

Against An Auxiliary-based Categorization of Modals in Jordanian Arabic

Mohammed Ali Malahmeh*

Abstract

This paper provides a detailed morphosyntactic analysis of modals in Jordanian Arabic (JA henceforth). It is mainly concerned with defending an alternative perspective of the conventional auxiliary-based categorization of modals in Arabic in general and in JA in particular. Contra to the long-held belief in the literature of Arabic where modals are categorized as auxiliary verbs, the paper shows with empirical evidence that the auxiliary-based analysis fails to account for the inconsistent and non-coherent morphosyntactic behavior of the JA modals *laazim* 'must', *mumkin/yemkin* 'may/might' and *bigdar* 'can/could'. The paper also shows that only the modal *bigdar* 'can/could' is the closest modal to the auxiliary category in JA. However, the paper argues that such modal should belong to a 'quasi-auxiliary' category rather than the 'conventional auxiliary' category. Key words: Modals, Categorization, Morphosyntactic Features, Jordanian Arabic, Auxiliary Analysis

* قسم اللغة الإنجليزية، كلية الآداب، جامعة مؤتة، الأردن.

تاريخ قبول البحث: 2020/6/3 م .

تاريخ تقديم البحث: 2020 /4/16 م.

© جميع حقوق النشر محفوظة لجامعة مؤتة، الكرك، المملكة الأردنية الهاشمية، 2021 م.

قراءة مغايرة في تصنيف التراكيب الدالة
على الاحتمال والضرورة في اللهجة الأردنية كأفعال مساعدة

محمد علي الملاحمة

ملخص

تهدف هذه الدراسة إلى تقديم قراءة نحوية وصرفية تفسيرية دقيقة للتراكيب الدالة على الضرورة والاحتمال والاستطاعة في اللهجة الأردنية. وقد قدمت الدراسة تصنيفاً نحويًا وصرفيًا مغايرًا للتصنيف النحوي والصرفي الشائع والذي كان يصنّف هذه التراكيب كأفعال مساعدة في اللهجة الأردنية واللهجات العربية السابقة. وبخلاف الدراسات السابقة والتي كانت تصنّف هذه التراكيب كأفعال مساعدة، أظهرت الدراسة أن التصنيف النحوي والصرفي الشائع لهذه التراكيب لا يمكن أن يفسر النمط النحوي والصرفي لهذه التراكيب (لازم، ممكن ويقدر) والذي يتصف بكونه نسقًا غير مترابط وغير متنسق نحويًا وصرفيًا. أما التراكيب الدالة على الاستطاعة، مثل "يقدر"، فقد خلّصت الدراسة إلى أن هذه التراكيب هي الأقرب نحويًا وصرفيًا للأفعال المساعدة في اللهجة الأردنية، وأوصت الدراسة بضرورة تصنيفها تحت مسمى جديد وهو "شبه فعل مساعد" وليس "فعل مساعد" كما هو الحال في التصنيفات النحوية الشائعة.

الكلمات الدالة: التراكيب الدالة على الضرورة والاحتمال والاستطاعة، التصنيف النحوي والصرفي، أقسام الكلام، اللهجة الأردنية.

Introduction

Categorization of Modals in Arabic

Typologically, categories tend to be defined semantically (De-Haan, 2004). This clearly means that a certain expression can be classified as a modal, for instance, if it expresses a modal interpretation (i.e. possibility, necessity, permission, etc.). Modality as a semantic concept can be expressed formally via various morphological, syntactic and lexical categories; to name a few: auxiliary verbs, lexical verbs, adjectives, adverbs and particles, among many others. Perhaps the best known means of expressing modality among those categories is with no doubt the auxiliary verbs category. Crosslinguistically, modal interpretations are expressed formally via the category AUX in many language families including for instance: Romance, Germanic, Slavic, Turkic Hungarian, among many others (See De-Haan, 2004; Machova, 2013 for a detailed survey of modal auxiliary verbs across many languages). Arabic in this regards is no exception. In fact, a closer look at the vast majority of the studies on modality in Arabic reveals that modal expressions have been categorized as auxiliary verbs (Jelink, 1981; FassiFehri, 1993; Ali, 1994; Mitchel and El-Hassan, 1994; Binmamoun, 2000; Safi, 2001; among many others). Unfortunately, these studies among others subsumed modal expressions under auxiliary categorization without providing the empirical evidence nor the attested data for such categorization. The strongest motivation of the studies that classified modal expressions in Arabic as auxiliary verbs comes from an attempt to draw a passive affinity between Arabic modals and English modals which are (English modals) classified morphosyntactically as auxiliary verbs (See section 3.1 for details).

The current paper explores the morphosyntactic behavior of modals in JA. It mainly provides counterarguments of the conventional view which subsumes modal expressions in Arabic in general and in JA in particular under the morphosyntactic categorization of auxiliary verbs.

This paper is organized as follows. In sub-section 1.2, I present an overview of modality definitions and its types. In section 2, I present the JA modals under discussion in this paper. In sections 3.1, 3.2 and 3.3, I provide counterarguments against the English-Arabic auxiliary parallel analysis and the kaan-auxiliary-based analysis respectively. In section 4, I conclude the paper.

Modality

Modality as a semantic category is considered among the most studied areas in the literature of linguistics and most particularly in the field of semantics. Halliday (1970, p. 189) defines modality as a notional category related to the “speaker’s assessment of the probability of what he is saying”. In other words, according to Haliday (1970), modality is the grammaticalization of the speaker’s attitudes and opinions towards a certain situation. Lyons (1977, p. 452) argues that modality “expresses the speaker’s opinions or attitudes towards the proposition that the sentence expresses or the situation that the proposition describes”. Palmer (1979,1986) and Mitchell and El-Hassan (1990) reported that modality refers to the speaker’s attitude toward what s/he says/regarding the content of a sentence. Modality has also been referred to as “the manner in which the meaning of a clause is qualified so as to reflect the speaker’s judgment of the likelihood of the proposition of the sentence being true” (Quirk et al., 1985, p. 219).

The most seminal classification of modality is a three-way classification where modality has three major types: epistemic modality, deontic modality and dynamic modality. This division was used in many works as Lyons (1977); Palmer (1990, 2001); Frawley (1992); De Haan (2004); Kearns (2000); Huddleston & Pullum (2002); Traugott & Dasher (2002); as well as in various other studies.

Epistemic modality is so called because it concerns what is known, from the Greek word *episteme*, meaning ‘knowledge’ (Kearns, 2000; Huddleston & Pullum, 2002). It is primarily concerned with “the necessity or possibility of a proposition being true in fact, given what is already known. In other words, epistemic modality expresses conclusions drawn from the actual evidence about the range of possibilities for what is the case in reality” (Kearns, 2000, p. 53). To put differently, epistemic modality involves the speaker’s degree of commitment or the speaker’s attitude toward the truth or factuality of a proposition and whether this proposition is possibly true or necessarily true.

There are two main sub-types of epistemic modality: epistemic possibility and epistemic necessity. The former is concerned with the truth of a proposition that is possibly true given what is already known. The

latter, on the other hand, pertains to a proposition that is necessarily true given what is already known. Examples (1 and 2) are illustrative.

It might rain tomorrow.

It must be raining outside; your clothes are wet.

Sentence (1) expresses an epistemic possibility interpretation: what is expressed in (1) can be paraphrased as 'Given what we already know, it is possible that it rains tomorrow'. Sentence (2) on the other hand, expresses an epistemic necessity reading: given what we already know, it is necessarily true that it is raining outside' or 'The evidence that we have (i.e. your wet clothes) leads to the inescapable conclusion that it is raining outside'.

The second major type of modality is the deontic modality. The term 'deontic' comes from the Greek word 'deon', meaning 'binding' because this type of modality pertains to imposing obligation and giving permissions (Huddleston and Pullum, 2002). Deontic modality means more specifically that the speaker "intervenes in the speech event by laying obligations or giving permission" (Downing & Locke, 1992, p. 332). Deontic modality, in this regard, is concerned with compliance with some code, binding authority, laws or set of rules. It also deals with the degree of force exerted on the subject of the sentence to perform an action. This force can come from the speaker but also from an unspecified third source (De Haan, 2004).

