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The Syntax of Palestinian Arabic Modal Verbs

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Abstract

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Modal verbs are a class of verbs that communicate various and complicated meanings such as possibility, obligation, ability, and supposition and usually possess special grammatical properties across languages. The nature of their use across the linguistic varieties of Arabic makes it unclear on the surface whether modal constructions form sentences with one clause or with two, and research is especially scarce on this question with regards to Arabic's nonstandard varieties. Through a series of verbal elicitation interviews with a speaker of Palestinian Arabic, we examined the ways in which the specific linguistic variety forms modal constructions and discovered that it is possible to produce both monoclausal and biclausal modal sentences. In Palestinian Arabic, an apparent monoclausal modal sentence is produced when a complementizer is not present, and an apparent biclausal modal sentence is produced when a complementizer is present. These findings provoke further discussion about what defines and constitutes a clause and its structural hierarchy, the properties of modal verbs across languages, and more detailed subtopics concerning nonstandard Arabic varieties.

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As a more specific addition to the main claim in (5), I believe that Palestinian Arabic sentences without complementizers are monoclausal and that sentences with them are biclausal.

In addition to arguments based on case marking and word order restrictions that do not exist in Palestinian Arabic, a large piece of Albaty's evidence for the difference between the two structures relies on the difference between the word *ʔanna* in sentence (4), which he deems to be a true complementizer and therefore responsible for biclausal structures, and *ʔan* in sentence (3), which he deems to be merely a subjunctive mood marker and therefore not an indicator of a second clause. In Palestinian Arabic, this evidence cannot apply because it seems that the two words have merged or that one of them (likely *ʔan*) has simply disappeared.

In sections 4.1 and 4.2, I will show that though there are two words in Palestinian Arabic (*ʔinnuh* and *ʔinn-*) that appear in place of Modern Standard Arabic's *ʔanna* and *ʔan*, the two words are only variants of one another and that the difference between them is not relevant to and not nearly as significant as the difference between *ʔanna* and *ʔan*. (6) shows a Palestinian sentence in which either *ʔinn-* or *ʔinnuh* can be used.

(6)	jimkin	ʔin-hum/ʔinnuh	il-banaat	raajih-iin	ʕa-l-maħal
	may	ʔinn-3PL/ʔinnuh	the-girl.PL	go.PROG-PL	to-the-store

‘The girls may be going to the store’

4.2 in particular will show that, when fronting operations are in effect, *ʔinnuh* requires a resumptive pronoun and *ʔinn-* only requires its suffix and that the distribution disparities between *ʔinnuh* and *ʔinn-* for at least the majority of cases can be attributed to these requirements. When neither word is present, resumptive pronouns are not required. Ultimately, I argue that *ʔinnuh* and *ʔinn-* are complementizers and that their sentences are therefore biclausal. On the other hand, I argue that modal sentences where they are absent are monoclausal.

In section 4.3, I will briefly discuss how the prepositional modal constructions that Albaty mentions in his work do not exist in Palestinian Arabic and therefore cannot be used to compare the two.

I will argue in section 4.4 that apparent restrictions on adverb repetition are not necessarily due to reasons of clausality. A line of evidence for the existence of monoclausal structures from Albaty's analysis of Modern Standard Arabic is the restriction that the same adverb cannot occur twice in a sentence with a modal construction. Since other biclausal sentences do not contain this restriction, Albaty argues that it is evidence for a monoclausal analysis and against a biclausal one. I argue that while the point may have some merit, it is not fully supported and semantic explanations may also account for the restrictions.

Finally, I will discuss the relative ordering of modals in section 4.5. Albaty argues that the existence of a relative ordering of different kinds of modals according to Cinque's Hierarchy is evidence for an exclusively monoclausal analysis because a series of fully distinct clauses should not have this restriction. However, I agree with his earlier contradictory point that *?anna* is a complementizer and again propose that semantics are the cause of the ordering rules.

Here below is a summary of each variety's attributes that appear as parts of each section's arguments in this work.

