليّة في العربية ليست فقط متنوعة من الناحية البنيوية، بل إنها متوغّلة بعمق في النحو، والدلالة، والبراجماتية؛ لذلك تدعو الدراسة إلى تبنّي نموذج متكامل للموداليّة يشمل الأبعاد النحوية، والدلالية، والمعرفية، والبراجماتيّة، من أجل تمثيل أكثر دقة للطبيعة المتعددة الأوجه للموداليّة في الخطاب العربي.

الكلمات المفتاحية : الموداليّة، اللغة العربية، الأشكال، الوظائف، التصنيف، النموذج المتكامل.

Modality in Arabic: Towards a multi-layered analysis.

Abstract:

This paper investigates the complex system of modality in Arabic through analyzing the diverse forms and functions of modal expressions and their interconnected relation with key grammatical categories such as tense and aspect and with morphology. It shows that although existing typological frameworks such as Palmer's classification offer a useful foundation for understanding basic modal distinctions, they often do not capture the full range and flexibility of modal expressions in Arabic.

The purpose of this study is to address these limitations by drawing attention to the need for a more inclusive and linguistically grounded framework that reflects the structural and functional complexity of modality in Arabic. Through detailed analysis, the paper shows that modality in Arabic is not only structurally diverse but also deeply embedded in the language's syntax, semantics, and pragmatics. The study therefore advocates for a comprehensive model to modality that considers syntactic, semantic, cognitive, and pragmatic dimensions in order to represent more accurately the multi-facets of modality within Arabic discourse.

Keywords: Modality, Arabic, Forms, Functions, Typology, Integrated model.

Introduction

Modality is a central component of meaning in natural language. It conveys a speaker's attitude towards the truth, necessity, obligation, or possibility of a given proposition. In Arabic, the expression of modality is especially rich and complex. It interacts closely with verbal morphology, tense, and aspect, and often reveals a level of grammatical and semantic intricacy that is not easily captured by general typological models.

While traditional classifications such as Palmer's division of modality into epistemic, deontic, and dynamic types offer a useful foundation for understanding broad modal categories, they frequently fail to account for the full range of modal expressions in Arabic. These frameworks tend to generalize across languages and, consequently, overlook the language-specific features and patterns that shape how modality operates in Arabic. Modal constructions in Arabic often blur the boundaries between established categories, showing overlapping or shifting meanings that resist simple classification.

The aim of this study is to analyze how modal meanings are expressed in Arabic and how they interact with key grammatical categories such as tense, aspect, and verbal morphology. It focuses on the morphological and syntactic realization of modality in Modern Standard Arabic and explores how these forms contribute to meaning in context.

The purpose of the research is to address the limitations of existing typological models by highlighting the need for a more inclusive and linguistically grounded framework. Rather than proposing a new model, the study proposes an approach that more accurately reflects the structural, semantic, and pragmatic complexity of modality in Arabic. As such, it contributes to a deeper understanding of how modality functions within Arabic discourse and raises broader questions about how typological frameworks can accommodate language-specific variation.

This study is guided by the following core questions:

1. How are modal meanings in Arabic expressed through morphological and syntactic structures

2. In what ways do Arabic modal elements interact with tense, aspect, and verbal morphology
3. To what extent do existing typological models adequately account for the range and function of modality in Arabic
4. What kind of framework could better reflect the integrated and context-sensitive nature of modality in Arabic discourse

Methodology and Approach of Inquiry

To address these questions, this study adopts a qualitative linguistic methodology grounded in descriptive analysis and comparative typology. The primary data consists of naturally occurring Arabic expressions, primarily from Modern Standard Arabic, with occasional reference to Classical Arabic where relevant. Given the researcher's expertise as a native speaker of Arabic and long-standing experience teaching both native and non-native speakers, much of the data has been drawn from intuitively constructed examples that reflect authentic and contextually appropriate usage. When necessary, these examples were cross-checked against authoritative traditional sources in Arabic grammar and morphology to ensure linguistic accuracy and normative validity.

The analysis focuses on identifying how modal meanings are expressed morphologically and syntactically in Arabic, and how they interact with tense and aspect. Particular attention is given to commonly used forms, while derivationally possible but unattested or rarely used forms are intentionally excluded from the core analysis to maintain empirical relevance.

