

Mandative Subjunctive in Arabic Syntax: A Minimalist Study

 Dr. Atef Jalabneh

Faculty of Languages and Translation-King Khalid University

Abha- Saudi Arabia

Abstract

An Arabic sentence is dealt with in this article as SVO at spell-out and VSO at the logical form (LF). Thus, the objective of this study is to check the grammaticality of the mandative subjunctive structure in the absence of a case assignor for the nominative case. It also checks the relevant syntactic and semantic formal and informal features that support the grammaticality of mandative subjunctive at LF. To achieve the objectives, the researcher refers to Chomsky's (1981, 1986a, 1986b and 1995) Minimalist Views and Radford's (1988) Empty Tense Theory. The problem is to find out the actual nominative case assignor for the subjunctive subject in the absence of an overt tense. The study illustrates that the only case assignor for the nominative case in these types of structures in Arabic is the empty tense [e]. The formal features ([T],[D-], [P-] and ['an]) are proved to be parts of numeration, and they have [+interpretable] features at LF; however, informal features, namely, (nominative case, theta-marking and Agrs") are not. The study concludes that the complementizer 'an 'that' and the subjunctive marker [a] are necessary to be overt for the grammaticality of the subjunctive sentence. It is proved that a mandative subjunctive sentence occupies an argument position and must be theta marked at spell-out to render a well-formed sentence at the logical form. The study is significant because the researcher found syntactic solutions to the grammaticality of these types of structures in Arabic syntax.

Keywords: Complementizer Phrase, Tense Phrase, Spell-Out, Logical Form, Features, Adjunction.

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المضارع المنصوب في النحو العربي : دراسة في المنهج التخفيضي

الملخص

لقد تم التعامل مع مكونات الجملة في اللغة العربية بوصفها فاعلاً وفعلاً ومفعولاً في المستوى النفثي، وفعلاً وفاعلاً ومفعولاً في المستوى المنطقي؛ لذا يهدف هذا البحث إلى تفحص صحة جملة المضارع المنصوب المحتضنة نحويًا في غياب معامل الزمن، وكذلك تفحص سماتها النحوية والدلالية الرئيسة والثانوية الأخرى التي تساعد في بنيتها، لتحقيق أهداف الدراسة رجع الباحث إلى أفكار كل من: تشومسكي (1981 و 1986 و 1995) في المنهج التخفيضي، ورادفورد (1988) في نظرية معامل الزمن.

تتمثل مشكلة الدراسة بكيفية إيجاد معامل الزمن المحذوف في الجملة، والذي لا تصح الجملة بغيره، وأوضحت الدراسة أن الفاعل يرفع بمعامل زمن محذوف في المستوى النفثي، وأن السمات الرئيسة (وهي الزمن، والاسم، والفعل، والناصب أن) هي سمات متأصلة في الجملة، وضرورية لترجمة جملة صحيحة نحويًا في المستوى المنطقي، في حين أن السمات الثانوية، وهي: (حالة رفع الفاعل، والسمات المعنوية، وعامل المطابقة) ليست ذات قيمة في الترجمة. وخلصت الدراسة للآتي لا تصح جملة المضارع المنصوب المحتضنة دون المتمم (أن) وحركة النصب معاً؛ لأنهما سمات رئيسة في كل مستويات النحو، وكذلك أن هذه الجملة قادرة على حمل سمة معنوية تحدد وتعين من فعل الجملة الرئيسة لتكون صحيحة في المستوى النفثي، وأخيراً تُعدّ هذه الدراسة هامة للغة العربية؛ لأن الباحث استطاع أن يجد حلولاً نحوية لبنية هذا النوع من الجمل في اللغة العربية.

الكلمات المفتاحية: عبارة المتمم، عبارة الزمن، المنهج التخفيضي، المستوى النفثي، المستوى المنطقي، سمات، الالتصاق.

Introduction

The subjunctive in modern English occurs in a variety of contexts in which the form of the verb used is different from the normal indicative form. Regardless of the subject, the form of the present subjunctive verb is used to express present or past desires as that of *that* clauses. For instance; ‘It was required that he *go* to the back of the line’ as compared with the past indicative ‘Everyone knows that he *went* to the back of the line’; and ‘It is required that he *go* to the back of the line’ as compared with the present indicative ‘Everyone knows that he *goes* to the back of the line’. The English subjunctive also occurs in counterfactual dependent clauses, using a form of the verb that in the indicative would indicate a time of action prior to the one implied by the subjunctive. It is called the past subjunctive when referring counterfactually to the present, and is called the pluperfect subjunctive when referring counterfactually to the past. It occurs in *that* clauses following the main-clause verb ‘wish’ as in ‘I wish that she *were* here now’, ‘I wish that she *had been* here yesterday’ and in *if* clauses expressing a condition that does not or did not hold as in ‘If she *were* here right now, I will see her’.