(7)

Comparison of Argument Evidence in Modern Standard and Palestinian Arabic

	Modern Standard Arabic	Palestinian Arabic
(4.1) Formation of modal constructions	Uses subjunctive marker <i>ʔan</i> or complementizer <i>ʔanna</i>	Uses complementizer <i>ʔinnuh</i> , complementizer <i>ʔinn-</i> , or simply the modal by itself
(4.2) Resumptive pronouns in topicalization	Required	Required
(4.3) Prepositional modal constructions	Permitted	Not permitted
(4.4) Reoccurrence of certain adverbs in modal constructions	Not permitted	Not permitted
(4.5) Relative ordering of modals	Present	Present

2. Background

Modal verbs are a category of verbs like *can*, *may*, *must*, or *should* that express meanings like possibility, necessity, permission, and a complicated range of many other semantic fields. Across languages, in addition to their unique semantics, they have grammatical properties that separate them from other verbs and occur in different environments, usually relying on and acting with verbs that have more substantial meaning. As the boundaries of their ranges of meaning are not always the most clear, there exist varying schemas of classification for them, but modal verbs are generally agreed to fall into three categories: deontic (or root) modals, which communicate information about how the world should ideally be (e.g. “All guests must leave.”), dynamic modals, which communicate information about objective ability and will (e.g. “That man can read.”), and epistemic modals, which communicate information about the speaker’s relationship with the statement in terms of belief or commitment to its truth (e.g. “He might be in the car, I don’t know.”).

What is popularly deemed a monolithic “Arabic language” is in reality a continuum of related but differing forms of speech, though the same formal standard is used throughout the Arabic-speaking world. As described in an article by Laila Abdullah Al Suwaiyan, the Arabic-speaking world displays a not uncommon phenomenon called diglossia, where the general population consistently uses two linguistic varieties: Modern Standard Arabic in more formal, educational, or literary contexts and any of various colloquial dialects in more informal and everyday life contexts. There exist significant lexical and grammatical differences both between the standard and non-standard varieties and especially among the more divergent non-standard varieties (e.g. Moroccan Arabic is extremely hard to understand for most speakers of other dialects). The colloquial variety addressed in this paper is Palestinian Arabic, a subdialect of a broader Levantine Arabic group that also includes the varieties of surrounding areas such as Lebanese, Syrian, and Jordanian. The Levantine varieties have extremely much in common, but small differences still exist, especially among individual lexical items (such as modal verbs) and their use. The Palestinian Arabic modals primarily appearing in this work are *laazim* (usually “have to” or “must”), *jimkin* (usually “may” or “can”), and forms of *(b)-(i)-ʔdar* (usually “be able to” or “can”). Though they share the same appearance as inflected forms of the roots *l-z-m* and *m-k-n*, *laazim* and *jimkin* generally do not change form when used. On the other hand, *(b)-(i)-ʔdar* inflects for its subject like other regular verbs.

Below is a summary of some similarities and differences between Modern Standard Arabic and Palestinian Arabic discussed in the following sections.

(8)

Comparison of General Traits in Modern Standard and Palestinian Arabic

	Modern Standard Arabic	Palestinian Arabic
Formation of modal constructions	Uses subjunctive marker <i>ʔan</i> or complementizer <i>ʔanna</i>	Uses complementizer <i>ʔinnuh</i> , complementizer <i>ʔinn-</i> , or simply the modal by itself
Word order	Primarily Verb-Subject-Object; Subject-Verb-Object after <i>ʔanna</i>	Likely Subject-Verb-Object in usual cases
Noun case suffixes	Present	Not present
Fronting mechanisms	Allows both focus extraction and topicalization	Allows only what appears to be topicalization

Modern Standard Arabic has always been the focus of far more scholarship than any of the non-standard varieties, and this fact especially applies to narrow topics like the syntax of modal verbs. Studies on such narrow topics in non-standard varieties are also generally very vague, and Palestinian Arabic is often not well distinguished from other Levantine dialects or even from broader groups in such studies. As the scholarship on non-standard varieties is lacking in these ways, I am taking relatively detailed work done on the topic in Modern Standard Arabic and then applying it to my interviews with a speaker of Palestinian Arabic.

The most thorough and relevant work encountered on the topic of modal verbs and their relation to the syntax of clauses in Modern Standard Arabic is a dissertation by Yasser A. Albaty. While modal verbs are not the ultimate focus of the dissertation, they are an important part of his overall reasoning, and he therefore dedicates a large and self-contained section to them and their involvement with a concept called “restructuring”, so named because it is historically thought to be a phenomenon where a structure that is originally biclausal undergoes some kind of transformation to become a monoclausal one. Albaty’s argument with respect to modals

specifically is that they are indeed “restructuring” verbs, but his view is that they can produce monoclausal structures from the beginning as opposed to biclausal ones.

Restructuring is a phenomenon previously investigated among many languages, though different languages allow different things with restructuring verbs grammatically, and diagnostics therefore vary. An example Albaty gives from another paper by Luigi Rizzi is from Italian, in which a phenomenon called clitic climbing is possible only with restructuring verbs and is therefore a diagnostic for their presence.