To highlight cross-linguistic parallels and differences, selected examples from Palmer's analysis of modality in English are referenced and used as a comparative base. In some cases, Arabic examples were constructed with direct reference to Palmer's English examples to examine the degree to which equivalent modal expressions exist in Arabic or diverge structurally and functionally.

The theoretical approach integrates insights from cognitive linguistics, formal semantics, and discourse analysis. This multi-dimensional perspective enables a deeper understanding of the syntactic, semantic, and pragmatic behavior of modal expressions in Arabic, and supports the broader goal of advocating for a more inclusive and context-sensitive framework for analyzing modality in typological research.

Modality in Arabic: Forms and Functions

Modality in Arabic is conveyed through a complex system comprising three primary linguistic forms: **modal particles, modal verbs,** and **modal expressions**. **Modal particles** are function words whose modal value is heavily context-dependent, influenced by their syntactic environment and semantic interplay with other elements in the sentence. For example, the particle قد qad does not have a fixed meaning but derives its modal interpretation from the context, particularly the morphological aspect of the verb it accompanies. When combined with the imperfective verb, typically signals possibility or uncertainty and is often translated as "may" or "might" as in قد تمطر (qad tumṭir), meaning "it may rain," or قد ينجح (qad yanjah), "he might succeed." Conversely, when قد precedes a perfective verb, it often expresses certainty or present perfect aspect, exemplified by قد قال(qad qāla), "he has certainly said," or as in لقد ذهب (laqad dhahaba), "he has gone." Additionally, in more complex verb phrases, قد interacts with auxiliary verbs to indicate nuanced temporal modalities. For instance, the construction كان قد ذهب (kāna qad dhahaba) denotes the past perfect ("he had gone"), while سيكون قد أكمل(sayakūnu qad akmala) indicates the future perfect "he will have finished". Thus, the modal meaning of قد is highly sensitive to verbal morphological aspect and syntactic environment, serving as a versatile marker of modality in Arabic.

Other modal particles include **لسوف** la-sawfa, emphatic future marker, **ربما** rubba-ma, "perhaps", **لعل** la'alla used to express hope or expectation, **ليت** layta, "if only", as well as prepositional constructions such as عليه '**alayhi** literally "upon him" used to mean "he must" and اللام "the prefix **li**" combined with verbs to indicate obligation or necessity. While these particles often lack independent lexical meaning, they are pivotal in encoding modality through their interaction with sentence structure.

These particles have no other forms, i.e. cannot be conjugated, and they have to combine with lexical verbs to give their meaning in a sentence, including those verbs that can function as modal verbs. For example, the particle قد proceeds the imperfective form of the modal verb يجب as in قد يجب عليه qad yajib 'alayhi "he may have to". Also, these particles must be followed immediately by a verb, Moreover, these particles take scope over negation, i.e, negation particles in Arabic must come after these modal particles as in قد لا تمطر (qad la tumTir) " it may not rain".

Modal verbs are distinct in that they do not express an action in themselves. Rather, they convey the speaker's attitude or judgment toward the likelihood, necessity, or desirability of the action expressed by the main verb as shown in the following examples:

- تستطيع أن تسبح
  ta-staTii' 'an ta-sbaH-a
  3.F-can COMP 3.F.S-wim-ACC
  "She can swim". → expresses ability
- يجب أن تغادر الآن
  Ya-jib-u 'an tughadir-a
  2.MS-msut COMP 2.MS-leave-ACC.
  "You must leave now". → expresses necessity/obligation
- يمكن يأتي متأخراً
  Yu-mkin ya-'tii muta'khir-an
  3.MS-might 3.MS-come late-MS-ACC.

  "He might come later". → expresses possibility

However, modal verbs in Arabic interact with morphology, tense, aspect, and mood. Like all verbs in Arabic, they originate from triliteral roots and exhibit a wide range of morphological forms, including past, present, verbal noun, active participle, and passive participle. These forms encode various modal nuances such as necessity, ability, probability, and permission. The following table provides an overview of selected modal verbs and their morphologically related derived forms. It includes only the forms that are actually used and excludes the forms that can be derivationally possible but not used.