Lyons (1968) argued that the subjunctive mood is a universal concept and generally occurs in all languages. Syntactically, it occurs in a dependent clause in the object position. It is basically marked by the

conjunctive 'that' which occurs after certain transitive verbs which project the mandative subjunctive. In non-inflectional languages like English, the subjunctive verb looks like the indicative insofar as tense is concerned. It is either visible by the base-form of the present or the past tense. To be understood, it is replaced by the putative 'should' of English or infinitive. Thus, it is unmarked though it expresses a speaker's attitude towards what is going to be said in the future in a simple statement form.

Quirk et al .(1972, 1985 and1990) argued that the subjunctive mood is not an important category in contemporary English if it is compared to the indicative use; it is normally paraphrased by other constructions such as the infinitive and the putative 'should'; it can be seen in three separate structures; for instance, (i) mandative in *that-clause* as in [I insist that he *reconsider* the council's decisions'], (ii) the formalic as in [God *save* the queen] and (iii) the hypothetical were -subjunctive as in [if I were rich, I would buy a citadel]. Our main concern is mandative subjunctive structure in English which occurs in subordinate clauses; it is initiated by the complementizer *that* which is followed by a subject and base form of the verb. There is no back-shifting of tense in such structures as that of the indicative. The mandative subjunctive is a productive type of structure because the verb used in the matrix can provide a super-ordinate clause that satisfies the

requisite semantic stipulation and show demand, recommendation, proposal, resolution ...etc. The mandative verbs that can be used in the embedded subjunctive clauses in English are: *propose, decide, suggest, insist, order, prefer, request, recommend, demand, mandate ...etc.* (c.f. Quirk et al 1985, p. 156-157).

Culicover (1982) argued that subjunctive is Aux -less because nothing can be put in Aux. He further illustrates that if an imperative mood lacks an underlying AUX, one cannot treat 'do' in imperatives as an underlying modal; likewise, one cannot posit 'should' in the underlying structure of mandative subjunctive.

In the relevant literature, Wright (1984) argued that the structure of *al-muḍāriʿ al-manṣūb* 'the subjunctive of the imperfective' occurs in an embedded position of a transitive verb and must be headed by a conjunctive and the verb must be marked by the subjunctive marker[a]. He also confirmed that the subjunctive semantically expresses a wish, command, emotion, possibility, judgment, opinion, necessity; this is shown in a statement that involves a type of verb that expresses such events. The subjunctive structure is used with the same type of verbs that project 'an 'that-clause' in the embedded position. They include, *yaqtariḥu* 'suggest', *yamīlu* 'incline', *yakrahu* 'disincline', *yakhāfu* 'fear', *yanwi* 'intend', *yafriḍu* 'propose', *yūṣi* 'recommend', *yaṭlubu* 'demand' and *yūṣi* 'mandate'. Furthermore, there are certain verbs in Arabic that can be

used in the subjunctive such as *yakrahu* 'hate', *yajibu* 'must' and *yuḥarramu* 'prohibit' but are not used in English. In case any other lexical verb of reporting nature is used, the subjunctive cannot occur in both languages as in [** qāla- 'an -ahu yaqūma biwājib-ihī* '*he- said- that -he – perform- his duty']. The sentence can be made grammatical in both languages if the indicative form of the verb is used as in [**qāla-'an n-ahu yaqūmu biwājib-ihī* 'he- said- that -he –performed- his duty']. There are certain differences between subjunctive structure of English and that of Arabic. In the former, the complementizer 'that' can be omitted at the logical form; however, in the latter it cannot. Moreover, the subjunctive structure in Arabic requires the compulsory overt occurrence of the subjunctive marker [a], which is not available in English.

Abdulhamid (1999) and Maghalsih (2007) made the point clear in the sense that the subjunctive of the imperfective normally occurs in a clause whose verb indicates (i) inclination or disinclination, (ii) order or prohibition, (iii) duty, (iv) effect, (v) effort, (vi) fear, (vii) necessity and (viii) permission. It is introduced by the primary conjunction '*an* 'that'.

In short, the above views will be helpful, in principle, to analyze the mandative structures in Modern Standard Arabic.

The Problem of the Study

The problem of this study is that the nominative case assignor [T] is missing and the sentence is still correct in Arabic; thus, we have to find a suitable case assignor because theoretically the subject is an overt D” and must be assigned a case.

The Objectives and Questions of the Study

There are certain objectives which are to be achieved: (1) to find out suitable nominative case assignor for the subject D” in mandative subjunctive structure to construct a grammatical sentence in Arabic, (2) to make sure that the complementizer [*an* ‘that’] is the only head for a complementizer phrase in such a structure and (3) to examine the syntactic significances of formal features (noun phrase [D-], verb phrase [P-] and complementizer phrases [C”s]) and informal features ([Agrs], [cases] and [theta roles]) in supporting the grammaticality of the mandative subjunctive at LF. To achieve the above objectives, the following questions are posited:

1. Why does the missing [T] pose a problem to the assignment of the nominative case in Arabic subjunctive?
2. How does the complementizer *an* ‘that’ pose a problem to V-movement in Arabic syntax at LF to get correct VSO word order at LF?

