JOURNAL OF CULTURAL ANALYSIS AND SOCIAL CHANGE

Journal of Cultural Analysis and Social Change,
2025, 10(2), 2740-2749
ISSN: 2589-1316

[C] Phase in Arabic Syntax: A Minimalist View

Atef Jalabneh [1], Awad H. Alshehri [2*]

[1] *Isra- University, Amman,* JORDAN.
[2] *Imam Mohammad Ibn Saud Islamic University (IMSIU), Riyadh,* SAUDI ARABIA

*__Corresponding Author:__ awad.journal@gmail.com

Citation: Jalabneh, A. and Alshehri, A. H. (2025). [C] Phase in Arabic Syntax: A Minimalist View, *Journal of Cultural Analysis and Social Change*, 10(2), 2740-2749. https://doi.org/10.64753/jcasc.v10i2.1997

Published: November 17, 2025

ABSTRACT

The objective of this article is to explore the syntactic and semantic values of the complementizer? An 'that' in coordinate and subordinate subjunctive clauses in Arabic syntax. [C] is filled with this entity at spell-out but not at the phonetic form (PF). However, if it occurs overtly at this level, it causes the ungrammaticality of the sentence; thus, it must be omitted after checking all features at the phase. The methodology: the researchers used qualitative and theoretical approaches to analyze the selected data. To solve this intricate issue in syntax, they referred to Chomsky's (1995 and 2005) views on minimalist and phase theory. Conclusions: the researchers discovered that? An 'that' is a true complementizer and performs its syntactic functions at spell - out and inherits all features available in [T"] at the logical form [LF]. [T"] has the features [categorial features, ϕ - features] and the optional features [Agrs, Case, Theta marking]. [C] must check all of them in the derivational processes at all levels of syntax. The features [Agrs, T, D±] enforce the lexical categories [D"] and [V"] to move to certain positions in the structures to complete the process of features checking. Thus, their covert syntactic movements are applied smoothly without causing crashes and achieve convergence. [+ interpretable] features are maintained at LF, while [- interpretable] are deleted before interface. The complementizer? An 'that' moves and merges covertly with coordinator? Aw 'and' and subordinator hatta 'until' at the highest nodes in the syntactic hierarchy to achieve word order.

Keywords: Phase, Subjunctive, Complementizer, Merge, Feature

INTRODUCTION

It is a syntactic fact, in Arabic syntax, that the entity *?an* performs a number of syntactic and semantic functions in indicative as well as subjunctive structures depending on either (i) the syntactic position which occupies or (ii) the entity that proceeds it. For instance, it occurs obligatorily overt at the phonetic form to show (i) purpose as in [*?aradtu ?an ?aʟaba* 'I wanted to play.' in which *?an* c-selects the infinitival clause *?aʟaba* because of the matrix verb *?arada* 'wanted'. It shows (ii) condition in [*wa ?an taṣuumu khairan lakum* 'If you fast, it is good for you.'. In this sentence, *?an* 'if' shows condition because of the coordinator *wa* 'and', which occurs before it in the same structure. It also shows (iii) expectation in [*ẓanantu ?an yaquuma* 'I thought that he stands.'. In this sentence, *?an* 'that' shows expectation because of the verb *ẓanna* 'think' that selects *?an* 'that' clause. In case *?an* is deleted in (i, ii and iii), the sentences are grammatically incorrect as in the specimen [**?aradtu ?aʟaba* '*I wanted play."]. However, if it occurs optionally overt at the phonetic form (PF), it illustrates the following functions: (i) purpose as in [*?ataina ?ilaika li(?an) nadrusa* 'we came to you to study."]. The entity *?an* 'to' shows an explanation of purpose for the visit. It also shows (ii) choice as in [*?imma ?an ta?tiy ?aw (?an) tursila risaalatan* 'whether you come or send a message.'. The entity *?an* 'to' illustrates choice because of the coordinator *?aw* 'or'. It also illustrates (iii) conditional meaning as in [*wa (?an) ?albasa ʿabaa?atan taqirra ʿayni* 'and if I dress a cloak, my eye relaxes.'. The conditional meaning is visible by *?an* 'if' because it occurs after the coordinator *wa* 'and'. In case *?an* is overt or covert, the sentences (i, ii and iii)

are grammatical as in the specimen [*?atainaa ?ilaika linadrusa* 'we came to you to study (cf,. Wright, (1984), Abdullhamid, (1999) and Maghalsih (2007) for these examples). In short, if *?an* 'to, if and that' occurs obligatorily overt, it initiates (i) infinitival clause, (ii) indicative that- clause and (iii) coordinate clause respectively. However, if *?an* 'to, to and if' occur optionally overt, it initiates (i) infinitival clause of purpose, (ii) adverbial clause of choice and (iii) coordinate clause of condition respectively. It is obvious that *?an* 'that' carries different meanings with different syntactic functions in Arabic syntax. Due to these syntactic diversities, the researchers focused merely on *?an* 'that' when it functions syntactically as a complementizer in the position [C, C'] in subjunctive coordinate and subordinate clauses; in such structures, it is obligatorily deleted at the phonetic form to maintain the grammaticality of the sentence.

As far as the empirical literature is concerned, it is evident that Friedmann et al (2020) suggested that in the acquisition of modern Hebrew, there could be several types of clausal embedding that might occur after a complementizer. Based on this hypothesis, it is possible that all forms of clausal embedding including finite phrases could be related to the emergence of a specific property of the complementizer. The availability of the topmost clausal projection of the complementizer, ForceP, could provide the impetus for the emergence of tensed embedded clauses. This observation is like the complementizer *che* 'that' in Italian which projects an embedded tense phrase.