There are two subtypes of deontic modality: deontic necessity and deontic possibility. Deontic necessity expresses what is required or what is obligatory for someone to do by the name of certain rules, laws, binding force, morals, etc. Such meaning is represented in sentence (3) below where all students are required to wear a uniform to abide with the school regulations. This reading is expressed by the modal must. However, deontic possibility expresses what is allowed or permitted as shown in sentence (4) where the speaker is giving the subject of the sentence the permission to leave. This reading is expressed by the use of the modal may.

All students must wear a uniform

You may leave the room now

The third type of modality is the dynamic modality which concerns two basic notions: ability and volition or willingness (Leech, 2004). Sentence (5) exemplifies the ‘ability’ interpretation as indicated by the modal can; and sentence (6) illustrates the volitional reading as expressed by the modal will.

Adam can swim.

I will give you a hand if you wish.

Expressions of Modality in JA

The modals under investigation in this paper are: laazim ‘must’, yemkin/mumkin ‘may’ and bigdar ‘can/be able to’. The motivation of studying these modals comes from the fact that these modals represent the prototypical members of deontic, epistemic and dynamic modality in JA and in various varieties of Levantine Arabic, respectively (Brustad, 2000; Holes, 2004). In this section, I introduce these modal expressions along with their modality types.

JA uses the modal laazim ‘must’ to express a deontic reading (i.e. deontic necessity reading). Consider these sentences:

- 1- sarah laazim t-roo7 3ala el- madraseh.
Sarah must subju.3.fem.sing.go to the school.
‘Sarah must go to school’.
- 2- adamlazim y-jeeb mu3adal 3aali mshaanyfoot el- jam3a.
Adam must subju-3.mas. sing get score high to go the
university.
‘Adam must get a high grade to join the university.’

In (1), the modal laazim ‘must’ has a deontic reading because there is a sense of obligation for Sarah to go to school. In (2) the modal laazim ‘must’ shows that there is obligation upon Adam to get high grade, otherwise he will not join the university.

JA also uses the modal yemkin/mummkin ‘may’ to express deontic and epistemic readings. Consider these sentences:

- 3- mummkin sami bi- smaa3 musiqa.
May Sami imperf.3.masc.sing.listen music.
'Sami might be listening to music.'
- 4- mummkinsami y- Tlaa3 hassa.
May Sami subju.3.masc.sing.leave now.
'Sami may leave now/Sami is allowed to leave now.'

In (3) the modal mummkin 'may' shows the attitude of the speaker towards the truth value of the proposition given. Therefore, mummkin 'may' in this sense indicates an epistemic possibility reading where the whole proposition can be interpreted under the scope of 'it is possible that.....'. However, in (4) mummkin 'may' expresses the existence of an external permission and is thus a modal with a deontic possibility reading and can be interpreted as 'It is allowed that.....'.

Furthermore, the modal bigdar 'can/could' in JA is used to express dynamic modality (i.e. a modal that expresses ability). It can also be used to express a deontic reading. Examples (5 and 6) are illustrative.

- 5- sarahbi- t- gdar t- soogel- seeyarah.
Sarah imperf.3.fem.sing.can subju3.fem.sing.drive the car.
'Sarah can drive a car.'
- 6- bi -t- gdar-uut- fta7 -uuel- awraqel'aan.
Imperf.2.can.masc.pl subju.2.open.masc.pl the papers now.
'You can open exam papers now.'

In (5) the modal bigdar 'can/could' relates to the ability of the individual concerned to do an action. However, in (6) bigdar 'can/could' relates to giving permission in the sense that it expresses the existence of an external permission (i.e. deontic possibility).

Modals in JA: A Morphosyntactic Analysis

The problem with defining auxiliary verbs across languages lies partly in the fact that auxiliary is by nature a category that arises out of diachronic developments in a particular language's verbal system (Givon, 1989).

“Auxiliary” in English includes both temporal (to be, to have, and to do) and modal auxiliary verbs, and their Arabic lexical counterparts have been described as auxiliaries as well. Harrel (1990) labels a number of modals in Moroccan Arabic as auxiliaries. Mitchell and El-Hassan (1994) join Harrell in categorizing modals in JA as auxiliaries as well. Many other studies addressing modals in other varieties of Arabic categorized modals as auxiliary verbs too (See FassiFehri, 1993; Mitchel and El-Hassan, 1994; Binmamoun, 2000; Safi, 2001; among many others). However, none of these studies along with others investigated the actual morpho-syntactic behavior of the modals whether in Moroccan, Jordanian or other Arabic dialects before jumping into this conclusion. According to these studies, the strongest motivation for categorizing modals as auxiliary verbs comes from two respects: first, some of these studies (Mitchel and El-Hassan, 1994; Safi, 2001; among others) attempted to draw a blind parallel between Arabic modals and English modals. The main claim in this regards is that since modals in English are auxiliaries so is the case for Arabic modals. I shall refer to this claim as ‘the English-Arabic Auxiliary parallel analysis’ in the remainder of this section. Second, modals in Arabic have been categorized as auxiliary verbs due to the fact that they resemble *kaan* ‘to be’ in their morphosyntactic behavior which is considered to be the exemplary structure of auxiliary verbs in Arabic as advocated in studies such as (Jelink, 1984; FassiFehri, 1993; Binmamoun, 2000; Brustad, 2000; among others). I will refer to this claim as “the Auxiliary-Kaan analysis”.

Contra to previous literature, I argue that modals in JA cannot be categorized as auxiliary verbs. I base this argument on the morpho-syntactic evidence and empirical data I present in the remainder of this section. This section will be organized as follows: in sub-section 3.1, I present a counterargument against the studies which attempted to categorize modals in Arabic as auxiliary verbs based on the parallel with their English counterparts (i.e. the English- Arabic Auxiliary Parallel analysis). In sub-section 3.2, I investigate the core morpho-syntactic features of *kaan* ‘to be’ which is considered to be the exemplary structure of auxiliary verbs in Arabic. In sub-section 3.3 I present a counterargument against the claim that modals in JA resemble *kaan* ‘to be’ in their morpho-syntactic behavior (i.e. the Auxiliary-Kaan analysis).

Against the English-Arabic Auxiliary Parallel Analysis

Modal expressions in English such as will, shall, might, must, can, could, etc. are categorized as auxiliary verbs (See Emonds, 1985; Quirk et al., 1985; Alexander, 1988; Huddleston et al., 2002; Sag et al., 2003; Kim & Sells, 2008 for further details). The motivation for classifying modals as auxiliaries in English comes from the fact that they share the NICE properties with the other auxiliary verb groups in English (verbs to be, verbs to do and verbs to have) as shown in A-D below. The NICE properties which stand for Negation, Inversion, Contraction and Ellipsis have been taken as the criteria to: (a) distinguish between lexical verbs and auxiliary verbs in English (b) and to classify any linguistic expression in which these properties are applicable to as an auxiliary verb (For further details on NICE properties see Downing & Locke, 1996; Huddleston et al., 2002; Hauge, 2003; Payne, 2011).

A. Negation: In English, a verb cannot be negated unless an auxiliary verb is used. When the auxiliary verb is used such as modals, then the auxiliary verb or the modal in this case can be followed by the negative marker not contrary to lexical verbs as shown in (1 and 2).

(1) Adam cannot speak French.

(2) *Adam speaks not French.

B. Inversion: Modals such as all the other auxiliary verb groups in English precede the subject in certain structures where inversion is needed such wh and yes/no questions as shown in (3). This fact does not hold for lexical verbs as shown by the ungrammaticality of sentence (4) below.

(3) Can Adam speak French?

(4) * Speak Adam French?

C. Contraction: Similar to other auxiliary verbs groups, modals in English can be contracted under negation unlike lexical verbs. Sentences (5 and 6) are illustrative.

(5) Adam can't speak French.

(6) * Adam speakn't French.

D. Ellipsis: The complement of modals in English can be elided in some constructions as exemplified in (7). However, this fact does not hold for lexical verbs as shown in (8).