3. How do the formal and informal syntactic and semantic features guarantee the grammaticality of the mandative subjunctive at all levels of syntax?

The Hypothesis of the Study

X is a mandative verb that selects a subjunctive sentence having the structure of [C''] in which [T], [D-], [P-] and ['an] are formal features at all levels; while, nominative case, theta-marking and agreement – subjects [A_{grs}] are informal ones. Empty [T] is the case assignor for the subjunctive subject.

The Theoretical Perspectives

Chomsky (1981, 1986a, 1986b and 1995) argued that the nature of tense [T] delimit the distinction between indicative and subjunctive. It has the value [$\pm$ Tense], where [+Tense] stands for finite and [-Tense] for infinitival. Thus, the former consists of [C''] and [T''] while the latter has only [T'']. [C''] is headed by the complementizer [C] which is marked by a specifier and it projects an inflectional phrase [I''] as the complement in X-bar syntax. [C''] typically has the structure [_{C'} Spec [_{C'} C [_{I'} Spec [_{I'} I V'']]]] in syntax. The [Spec, C''] is optional and it is a non argument position. The Extended Projection Principle (EPP) confirms that [Spec, T''] position is obligatory, and it is regarded as an argument position for theta-marking. Strong features in [C''] are narrowly limited in distribution and represented by the functional category [T].The

substantive noun phrase category [D-] and the verb phrase [P-] that head the major projections within the clause and complementizers [Cs] serve as mood-force indicators (Chomsky, 1995, p. 379). Such features are drawn from the lexicon for numeration and need to be checked at all levels of syntax. Although the Agrs features of [P-] have [-interpretable] power at LF, they are regarded [+interpretable] as that of [D-] in numeration. They are added optionally to [P-] in the lexicon (c.f. Chomsky, 1995, p. 377). Other [-interpretable] features of categories, namely, the nominative case and theta roles are checked at spell-out but deleted at interface and LF levels because they are not part of numeration in the computational channel. Chomsky (1986b) argued that structures established at D-structure must be preserved at S-structure in a mechanism called structure preserving principle. Thus, a syntactic structure of a sentence is required at D-structure and will be present at S-structure as well. For instance, a position is required by the projection principle at D-structure and will also be present at S-structure, a position projected as a certain category at D-structure cannot change its category at S-structure, i.e., [I] remains [I], [V] remains [V] ...etc. The structure preserving principle has also consequences for movement of all types. A constraint imposed on movement is that a phrasal projection must move to another position labeled as a phrasal projection. [VP] must not move into a position dominated by a lexical category [NP] nor to

intermediate phrasal category [N']. A movement has to respect syntactic categories. For example, [NP] can move into NP-position without a problem but it will not be able to move to a position labeled [AP]. This does not mean that an [NP] must move to NP-position. Provided all other principles of grammar are respected, an [NP] is also allowed to move to positions which are not specified for a syntactic category as that of wh-movement. The structure preserving principle does not prevent a moved entity which is given a new position at S-structure, i.e., a position which does not exist at D-structure as long as the new position created respects the principle of phrase structure. Such movement would not violate the principle in which the structure must be preserved. The principle of adjunction allows us to generate new structures at S-structure in syntax for any moved entity.

Radford (1988) argued that the verb in the subjunctive is invariable; thus, it has neither an overt tense nor [Agrs] though it is a pure finite clause. In inflectional languages like Spanish, Romanian, Italian and Arabic, the subjunctive verb is inflected in both [T /or I] and [Agrs] simultaneously. As subjunctive clauses are finite in such languages, it is possible to regard them finite in English as they share certain morpho-syntactic properties in common with indicative clauses which make them different from non-finite clauses. For instance, (i) neither subjunctive nor indicative clauses can be constructed without overt subjects; whereas,

nonfinite clauses can indeed be subjectless at LF. (ii) The subjects of both types must be assigned the nominative by [T] but nonfinite clauses must not as they are tenseless. The question arising here is that: How is the nominative case assigned to the subject of the subjunctive without having [T] constituent as per X-bar syntax? Theoretically, although a finite [T] is overtly or covertly inflected for tense and agreement features, the nonfinite [T] lacks such features. It is also argued that finite clauses that contain an overt [C] in fact must have a finite [T']; however, a clause that contains a nonfinite [C] requires a nonfinite [T']. But contradictory to the former logic is the subjunctive clause in which there is [C] but no overt [T]. An assumption given by Radford (1988, p. 307) says "Any clause which contains [C] contains a compatible [T]". Thus, subjunctive clauses in English require an overt complementizer and any clause that contains [C] also contains [T], then, it follows that a subjunctive complement clause contains [T] node. And since [T] constituent does not appear overtly in such structures, the obvious solution to be followed over here is that the subjunctive [C]'s have an empty [T]. This assumption leads to a final universal conclusion that says all clauses that have [T] can either be filled by [T] if finite, by 'to' if nonfinite or left empty. The empty [T] helps to achieve the structural account of the nominative case checking. In other words, a[DP] which is a sister of a finite [T] must assign the nominative case in accordance with the case-filter as well as the adjacency parameter.