Mostcati and Rizzi (2021) propagated that embedded clauses are categorially uniform because there are verbs that select a finite complement that projects subjunctive ForceP under sisterhood in the complementizer phrases. All kinds of finite embedded clauses need to establish a syntactic relation with the topmost projection ForceP to check features where the appropriate grammatical traits are encoded to satisfy the requirements of the matrix embedding verb. The consequence of this issue is that other types of embedded clauses, such as the conditional clauses introduced by *se* 'that' are only possible if ForceP is already available in the early clausal structure. Thus, the appearance of *che* 'that' in Italian as a signal ForceP can be projected. Thus, *che* 'that' could either slightly precede *se* and *di* 'that' in the structure in Italian, or the three particles become simultaneously accessible upon the availability of ForceP to check features.

Kotzoglou and Canakis (2021) argued that *ke* 'that' complement clauses may not manifest the full matrix of Tense-Aspect-Mood morphological exponents in any given situation in Greek. Their morphological markings depend primarily on the category and the morphological specification of the matrix verb. The clauses of the complementizer *ke* 'that' invariably copy the mood specification of the matrix verb. Thus, the embedded clause must surface in subjunctive and imperative mood in tandem with the matrix subjunctive. They summarized certain properties of the complementizer *ke* 'that' complement clauses; they are the only Greek embedded clauses that are underspecified for mood and, consequently, they are the only ones that may be marked as [+Imperative]. *Ke*-complement clauses may be obligatorily controlled by an argument of the matrix clause with some predicates no matter in what mood they surface; therefore, they constitute a strong argument against defining control as stemming from subjunctives (or untensed subjunctives). *Ke*-complement clauses constitute an argument for the fact that featural deficiency which is a necessary but not sufficient condition for control might be manifested in different ways even within the same language. In short, a complementizer, in most languages, projects a tense phrase enjoying a subjunctive force.

Alem (2024) illustrated that the complementizer may or may not agree with the subject in nonstandard West Germanic languages. He provided data from Frisian and Limburgian on intervention effects: In Frisian, intervention leads to ungrammaticality; however, in Limburgian, it leads to the realization of complementizer agreement between the intervener and the subject. These effects cannot account for the existing Agree and PF analyses of complementizer agreement. As an alternative to these views, he proposed a hypothesis in which he commented that the complementizer agreement morpheme is a clinic. Adopting van Craenenbroeck's and van Koppen's (2008) approach to clitic doubling, they developed an analysis of complementizer agreement as clitic doubling. The intervention effects in Frisian and Limburgian follow from an interplay of the structural size of the clinic and restrictions on movement. The ungrammaticality of intervention in Frisian is the result of competition between clinic and intervener for the same structural position, whereas the subject-internal realization of complementizer agreement in Limburgian is the result of movement of the clitic below the intervener.

Gentens and Boye (2024) introduced a special development of manner expressions into complementizers. This flexibility may result in distinct types of complementizers (i) manner complementizers, (ii) eventive complementizers and (iii) propositional complementizers either through manner semantics or through integration of independent clauses. In accordance with Saxena's (1995) proposal, there are distinct types of manner expressions that can be the source of complementizers such as demonstratives 'thus' or 'so', manner question words like 'how', manner nouns 'way' or similative adpositions 'like'. Their contributions to the development of manner expressions into complementizers may accompany by distinct semantic developments. For instance, Basque, Russian, and Semitic, the resulting complementizer is a factive; while, in Estonian, Finnish, and Polish, the resulting complementizers represent a lower degree of certainty.

Hypothesis

?an 'that' initiates coordinate and subordinate subjunctive embedded clauses; it must be merged with coordinators and subordinators at [PF]; otherwise, the sentence is ungrammatical.

Problem of Study

Though*? an* 'that' occurs covertly at PF in the syntactic hierarchy; it inherits all syntactic and semantic features of tense phrase to guarantee the grammaticality of the sentence at [LF]. The problem to be discussed is how does this complementizer perform all the processes and check all features although it is absent at [PF]. Such an intricate issue, in Arabic syntax, is analyzed with reference to Chomsky's (1995 and 2005) minimalist views and phase theory.

Objectives and Questions

The objective of this study is to investigate the syntactic and semantic values of features by the phases [C] and [vP*] in *?an* 'that' subjunctive coordinate and subordinate clauses in Arabic syntax at all levels of syntax. To solve the problem, the following questions are posited.

1.How does *?an* 'that' act as a true complementizer in coordinate clauses in Arabic syntax?

2. How does *?an* 'that' act as a true complementizer in subordinate clauses in Arabic syntax?

METHODOLOGY AND FRAMEWORK

The Approach

The researcher uses theoretical and qualitative approaches. The theoretical insights emerge in the process of checking the obligatory and optional features of [T"] and the complementizer phrase structure of *?an* 'that' in coordinate and subordinate clauses in Arabic syntax in [C, C'] position; however, the qualitative approach is applied to discuss a few numbers of specimens which are valid. The two approaches are reliable because they are used to investigating similar issues in other languages. Thus, the researcher begins the article with a hypothesis, research questions and literature review.

Data Collection

The Arabic examples are selected by the researcher from reliable references such as (Wright 1984, Abdulhamid 1999, and Maghalsih 2007).