(7) Adam can speak French, so can Sarah.

(8) * Adam speaks French, so speaks Sarah

The NICE properties discussed above are shared by all the auxiliary verb groups in English, i.e., the modal group and the non-modal groups (to do, to have and to be). Modal auxiliary verbs in English, however, share other distinctive properties that set them apart from the other non-modal auxiliary verbs (Huddleston et al., 2002; Sag et al., 2003; Kim & Sells 2008; Althawab, 2014). These properties are discussed in E and F below.

E. Finite positions only. It has been pointed out by Emond (1985), among many others, that modals in English are best analyzed as instances of the category AUX (INFL in Chomyskyan minimalist terminology 1986, 1993, 1995, 2000) and that one of the major properties of this category is tense-marking (FassiFehri, 1993, p.159; See Radford, 1997 for further details). This fact has many consequences: first, the modal in English has to be in initial position of the clause especially when another verb is used in the same clause; second, modals in English cannot hold any non-finite position; third, English modals have primary or frozen forms (i.e. no secondary forms such as past or progressive forms). This property is illustrated in sentences (9-11).

9- Sarah might have been cooking. (Finite initial position)

10- * I want to can drive this car. (Not allowed in non-finite position)

11- *Adam is maying.... (Restricted form)

F. Bare Infinitival Complement. Unlike the other auxiliary verb groups (except for verbs to do), modals in English can only be followed by a non-finite verbal complement, i.e., bare VPs and not CPs since AUX heads its own projection and selects for a bare VP as shown in (12-14) below.

12-Adam must apply for the visa soon.

13-* Adam must applying for the visa soon.

14- * Adam must applied for the visa soon.

The English- Arabic Auxiliary parallel analysis is one of the strongest in the literature of modality in Arabic where many studies have blindly and passively drawn a parallel between Arabic and English modals claiming that Arabic modals can be categorized as auxiliary verbs as their English counterparts (Jelink, 1984; FassiFehri, 1993; Ali. M, 1994; Mitchel and El-Hassan, 1994; Brustad, 2000; among others). However, I argue that the English-Arabic Auxiliary parallel analysis stands on a weak footing. The above NICE properties which are, as mentioned earlier, core features for all auxiliary verbs in English are not applicable to modals in Arabic and to JA modals in particular. For example, in English, a verb cannot be negated unless an auxiliary verb is used. When the auxiliary verb is used such as modals, then the auxiliary verb or the modal in this case can be followed by the negative marker not contrary to lexical verbs as shown in (1 and 2) earlier. However, this fact does not hold for JA modals as exemplified by sentences (15 and 16) below.

15- adammaalaazim (maa) yrud 3alehum
Adam not must (not) subju.3.sing.masc. listen to. them
'Adam must listen to his father and mother.'

16- adammaa bi-rud 3ala abuhwuumuh
Adam not imperf-listen to father-his and mother-his
'Adam does not listen to his father and mother.'

As shown in (15), the negative marker is used before the modal laazim and the other negative marker is used after the modal but this time in order to negate the verb and not the modal. If NICE properties and especially the Negation property is applicable to JA modals then sentence (15) should be ungrammatical due to two facts (violations): first, the negative marker should not precede the modal laazim because this is not allowed with English modals as shown in property (A) above. Second, the other negative marker that negates the verb yrud 'listen' should only be used with another auxiliary verb (another modal in this case) because only auxiliary verbs can be used with negative markers in English. However, sentence (15) is perfectly grammatical despite these violations. Moreover and hypothetically speaking, even when we assume that sentence (15) is grammatical in English (with the negative marker preceding the modal verb must), the semantic interpretations of the English and JA sentences are totally different. In fact, the two interpretations are totally opposite to each other. If sentence (15) is uttered without the other negative marker (maa) that negates

the verb *yruḍ* ‘listen’, then, according to the interaction between modals and negation in English, the sentence should yield this interpretation “Not>Must>Listen” (i.e. It is not necessary for Adam to listen to them). In other words, there is a lack of necessity for Adam to listen to them. However, this interpretation does not hold in JA because sentence (15) is only semantically acceptable under the opposite interpretation “Must>Not>Listen” (i.e. It is necessary for Adam Not to listen to them). In other words, there is a necessity for Adam not to listen to them. As for sentence (16), the sentence is still grammatically acceptable despite the fact that the negative marker precedes the verb and it is used without the need of an auxiliary verb contra to English. The negation property cannot, therefore, be taken as an argument in support of the English-Arabic auxiliary parallel analysis.

The rest of the NICE properties are also inapplicable to JA modals. In JA, there is no need to invert the auxiliary with the subject to form questions as shown in (17 and 18). In fact, there is no need to use an auxiliary verb in the first place to form a question in JA and in Arabic dialects in general. The contraction property along with the ellipsis are not even compatible with JA morpho-syntax in particular and Arabic dialects in general. Furthermore, in JA and in Arabic dialects in general there is no Do-support, no tag questions, no auxiliary reduction, nor anything resembling these (See Eisele, 1992 for further details on the incompatibility of English auxiliary properties on Egyptian Arabic and other dialects of Arabic as well).

17- *weinadam raa7?* where Adam

go.PAST.3.SING

Where did Adam go?’

18- *wein raa7 adam ?*

where *go.PAST.3.SING* Adam

‘Where did Adam go?’

I. further argue that the distinctive properties of English modals (discussed under E and F above) are not applicable to JA modals either. As shown under property (E), English modals hold a finite position in the sentence. However, this is not true for JA modals. Consider sentences (19-23).

19- *laazim y- gadem el- emti7aan.*

- Must subju.3.masc.sing the exam.
‘He must take the exam.’
- 20- mummkin y-safir-u.
May subju-go-3.sing.masc.
‘They might leave.’
- 21- kaan laazim y- gadem el- emti7aan.
Be.past must subju.3.masc.sing the exam.
‘He had to take the exam/He should have taken the exam.’
- 22- kaanmummkin y-safir-u embare7.
Be.past may subju.study.3.masc.pl yesterday.
‘It was possible for them to leave yesterday.’
- 23- * mummkin y-safir-u embare7.
may subju.study.3.masc.pl yesterday.
‘It is possible for them to leave yesterday.’

In (19) and (20), the modal *laazim* ‘must’ and *mummkin* ‘may’ mark zero tense. These modals allow generic readings where the propositions could take place in the present or future. This clearly suggests that these modals do not hold a finite position otherwise the temporal readings in (19) and (20) should be clearly anchored to one specific temporal location, i.e., either at the time of utterance (present) or after the time of utterance (future) but not both of them. Sentences (21 and 22) add further supportive evidence to the fact that modals in JA do not hold a finite position. When these modals are used under a past temporal interpretation as evident in sentences (21 and 22), the auxiliary verb *kaan* ‘to be’ is used to mark the past temporal reading. It is the auxiliary verb *kaan* ‘to be’ that locates the statements in (21 and 22) in past tense and not the modals. The auxiliary verb *kaan* ‘to be’ takes initial position in the sentence indicating that it holds the finite position in the sentence. This can be supported by the ungrammaticality of sentence (23) where the sentence expresses a past reading indicated by the adverb *embare7* ‘yesterday’ but the auxiliary verb *kaan* ‘to be’ is removed

from the sentence. If modals in JA indicate tense and hold finite position, sentence (23) should be grammatical. However, the fact that sentence (23) yields ungrammaticality clearly suggests that it is the auxiliary verb *kaan* ‘to be’ and not the modal that locates the sentence in past tense. The fact that JA do not hold a finite position and that they do not occur in initial position in the presence of other verbs as shown in the above discussion stands in a clear opposition to the first distinctive property of English modals discussed under (E) above in which: (a) modals in English hold finite position and (b) modals in English have to be in initial position of the clause especially when other verb is used in the same clause.

There is also a stark difference between modals in JA and English modals with regards to the infinitival complement as shown under property (F). While it is true that modals in English can be followed only with the infinitival form of the verb, the empirical data from JA which I provide below (sentences 24-26) demonstrates that modals in JA exhibit various patterns of verbal complements contra to English modals.