Jalabneh (1992 and 2007) conducted studies in Arabic in which he dealt with SVO at spell-out but VSO at LF due to a number of reasons. Firstly, all conditions of government theory, namely, c-command and m-command relations are to be met. Secondly, all conditions of case theory, namely, adjacency parameter and case filter are to be met. In other words, the nominative case is to be checked by [T] in [Spec, T''] with a governor. Thirdly, the thematic relations, namely, theta criterion and assignment of theta roles to arguments in [D'', V''] are also to be met in this approach for correct semantic interpretation. V-movement is essential to get grammatical sentences of both c-selection and s-selection at all levels of syntax and to meet the word order of Arabic at the logical form.

Thus, the above views will be our guide to explicate case assignment, the formal, the informal and other relevant issues of subjunctive in Arabic syntax.

Discussions and Results: *A Minimalist Study*

This work tries to account for the nominative case assignment that arises due to the missing [T] from the subjunctive mandative though it is a finite clause. If the subject remains without a case, the sentence will be ungrammatical.

In such a way, we have to find a suitable case assignor. Formal and informal features must be checked at spell-out in order to support the grammaticality of the same structure at the logical form. The study deals with [C''] as an essential regulator for the features whose head-position is

occupied by the complementizers 'an 'that' which forms a barrier for V-movement to get a correct word order at LF.

Formal Features of Mandative Subjunctive in Arabic Syntax

There are certain formal features that need to be checked as follows:

A. Tense [T] as a formal feature

It is evident that [T] poses a problem for the nominative case assignment in mandative subjunctive structures because it is not available at all. This approach considers the functional category [T] an obligatory syntactic feature of a finite clause [T^{''}], and without which the subject of the subjunctive structure cannot be assigned the nominative case in the course of derivation to guarantee the grammaticality of the sentence at LF. It is argued that [_T T', T] is empty and cannot be visible as that of [T] in the indicative tense phrase.

Therefore this position is filled by the empty category [e] which, in turn, has the same syntactic function as that of the overt finite [T]. components of An Arabic sentence are dealt with in this approach as SVO at spell-out for better government of the internal arguments and VSO at LF. The specimen (1) illustrates the syntactic function of [T].

LF

1a. 'iqtarah- ' - tu 'anla ya- drib- a 'amr- un
 suggest past I that not 2nd, sg, masc. write subj Amr nom
 zayd -an
 Zaid acc

Literally:

‘suggested I that not hit Amr Zaid’

‘I suggested that Amr do not hit Zaid’

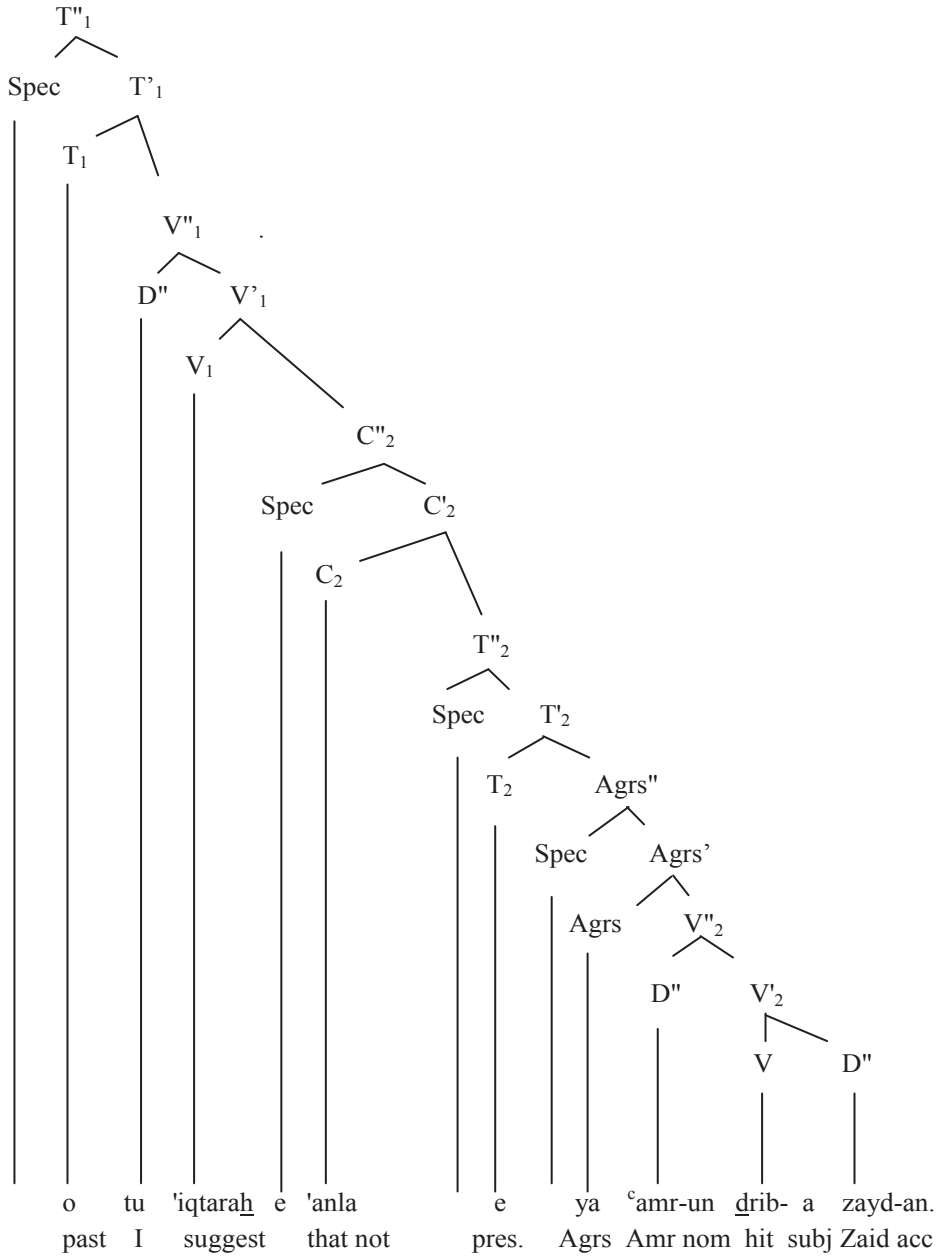
(1b) is the spell-out tree diagram representation for (1a):