THEORETICAL LITERATURE

Chomsky (1995) argued that the complementizer phrase [C"] is headed by a complementizer [C] and a specifier but it must have the tense phrase [T"] as a complement. A clause, typically, has the structure [$_{C"}$ Spec [$_{C'}$ C [$_{T"}$ Spec [$_{T'}$ T V"]]]]. A specifier of [Spec, C"] is optional, and it is A'- argument position. However, [Spec, T"] is an argument (A – position) and assigns a theta role for the external subject. The obligatory features of [C"] are limited in distribution; they represent the functional features of [T] and [C]; [C] imposes mood-force power indicators in the structure. Chomsky (2005) stated that [T] fails to define a phase boundary along with [C] because, on the surface, it is [T] but not [C] is the locus of ϕ- features that are involved in the nominative-agreement system and raising of the external argument subject to [Spec-T]. As a syntactic fact [T] and ϕ- features appear to be derivative but not inherent. However, basic tense and tense-like properties are determined by [C] in which they are inherent. In the lexicon, [T] lacks these features. [T] manifests the basic tense features if and only if it is selected by [C]. Thus, Agree- and Tense features are inherited by the phase head [C]. Transmission of Agree- feature is the property of phase head like [C]. He confirmed that the size of the phase is in part determined by uninterpretable features. Such features are redundant, and they are fixed by structural position during derivation; thus, they are unvalued in the lexicon before numeration. Since these features have no semantic interpretation, they must be deleted before they reach the semantic interface for the derivation of convergence. If they have phonetic value, they cannot be deleted before being transferred to the phonological component at PF. They must be valued at the stage in computation where they are transferred at the phase[C]. Once valued, the uninterpretable features are deleted by mapping them to the semantic component and given whatever phonetic properties feature they have in a language by the phonological component. Also, they become indistinguishable from interpretable features and there is no indication of their relation to the interpretable features that match them and assign them their values. Hence, they must be transferred at the point where they are valued at the phase [C] but not [T]. [T] operates as a probe only derivatively by virtue of its relation to [C]. The above views will be the guidance for this work.

RESULTS

ʔan 'that' as a Complementizer in Coordinate Subjunctive Clauses in Arabic Syntax

It is a syntactic fact that the entity *ʔan* 'that' functions as a complementizer in [C, C'] in the syntactic hierarchy; it inherits all obligatory and optional functional features of [T"] though it must be deleted at PF. In an attempt to answer question one, the specimen (1) is an illustration of the issue.

PF

1a. *la ta- ʔkul al- samaka wa [C ʔan] ta- shrab- **a** al- labana.
no agr eat det fish and that agr/ you drink subj. det curd

*'Do not eat fish and that drink curd.'

LF

1b. la ta- ʔkul al- samaka wa [C **0**] ta- shrab- **a** al- labana.
no agr eat det fish and **-** agr drink subj. det curd

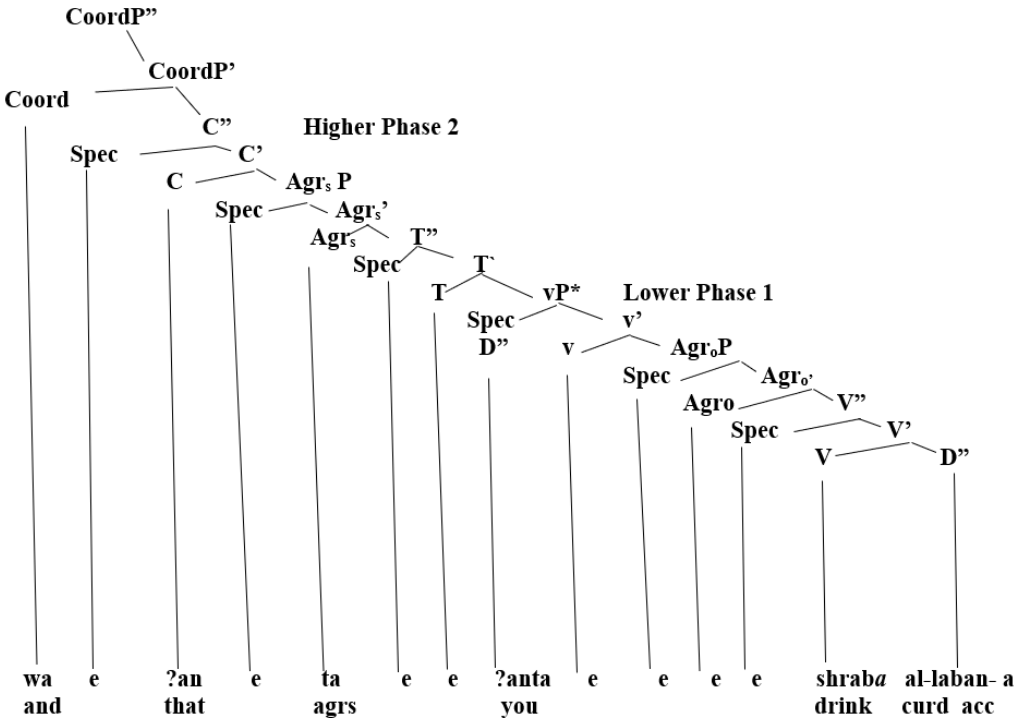
'Do not eat fish and drink curd'

(Abdullhamid 1999, and Maghalsih 2007)

(1c) is the spell out representation of the coordinate structure LF (1b).

1c.