- 24- *laazim 7akeit ma3uh*
 must talk.past.2.sing with-him
 ‘You should have talked to him.’
- 25- *yemkinejuu embare7*
 may come.past.3.pl yesterday
 ‘They might have come yesterday.’
- 26- *laazimadam ye7ki ma3uh*
 must Adam talk.past.3.sing with-him
 ‘Adam must talk to him.’
- 27- *yemkin el-shababejuu embare7*
 may the-young come.past.3.pl yesterday
 ‘They might have come yesterday.’

In (24 and 25), the modals *laazim* ‘must’ and *yemkin* ‘may’ are followed by perfective verbal complement and not infinitival verbal complement. Yet, the sentences are perfectly grammatical. In (26 and 27), the modals *laazim* ‘must’ and *yemkin* ‘may’ are followed by a full sentence where the subjects *Adam* and *el-shabab* constitute a barrier between the modal and its verbal complement and yet the sentences are still grammatical.

In sum, the aforementioned arguments and empirical data clearly assert that there is no modal in JA which has properties even remotely similar to the behavior of English modals be it the NICE properties or even the distinctive properties of English modals.

3.2 kaan‘to be’ as the Exemplary Structure of Auxiliaries in Arabic

As pointed out earlier, one of the strongest arguments for categorizing modals in Arabic in general and in JA in particular is that modals in Arabic are auxiliary verbs. This claim stems from the assumption that they resemble kaan ‘to be’ in their morpho-syntactic behavior (the Auxiliary-kaan analysis). The auxiliary verb kaan ‘to be’ has been considered by many seminal studies in Arabic linguistics to be the exemplary structure of the category AUXILIARY in Arabic (Cowell, 1964; Jelink, 1984; Steel et al., 1981; Harrell, 1990; FassiFehri, 1993; Eisele, 1988; Binmamoun, 2000; Brustad, 2000; among many others). In fact, one of the compelling evidence for considering kaan‘to be’ an auxiliary verb comes from the Chomskyan minimalist view of language. Chomsky (1981, 1986, 1993, 1995, 2000) specified that auxiliaries are to be give the functional category of INFL (Inflection) usually abbreviated as IP. The general idea behind this assumption is that according to Chomsky auxiliaries are a functional category that inflect for Tense and Agreement (See Radford, 1997, 2001 for further details and discussions). In other words, the temporal and agreement inflections are the two core features of the AUX category according to Chomsky (1981, 1986). This observation holds true for the auxiliary verb kaan‘to be’ as we will see later in this section.

I will follow the same line of argumentation adopted by Emonds (1985); Quirk et al. (1985); Huddleston et al. (2002); Hauge (2003) and Payne (2011) in proposing the NICE properties discussed in the earlier section (3.1). The argumentation behind the NICE properties is as follows: if linguistic structure X has the NICE properties, then the linguistic structure X is an AUX. By the same token, since kaan ‘to be’ has been considered in Arabic linguistics to be the exemplary structure of the category AUXILIARY in Arabic, it follows then: if linguistic structure X (in this case JA modals) has the kaan ‘to be’ properties, then the linguistic structure X (JA modals in this case) is an AUX. In order to follow this line of argumentation, two important tasks are needed: first, it is necessary to discuss the core properties of the auxiliary verb kaan ‘to be’ and second, to

test whether these core features are applicable to JA modals or not. Any other attempts for categorizing modals as auxiliaries without considering these two tasks are nebulous and not empirically motivated. In the remainder of this section I will discuss the core feature of the auxiliary verb *kaan* 'to be' and in section (3.3) I will apply these features on JA modals.

There is number of core features of the auxiliary verb *kaan* 'to be' in Arabic dialects in general and in JA in particular. First, the auxiliary verb *kaan* 'to be' appears to behave like verbs in JA in terms of agreement inflection. In other words, this auxiliary verb is inflected for number, person and gender, consider the following examples:

- 1- sarahkan -at bi- t- ktib fi ar- resaleh.
Sarah was.past.3.fem.sing imperf.3.fem.sing.write in the letter.
'Sarah was writing the letter.'
- 2- el- 'awlad kan -uubi -l3ab -u barra.
The children were.past.3.mas.pl imperf.Play.3.masc.pl outside.
'The children were playing outside.'
- 3- hassaakeedbi- y-koonbi-drus 3ala el- emti7an.
Now certainly imper.pres.is.3.masc.sing imperf. study on the exam.
'He is studying for the exam now.'

In (1), (2) and (3) the auxiliary *kaan* 'to be' is fully inflected for number, gender and person. Although *kaan* 'to be' shares the inflectional paradigm of verbs in JA, in sentences such as the ones below, it and it alone of all the members of the morphological class "verb" in JA marks tense (FassiFehri, 1993; Binmamoun, 2000). This peculiar feature of *kaan* 'to be' makes it distinctive in the morphological class "verb" in JA^{*}. Sentences (4-6) are illustrative.

- 4- ahmadkaan bi- tfaraj 3ala et- telfizioon.
Ahmad was.past.3.masc.sing imperf.watch.3.masc.sing on the T.V.
'Ahmad was watching T.V.'

* Al-Horais (2012) conducted a study on the universal features of the category 'Auxiliary' based on cross-linguistic data where he found that deictic nature and agreement are core features of the category Aux.

- 5- * ahmadkaantfaraj3ala et- telfizioon.
Ahmad was.past.3.masc.sing perf .past watch.3.masc.sing on the
T.V.
'Ahmad was watching T.V.'
- 6- (a) huwwaTalib.
He student.
'He is student.'
- (b) huwwakaanTalib.
He was.past.3.masc.sing. student.
'He was student'

In example (4) above, the auxiliary kaan'to be' marks past tense and the verbal complement bi -tfaraj 'watch' only marks imperfective aspect. Sentence (5) is ungrammatical because the auxiliary kaan'to be' does not allow verb complement to mark deictic time reference. Example (6) (a) presents a verbless sentence (also referred to as nominal sentences) where the auxiliary kaan'to be' is implied under present temporal reading. In (6) (b), however, kaan'to be' surfaces to mark past tense (FassiFehri, 1993; Binmamoun, 2000).

The deictic nature of the auxiliary verb kaan'to be' can also be manifested by two facts. First, it always holds the initial and finite position of the sentence similar to auxiliaries in English especially when it is used with another verb in the same clause (Jelink, 1984). Second, it is followed by a non-deictic verbal complement (Eisele, 1994). These facts are exemplified in sentences (7-10).

- 7- ahmad bi- tfaraj 3ala et- telfizioon.
Ahmad imperf.watch.3.masc.sing on the T.V.
'Ahmad is watching T.V.'
- 8- ahmadkaan bi- tfaraj 3ala et- telfizioon.
Ahmad was.past.3.masc.sing imperf.watch.3.masc.sing on the
T.V.
'Ahmad was watching T.V.'
- 9- adam m5ales er-resaleh.
Adam finish.perf.3.masc.sing the-letter.
'Adam has finished the letter.'

10- adamkaanmxaleser-resaleh.

Adam was.past.3.masc.sing finish.perf.3.masc.sing the-letter.
 ‘Adam had finished the letter.’

Sentence (7) expresses an on-going situation at the moment of speaking. However, when the same situation is expressed under a past temporal reading as in sentence (8), the auxiliary verb *kaan* ‘to be’ is used. Note here that it is the auxiliary verb *kaan* ‘to be’ that locates the situation in (7) in past tense and not the verb. The verb *bitfaraj* ‘watching’ indicates only an imperfective aspectual reading not a temporal reading. The auxiliary verb *kaan* ‘to be’ takes initial position in sentence (8) in the presence of the other verb *bitfaraj* ‘watching’ indicating that it holds the finite position in the sentence which licenses the past temporal reading. The same facts hold for sentences (9 and 10).