(9) Mario sa resolver-lo da solo
 Mario can solve-it by himself
 ‘Mario can solve it by himself’ (Albaty, 2019)

(10) Mario lo-sa risolvere da solo
 Mario it-can solve by himself
 ‘Mario can solve it by himself’ (Albaty, 2019)

(11) Credo che Gianni la-presenterà a Francesco
 believe.1S that Gianni her-present.FUT to Francesco
 ‘I believe that Gianni will present her to Francesco’ (Albaty, 2019)

(12) *la-Credo che Gianni presenterà a Francesco
 her-believe-1S that Gianni present.FUT to Francesco
 ‘I believe that Gianni will present her to Francesco’ (Albaty, 2019)

In the above examples, the restructuring verb (*sa*) allows the clitic (*lo*) to climb onto it from the verb lower in the tree structure. On the other hand, the non-restructuring verb (*credo*) does not allow the clitic in its sentence (*la*) to do the same, as shown in the invalid sentence (12). Modal

verbs have been found across languages to be restructuring verbs, and Albaty analyzes them as such in his paper.

Albaty mainly relies most of all on the previous ideas of two linguists: Guglielmo Cinque and Susi Wurmbrand. Cinque is largely responsible for a very influential concept in syntax called Cinque's Hierarchy, which posits a crosslinguistic master order of functional heads/phrases and their relative positions in tree structures, a portion of which is displayed in (13). "Asp" represents words or morphemes that communicate grammatical aspect, and "Mod" represents words or morphemes that communicate modality.

(13) ...Asp_{inceptive} > Mod_{obligation} > Mod_{ability} > Asp_{frustrative/success} > Mod_{permission} > Asp_{conative} > Asp_{completive (I)} > Voice... (Cinque 2006)

For example, according to supporters of Cinque, in all languages, modal obligation heads/phrases would supposedly appear higher in the tree structure than modal ability heads/phrases, and modal ability heads/phrases would appear higher than voice heads/phrases, (different languages may then apply different rules and movements to this initial universal hierarchy to result in different word and morpheme orders on the surface). This concept relates to Albaty's paper because Cinque counts the different types and meanings of modals as functional heads that are higher up in the tree structure than a sentence's main verb, and therefore includes them in his hierarchy. In this way, Albaty reasons that Cinque argues by default that modals produce monoclausal structures, since in his hierarchy they are merely functional heads above main verbs instead of verbs themselves that embed a second clause. More narrowly, Albaty also relies on Susi Wurmbrand for his analysis of modal structures in Arabic because she introduces the idea that not all restructuring verbs are necessarily functional as Cinque proposes, but some are lexical. Albaty carries this idea further and specifically proposes that, while most of the

modals are indeed functional verbs (typically carrying more grammatical information), the dynamic modal that he analyzes is actually a lexical verb (typically carrying more semantic content). In short, he reasons that this is because the dynamic modal shows much more inflection than any of the other modals and occurs low enough in the tree's hierarchy to fall more into the domain of the meaning-centric main verb than that of the more grammar-centric functional words higher up in the tree. While the equivalent Palestinian Arabic dynamic modal does appear in this work, Albaty's question of whether it is lexical or functional has more to do with his later discussion on restructuring phenomena in general than specifically modal verbs and their clauses, and therefore this question will not be directly addressed here.

Cinque's Hierarchy is an extremely extensive and far-reaching concept, and therefore this work could not even begin to fully address it, but some interesting interactions with it concerning modal verbs do arise. Specifically, the idea that relative ordering of modals may hold across clause boundaries may prompt further questioning on Cinque's Hierarchy's relevance to multiclausal sentences and what relative ordering of modals implies about aspects of it.

3. Methodology

In gathering data, I conducted a series of verbal interviews with a single native speaker of Palestinian Arabic. The speaker is a woman in her 50's and was raised in parts of the Arabic-speaking world other than Palestine, but both of her parents are Palestinian. She is a native speaker of Palestinian Arabic, though she also fluently speaks English and has great knowledge of Modern Standard Arabic (as well as exposure to dialects like Kuwaiti and Egyptian) because she grew up and was educated in the Arab world. This knowledge means that interference from other dialects or the standard language is possible, but it likely will not be a massive influence because Palestinian Arabic is her native language and her knowledge of the other varieties is far

less complete and natural. During the interviews, sentences that for the most part contained modal verbs were given as prompts in English, and the speaker answered with the Palestinian Arabic equivalents. At many points, if there was suspicion by the interviewer or interviewee that other answers were possible, the speaker was asked to use a certain specified word or construction or was given a sentence in Palestinian Arabic and asked whether it was appropriate to the prompt. The speaker would occasionally also be asked directly if a certain word, word order, or construction was acceptable to her or possible for her. This elicitation process is a very standard and accepted procedure within linguistic fieldwork, especially when attempting to gain insight into the morphology and syntax of a language through direct communication with one of its speakers (Meakins et al. 2018).