Past	Present	Verbal noun	Active Participle	Passive Participle	Meaning
وجب	يجب	وجوب	واجب	–	Necessity
استطاع	يستطيع	استطاعة	مستطيع	مستطاع	Ability
أمكن	يمكن	إمكان	ممكِن	ممكن	Possibility
احتمل	يحتمل	احتمال	محتمِل	محتمل	Probability
قدر	يقدر	قدرة	مقتدِر	مقتدَر	Ability
انبغى	ينبغي	–	–	–	Duty/ Advisability
لزم	يلزم	إلزام	ملزِم	ملزَم	Obligation
جاز	يجوز	جواز	جائز	–	Permissibility
تعيّن	يتعين	تعين	متعيِّن	متعيَّن	Requirement

It is important to note that this list is not an exhaustive list. Many roots produce derived forms with related yet distinct meanings. For example, the triliteral verb وجب wajiba has derived forms such as وجّب wajjaba, أوجب awjaba and استوجب istawjaba. As observed by Tammam Hassan (1994), these derived forms carry subtle aspectual meanings: استوجب conveys a sense of "requested or demanded an obligation," while وجّب wajjaba and أوجب awjaba indicate "causing a necessity or an obligation."

In contrast to the way modality is expressed in English, there is nothing that distinguish modal verbs in Arabic from other verbs except that they express modality. As such, polysemy is a common characteristic of Arabic modal verbs. For instance, احتاج (iḥtāja) can signify "to need" in a physical sense (e.g., needing water), or it may introduce a verbal complement, thus functioning modally. Passive constructions also express modality, as in وجِب عليه (wajiba ʿalayhi, "it was obligatory for him") or تَوَجّب عليه (tawajjaba ʿalayhi, "it became necessary for him"), which highlight external imposition or logical necessity. In addition, there is an interaction between modality and the subjunctive mood. All modal verbs, and modal expressions are followed by the infinitive أن (a'n) and the main verb in the subjunctive mood as in يجب أن يدرس yajib an yadrus–**a** " he must study", يمكن أن يسافر yukin an ysafir–**a** " he may travel".

Modal expressions are often a combination of a preposition with a nominal from such as verbal nouns or participles followed by a verb in the subjunctive mood introduced

by the complementizer 'an. Active participles such as لازم (lāzim), واجب (wājib), and جائز (jā'iz), passive participles like محتمل (muHtamal), مفترض (muftaraD), and ممنوع (mumnooa'). These participles frequently combine with the preposition من min to indicate modal meanings. There are also modal expressions consists of the preposition ب and verbal noun as well as the negation particle لا and verb noun.

Structure	Example	English equivalent
من min+ active participle	من الواجب, من اللازم	It is obligatory
من min+ passive participle	من الممكن, من المحتمل, من المفترض, من المتوقع, من المنتظر, من المعروف	It is possible, probable, supposed, expected, awaited, known
ب bi + verbal noun	بمقدور، بأستطاعة ، بأمكان	Can (ability)
لا la+ verbal noun	لاريب ،لامحالة	No doubt, undoubtedly
	لامندوحة ،لامناص، لامفر	Inevitable, no escape, no alternative
	لابد ،لاجرم	Must, verily or undoubtedly

Finally, Arabic employs evaluative expressions using the superlative forms (أفعل التفضيل) or exaggerative patterns (صيغة المبالغة), such as من الأفضل mina al-afDal "it is better", من الأحسن min-al-aHsan "it is more desirable", من الأجدر min al-ajdar "it is more appropriate", and من المفيد min al-mufeed "it is useful". These expressions reflect the speaker's subjective evaluation or belief but do not constitute modality in the strict logical or epistemic sense—they do not directly encode notions of necessity, possibility, or probability.

The expression of modality in Arabic is marked by its linguistic diversity and depth, drawing from a wide array of lexical and grammatical resources grounded in classical logical and philosophical traditions. These modalities encompass both objective modal relations, which pertain to the existential status of propositions, and subjective modality, reflecting the speaker's stance or attitude. The dynamic interplay of these systems, both diachronically and synchronically, continues to inform and enrich the analysis of modality within Arabic linguistics.

Typology of Arabic Modality: Applying Palmer's Framework

Palmer (1986, 2001) developed one of the most influential and widely adopted typologies of modality. His framework classifies modal expressions according to their semantic functions and the types of propositions they encode. Central to Palmer's approach is the primary division between realis and irrealis propositions. Realis propositions are presented as factual or corresponding to reality, typically expressed through the indicative mood. By contrast, irrealis propositions refer to non-factual situations—hypothetical, potential, desired, or necessary states—often marked by non-indicative moods such as the subjunctive or expressed through modal expressions.