A further piece of evidence that *kaan* ‘to be’ marks tense is the fact that this auxiliary does not show up in nonfinite environments. For example, verbs such as the verb *bi7awel* ‘try’ allows only subjunctive mood as its complement. Examples 11(a) and (b) are illustrative:

11- (a) huwwa bi-7awel y-Tawirmaharat-uh.
 He imperf.3.masc.sing.try Subju.masc.sing.developskills. his.
 ‘He tries to develop his skills.’

(b) * huwwa bi-7awel biykun/kaan y-Tawirmaharat-uh.
 He imperf.3.masc.sing.try is/was Subju.masc.sing.developskills.
 his.
 ‘He tries to develop his skills.’

Sentence 11 (a) is grammatical because the verb *bi7awel* ‘try’ only allows subjunctive or non-finite verbal complements. However, sentence 11 (b) is ungrammatical because *kaan* ‘to be’ cannot appear in non-finite positions.

JA also has independent subjunctive clauses where the paradigms with *kaan* ‘to be’ does not occur, these sentences employ the same subjunctive verb inflection that appears in 11 (a) above. Consider these sentences:

12 - (a) Xalli y- ngale3.
 Let.him Subju.3.masc.sing.go to hell!
 ‘Let him go to hell!’

- (b) ma- ti7kee -sh la-nas .
Neg. talk not to anyone.
'Do not talk to anyone.'
- (c)* Xallikaan/biykoony- ngale3.
Let.him was/is Subju.3.masc.sing.go to hell!
'Let him go to hell!'
- (d)* kaan ma- ti7kee -sh la-nas .
was Neg. talk. not to anyone.
'Do not talk to anyone.'

The fact that the non-finite sentences in 12 (a) and (b) also lack the paradigm wit kaan'to be' (12 c & d) is consistent a with the fact that kaan'to be' marks deictic reference.

One of the other features of the auxiliary kaan'to be' is its distribution in the sentence. kaan'to be' distributes in three main positions in the clause: a- kaan predicate , b- subject kaanpredicate, c- kaansubject predicate. Consider the examples below:

- 13- (a) kaan -at bi- t- ktib fi er- resaleh.
was.past.3.fem.sing imperf.3.fem.sing.write in the letter.
'She was writing the letter.'
- (b) sarahkaan -at bi- t- ktib fi er- resaleh.
Sarah was.past.3.Fem.sing imperf.3.fem.sing.write in the letter.
'Sarah was writing the letter.'
- (c) kaan -at sarah bi-t-ktib fi er- resaleh.
was.past.3.fem.sing Sarah imperf.3.fem.sing.write in the letter.
'Sarah was writing the letter.'

Sentence 13 (a) above shows that kaan'to be' can occur initially in the sentence before the main predicate biktib 'write'. In 13 (a) there is no overt subject in the sentence as JA is a pro-drop language that allows both an explicit or dropped subject. The morphological inflection on the auxiliary verb kaan'to be' shows the number, and gender of the dropped subject. In 13 (b) kaan'to be' can occur medially between the subject and the main

verb. In 13 (c), it occurs initially in the sentence but this time before the subject and the main verb.

In JA, the auxiliary *kaan* 'to be' is negated using the sentential negation marker *ma* which corresponds to 'not' in English. The negative marker *ma* 'not' is used also to negate verbs in JA. *Mush* 'not' or *muu* 'not' are also other negation markers in JA, but these are markers for non-verbal predicates. The negative markers *mush* or *muu* cannot be used to negate the auxiliary *kaan* 'to be', as shown in 14(a and b).

14- (a) *el- awladmakaan -uubi- l3ab-uu barra.*

The children not were.past.3.Mas.Pl
imperf.play.3.Mas.Pl outside.

'The children were not playing outside.'

(b)* *el- awlad mush kaan -u bi- l3abu barra.*

The childrennot were.past.3.Mas.Pl imperf.play.3.Mas.Pl
outside.

'The children were not playing outside.'

In 14 (a) above the negation marker *ma* 'not' is correctly used to negate the auxiliary *kaan* 'to be'. However, 14 (b) yields ungrammaticality because *kaan* 'to be' is negated by the negative marker *mush* 'not'.

Furthermore, one of the distinctive features of the auxiliary verb *kaan* 'to be' which sets it apart from the morphological class of "verb" in JA is that *kaan* 'to be' does not select for a complementizer [-Comp]; for some other verbs this feature is optional [- / + Comp]; and for some others it is an obligatory feature [+Comp]. Consider the examples below:

15- (a) *sami bi- 7awel (innuh) y- bthuljuhd -uh.*

Sami imperf.3.masc.sing that subjun.3.masc.sing effort. his.

'Sami tries to do his best.'

(b)* *samikaaninnuh bi-7awel (innuh) y-bthuljuhd -uh.*

Sami was.3.masc.sing that imperf.3.masc.sing.try that

subjun.3.masc.sing effort. his.

'Sami tries to do his best.'

In 15 (a) above, the presence of the complementizer *innuh* 'that' is optional with the verb *bi7awel* 'try'. However, 15 (b) is ungrammatical as the auxiliary verb *kaan* 'to be' does not select for complementizers.

Against the Auxiliary-kaan Analysis

In this section, I subject the main claims of the auxiliary-kaan analysis to scrutiny. To this end, I extend the properties of the auxiliary verb *kaan* to the modals in JA under investigation, mainly the modal *laazim* 'must', *mummkin* 'may/might' and the modal *bigdar* 'can/could'.

We have seen that there is number of core features of the auxiliary *kaan* 'to be' in JA, above all is that *kaan* 'to be' appears to behave like verbs in JA in that it is inflected for number, person and gender. However, this fact does not hold for modals in JA mainly *laazim* 'must' and *mummkin* 'may'. The following examples are illustrative:

- 16- (a) *sarah laazim t-roo73ala el- madraseh.*
Sarah must subju.3.fem.sing.go to the school.
'Sarah must go to school.'
- (b) *laazimyegadmu 3ala el-viza.*
Must.imperf.3.masc.pl. apply to the-visa
'They must apply to the visa.'
- (c) * *sarahlaazim-t t- roo73ala el- madraseh.*
Sarah must.3.fem.sing subju.3.fem.sing.go to the school.
'Sarah must go to school.'
- (d) * *laazim-uuyegadmu3ala el-viza.*
Must.3.masc.pl imperf.3.masc.pl.apply to the-visa.
'They must apply to the visa.'
- 17- (a) *mummkinsarah bi- t- smaa3musiqaa.*
May Sarah imperf.3.fem.sing.listen music.
'Sarah might be listening to music.'
- (b) *mummkin y- lbas -uu3aadi.*
May subju.3.mas.wear.pl normal.
'They may wear casual outfit/ They are allowed to wear casual outfit.'
- (c) * *mummkin-t sarahbi-t- smaa3 musiqaa.*

May.3.fem.sing Sarah imperf.3.fem.sing.listen music.

‘Sarah might be listening to music.’

- (d) *mummkin-uu y- lbas -uu3aadi.

May.3.masc.pl subju.3.mas.wear.pl normal.

‘They may wear casual outfit/ They are allowed to wear casual outfit.’

In 16 (a) and (b) above the modal *laazim* ‘must’ is not inflected for number, gender or person. Thus, the sentences are grammatical. However, in 16 (c) and (d), the modal *laazim* ‘must’ is inflected for number, gender and person. The agreement morphology on this modal yields ungrammaticality of these sentences. The same fact holds for the modal *mummkin* ‘may’. In 17 (a) and (b), the modal *mummkin* ‘may’ is not inflected for number, gender or person. Thus, the sentences are grammatical. However, in 17 (c) and (d), the modal *mummkin* ‘may’ is inflected for number, gender and person, and thus the sentences are ungrammatical.

Interestingly enough, the agreement inflections can only appear on the modal *bigdar* ‘can/could’. This modal can be inflected for number, gender and person exactly like the auxiliary verb *kaan* ‘to be’ as evident in 18 (a-d)

- 18- (a) sarahbi-t- gdart- soogel- seeyarah.

Sarah imperf.3.fem.sing.can subju3.fem.sing.drive the car.

‘Sarah can drive a car.’

- (b) bi- gdar -uu y-ghelb –uu -hum.