The interviews were conducted in three sessions in December 2020 and January 2021, two of which were longer (about an hour) and one of which was shorter. The first session attempted to establish a baseline of different kinds of Palestinian Arabic modal sentences, to compare them to typical biclausal sentences like “He said that they are going to the store.”, and to test whether certain adverbs could be repeated in modal sentences or whether Modern Standard Arabic’s prepositional modal constructions are also possible in Palestinian. The second session attempted to more clearly establish the difference between using *?innuh*, *?inn-*, or nothing in both modal and typical biclausal sentences and also explored sentences using multiple modals at the same time. The third session attempted to resolve apparent instances of *?innuh* and *?inn-* cooccurring and to find orders of modals that are not possible in Palestinian Arabic. Interviews were recorded using the program Praat on a laptop.

An Institutional Review Board application was formulated and submitted to Emory University for the elicitation interviews in September and October of 2020, and approval was given in November 2020.

4. Arguments

Similar to parts of Albaty's argument, I argue that Palestinian Arabic modal verbs are capable of producing both monoclausal and biclausal sentences, the monoclausal sentences appearing when there is no complementizer present and the biclausal sentences appearing when the complementizer *ʔinnuh* or *ʔinn-* is present. In the following sections, I will argue that restrictions on the use of *ʔinnuh* as opposed to *ʔinn-* are not the same as the difference that Albaty shows for Modern Standard Arabic *ʔan* and *ʔanna*, that both *ʔinnuh* or *ʔinn-* are complementizers in Palestinian Arabic, and that Albaty's prepositional modal constructions cannot apply to Palestinian. An example of the complementizers *ʔinnuh* and *ʔinn-* is given again below with brackets showing the second clause.

- (14) jimkin [ʔin-hum/ʔinnuh il-banaat raajih-iin ʕa-l-maħal]
 may ʔinn-3PL/ʔinnuh the-girl.PL go.PROG-PL to-the-store
 ‘The girls may be going to the store’

In the final sections, I argue that Albaty's adverb reoccurrence and relative ordering arguments may be due to semantics instead of showing evidence for monoclausal modal sentences over biclausal ones as he proposes (the prohibition on adverb reoccurrence and the requirement for relative ordering of modals that Albaty shows are because the sentences would not make semantic sense if these rules are violated, not because of any reason relating to the number of clauses present).

structure, Albaty often uses them as examples of biclausal and monoclausal structures (respectively) for the purpose of running diagnostic tests and making further points about modal verbs.

The reason that the same cannot be done in Palestinian Arabic is that Palestinian does not appear to draw a clear distinction between *ʔan* and *ʔanna* at all. In situations where *ʔan* and *ʔanna* would appear, there is instead a word seemingly related to one or both of them that takes the form of either the invariable word *ʔinnuh* or *ʔinn-* followed by a person-number suffix denoting or agreeing with the subject. This word itself is virtually completely optional, and the speaker said that, with isolated exceptions, every sentence in which it appeared would be fairly the same with or without it. These sentences include both modal constructions as in (17) and (18) as well as clearly biclausal constructions as in (19) and (20). The latter sentences are clearly biclausal because the word “say” is followed (both in English and Arabic) with a new clause led by the complementizer “that” (which can be omitted in both English and Arabic as in (20)).

(17) jimkin ʔinnuh/ʔin-hum il-banaat raajih-iin ʕa-l-maħal
 may ʔinnuh/ʔinn-3PL the-girl.PL go.PROG-PL to-the-store
 ‘The girls may be going to the store’ (‘It may be that the girls are going to the store’)

(18) jimkin il-banaat raajih-iin ʕa-l-maħal
 may the-girl.PL go.PROG-PL to-the-store
 ‘The girls may be going to the store’ (‘It may be the girls are going to the store’)

(19) huwwi ʔaal ʔinnuh/ʔin-hum il-banaat raajih-iin ʕa-l-maħal
 he say.3MS.PST ʔinnuh/ʔinn-3PL the-girl.PL go.PROG-PL to-the-store
 ‘He said that the girls are going to the store’

(20) huwwi ʔaal il-banaat raajih-iin ʕa-l-maħal
 he say.3MS.PST the-girl.PL go.PROG-PL to-the-store

‘He said the girls are going to the store’