Palmer (2001) further divides modality into two overarching semantic types: propositional modality and event modality. Propositional modality involves the speaker's stance on the truth of a proposition, encompassing epistemic and evidential modalities. Epistemic modality expresses varying degrees of certainty or necessity grounded in knowledge, which can be deductive, speculative, or assumptive, as seen in examples such as:

- Kate may be at home now. → (speculative possibility).
- Kate must be at home now. → (deductive necessity).
- Kate will be at home now. → (assumptive likelihood).
- (Palmer, 2001:)

Evidential modality, on the other hand, signals the source or type of evidence underlying the speaker's inference (e.g., reported, inferred, or directly observed evidence). Although evidentiality is grammatically marked in many languages, English generally does not encode it morphologically. Therefore, epistemic modality primarily reflects the speaker's judgment about the truth of a proposition based on knowledge, while evidential modality relates to the nature and reliability of the evidence supporting that judgment (Palmer, 2001).

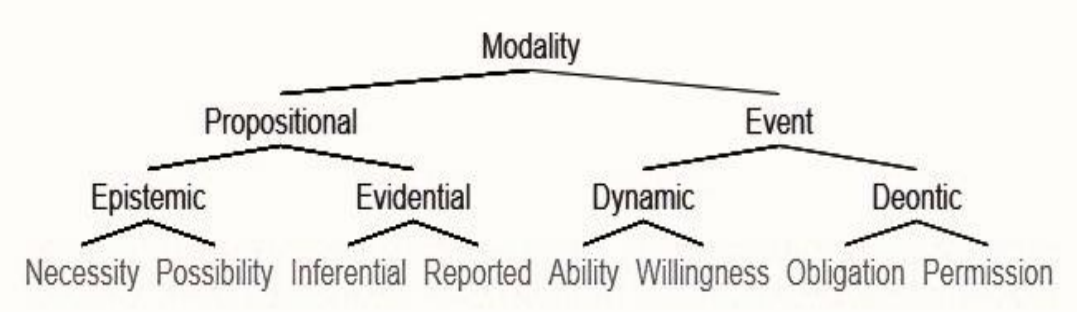
Event modality concerns the necessity or possibility of events, with two primary subtypes: deontic and dynamic modality. Deontic modality involves permissions and obligations grounded in external norms, laws, or rules:

- John must come in. → It is necessary for John to come in now (Obligation)
- John may come in. → It is possible for John to come in now (Permission)

However, dynamic modality relates to internal properties of the subject such as ability or willingness:

- John can speak French. → (Ability)
- John will do it. → (Willingness)

Palmer's overall typology of modality can be summarized in the following comprehensive diagram:



Palmer's modality classification is often criticized for its rigid division between propositional and event modality, overlooking gradience and context-dependent shifts. It also focuses heavily on grammatical forms, lacks formal semantic precision, and doesn't fully account for speaker subjectivity and cognitive dimension (Bybee, Perkins, & Pagliuca 1994, Nuyts 2001)

Applying Pamler's typology of modality to Arabic modality can yield a superficially similar classification, i.e, modal particles, modal verbs, and modal expressions can be classified according to their function into propositional and event modality. Propositional modality relates to the speaker's assessment of the truth value or evidential basis of a proposition, which include epistemic modality, and evidential modality. Epistemic modality is frequently expressed through particles, verbs, and syntactic constructions as shown in the following examples:

- **قد** تكون ليلى في البيت
  qad ta-koon Layla fil-bayt-i
  May 3.FS.be Layla in-the-house-GEN.
  "Layla may be at home now". → (Speculative judgment)
- لا بد أن ليلى في البيت الآن
  La-budda 'an Layla fil-bayt-i al-'aan
  No-doubt Comp Layla in-the-house-GEN now.
  "Layla must be at home now". → (Deductive judgment)
- ستكون ليلى في البيت الآن
  sa-ta-koon Layla fil-bayt-i al-'aan

will–3.FS.be Layla Layla in–the–house–GEN now.

"Layla will be at home now".→ (Assumptive judgment)

These expressions illustrate a range of epistemic commitments, from weak possibility to strong necessity. Modal markers such as قد "might", لا بد "must", and ستكون "will be" are deployed to modulate degrees of certainty or assumption.