Imperf.can.3.masc.pl subju.3.beat. masc.pl.3.masc.pl.obj.

‘They can beat them.’

- (c) * sarahbi-gdart- sooq el- seeyarah.

Sarah imperf.can.3.masc.sing subju.drive.3.fem.sing the car.

‘Sarah can drive a car.’

- (d) * bi- gdary- ghelb -uu-hum.

Imperf.can.3.masc.sing subju.3.beat. masc.pl 3.masc.pl.obj.

‘They can beat them.’

In 18 (a) and (b) the modal bigdar ‘can/could’ is inflected for number, gender and person. Thus, the sentences are grammatical. However, in 18 (c) and (d) the modal bigdar ‘can/could’ is used without the inflectional markers of person, number and gender. Therefore, the sentences are ungrammatical. This suggests that the modal bigdar ‘can/could’ is the only modal in JA that has a parallel morpho-syntactic behavior to the auxiliary kaan ‘to be’ as far as agreement is concerned.

Another feature of the auxiliary verb kaan ‘to be’ is the fact that it marks tense. This fact does not hold for modals in JA either as modals in JA mark zero-tense. In fact, when modals are used under past temporal reading, the auxiliary kaan ‘to be’ must be used to indicate past tense otherwise the sentence is ungrammatical. Examples 19 (a-f) are illustrative:

19- (a) kann-uu el- awlad bi-l3aab -uu barra.

Were.3.masc.pl the children imperf.play.3.masc.pl outside.

‘The children were playing outside.’

(b) hassa bi-ykoon y-l3aab faTbol.

Now imperf.3.masc.sing.be subju.3.masc.sing.play football.

‘At this moment, he is playing football.’

(c) laazim y- gadem el- emti7aan.

Must subju.3.masc.sing the exam.

‘He must take the exam.’

(d) mumkin bi- drus -uu fi al- maktabeh.

May imperf.study.3.masc.pl in the library.

‘They might study at the library.’

(e) kaan laazim y- ghadem el- emti7aan.

Be.past Must subju.3.masc.sing the exam.

‘He had to take the exam/He should have taken the exam.’

(f) mummkinaan-u bi- drus -uu fi al- maktabeh.

May Be.past.pl imperf.study.3.masc.pl in the library.

‘It was possible that they study at the library.’

In 19 (a) the auxiliary kaan ‘to be’ marks past tense and in 19 (b) it marks present tense. In 19 (c) and (d) the modal laazim ‘must’ and mummkin ‘may’ mark zero tense. These modals allow generic readings where the statement could take place in the present as in 19 (d) or present and future as in 19 (c). In 19 (e) and (f) modals are used in the past tense with the insertion of the auxiliary kaan ‘to be’. It is kaan ‘to be’ that locates the statements in 19 (e) and (f) in past tense and not the modals. This is supported by the fact that sentences 19 (e and f) are ungrammatical under past temporal reading without the auxiliary verb kaan.

Further evidence that laazim ‘must’ and mummkin ‘may’ do not express a temporal reading while kaan ‘to be’ does is the fact that kaan ‘to be’ does not allow for a deictic verbal complement as we have seen in examples (7-10) in section (3.2). However, laazim ‘must’ and mummkin/yemkin ‘may’ do allow for deictic verbal complements as evident in examples 20 (a-d) below:

20- (a) samimummkin y-Tawermaharat- uh.

Sami may subju.3.masc.sing.develop skill.pl. his.

‘Sami may work on his skills.’

(b) samimummkinTawarmaharat- uh el-saneh el-maaDyeh. Sami may

past.3.masc.sing.develop skill.pl. his the-year the-past.

‘Sami may have worked on his skills last year.’

(c) samilaazim y-Tawermaharat- uh.

Sami must subju.3.masc.sing.develop skill.pl. his.

‘Sami must work on his skills.’

(d) samilaazimTawarmaharat- uh el-saneh el-maaDyeh.

Sami must past.3.masc.sing.develop skill.pl. his the-year the-

past.

'Sami should have worked on his skills last year.'

Sentence 20 (a) expresses a generic reading where the situation might take place in the present or the future. When the same situation is expressed under a past temporal reading the modal *mummkin* 'may' allowed for a deictic verbal complement which triggers the past temporal reading as exemplified in 20 (b). The same facts hold for 20 (c and d) for the modal *laazim* 'must'. The stark difference between the modals in JA and the auxiliary verb *kaan* with regards to the deictic verbal complement clearly exemplifies the fact that modals in JA (*laazim* 'must' and *mummkin* 'may') are not deictic in nature contra to *kaan*.

The modal *bigdar* 'can/could', on the other hand, is different from *laazim* 'must' and *mummkin* 'may' as far as tense-marking is concerned. This dynamic modal marks past tense without the need of *kaan* 'to be'. Also, it cannot appear in non-finite contexts in its past form *gader* 'could' exactly like the auxiliary verb *kaan* 'to be'. Furthermore, this modal, similar to *kaan*, does not allow for a deictic verbal complement. Examples 21 (a-d) are illustrative.

21- (a) *sami gader y-nja7fi al- emti7aan.*

Sami past.3.masc.sing.can subju.3.masc.sing.pass in the exam.

'Sami was able to pass the exam.'

(b) *farreeg-na gader y-fooz fi el -mubarrah.*

Team. Our past.3.masc.sing.can subju.3.masc.sing.win in the match.

'Our team was able to win the match.'

(c) * *sami wa3adgader y-Tawermaharat- uh.*

Sami promise.past could subju.3.masc.sing.develop skill.pl. his.

'Sami promised to work on his skills.'

(d) * *samigadernaja7fi al- emti7aan.*

Sami past.3.masc.sing.can past.3.masc.sing.pass in the exam.

'Sami was able to pass the exam.'

In 21 (a) and (b) the modal *gader* ‘could’ marks past tense without the insertion of the auxiliary verb *kaan* ‘to be’. This modal marks past tense exactly as the auxiliary verb *kaan* ‘to be’. In 21 (c) the modal *bigdar* in its past form “*gader*” is used in non-finite context. However, the sentence is ungrammatical. In 21(d), the sentence is ungrammatical due to the fact that the modal *gader* ‘could’ does not allow for a deictic verbal complement. So far, we have seen that the modal *bigdar* ‘can/could’ has a parallel morpho-syntactic behavior to the auxiliary verb *kaan* ‘to be’ with respect to agreement inflection and tense marking.

Earlier I argued that *kaan* ‘to be’ distributes in three main positions in the clause: a-*kaan*- predicate, b- subject- *kaan*- predicate, c- *kaan*- subject-predicate (See sub-section 3.1.2 for further details and examples). Modals in JA share the same distribution. However, while the auxiliary verb *kaan* bears the agreement morphology in the absence of the subject (template a), the modals in JA (*laazim* ‘must’ and *mummkin* ‘may’) with the exception of *bigdar* ‘can/could’ do not. Consider sentences (22), (23) and (24):

22- (a) *sarah laazim t-roo7 3ala el- madraseh.*

Sarah must subju.3.fem.sing.go to the school.

‘Sarah must go to school.’

(b) *laazim El- Tulaab y- lbas -uu el- zai el- muwa7aad.*

Must the student.3.masc.pl subju.wear.3.masc.pl the form the unified.

‘The students must wear a uniform.’

(c) *laazim t- gadem el- emti7aan.*

Must subju.3.masc.sing the exam.

‘You must take the exam.’

23- (a) *sarahmummkin bi-t-7ib hath-i el- fawakeh.*

Sarah may imperf-3.fem.sing.like this.fem the fruit.

‘Sarah might like this fruit.’

- (b) mummkin sami bi- smaa3musiqaa.
May Sami imperf.3.masc.sing.listen music.
'Sami might be listening to music.'
- (c) mummkin bi- drus -uu fi al- maktabeh.
May imperf.study.3.masc.pl in the library.
'They might be studying at the library.'
- 24- (a) sarahbi-t-gdart- soogel- seeyarah.
Sarah imperf.3.fem.sing.can subju3.fem.sing.drive the car.
'Sarah can drive a car.'
- (b) bi- gdarsami y- staxdimade- eh el- thentein.
Imperf.3.masc.sing.can Sami subju.3.masc.sing.use hand.pl 3.
masc.sing the two.
'Sami can use both hands.'
- (c) bi- gdar -uuy- ghelb -uu -hum.
Imperf. 3.can.masc.pl subju.3.beat. masc.pl 3.masc.pl.obj.
'They can beat them.'