The Palestinian Arabic sentence (17) is very similar in form to Modern Standard Arabic (15), consisting of a modal, then a complementizer, and finally the second clause. As the form *ʔinnuh*, the form *ʔinn-* plus a person-number suffix, and the omission of both forms of the word altogether are all possible in sentences where both *ʔan* and *ʔanna* would appear in Modern Standard Arabic, there is in many cases no perceivable difference left between the two words in Palestinian Arabic. At least as far as modal structures are concerned, the differences in grammatical behavior that Albaty observed between *ʔan* and *ʔanna* also do not exist in Palestinian Arabic, since *ʔinnuh* and the forms of *ʔinn-* do not have any restrictions on adjacency or anti-adjacency. According to Albaty’s explanation, *ʔinnuh* and *ʔinn-*’s lack of need to be adjacent to the verb would also align them with Modern Standard Arabic complementizer *ʔanna* over the mood marker *ʔan*, since mood markers like *ʔan* must be adjacent to the verb (he does not make explanations for *ʔanna*’s restrictions). I therefore propose that *ʔinnuh* and *ʔinn-* are not mood markers but complementizers like *ʔanna*. (21) is another example of *ʔinnuh* and *ʔinn-* acting as complementizer with the verb “say” in a (clearly) biclausal sentence.

(21) ana ʔult ʔinnuh/ʔin-ha il-bint b-ti-ʔdar
 I say.1S.PST *ʔinnuh/ʔinn-*3FS the-girl IND-3FS-can.PRS
 ta-akul is-samakih
 3FS-eat.PRS the-fish

‘I said that the girl can eat the fish’

Unlike Modern Standard Arabic, Palestinian's default word order appears to be SVO, and, just like simple monoclausal sentences, sentences with *ʔinnuh* and the forms of *ʔinn-* still also display this (under normal circumstances). Whether the subject comes first or the default word order is somehow altered and the verb does, both *ʔinnuh* and *ʔinn-* (as well as omission) are still valid, though there is one remaining restriction on where *ʔinnuh* specifically can appear to be addressed below.

4.2 Argument- Fronting

So far, I argue that Palestinian Arabic *ʔinnuh* and *ʔinn-* are complementizers and therefore correspond to Modern Standard Arabic complementizer *ʔanna* over the mood marker *ʔan*. Since they are complementizers, their presence produces biclausal sentences. In this section, I will address another complicated area where this interpretation is visible: sentences that involve fronting nouns for emphasis as in (22) and (23) below.

(22) The boy(,) I saw (him) at the theater yesterday.

(23) That woman(,) I heard the teacher talking to (her) in the morning.

In such sentences in Palestinian Arabic, when nouns are fronted, they obligatorily leave behind a resumptive pronoun in their original place like the “him” and “her” in sentences (22) and (23). As will be shown below, this is also true when the subject of a clause introduced by *ʔinnuh* or *ʔinn-* is fronted. However, when the subject appears at the front and the complementizers *ʔinnuh* and *ʔinn-* are absent, no resumptive pronoun is required. I argue that the different results of these environments are actually because sentences with the complementizers are biclausal but sentences without them are monoclausal. In the biclausal sentences, resumptive pronouns are required because of fronting, but resumptive pronouns are not required in the seemingly similar monoclausal sentences because they merely follow regular word order.

beginning (“base-generated”) at the front of the sentence as topics and in which they refer to a resumptive pronoun later in the sentence.

- (26) al-baab-u_i a-ð^sunn-u [ʔanna zajd-an kasara-hu_i]
 the-door-NOM 1S-think.PRS-IND that Zayd-ACC break.3MS.PST-it
 ‘The door, I think that Zayd broke it’ (Albaty, 2019)

With focus extraction, the extracted noun would supposedly keep its case (as shown in the hypothetical but invalid sentence (24) above), but when nouns are base-generated as topics, they are in the nominative case no matter what their original case was (as shown in the valid sentence (26)), and he is therefore able to make the point that *ʔanna* specifically blocks focus extraction but does not block base-generated topics.

In Palestinian, case suffixes on nouns have disappeared and provide no help in reaching such a conclusion, but in sentences such as (27) and (28), the resumptive pronoun is required.

- (27) il-baab_i ana ʔult ʔinnuh/ʔin-hum il-banaat
 the-door I say.1S.PST *ʔinnuh/ʔinn*-3PL the-girl.PL
 kasaru-**u(h)**_i
 break.3PL.PST-3MS.OBJ
 ‘The door(,) I said the girls broke’
- (28) il-baab_i ana ʔult il-banaat kasaru-**u(h)**_i
 the-door I say.1S.PST the-girl.PL break.3PL.PST-3MS.OBJ
 ‘The door(,) I said the girls broke’
- (29) *il-baab ana ʔult il-banaat kasaru
 the-door I say.1S.PST the-girl.PL break.3PL.PST
 ‘The door(,) I said the girls broke’

Since in Modern Standard Arabic resumptive pronouns do not appear with focus extraction and must appear with topicalization, this implies that the phenomenon depicted in (27) and (28) is topicalization and that, at least for an object, focus extraction is not possible in Palestinian (assuming that each phenomenon's rules concerning resumptive pronouns are the same as in Modern Standard Arabic). Sentence (29) is not valid because of the absence of a resumptive pronoun to replace the object.