With regards to evidential modality, unlike languages with grammaticalized evidentiality (e.g., Turkish, Quechua), Arabic does not encode evidentiality through obligatory grammatical markers. Nonetheless, it expresses evidential modality lexically and syntactically, using strategies such as:

- قال إن... (qāla ʾinna) — "He said that..." → (attribution/reporting)
- سمعت أن... (samiʿtu ʾanna) — "I heard that..." → (auditory evidence)
- يبدو أن... (yabdu ʾanna) — "It seems that..." → (inferential)
- من الواضح أن... (min al–wāḍiḥ ʾanna) — "It is clear that..." → (visual or inferential)
- يُقال إن... (yuqālu ʾinna) — "It is said that..." → (hearsay)

Arabic also expresses event modality, which includes both dynamic and deontic subcategories. Deontic modality in Arabic is conveyed using modal verbs and semi–auxiliary constructions such as يجب أن(yajibu ʾan) – "must", ينبغي أن (yanbaghī ʾan) – "should/ought to", له أن / بإمكانه أن (lahu ʾan / bi–ʾimkānihi ʾan) – "he may/can". Consider the following examples:

- بإمكان ليلى أن تدخل الآن

  bi–imkaan Layla 'an ta–dkhul–a

  can Layla Copm 3.FS.enter–ACC

  Layla may come in now. → (Permission)
- يجب على ليلى أن تدخل الآن

  Yajib ala Layla 'an ta–dkhul–a al–aan

  Must upon Layla Comp 3.FS.enter–ACC

  Layla must come in now. → (Obligation)

Dynamic modality which reflects internal factors such as capability or intention is expressed through verbs like يستطيع أن (yastaṭīʿu ʾan) – "can/is able to", يقدر على أن (yaqdiru ʿalā ʾan) – "is capable of" سيفعل / سوف – future forms for volition or intention. For example,

- حسن يستطيع أن يتكلم الفرنسية
  Hasan can speak French. → (Ability)
  Hasan ya-staTii' 'an ya-takallam-a al-faransiya
  Hasan 3.MS-can Comp 3.MS-speak-ACC the-French
- سيقوم حسن بذلك
  Hasan will do that. → (Intention/volition)

However, while Palmer's (1986, 2001) classification is foundational, it does not explicitly include bouletic or circumstantial modality. Bouletic modality concerns what is possible or necessary in light of a speaker's desires or preferences, while circumstantial modality reflects constraints or possibilities imposed by external circumstances. Arabic expresses both types with a variety of constructions:

- أرغب أن أخرج الآن
  a-rghab-u 'an a-khruj-a al-'aan
  1.S-desire Comp 1.S-exit-ACC now
  I would like to go out now. → (Bouletic — desire)
- في حال توفر الوقت، سأساعدك
  fii Haal tawaffar al-waqt sa-'u-saa'du-ka
  in-case-available-the-time will-1.S-help-you.MS.
  If time allows, I will help you. → (Circumstantial — conditional possibility)

Arabic features a wide range of modal expressions—verbs, particles, and constructions—that convey meanings comparable to those found in Palmer's typology. However, the typology itself fails to account for the full complexity of modality in Arabic, particularly its multifunctionality, context sensitivity, and pragmatic richness. Unlike English, where modality is primarily encoded through a closed set of modal auxiliaries, Arabic employs diverse linguistic strategies, including particles (e.g., لعل laʿalla, عسىʿasā), modal verbs (e.g., يمكن yumkin, ينبغي yanbaghi, يجبyajibu), periphrastic constructions (e.g., من الممكن min al-mumkin, لابدlā budda), and stance markers (e.g., أظن أن aDHunnu ʾanna, أخشى ʾakhsha). These forms often overlap in meaning and exhibit variation depending on syntactic structure, discourse context, and speaker intention.

For instance, لعل laʿalla may express epistemic possibility, bouletic desire, or pragmatic politeness, depending on usage. A single modal form in Arabic may encode

epistemic, deontic, or volitional meanings based on contextual cues, highlighting the fluid and dynamic nature of modality in the language.

Moreover, Palmer's framework lacks formal semantic rigor, relying on broad descriptive categories rather than precise analytical distinctions. It also overlooks the interaction of modality with discourse strategies and interpersonal stance which are key elements in understanding modal usage in Arabic, as was noted by Kahlaoui (2015).