1b. tu- 'iqtarah- ' - [C' 'anla e 'amr- un yadrib - a
 I suggest past that not pres. Amr nom write subj
 zayd- an]
 Zaid acc

‘I suggested that Amr do not hit Zaid’

(1c) is the spell-out tree-diagram for (1b):

1c.



(1c) illustrates clearly that the position of $[T, T']$ of $[C'']$ is filled with the empty category $[e]$. D'' *'amr-un* 'Amr' occupies the position of $[Spec,$

V"] which is, in fact, a caseless position in syntax. Thus, it has to move to the case position of [Spec, T"] to be assigned the nominative case by the invented head [T] of [T"] and becomes *°amr-un* 'Amr' to which the case-marker [un] is attached. If *°amr-un* 'Amr' is not case-marked, the resulting structure is incorrect as in [**iqtarah- tu 'anla yadrib-a °amr zayd-an* 'I suggest that Amr do not hit Zaid']. As *°amr-un* is without a case, it violates the case filter stipulation in syntax that says "Every phonetically realized NP must be assigned an (abstract) case" (c.f., Chomsky 1995, p. 111); thus, movement is a must. Not only *°amr-un* 'Amr' but also *zayd-an* 'Zaid' must be assigned the accusative case by the *yadrib* 'hit' to which the case -marker [an] is added to the object in the maximal projection [V"]₂. If [T₂] node is omitted in syntax, theoretically in assumption, the resulting sentence is ungrammatical as in [**'iqtarah-tu 'anla yadrib- a °amr zayd-an*] because the overt D" *°amr* cannot become the subject without [un]. It is also important to notice that the functional category [Agrs] is filled by the marker [ya] as third person and singular . [Agrs"] is not enough to give a grammatical sentence in Arabic syntax as in [**'iqtarah-tu 'anla drib- a °amr zayd-an*]. This is because theoretically [T"] is a collection of both [T and Agrs"]. Both of them complement each other in the sentence to form the theory of [T"]. LF form can only be formed if the subjunctive verb *driba* 'hit' moves to the position of [Agrs, Agrs"] to check agreement marker [ya] and becomes

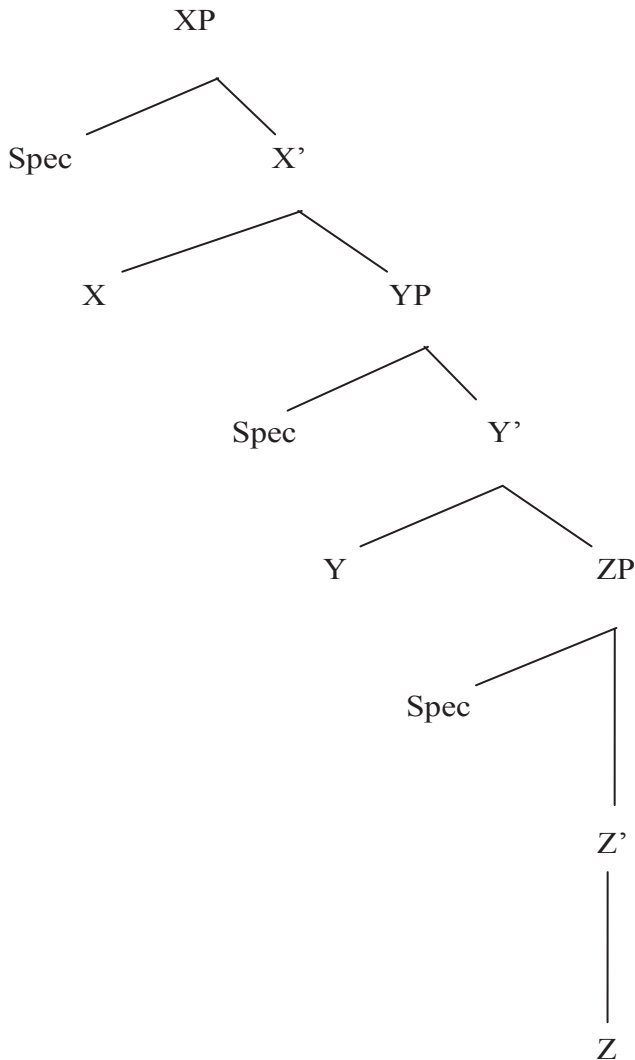
yadriba ‘hit’ and to the position of [T, T'] to check the empty tense carrying the same form and lands over there; however, it cannot move higher than this node as there is no empty node for it to land. Thus, the result is this word order: complementizer, subject and verb, which is in fact, an ungrammatical sentence at LF as in (1d)