However, when a subject is fronted, an interesting restriction arises both in strictly biclausal sentences like (30) and (31) and in modal construction sentences like (32) and (33).

(30) il-banaat ana ?ult ?in-hum kasaru il-baab
 the-girl.PL I say.1S.PST ?inn-3PL break.3PL.PST the-door
 'The girls(,) I said broke the door' ('The girls(,) I said that they broke the door')

(31) *il-banaat ana ?ult ?innuh kasaru il-baab
 the-girl.PL I say.1S.PST ?innuh break.3PL.PST the-door
 'The girls(,) I said broke the door'

(32) il-banaat laazim ?in-hum ji-ruuħ-u řa-l-maħal
 the-girl.PL must ?inn-3PL 3-go.PRS-PL to-the-store
 'The girls must go to the store' ('The girls(,) it must be that they go to the store')

(33) *il-banaat laazim ?innuh ji-ruuħ-u řa-l-maħal
 the-girl.PL must ?innuh 3-go.PRS-PL to-the-store
 'The girls must go to the store'

(34) il-banaat laazim ji-ruuħ-u řa-l-maħal
 the-girl.PL must 3-go.PRS-PL to-the-store
 'The girls must go to the store' ('The girls must go to the store')

As shown in sentences (31) and (33), *ʔinnuh* may not appear when the subject is fronted. This same restriction applies even in (35) and (36) when the subject falls between the modal and the phrase it presides over, a word order that is not possible in Modern Standard Arabic.

(35) laazim il-banaat ʔin-hum ji-ruuḥ-u ʕa-l-maḥal
 must the-girl.PL ʔinn-3PL 3-go.PRS-PL to-the-store
 ‘The girls must go to the store’ (‘It must be(,) the girls(,) that they go to the store’)

(36) *laazim il-banaat ʔinnuh ji-ruuḥ-u ʕa-l-maḥal
 must the-girl.PL ʔinnuh 3-go.PRS-PL to-the-store
 ‘The girls must go to the store’

Some randomly conflicting answers were given in sentences similar or analogous to those shown, but this conflict is possibly due to confusion by the speaker, who seemed very unsure of the answers in these situations. More investigation on this particular environment may therefore be needed in future studies. Generally, however, the restriction simply appears to be due to the lack of a resumptive pronoun referring to *il-banaat*, since similar sentences where a resumptive pronoun is reinserted like (39) are valid. I propose that the same restriction does not exist for forms of *ʔinn-* because their person/number suffixes essentially act as resumptive pronouns (as in (37)).

(37) il-bint laazim ʔin-ha b-ti-ʔdar ta-akul
 the-girl must ʔinn-3FS IND-3FS-can.PRS 3FS-eat.PRS
 is-samakih
 the-fish
 ‘The girl must be able to eat the fish’ (‘The girl(,) it must be that she can eat the fish’)

(38) *il-bint laazim ?innuh b-ti-?dar ta-akul
 the-girl must ?innuh IND-3FS-can.PRS 3FS-eat.PRS
 is-samakih
 the-fish

‘The girl must be able to eat the fish’

(39) il-bint laazim ?innuh hijji b-ti-?dar ta-akul
 the-girl must ?innuh she IND-3FS-can.PRS 3FS-eat.PRS
 is-samakih
 the-fish

‘The girl must be able to eat the fish’ (‘The girl(,) it must be that she can eat the fish’)

This would not explain why sentence (34) does not also require a resumptive pronoun. Sentence (34) in turn may be explained as a case of focus extraction (which does not require a resumptive pronoun in Modern Standard Arabic), but I believe that this answer is unlikely because there is no evidence of focus extraction in any other environments. I propose instead that sentences that do not contain the complementizers *?innuh* or *?inn-* like (34) are simply monoclausal, there being no solid reason that they be considered biclausal. (34) therefore does not even exhibit fronting and is instead a regular Subject-(Modal-)Verb-Object sentence. Because focus extraction does not seem to exist in Palestinian Arabic and because topicalization is not blocked by complementizers like *?innuh* and *?inn-*, Albaty’s topicalization and focus extraction arguments for monoclausal modal constructions in Modern Standard Arabic are not easily or straightforwardly (if at all) applicable to Palestinian. Nevertheless, his points on resumptive pronouns do help to shed some light on the distributive differences between *?innuh*, *?inn-*, and the omission of the complementizer.