An Alternative multi-layered Analysis

The analysis of modality in Arabic requires a model capable of accounting for its structural diversity, semantic nuance, and cognitive-pragmatic complexity. While typological frameworks such as Palmer's (2001) usefully distinguish between types of modality, they fall short of capturing the formal mechanisms of modal interpretation, the speaker's evaluative stance, and communicative intent. Similarly, mono-dimensional models such as Kratzer's (1981, 1991) formal semantics or Nuyts' (2001, 2006, 2016) cognitive stance approach are limited in their ability to address the full range of modal expressions in Arabic. Even interface-based analyses, such as Fassi Fehri's (2012) syntactic treatment grounded in Kratzer's framework or Kahlaoui's (2015) speaker-centered, cognitive-pragmatic metalinguistic strategy, fail to fully capture the multifaceted nature of modality in Arabic. As such, there is a need for a comprehensive framework that integrates syntactic structure, formal semantics, speaker-oriented interpretation, and discourse-pragmatic function. This necessitates the adoption of a **multi-layered model** that draws on insights from each of these approaches.

Fassi Fehri's (2012) analysis can provide the basis for a precise syntactic framework that structurally encodes different types of modality by assigning each type a distinct hierarchical position within the clause. The important contribution is that syntax constrains what kind of modal is possible, and how it interacts with tense, aspect, and argument structure. Therefore, it provides the necessary syntactic scaffolding for interpreting modal meanings in context. It can contribute to modeling modal scope, epistemic vs. deontic distinctions, and gradability, especially in Qur'anic Arabic and MSA.

Kratzer's formal semantic framework offers a compositional model for interpreting modality as quantification over possible worlds, constrained by two key parameters: the

modal base and the ordering source. In Arabic, various modal constructions instantiate different types of modal bases and ordering sources, as shown below:

Arabic modal	Base Type	Ordering source
قد + imperfective	Epistemic	Knowledge based
يجب أن	Deontic	Norms/Obligation
يجب أن	Epistemic/ Dynamic	Varies by context

Kratzer's (1981, 1991) framework also accounts for context-sensitive shifts in modal interpretation. For instance, the modal لعل laʿalla "perhaps" or "hopefully" can yield different readings depending on context: in epistemic contexts, it expresses logical possibility, while in bouletic contexts, it conveys hope or desire. This kind of contextual parameterization is crucial for capturing the fluidity of modal meaning in Arabic discourse.

Nuyts' (2001, 2006, 2016) cognitive stance complements Fassi Fehri's (2012) syntactic model and Kratzer's (1981, 1991) formal semantics by bringing the speaker's evaluative attitude and degree of commitment toward the proposition; such dimensions are not explicitly encoded in structural or truth-conditional terms. As such, it introduces a functional-pragmatic layer that captures the speaker's mental perspective, subjective judgment, and discourse role. This is especially relevant in Arabic, where subtle gradations of speaker certainty, intention, or evidential sourcing frequently shape modal meaning. Arabic data spans a spectrum from high-certainty assertions like لابد أن laa budda ʾan "it must be", to tentative speculation رُب rubba, "perhaps", and from strong volitional intent نويتُ nawaytu ʾan, "I intend to" to mild preferences يُستحسن yustaHsanu, "it is preferable". These distinctions are crucial in Arabic, where modal expressions often encode fine-grained differences in inference, hearsay, evaluation, and belief.

Kahlaoui's (2015) speaker-centered, metalinguistic strategy for managing meaning, expressing stance, and navigating social interaction account for discourse-level functions or speaker involvement—particularly in evaluative expressions like من المهم min al-muhimm ʾan "it is important that". It also addresses encoded rhetorical positioning, interpersonal alignment, and genre-specific functions—dimensions often overlooked in structural or truth-conditional models. Kahlaoui's (2015) model is thus essential for capturing the interactional, evaluative, and communicative dimensions of modality that are central to

Arabic usage, motivating the need for an integrated framework that accounts for not only syntactic and semantic layers but also pragmatic and discourse-level functions.