Spell out



The sentence (1a) is ungrammatical because the complementizer *ʔan* 'that' is overt after the coordinator *wa* 'and'. It is evident that *ʔan* carries the meaning of the complementizer 'that' but nothing else. The sentence (1b) is grammatical because the same complementizer is covert. The sentence (1c) is the spell out representation for (1b); in it, the coordinator *wa* 'and' initiates the coordinated phrase *wa ʔan ʔanta tashraba al-labana* 'and that you drink curd'. It projects the complementizer phrase *ʔan ʔanta tashraba al-labana* 'that you drink curd'. The complementizer *ʔan* 'that' functions the head of the complementizer phrase, namely, [C, C']. It is considered a complementizer because it cannot be substituted by any other entity such as *ʔan* 'to' and *ʔan* 'if' as mentioned (cf,. Maghalsih, 2007). In phase theory, *ʔan* 'that', as a complementizer, selects [T"] [e - e ʔanta – e – e - e – e -*shraba* - *al-labana* 'you drink curd] as the complement. In [T"], both obligatory and optional features are to be checked; for instance, in overt syntax, [D"] *al-labana* 'curd' has the obligatory features [nominal, person and gender]; thus, it is [- human, 3rd person and masculine]; it also has the optional features [number, Case and ϕ - feature]; thus, it is [one, accusative, 3rd singular and masculine]. However, the verb *shrab-* ***a*** (subj) 'drink' has the obligatory features [verbal, Case]; thus, it is [an action transitive verb]. It assigns the accusative case to [D"] *al-labana* 'curd' in [V, V'] position because it is

the object complement; due to this checking, the accusative marker [a] is attached to the [D"] *al-laban-**a***. The verb *shraba* shows [second person and masculine] because of [Agrs *(ta)*] and the subjunctive marker [a]. In this position, it assigns the theta role of patient to the same complement in [V, V']. Let us shift to covert syntax in phase theory to check other features at spell out by using the mechanisms of move and merge in the lower phase 1 [vP*]. The verb *shrab* 'drink' merges with the subjunctive marker [a] in [V, V'] to become *shraba* before moving higher; then, it starts its first covert movement to [Agro, Agro'] to check weak object agreement features with the complement *al-labana* 'curd'. In head-to-head movement, the verb moves in another covert movement to the light verb [v, v'] position to check theta marking feature with the subject *?anta* 'you'; the verb assigns the theta role of goal to it in [Spec, vP*]. To check other features, the verb moves to [T, T'] to check empty [T] in this coordinated clause. Then, in a final cyclic movement, it moves to [Agrs, Agrs'] to check the strong optional agreement feature [ta] and becomes *ta-shraba* 'agr-drink' to meet correct word order VSO at PF. Regarding the covert of the subject [D"] *?anta* 'you', it is in a caseless position in [Spec, vP*], it must move to the position of [Spec, T"] to check the nominative case by the empty [T]; it has to be deleted in this position at interface due to command force as in Greek language (cf,. Kotzoglou and Canakis, 2021). As discussed above, the complementizer *?an* 'that' initiates the complementizer phrase [*?an tashraba ?anta al-labana* 'that you drink curd']; it is considered the higher phase 2 in syntax. Thus, in this phase, it imposes the subjunctive feature [a] and the empty tense [e] to the verb *shrab* 'drink' because they are parts of numeration in the lexicon like Greek language. It is valued during derivation though it remains in situ until LF but not PF; thus, it retains the subjunctive marker [a] at the end of the verb *tashrab- a* until PF after being obligatorily deleted at this level; otherwise, the resulting structure is ungrammatical as (1a). Its value is also visible, in (1c), in the sense that it inherits the features [T, Agrs, Case, D-]. Therefore, [T, Agrs and D-] attracted the lexical categories [V] and [D"] to move higher to check their features in the syntactic hierarchy. The feature [Case] does not have this power to attract [V] and [D"] in syntax. In the same phase, [- interpretable] features, namely, [Agr, Case and theta roles] must be deleted at LF to achieve convergence. However, [+ interpretable] features, namely, [V] and [D±] remain until LF. Finally, *?an* 'that' imposes the mood force even after being covert at PF in (1c). To get a grammatical sentence at PF, *?an* 'that' merges in a covert movement with the coordinator *wa* 'and'.

The complementizer *?an* in [C] has a very strong syntactic relation with the mood marker [a] at the end of the verb *tashrab* 'drink'. In other words, whether *?an* 'that' overt or covert, [a] must occur overtly in Arabic; this situation is like the situation in Italian language (cf. Mostcati and Rizzi (2021). Therefore, the PF (1d) is ungrammatical when *?an* occurs but [a] does not.

PF

1d.*la	ta-	?kul -	0	al-	samaka	wa	[C	?an]	ta-	shrab-	**0**	al-	labana.		
no	agr	eat	juss.	det	fish	and		that	agr	drink	subj.	det	curd		

*'Do not eat fish and drink curd'

The sentence (1d) is ungrammatical because the subjunctive marker [a] is deleted in contrast with (1b) above where this marker is overt but the complementizer *?an* is covert.

The Arab syntacticians argued that, in this coordinate structure, (1d) can be made syntactically and semantically grammatical without the complementizer *?an* 'that' in the sense of jussive in (1e) and in the sense of negative indicative in (1f).

1e. la	ta-	?kul-	**0**	al-	samaka	wa	0	ta-	shrab-	**0**	al-	labana.		
no	agr	eat	juss.	det	fish	and	no	agr	drink	juss.	det	curd		

'Do not eat fish and do not drink curd'

(Maghalsih 2007)

In (1e), the jussive feature [**0**] is strong on both the verbs *ta?kul* 'eat' and *tashrab* 'drink' at all levels of syntax. The clause is paraphrased as [*la ta?kul -0 (jussive) al- samaka wa la tashrab-0 (jussive) al-labana* 'do not eat fish and does not drink curd'. The negative marker *la* 'not' negates both the action of eating and drinking simultaneously.