In 22 (a) the modal laazim 'must' occurs in medial position between the subject and the verb. In 22 (b) the modal laazim 'must' occurs in sentence initial position before the subject, and in 22 (c) it occurs in initial position but with the subject dropped (JA is a pro-drop language which allows +/- subject in the sentence.). With the absence of the subject, the modal laazim does not bear the agreement morphology of the dropped subject contra to kaan. The same facts hold for the modal mummkin 'may' in 23 (a), (b) and (c). However, similar to the auxiliary verb kaan, the modal bigdar 'can/could' bears the agreement morphology of the dropped subject as exemplified in sentence 24 (c).

As we have seen earlier, in JA the auxiliary verb kaan 'to be' is negated using the sentential negation marker ma 'not'. This negation marker is used also to negate verbs in JA. mush 'not' is also another negation marker in JA, but this marker is used to negate non-verbal predicates such as nouns and adjectives. The negative marker mush 'not' cannot be used to negate the auxiliary verb kaan 'to be'. However, while it is true that the modals laazim 'must' can be negated with the sentential negation marker ma 'not', it can

also be negated with the non-verbal negation marker *mush* 'not'. With respect to the modal *mummkin* 'may', it can only be negated with the non-verbal negation marker *mush* 'not'. Consider these examples:

25- (a) *ma kaan -at bi- t- ktib fi er- resaleh.*
 Not was.past .fem.singimperf 3.fem.sing.write in the
 letter.

'She was not writing the letter.'

(b) * *mush kaan -at bi- t- ktib fi er-
 resaleh.*

Not was.past.3.fem.sing imperf.3.fem.sing write in the
 letter.

'She was not writing the letter.'

26- (a) *ma laazim y-t'axar 3ala el- muhadarah..*

Not must subju.3.masc.come late to the lecture.

'He must not come late to lecture.'

(b) A: *laazimadawembukrah?.*

Must subju.1.sing tomorrow

'Do I have to come to school tomorrow?'

B: *la', mush laazim.*

No, not must

'No, you do not have to.'

27- (a) * *ma mummkin bi-drus -uu fi al- maktabeh.*

Not may imperf.study.3.masc.pl in the library.

'They might not study at the library.'

(b) *mush mummkin ba3dhum bi- drus -uu fi al- maktabehlahasa.*

Not May still imperf.study.3.masc.pl in the
 library till-now .

'They might not be studying at the library till now!'

In 25 (a) the auxiliary verb *kaan* 'to be' is negated with negation marker *ma* 'not'; therefore the sentence is grammatical. However, in 25 (b) *kaan* 'to be' is negated with the non-verbal negation marker *mush* 'not' and therefore the sentence yields ungrammaticality. In 26 (a) the modal *laazim* 'must' is negated with the negation marker *ma* 'not' and the sentence is grammatical, and in 26 (b) the same modal is negated with *mush* 'not' and the sentence is grammatical too. In 27 (a) the modal *mummkin* 'may' is negated with the negation marker *ma* 'not' and this yields ungrammatical production. In 27 (b) the same modal is negated with *mush* 'not' and the sentence is grammatical. This shows that *laazim* 'must' can tolerate the non-verbal negation marker *mush* 'not' while the auxiliary verb *kaan* 'to be' cannot. Contrary to *laazim* 'must' and *mummkin* 'may', the modal *bigdar* 'can/could' selects only for the verbal-negation marker *ma* 'not' exactly as the auxiliary verb *kaan* 'to be' as illustrated in 28 (a) and (b) below.

28- (a) *sarah ma bi- t- gdart- sooq el- seeyarah.*

Sarah not imperf.3.fem.sing.can subju3.fem.sing.drive the car.

'Sarah cannot drive a car.'

(b) * *sarahmush bi- t- gdar t- soog el- seeyarah.*

Sarah not imperf.3.fem.sing.can subju3.fem.sing.drive the car.

'Sarah cannot drive a car.'

In 28 (a) the modal *bigdar* 'can/could' is negated with the negation marker *ma* 'not' and thus the sentence is grammatical. In 28 (b), however, the modal *bigdar* 'can/could' is negated with the negation marker *mush* 'not' and therefore the sentence is ungrammatical.

One of the distinctive features of the auxiliary verb *kaan* 'to be', as we have seen earlier, which sets it apart from the morphological class of "verb" in JA is that *kaan* 'to be' does not select for a complementizer [-Comp]. However, for all the modals in JA, this feature is optional [- / + Comp] as examples (29), (30), (31), and (32) illustrate.

29- (a) *samikaan bi-7awel y- bthuljuhd -uh.*

Sami was.3.masc.sing imperf.3.masc.sing.try

-
- subjun.3.masc.sing effort. His.
 ‘Sami was trying to do his best.’
- (b) * samikaaninnuh bi- 7awel y- bthuljuhd -uh.
 Sami was.3.masc.sing that imperf.3.masc.sing.try
 subjun.3.masc.sing effort. His.
 ‘Sami was trying to do his best.’
- 30- (a) laazim t- gadem el- emti7aan.
 Must subju.3.masc.sing the exam.
 ‘You must take the exam.’
- (b) laazim innuh t- gadem el- emti7aan.
 Must that subju.3.masc.sing the exam.
 ‘You must take the exam.’
- 31- (a) mummkinsami y- Tlaa3hassa.
 May Sami subju.3.masc.sing.leave now.
 ‘Sami may leave now/Sami is allowed to leave now.’
- (b) mummkininnuhsami y- Tlaa3 hassa.
 May that Sami subju.3.masc.sing.leave now.
 ‘Sami may leave now/Sami is allowed to leave now.’
- 32- (a) bi- gdar -uu y- ghelb -uu -hum.
 Imperf. 3.can.masc.plsubju.3.beat. masc.pl 3.masc.pl.obj.
 ‘They can beat them.’
- (b) bi- gdar -uunnuhy- ghelb -uu -hum.
 Imperf. 3.can.masc.plthat subju.3.beat. masc.pl 3.masc.pl.obj.
 ‘They can beat them.’

Example 29 (a) above is grammatical because the auxiliary verb *kaan* ‘to be’ is not followed by the complementizer *inna* ‘that’. Sentence 29 (b), however, is ungrammatical because the auxiliary verb *kaan* ‘to be’ is followed by the complementizer *inna* ‘that’. In 30 (a) the modal *laazim* ‘must’ is not followed by the complementizer *inna* ‘that’ and the sentence is grammatical. In 30 (b) the modal *laazim* ‘must’ is followed by the complementizer *inna* ‘that’ and the sentence is still grammatical. The same fact holds for the modal *mumkin* ‘may’ in 31 (a) and (b) and the modal *bigdar* ‘can/could’ in 32 (a) and (b) respectively. In fact, this is the first time

we see the modal bigdar 'can/could' differs from the auxiliary verb kaan 'to be'. We have seen this modal behave like the auxiliary verb kaan 'to be' in all the previous examples, i.e. in terms of agreement, tense-marking, distribution and negation.

Conclusion

I argued in this paper that modals in JA cannot be categorized as auxiliary verbs, despite the long held belief in the literature. I showed with empirical evidence that the modals laazim 'must' and yemkin/mumkin 'may' display a distinctive morpho-syntactic pattern from that of the auxiliary verb kaan 'to be' which is the exemplary structure of the auxiliary category in Arabic. The empirical data I provided clearly demonstrated that there are subtle differences between those modals and the auxiliary kaan in terms of agreement, tense marking, negation, distribution in the sentence and selection of complementizers. Furthermore, I showed that the modal bigdar 'can/could' is the closest modal to the auxiliary category in JA. This is due to the fact that this modal behaves like the auxiliary kaan 'to be' in terms of the two core features of the category 'Auxiliary' in Arabic, that is agreement and tense marking. The modal bigdar 'can/could' also displays a parallel morpho-syntactic behavior with kaan in terms of negation and distribution as well. However, the modal bigdar 'can/could' differs from the auxiliary kaan 'to be' in that the modal bigdar 'can/could' selects for complementizers unlike the auxiliary verb kaan 'to be'. It is argued therefore that the modal bigdar 'can/could' exhibits a 'quasi-auxiliary' behavior since it is the closest modal to the auxiliary category in JA.