1d.* 'iqtarah- 0 tu [C'] [C' [C 'anla 'amr- un yadriba
 suggest past I that not Amr nom write
 zayd- an]]]
 Zaid acc

'I suggest that Amr write his lesson'

As (1d) is an incorrect subjunctive sentence in Arabic; we have to refer to the notion of “adjunction” to get VSO in the internal structure. The structure preserving principle does not prevent a moved entity which is given a new position at S-structure, i.e., a position which does not exist at D-structure as long as the new position created respects the principle of phrase structure. Such a move would not violate the principle that structure must be preserved. This principle leads us, in this analysis, to discuss the notion of adjunction as a principle of syntax that allows us to generate a new structure at S-structure for the verb. In this section, we shall discuss V-movement to create a new position for V in (1e).

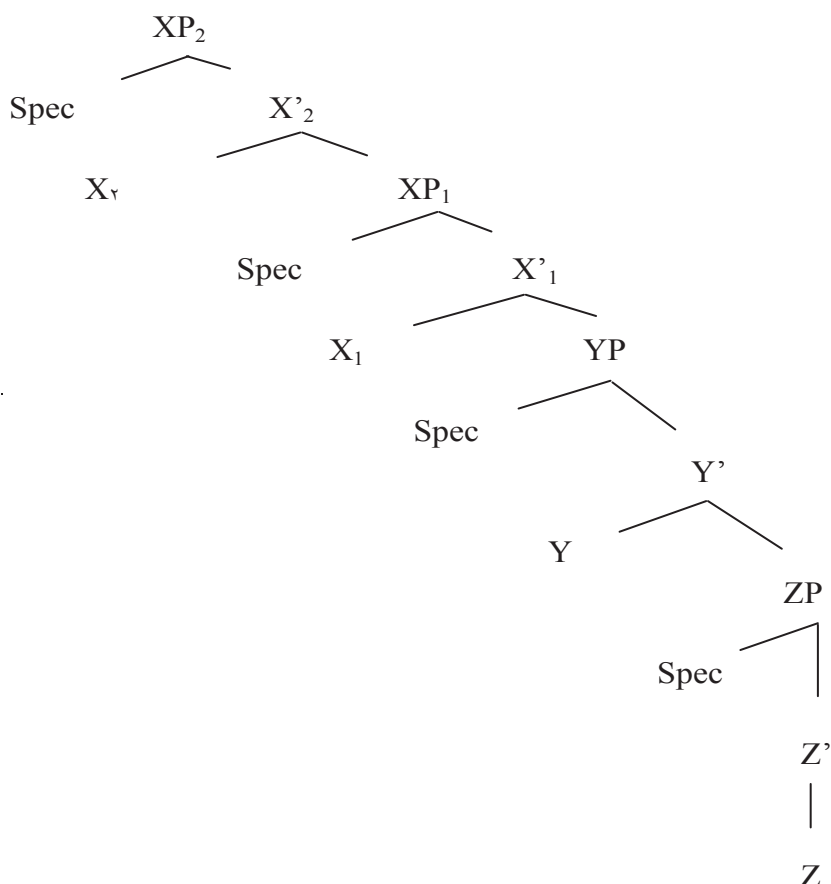
1e.



In (1e), [XP] functions as the complementizer phrase, [YP] functions as the tense phrase and [ZP] functions as the verb phrase. The lexical category that is going to move is [Z, ZP] which is the subjunctive verb; it has already moved to [Y] position in (1c) but it cannot go higher

because [X] position of [X'] is also occupied by the complementizer 'an 'that'. This means that we must create a new position for [Z] higher than [YP]. Following the principles of grammar, the moved element must c-command its traces. Suppose [X] moves somewhere in the vicinity of the topmost node of [YP], we need to create a node for the moved [Z] but in doing so we must respect the format of X-bar syntax for phrase structure. (1f) would be the best option for V-movement to be attached in these structures in Arabic syntax.