To summarize:

- Focus extraction and topicalization are two fronting phenomena that are both possible in Modern Standard Arabic.
 - Case suffixes help to distinguish the two in Modern Standard Arabic but not in Palestinian.
 - The only distinction from Modern Standard Arabic applicable to Palestinian is that topicalization leaves resumptive pronouns and focus extraction does not.
- Resumptive pronouns are seemingly required in Palestinian Arabic fronting sentences.
 - Assuming rules for the two phenomena would be the same for both varieties, focus extraction does not appear to be possible in Palestinian.
- When fronting of a subject occurs in both modal and typically biclausal sentences, *ʔinnuh* specifically is not permitted in Palestinian.
 - This restriction is lifted if a pronoun replaces the subject.
- Sentences with neither *ʔinnuh* nor *ʔinn-* do not require resumptive pronouns.
 - Topicalization is therefore not occurring.
 - The resulting construction (subject-modal-verb-object) resembles simple monoclausal sentences.
 - Sentences with neither *ʔinnuh* nor *ʔinn-* are monoclausal.
 - It is unlikely that deletion of the complementizer is occurring because it would not explain the disappearance of the resumptive pronoun (which would be necessary since topicalization would hypothetically still be happening).

Because the exact same rules apply as in Modern Standard Arabic and the same contrast can be seen between strictly biclausal sentences and modal construction sentences, the argument that sentences with modal constructions are monoclausal because they disallow the repetition of adverbs like “always” does hold some merit in Palestinian Arabic, but the results are also explainable by the simple fact that repeating “always” in a modal construction is semantically redundant or nonsensical even in biclausal sentences like (51). Albaty indeed does not include an example of a biclausal *ʔanna* modal sentence in his discussion of this point, relying instead on the non-modal biclausal sentence (47).

(51) *It is always possible that I always go to the store.

(52) (**daaiman*) aħmad laazim ʔinn-uh ju-drus daaiman
 (always) Ahmad must ʔinn-3MS(?) 3M-study.PRS always
 ‘Ahmad must always study’

Moreover, the speaker for this work also said that it was impossible to insert another *daaiman* into sentence (52) (which does have a complementizer), and so Albaty’s point does not fully hold, applying only to the monoclausal, non-complementizer sentences in Palestinian.

Ultimately, the conclusions drawn here are very tentative, and I believe more investigation into the specifics of adverb reoccurrence claims is necessary to draw anything further or more definitive. The only data collected as evidence is the body of grammaticality judgements by a single speaker on these specific sets of sentences, and so no more generalization is possible as of yet. A deeper look into the parameters of the group of “certain adverbs” involved and into the interaction between the environment’s syntax (of clauses) and semantics would be especially helpful first steps into subsequent investigation of this subtopic.

4.5 Argument- Relative Ordering

Palestinian Arabic displays a phenomenon where the modals must fall in a particular order, as exemplified in (53) and (54).

(53) il-bint laazim b-ti-ʔdar ta-akul is-samakih
 the-girl must IND-3FS-can.PRS 3FS-eat.PRS the-fish
 ‘The girl must be able to eat the fish’

(54) *il-bint b-ti-ʔdar laazim ta-akul is-samakih
 the-girl IND-3FS-can.PRS must 3FS-eat.PRS the-fish
 ‘The girl is able to have to eat the fish’

The ability modal *btiʔdar* must follow the necessity modal *laazim* as it does in sentence (53), and sentence (54) is invalid because it breaks this rule.

The relative ordering of different modals and types of modals is another diagnostic based on Cinque’s work that Albaty proposes. Cinque’s Hierarchy is a supposed ordering of heads/phrases in the sentence tree that applies across languages, a portion of which is shown again below.

(55) ...Asp_{inceptive} > Mod_{obligation} > Mod_{ability} > Asp_{frustrative/success} > Mod_{permission} > Asp_{conative} >
 Asp_{completive (I)} > Voice... (Cinque 2006)

Although Albaty says that examining Cinque’s Hierarchy as a whole exceeds the limits of his work, Albaty does draw inspiration from it and focuses on the part of the hierarchy that concerns modal verbs and their ordering. For example, parallel to the Palestinian sentences above, he shows that the necessity modal *jadʒibu* must precede the ability modal *tastatʕiʕa* in the Modern Standard Arabic sentence (56).