1f. la	ta-	?kul-	**u**	al-	samaka	wa	ta	shrab-	**u**	al-	labana.		
no	agr	eat	pres.	det	fish	and	agr	drink	pres.	det	curd		

'Do not eat fish while drinking curd'
(Maghalsih 2007).

In (1f), the tense feature [**u**] made the clause grammatical sentence because it is paraphrased as [*la ta?kul -u (indicative) al- samaka wa-ta-shrab- u (indicative) al- labana* 'do not eat fish while drinking the curd'. The negative marker *la* 'not' negates, merely, the action of eating but not drinking (cf,. Wright 1984, Abdullhamid 1999 and Maghalsih 2007). In short, the subjunctive occurs in coordinate clauses when *?an* 'that' is projected in the lexicon as a complementizer only as in (1c) discussed above in contrast with non- subjunctive clauses (1e) and (1f).

Another example of coordinate clauses in which *?an* 'that' functions as the complementizer is the sentence (2).

PF

2a. saara al- laila ?aw [C" [C' [C **0** [T" yu - drik- **a** al- mawta]]].
walked he det night or that agr reach subj. det death

'He walked the night or reached death'

2b. * saara al- laila ?aw [C" [C' [C ?an [T" yu- drik- **a** al- mawta]
walked he det night or that agr reach subj. det death

'*He walked the night or that reached death'
(Maghalsih 2007)

(2a) is correct because the complementizer *?an* 'that' inherits all features of [T"] exactly in the same way in (1c). It must be deleted at PF in (2a) in [C, C'] position. The subjunctive marker [a] and the coordinator *?aw* 'or' are sufficient to render the grammaticality of this coordinate clause because of external merger and incorporation at PF. This is evident due to the fact that *?an* 'that' is merging in a covert movement with the coordinator *?aw* 'or' at PF. However, if it is overt at [C, C'] position, the sentence is ungrammatical as in (2b) because of redundancy. Thus, its deletion at PF is obligatory. As a syntactic fact, in (2a), *?an* 'that' in [C] phase inherits [T and ϕ- features] at PF. In short, [C] is a phase in which all obligatory functional formal features, namely, [C, T] as well as optional functional formal features [Agrs, Case, Theta marking] are checked at LF. It has semantic properties at interface because of the lexical category *?an* 'that' but [T] does not. As [Agrs, subjunctive and Case] have phonetic value in Arabic, they must be transferred to the phonological component at PF. They must be valued and transferred to the phase [C] in the computational stage. All [-interpretable] features, namely, [Case, T", Subjunctive and Theta marking] are deleted by mapping them to the semantic component; they will be marked by the phonetic markers which they have by the phonological components.

?an 'that' as a Complementizer in Subordinate Subjunctive Clauses in Arabic Syntax

The complementizer *?an* 'that' functions as a complementizer in subordinate clauses in Arabic syntax; in an attempt to answer question two, the sentence (3) is an illustration of the issue.

PF

3a. *sir- tu hatta [C" [C' [C ?an ?a- dkhul- **a** al- qaryati].
walked I until that agr enter I subj. det village

'*I walked until that I entered into the village'
(Maghalsih 2007)

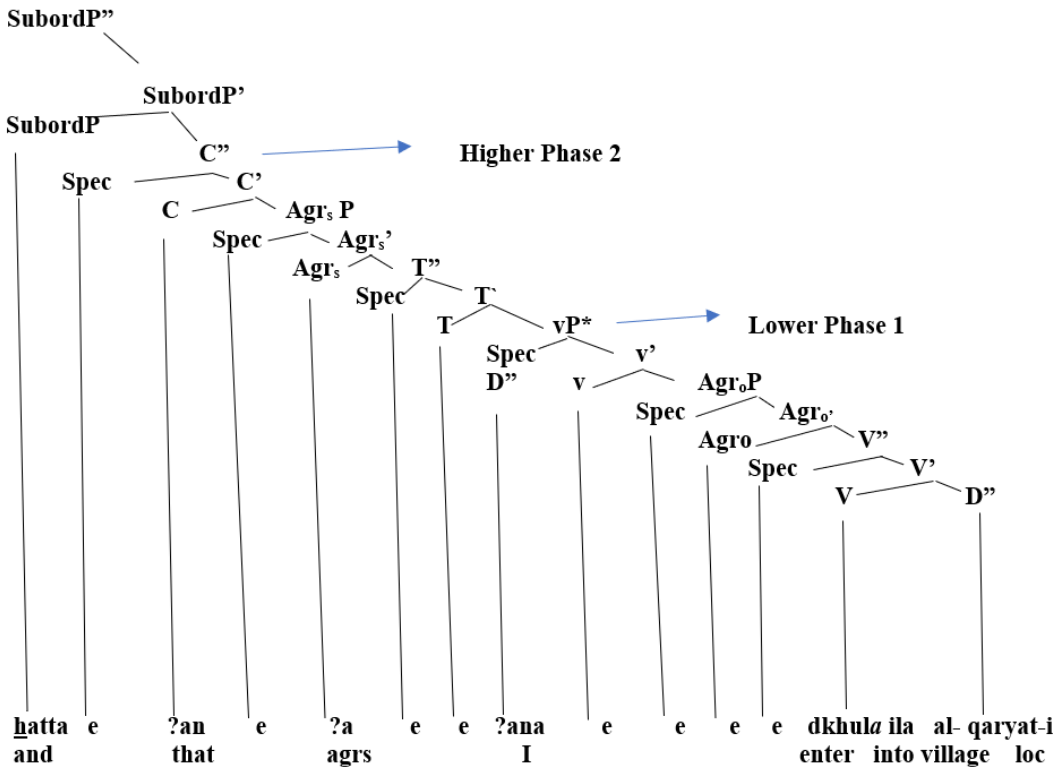
(3a) is ungrammatical because the complementizer *?an* 'that' is overt. The sentence can be made correct if it is covert as in (3b).