References

- Alexander, L. (1988). *Longman English grammar*. London: Longman.
- Al-Horais, N. (2012). On the universality of auxiliary verbs. *Journal of Universal Language*, 13(1), 7-30.
- Ali, M. (1994). *The expression of modality in modern standard Arabic* (Doctoral dissertation), University of London, UK.
- Althawab, A. S. (2014). *Modality in English and Arabic: Description and analysis* (Doctoral dissertation). University of Essex, UK.
- Barbiers, S. (2006). The syntax of modal auxiliaries. In M. Everaert & H. van Riemsdijk (Eds.), *The blackwell companion to syntax*, vol. 5, chap. 70, (pp.1–22). Blackwell Publisher.
- Benmamoun, E. (2000). *The feature structure of functional categories: A comparative study of Arabic dialects*. Oxford University Press.
- Brenann, V. (1993). *Root and epistemic modal auxiliary verbs* (Doctoral dissertation). University of Massachusetts Amherst.
- Brustad, K. E. (2000). *The syntax of spoken Arabic*. Georgetown University Press.
- Bybee, J., Perkins, R. & Pagluica, W. (1994). *The evolution of grammar: Tense, aspect and modality in the languages of the world*. The University of Chicago Press.
- Chomsky, N. (1981). *Lectures on government and binding*. Foris Publications, Dordrecht.
- Chomsky, N. (1986). *Barriers*. MIT Press, Cambridge, Massachusetts.
- Chomsky, N. (1993). A minimalist program for linguistic theory. In K. Hale & S. J. Keyser (Eds.), *The view from Building* (pp. 1 – 52). MIT Press, Cambridge, Massachusetts.
- Chomsky, N. (1995). *The minimalist program*. MIT Press, Cambridge, Massachusetts.
- Chomsky, N. (2000). Minimalist inquiries. In R. Martin, D. Michaels & H. Uriagereka (Eds.), *Step by Step. Essays on Minimalist Syntax in*

- Honor of Howard Lasnik (pp.89 – 155). MIT Press, Cambridge, Massachusetts.
- Coates, J. (1983). *The semantics of the modal auxiliaries*. London: Croom Helm.
- Cowell, M.W. (1964). *A reference grammar of Syrian Arabic*. Washington, DC: Georgetown University Press.
- De Haan, F. (2004). *Typological approaches to modality*. In W. Frawley (Ed.), *Modality* (pp. 27- 70). Berlin: Mouton de Gruyter.
- Downing, A. & Locke, P. (1992). *A university English grammar*. Routledge.
- Eisele, J. (1988). *The syntax and semantics of tense, aspect, and time reference in Cairene Arabic* (Doctoral Dissertation). University of Chicago.
- Eisle, J. (1992). *Cairene Arabic auxiliaries and the category of AUX*. In E. Broselow, M. Eid & J. McCarthy (Eds.), *Perspective of Arabic linguistics* (pp.143-169). John Benjamins.
- Emonds, J. (1985). *A unified theory of syntactic categories*. Foris, Dordrecht.
- Fehri, F. (1993). *Issues in the structure of Arabic clauses and words*. Kluwer Academic Publisher.
- Frawley, W. (1992). *Linguistic semantics*. Hillsdale, NJ Lawrence Erlbaum.
- Givón, T. (1982). *Evidentiality and epistemic space*. *Studies in Language*, 6, 23-49.
- Givon, T. (1989). *Syntax: An introduction*. Amsterdam: John Benjamins.
- Halliday, M. (1970). *Functional diversity in language as seen from a consideration of modality and mood in English*. *Foundations of language*, 6(3), 322-361.
- Harrell, R. (1990). *A short reference grammar of Moroccan Arabic*. Washington DC: Georgetown University Press.
- Hauge, H. (2003). *Towards a unified representation of English and Norwegian auxiliaries*. *Nordic Journal of English Studies* 2(1), 53-74.

-
- Holes, C. (2004). *Modern Arabic: structures, functions, and variations*. London: Longman Linguistic Library.
- Huddleston, R., & Pullum, G. K. (2002). *The Cambridge grammar Of the English language*. Cambridge University Press.
- Jelinek, E. (1984). *On defining categories: AUX and predicate in Egyptian colloquial Arabic (Doctoral Dissertation)*. University of Arizona.
- Kearns, K. (2000). *Semantics*. New York: Palgrave Macmillan. Kim, J. Sells, P. (2008). *English syntax: An introduction*. Stanford: CSLI Publications.
- Kratzer, A. (1981). The notional category of modality. In H. J. Eikmeyer and H. Rieser (Eds.), *Words, Worlds, and Contexts: New Approaches in word semantics* (pp. 38-74). Berlin, de Gruyter,
- Leech, G. (2004). *Meaning and the English verb*. Harlow, Pearson Education.
- Lyons, J. (1977). *Semantics*. Cambridge University Press.
- Machova, D. (2013). Modal verbs from a cross linguistic perspective. In T. Roman, B. J. Gregory & N. Katarina (Eds.), *ZlIn Proceedings in Humanities* (pp. 79-89). Tomas Bata University, Zln, Czech Republic
- Mitchell, T. & El-Hassan, S. (1994). *Modality, mood, and aspect in spoken Arabic with special reference to Egypt and the levant*. Kegan Paul International.
- Nauze, F. (2008) *Modality in typological perspective (Doctoral dissertation)*. Universiteit van Amsterdam.
- Nuyts, J. (2005). *Epistemic modality, language, and conceptualization: a cognitive-pragmatic perspective*. Amsterdam: Benjamins.
- Palmer, F. (1990). *Modality and the English modals*, 2nd edition. London: Longmans.
- Palmer, F. (1986). *Mood and Modality*. Cambridge: Cambridge University Press.
- Palmer, F. (1995). Negation and the modals of possibility and necessity. In J. Bybee & S. Fleischman (Eds.), *Modality in grammar and discourse* (p. 453-72). Amsterdam.

- Palmer, F. (2001). *Mood and modality*, second edition. Cambridge: Cambridge University Press.
- Payne, T. (2011). *Understanding English grammar: A linguistic introduction*. Cambridge: Portner, P. (2009). *Modality*. Oxford: Oxford University Press.
- Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1985). *A comprehensive grammar of the English language*. New York: Longman.
- Radford, A. (1997). *Syntax: A minimalist introduction*. Cambridge: Cambridge University Press.
- Ryding, K. (2005). *A reference grammar of Modern Standard Arabic*. Cambridge University Press.
- Safi, A. B. (2001). Lexicalization and modalization of prepositions in English-Arabic translation. *International Journal of Arabic- English Studies*, 2(1), 35-60.
- Sag, I., Wasow, T. & Bender, E. (2003). *Syntactic theory: A formal introduction*. Stanford: CSLI Publications.
- Steel, S. (1981). *An encyclopedia of AUX: a study in cross-linguistic equivalence*. The MIT press.
- Taylor, J. (2003). *Linguistic categorization*. Oxford: Oxford University Press.
- Traugott, E. & Dasher, R. (2002). *Regularity in semantic change*. Cambridge University Press.
- Vanhove, M., Miller, C., & Caubet, D. (2009). The grammaticalisation of modal auxiliaries in Maltese and Arabic vernaculars of the Mediterranean area. *Empirical Approaches to Language Typology*, 44, 325-362.
- Wilmsen, D. (2013). Grammaticalization of the Arabic demonstrative Iyyā- as a pronominal object marker in ditransitive verbs. *Journal of Semitic Studies*, 58(1), 149-167.