Thus, our proposed integrated model allows for the simultaneous analysis of modal force (necessity vs. possibility), modal flavor (epistemic, deontic, dynamic, bouletic, etc.), speaker stance, and discourse function. It also captures the semantic plasticity, structural diversity, and discourse-level functionality of modality in Arabic. To illustrate this integrated model in application, consider the following example:

- قد يسافر محمد غدًا
  qad yusāfir Muḥammad ghadan
  might 3. MS.travel Muhammad tomorrow
  "Mohammed might travel tomorrow."

Layer	Analysis
Syntax	قد occupies ModP above TP; the verb يسافر is in TP
Semantics	Epistemic possibility: modal base is speaker knowledge; no necessity
Cognition	Lower speaker commitment: the proposition is treated as plausible but uncertain
Pragmatic	Hedging strategy; avoids overcommitment in case of later inaccuracy

This example demonstrates how a single modal utterance in Arabic simultaneously involves structural encoding, semantic computation, evaluative positioning, and strategic discourse function. Through this layered model, we gain a comprehensive picture of how modality functions in Arabic; not merely as a matter of sentence grammar, but as a complex interface phenomenon.

The justification for an integrated model of modality that spans syntax, semantics, cognition, and pragmatics is well-supported in contemporary linguistic literature. While traditional generative frameworks (e.g., Chomsky, 1995) treat phonology, syntax, and semantics as discrete modules or levels of representation, recent approaches emphasize the importance of interface phenomena, especially in the analysis of modality (see Caha, 2009; Bybee, 2010; Sorace, 2011). Although cognition and pragmatics may not constitute formal levels

of linguistic representation in narrow generative models, they are increasingly treated as essential dimensions of analysis in integrated frameworks (see Cerrudo, 2019; Terzi, Marinis, & Francis, 2016; Chierchia, 2004; Cruschina & Bianchi, 2022). Therefore, a multi-layered model of modality grounded in syntax, formal semantics, cognitive stance, and discourse function is not only theoretically justified but also empirically necessary, especially for capturing the rich modal system of Arabic.

Conclusion

This study has examined the expression of modality in Arabic, focusing on its morphological, syntactic, semantic, cognitive, and pragmatic dimensions. In addressing the research questions, the analysis has demonstrated how modal meanings in Arabic are realized through a range of grammatical strategies and how they interact with tense, aspect, and verbal morphology. It has also evaluated the extent to which existing typological models, particularly Palmer's classification, capture the complexity of Arabic modal expressions. The findings reveal that such models, though useful as heuristic tools, are insufficient to account for the nuanced and overlapping functions that characterize modality in Arabic.

In light of these observations, the study has argued for an alternative analysis that does not propose a novel theoretical framework, but rather advocates for a more inclusive and contextually grounded approach. This analysis draws upon and integrates existing research, including Fassi Fehri's (2012) syntactic framework, Kratzer's (1981, 1991) compositional semantics, Nuyts's (2001, 2006, 2016) cognitive perspective on modality as speaker stance, and Kahlaoui's (2015) discourse-based insights. By bringing these perspectives into dialogue, the study establishes a multi-dimensional foundation capable of capturing the fluid and embedded nature of modality in Arabic.

Although the formal modelling of this integrative approach lies beyond the scope of the present study, its theoretical and empirical underpinnings are clearly articulated. The analysis presented here not only responds to the limitations of dominant typological frameworks but also lays the groundwork for a more comprehensive account of modality that reflects the linguistic realities of Arabic speakers. In doing so, it contributes

meaningfully to the typological and theoretical study of modality and opens the door to further research in both formal and functional directions.

Implications

The implications of this study extend across several domains. For Arabic linguistics, the findings call for a more nuanced treatment of modality—one that moves beyond rigid taxonomies and engages with the complex interaction of grammatical structure, speaker intention, and discourse context. The study highlights the importance of drawing on native speaker knowledge, supported by traditional sources, to construct analyses that are both linguistically accurate and pragmatically grounded.

For typological theory and linguistic analysis more broadly, this research underscores the limitations of applying uniform models to languages with highly developed and internally diverse modal systems. It advocates for an approach that accommodates structural variation and semantic flexibility, while also accounting for cognitive and pragmatic factors that influence the use and interpretation of modality.

By offering a theoretically informed and empirically supported foundation for such an approach, this study provides a valuable point of departure for future formalization and cross-linguistic comparison. It invites further exploration of how modality operates not only in Arabic, but also in other languages where traditional models may obscure rather than clarify the complexity of modal meaning.

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