1f.



In (1f), the new node $[XP_1]$ is created to dominate the maximal projection $[YP]$ from where $[Z]$ moves. This operation is known in syntax as “adjunction”. This adjunction mechanism respects our phrase structure theory, i.e., the new constituent $[XP_1]$ is headed by $[X_1]$. The node $[XP_1]$ which is created by adjunction is binary branching ...etc. Let us check more carefully the relation between $[XP_1]$ and $[ZP]$ (from which the verb *yadriba* ‘hit’ moved). There are two nodes $[XPs]$. $[XP_2]$ is the topmost original maximal projection and $[XP_1]$ is the new maximal projection. $[XP_2]$ dominates the maximal projection $[XP_1]$ but not $[YP]$ in which $[ZP]$ is located. $[ZP]$ is dominated indirectly by the maximal projection $[XP_1]$ but it is not dominated at all by the topmost maximal projection $[XP_2]$. Thus, $[YP]$ is completely inside the projection of $[X_1]$ of $[XP_1]$. $[YP]$ is included in the projection of $[X_1]$. Thus, $[ZP]$ is partly inside the projection of $[X_1]$; in other words, it is not fully part of the maximal projection $[XP_1]$. In such situation, Chomsky (1986b, p.7) proposed a formulation to solve this problem called dominance as in (1g).

1g. Dominance

A is dominated by B only if it is dominated by every segment of B.

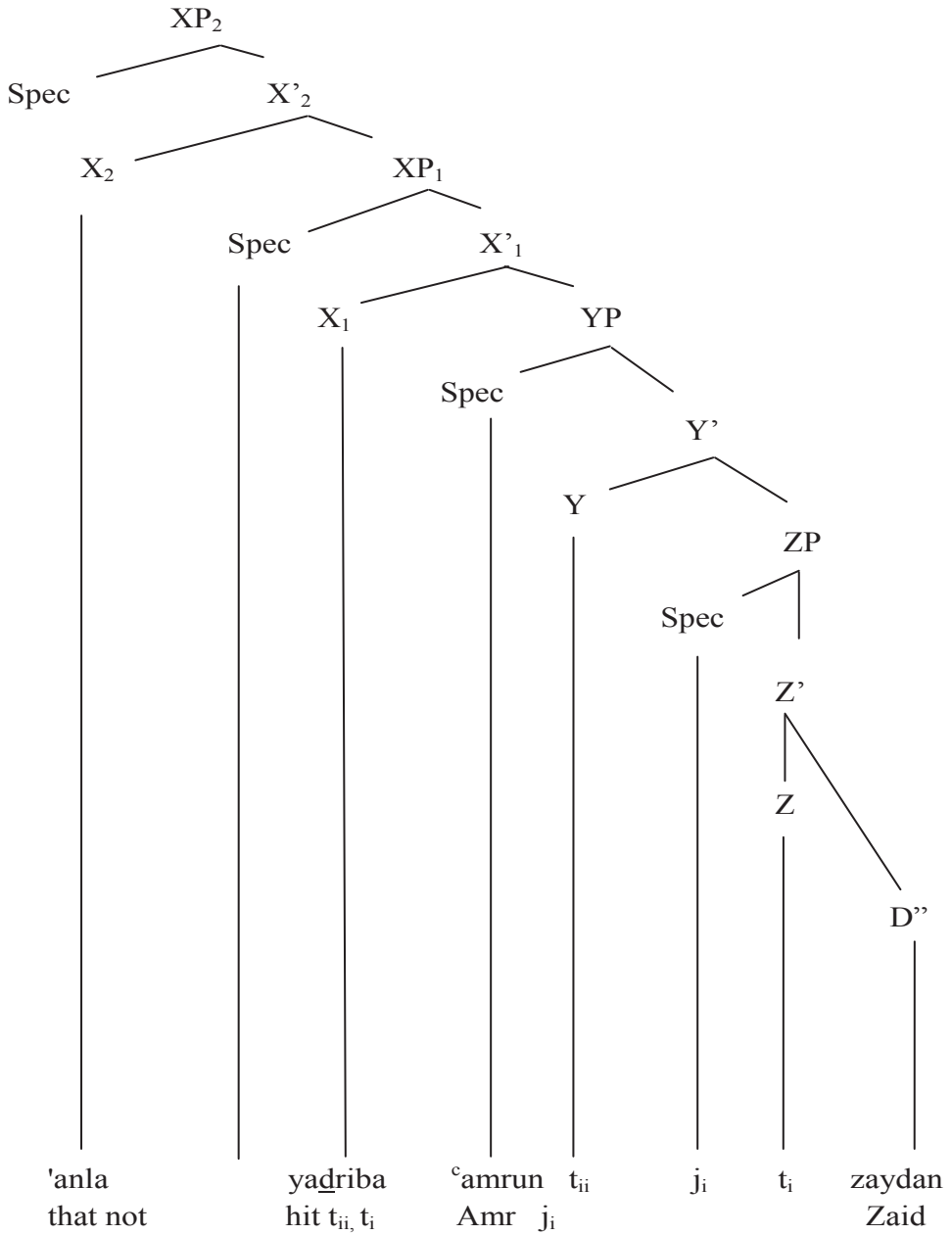
A is [YP] and B is the inner maximal projection of [XP₁]. In principle, in (1f), [XP₁] dominates every segment of the maximal projection [YP] because of c-command relation. As [ZP] is a part of [YP], [ZP] is automatically dominated by [XP₁]. We proved that [ZP] is not excluded in [XP₁] for adjunction following Chomsky's (1986b) notion of "exclusion" as it is defined in (1h).