3b. sir- tu hatta [C" [C' [C **0** ?a- dkhul- **a** al- qaryati].
walked I until that agr enter I subj. det country

'I walked until I entered the village'

(3c) is the tree - diagram for (3b) for the subordinate clause only.

3c.
Spell-out



In (3c), the subordinator *hatta* ‘until’ initiates the subordinate phrase *hatta ?an ?ana ?adkhula al-qaryati* ‘until that I entered the village'. It projects the complementizer phrase *?an ?ana ?adkhula ila al-qaryati* ‘that I entered into the village'. The complementizer *?an* ‘that’ functions the head of the complementizer phrase in the syntactic position of [C, C’]. It is evident that *?an* ‘that’ heads and retains all the obligatory as well as the optional features of the complement tense phrase [T” e -e - ?ana – e – e - e – e -*?adkhul**a*** *ila- al- qaryati* ‘I entered into the village’; they guarantee the grammaticality of the sentence after the derivational processes are applied at all levels of syntax. For instance, [D”] *al- qaryati* ‘the village’ has the obligatory features [nominal, person, gender]; thus, it is [- human, 3rd person, feminine]; it also has the optional features [number, Case, ϕ - feature]; thus, it is [one, locative, 3rd singular, feminine]. However, the verb *dkhul- **a*** (subj) ‘enter’ has the obligatory features [verbal]; thus, it is [a motion verb, and it is unable to assign a case to [D”] *al- qaryati* ‘the village’ because it is an intransitive verb; this [D”] is assigned the locative case by the incorporated preposition *ila* ‘into’ to which the locative marker [i] is added . The verb *dkhul* ‘enter’ has the optional features [ϕ - feature, subjunctive mood]; the form of the verb *dkhul* shows either [first, person and feminine / or masculine] because of [Agrs (?a)] and the subjunctive marker [a]. Let us shift to check other features by using the minimalist mechanisms of move and merge in phase [vP*]. The verb *dkhul* ‘enter’ merges with the subjunctive marker [a] in [V, V’] to become *dkhula*; then, it assigns the theta role of location to the prepositional phrase *ila al-garyati* ‘into the village’ in [V, V’]. It starts its first covert movement to [Agro, Agro’]. In this position, it checks weak [Agro] with the adjunct *ila al- qaryati* ‘into the village’. In head-to-head movement, the verb moves to the light verb [v, v’] to check theta role marking feature with the subject *?ana* ‘I’; it is assigned the theta role of agent in this position of [Spec, vP*] by the whole [V”] *dkula ila al-qaryati* ‘entered into the village’. To complete the process of covert movements to come closer to the higher phase 2 [C], it moves in a head-to-head movement to [T, T’] to check empty [T] in this coordinate clause. In a final cyclic movement, it moves to [Agrs, Agrs’] to check the strong optional agreement feature [?a] and becomes *?a-dkhula* ‘agr-entered’ to meet word order VSO of Arabic . Likewise, the empty category pro [D”] *?ana* ‘I’ moves in a covert movement from the caseless position of [Spec, vP*] to the position of [Spec, T”] to check the nominative case by the empty [T]; it must be dropped at interface before LF because Arabic is a pro-drop language. In phase theory, *?an* ‘that’ c- selects the subordinated clause [T”] i.e. [*dkhula ?ana al-qaryati* ‘I entered the village’]; thus, it is a very strong obligatory functional feature at spell out. It imposes the subjunctive feature [a] to the verb *dkhul- a* ‘entered’ and the empty tense to [T] in the lexicon. Thus, it retains the subjunctive mood force at the end of the verb *dkhul- a* at LF. *?an* ‘that’ in [C] is valued in the course of derivation though it remains in situ until LF but not PF; thus, it retains this subjunctive marker [a] until PF although it must be obligatorily deleted at this level; otherwise, the resulting structure is ungrammatical as (3a). There are syntactic values for the complementizer *?an* in the higher phase 2; first, it inherits the features [T, Agrs, D±, Case, theta roles]. Only the features [T, Agrs, D±] attract the lexical categories [V] and [D”] to move higher to check their features in the syntactic hierarchy but not [Case and theta roles]. Their obligatory as well as optional features are posited obligatorily at spell - out because of [C] in the

structure. [T] is syntactically selected by [C]; as it is a finite clause, the subject *ʔana* 'I' checks the nominative case, and the theta role of agent as mentioned above. As these two features are optional and have [- interpretable] power at LF / PF levels, they must be omitted at interface. Second, it retains the subjunctive mood force after being omitted at PF in (3c). Before PF, the complementizer *ʔan* 'that' merges with the subordinator *ḥatta* 'until' gets a grammatical sentence and meets the word order at PF in Arabic syntax. In short, weak features (Case, Agrs, T, theta roles and mood marker) are valued at spell out; therefore, they retain their phonetic values by phonological components in Arabic. [+ interpretable] features [C], [V] and [D"] remain until LF; however, [- interpretable] features [Case, Agrs, T, theta roles and mood marker] are omitted at the same level. *ʔan* 'that', in [C], cannot occur overtly in subordinate clauses because the subordinator *ḥatta* 'until' incorporates it at PF. (3b) is correct because the complementizer *ʔan* 'that' is covert. The subjunctive marker [a] and the adverbial *ḥatta* 'until' are sufficient to produce a grammatical subordinate clause in Arabic syntax. This is evident due to the fact that *ʔan* 'that' is merged in a covert movement with the adverbial of time *ḥatta* 'until' at PF. However, if it is overt, the structure is ungrammatical as (3a).