ʔanna is a complementizer and therefore produces biclausal structures (the section of his paper that concerns relative ordering does not include or address any *ʔanna* sentences). If Albaty had provided sentences that explicitly show that the requirement for relative ordering does not hold with the complementizer *ʔanna*, then his argument on this point would be very compelling.

Sentences (59) and (60) below are examples of sentences from Palestinian Arabic that show relative ordering like (56) and (57) but with complementizers. With regards to relative ordering in Palestinian Arabic, the speaker said that she does not believe *btiʔdar* can come before *laazim* in any case.

(59) il-bint laazim ʔin-ha b-ti-ʔdar ta-akul
 the-girl must *ʔinn*-3FS IND-3FS-can.PRS 3FS-eat.PRS
 is-samakih
 the-fish
 ‘The girl must be able to eat the fish’

(60) il-bint laazim ʔinnuh hijji b-ti-ʔdar ta-akul
 the-girl must *ʔinnuh* she IND-3FS-can.PRS 3FS-eat.PRS
 is-samakih
 the-fish
 ‘The girl must be able to eat the fish’

Furthermore, even though Albaty’s points about relative ordering technically hold in Palestinian Arabic, I propose again that it is because the semantics do not make sense for other orders. For example, the same restriction exists on both the monoclausal sentence (61) and the biclausal sentence (63) below even in English.

(61) I may have to go the store.

- (62) *I must may go to the store.
- (63) It may be that I must/have to go to the store.
- (64) *It must be that I may be going to the store.

Even though both monoclausal structures like (61) and biclausal structures like (63) are allowed in English, the modals must keep the same relative ordering because deviations like (62) and (64) do not make sense semantically. I argue that Palestinian Arabic similarly allows monoclausal and biclausal structures and that relative ordering must be maintained in both because of semantics.

As with the section on adverb reoccurrence, the data collected for the phenomenon of relative ordering is scarce. The conclusions drawn, since they rely on questions posed to a single speaker, are tentative, and much more data is needed especially on the various semantic roles that each modal can play and how this variation might affect their ordering if any further observations are to emerge.

5. Conclusion

Ultimately, modal verbs in Palestinian Arabic do seem to be able to produce both monoclausal and biclausal structures. Unlike Modern Standard Arabic, which has a complementizer *ʔanna* and a subjunctive mood marker *ʔan* that show fairly different behavior from each other, Palestinian Arabic has two similar words that act as complementizers, *ʔinnuh* and *ʔinn-*, and no direct equivalent to *ʔan*. Palestinian Arabic modal structures can involve the use of the complementizers *ʔinnuh* or *ʔinn-* or no extra word instead.

When nouns are fronted out of the clause that a modal introduces and the complementizer *ʔinnuh* or *ʔinn-* appears, a resumptive pronoun must be present in the place the noun would have held in the clause without fronting. On the other hand, if the complementizers are not present, the resumptive pronoun is not required and the word order of the sentence closely resembles the

Subject-(Modal-)Verb-Object order of monoclausal sentences without modals, and this contrast suggests that the sentences with no complementizer are in fact monoclausal. Complementizers introduce new clauses by definition, and so the sentences with complementizers must be biclausal. Both monoclausal and biclausal modal structures therefore seem to be possible in Palestinian Arabic.

Unlike Modern Standard Arabic, Palestinian does not allow modal constructions with an agent introduced by a preposition, and so they cannot be compared in this environment. Similar to Modern Standard Arabic, Palestinian displays restrictions on the repetition of certain adverbs in modal sentences as well as a relative ordering of modals. These rules, however, seem to apply to both monoclausal and biclausal modal constructions (simply because the sentences would otherwise not make semantic sense in either case) and therefore do not disprove the existence or relevance of either.

While this study was somewhat able to support aspects of the influential theory of Cinque's Hierarchy in its restrictions on certain adverbs' repetition and the relative ordering of modals, it could not fully address how the biclausal examples in these sections relate to the theory and certainly could not address the wide range of other topics that the theory encompasses. Though any additional detailed scholarship on the understudied subdialects of Arabic would be beneficial, future research in this area may profit from a more thorough investigation of Cinque's Hierarchy, especially in relation to the ordering of various modal meanings and their place within the wider tree order (for example, how *laazim*'s epistemic and root meanings interact with the heads/phrases near them and with the hierarchy as a whole). Specific questions based on the sections of Albaty's paper not addressed here would be the investigation of Palestinian Arabic's dynamic modal(s), of whether it is functional or lexical, and

of how it fits into the study of restructuring as a larger phenomenon. All in all, modality, Cinque's Hierarchy, and restructuring are very extensive topics of discussion, and their application to understudied varieties like Palestinian Arabic would advance both understanding of these subjects and of the linguistic varieties in which they can be investigated.

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