We may look at (4) in which *ʔan* 'that' functions as a complementizer with the adverbial of time *fa* 'so'.

PF

4a. ʔala	ta-	nzil	ʿindana	fa-	[C"	[C'	[C	**0**	tu-	siib-	**a**	khairan].
cannot	you	visit	us	so				that	you	get	subj.	grace

'Cannot you visit us, so you get happy?'

LF

4b.* ʔala	tanzil	ʿindana	fa-	[C"	[C'	[C	ʔan	tusiib-	**a**	khairan]]].
cannot	visit you	us	so				that	get you	subj.	grace

'*Cannot you visit us, so that you get happy?'

(Maghalsih 2007)

(4a) is correct because the complementizer *ʔan* 'that' is covert at PF. The subjunctive marker [a] and the adverbial of purpose *fa* 'so' are sufficient to guarantee the grammaticality of this subjunctive subordinate clause. This is evident due to the fact that *ʔan* 'that' is merging and incorporating in the adverbial *fa* 'so' at PF. However, if it is overt, the structure is wrong as (4b). Thus, it must be deleted at this level.

To sum up; the entity *ʔan* 'that' is a true complementizer, in both types of clauses, and it occupies the head [C, C'] of the phrase [C"] . It represents the higher phase 2 in which all features of [T"] are finally inherited at LF and PF. As [Agrs, Case and subjunctive marker] have phonetic value in Arabic syntax, they must be transferred to the phonological components at PF. In this phase, [-interpretable] features, namely, [T, Agrs, Case, Theta marking and subjunctive marker] are deleted by mapping them to the semantic component. However, [+ interpretable] features, namely, [C, V and D"] remain until PF because they are parts of numeration.

DISCUSSIONS

Discussion of Question One

The results proved that the entity *ʔan* 'that' is a true complementizer in coordinate clauses; it occupies the head position of [C, C'] of the complementizer phrase [C"]. The sentence (1a) is ungrammatical because the coordinator *ʔaw* 'and' semantically incorporates the meaning of the complementizer *ʔan* 'that' at PF; therefore, *ʔan* cannot occur overtly at this level. As [C] is theoretically a phase in syntax, all obligatory and optional features of the complement [T"] must be checked in (1c). It is obvious that the categorial features of [C], [V"] and [D"] are retained until PF and LF for correct interpretations. Therefore, *ʔan* 'that', [D"] *al-labana* 'curd' and the verb *tashraba* 'drink' cannot be deleted at all levels. Regarding the subject pro subject [D-] *ʔanta* 'you', it is retained at interface for correct meaning and must be deleted at interface due to command force. All obligatory functional formal features, namely, [C, subj. T and D±] as well as optional functional formal features [Agrs, Case and Theta marking] are checked in the two phases in a courteous manner. The feature [C] but not [T] imposes the semantic properties at spell out and interface; thus, it is retained until LF but not PF. As the features [T, Agrs, Case, subjunctive and Theta marking] do not have [+ interpretable] values, they must be deleted before interface. Since [Agrs and Case] features have phonetic value in Arabic syntax, they must be transferred to the phonological components at PF. They must be valued in the computational stage where they are transferred to the higher phase **(2)**. Weak features (i.e. Case, T", Agrs and subjunctive marker) are valued at spell out; therefore, they retain their phonetic values by phonological components in Arabic. This complementizer cannot occur overtly in coordinate clauses because the coordinator *wa* 'and' incorporates it at PF.

Discussion of Question Two

Likewise, *?an* 'that' initiates the subordinate phrase in (3). The sentence (3a) is ungrammatical because the subordinator *hatta* 'until' semantically incorporates the meaning of the complementizer *?an* 'that' at PF; therefore, *?an* cannot occur overtly at this level. In (3c), [D"] *al-qaryati* 'the village' and the verb *?adkhula* 'entered into' cannot be deleted at all levels; whereas the subject [D-] *?ana* 'I' is retained until interface for correct meaning. It must be deleted at PF because Arabic is a pro- drop language. All obligatory functional formal features, namely, [C, subj. T, D±] as well as optional functional formal features [Agrs, Case, Theta marking] are checked in the phases in a proper manner. The feature [C] but not [T] imposes the semantic properties at spell out and interface; thus, it is retained until LF but not PF; as the features [T, Agrs, Case and Theta marking] do not have semantic properties, they must be deleted before interface. Since the features [Agrs and Case] have phonetic values in Arabic syntax, they must be transferred to the phonological components at PF. They must be valued in the computational stage when they are transferred to higher phase 2. In this phase, all [- interpretable] features, namely, [Agrs, Case, subj. and Theta marking but not T] are deleted by mapping them to the semantic component; they will be assigned the phonetic case markers by the phonological components at PF.

If the results of question one and two were compared with literature, we agree with Friedmann et al. (2020) who suggested that in the acquisition of modern Hebrew, there could be several types of clausal embedding that might occur after a complementizer. It is possible that all forms of clausal embedding including finite phrases could be related to the emergence of a specific property of the complementizer. We also agree with Mostcati and Rizzi (2021) who propagated that all kinds of finite embedded clauses need to establish a syntactic relation with the topmost projection ForceP to check features with the complementizer. We also agree with Gentens and Boye (2024) who confirmed that the resulting complementizer Basque, Russian and Semitic is a factive entity. Though Kotzoglou and Canakis (2021) assured that *ke* 'that' complement clauses may not manifest the full matrix of Tense-Aspect-Mood morphological exponents in any given situation in Greek, their morphological markings depend primarily on the category and the morphological specification of the matrix verb. The clauses of the complementizer *ke* 'that' invariably copy the mood specification of the matrix verb. Thus, the embedded clause must surface in subjunctive and imperative mood in tandem with the matrix subjunctive. However, in Arabic, *?an* 'that' imposes the subjunctive marker on the verb whether it is overt at spell out or covert at LF. We disagree with Alem (2024) who confirmed that the complementizer may or may not agree with the subject in nonstandard in embedded clauses; however, in Arabic *?an* does not agree all with the subject in both embedded clauses. It retains the same form. We also disagree with Van Craenenbroeck's and Koppen's (2008) who discussed the complementizer agreement with the subject as clitic doubling. However, in Arabic, this type of clitic for agreement is not possible. We also disagree with Saxena's (1995) proposal in which distinct types of manner expressions are used complementizers such as 'thus' or 'so', manner question words like 'how', manner nouns 'way' or similative adpositions 'like'. In contrast, Arabic manner expressions cannot function complementizers.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The phase [C] inherits all features of [T"] to achieve convergence in syntax. To get grammatical coordinate and subordinate structures, the minimalist mechanisms of move and merge facilitate the derivation process from spell - out until PF in an optimal manner. Thus, covert movements of [D"] and [V"] are applied without a crash. These two mechanisms supported our hypothesis "*?an* 'that' initiates coordinate and subordinate subjunctive embedded clauses; it must be merged with coordinators and subordinators at [PF]; otherwise, the sentence is ungrammatical."

This study is significant because it made a clear distinction between *?an* 'that' as a complementizer in [C, C'] position and other similar forms that give different syntactic functions and occupy various positions in the syntactic hierarchy in Arabic syntax. Thus, the researchers made use of minimalist and phase theory to check all the features available in its complement which is the tense phrase [T"] to ensure the grammaticality of the sentence at LF / PF. Therefore, it can safely be argued that this study is a new addition to the field of syntax in research to patch the gap in research. The study examines the effect of *?an* in determining the grammaticality of the sentence before being merged to meet word order VSO at PF in Arabic syntax.

RECOMMENDATIONS

The researchers recommended the following:

1. The study of the complementizer *?an 'that* needs more attention from Arab scholars to explore its distributions in Arabic varieties because it is sometimes covert and its being visible causes the ungrammaticality to the sentence.
2. It is also recommended that, in language acquisition, Arab children must know that Arabic *?an* 'that' in syntax imposes subjunctive features whether overt or covert.
3. It is recommended that this approach is very helpful for scholars who are interested in Chomsky's syntax; his views were fit as they lead to optimal results with the amalgamation of syntax, semantics and phonology. Syntactic derivations occur in discreet computation phase which are sent to the interface level with phonological and semantic systems. These phases are independent units with escape hatches liable to movements and reconstructions allowing for limited access to their internal components by narrow syntax.

ACKNOWLEDGEMENT

This work was supported and funded by the Deanship of Scientific Research at Imam Mohammad Ibn Saud Islamic University (IMSIU) (grant number IMSIU-DDRSP2502)

REFERENCES

Alem, Astrid van. (2024). 'Complementizer agreement is clitic doubling Evidence from intervention effects in Frisian and Limburgian'. *Natural Language & Linguistic Theory*. https://doi.org/10.1007/s11049-024-09621-9

Abdullhamid, Muhammad. (1999). *Shrah ibn ʿaqil ʿala alfiyat ibn Malik*. Cairo: Maktabat Dar Al-Turath.

Caroline, Gentens and Kasper Boye. (2024) 'Introduction: the development of manner expressions into complementizers or quotatives. *Linguistics* 2024; 62(3): 531–539. https://doi.org/10.1515/ling-2024-0019

Chomsky, Noam. (1995). *The Minimalist Program*. Cambridge: MIT press.

Chomsky, Noam. (2005). *On Phases*. USA: MIT Press.

Friedmann, Naama, Adriana Belletti and Luigi Rizzi. (2020). Growing Trees. The Acquisition of the Left-periphery. https://ling.auf.net/lingbuzz/005369

Kotzoglou, George and Costas Canakis. (2021). On Some Properties of the Complementizer ke. https://pasithee.library.upatras.gr/icgl/article/view/3698

Maghalsih, Mahmoud. (2007). *Al-nahu Al-Shafi d Syntactic StructureAl- Shamil*. Amman: Dar Al- Masirah.

Moscati, Vincenzo and Luigi Rizzi. (2021). 'The Layered Syntactic Structure of the Complementizer System: Functional Heads and Multiple Movements in the Early Left-Periphery. A Corpus Study on Italian'. *Psychology of Language*. Vol. 12. https://doi.org/10.3389/fpsyg.2021.627841

Saxena, Anju. (1995). 'Unidirectional grammaticalization: Diachronic and cross-linguistic evidence. *Sprachtypologie und Universalienforschung* (STUF) 48(4). 350–372.

Van Craenenbroeck, Jeroen, and Marjo van Koppen. (2008). 'Pronominal doubling in Dutch dialects: Big DPs and coordinations'. *Microvariation in Syntactic Doubling* 36: 207–249.

Wright, William. (1984). *Grammar of the Arabic language*. India: S. Chand.