1h. Exclusion

B excludes A if no segment of B dominates A.

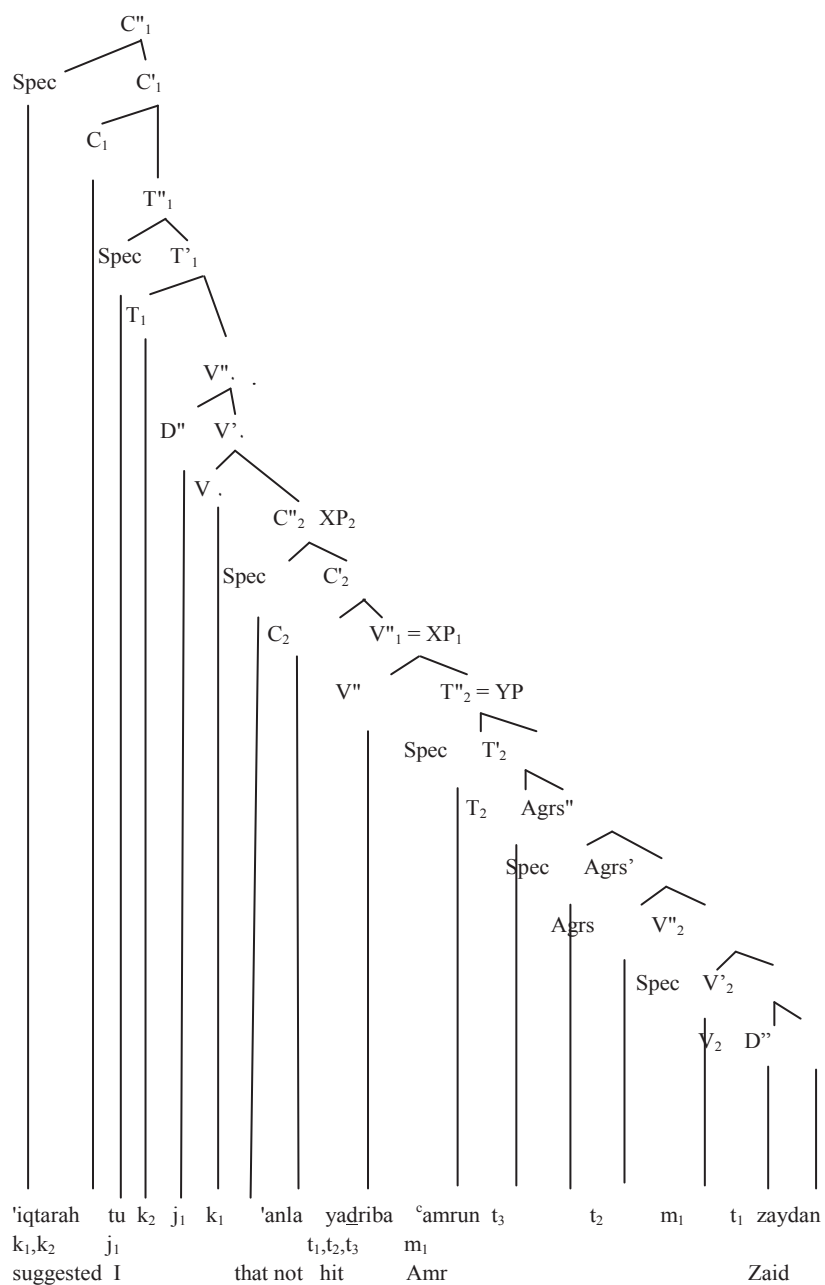
Thus, adjunction is very much suitable to get the VSO order in Arabic syntax in these kinds of structures. This mechanism of adjunction does not violate the restriction imposed by Chomsky (1986b); the restriction is that phrases can only be adjoined to maximal projections and that adjunction can only be to non-argument; thus, [V, V'] is a non argument position in (1f) i.e., not a noun phrase to get a theta role. In it, the verb *yadriba* 'hit' can move easily to the position of [X₁, X'₁] as in (1i) (for the internal C") without disturbing other constituents, namely, the subject *'amrun* 'Amr' which occupies the position of [Y, Y'], and the complementizer *'an* 'that' which occupies the position of [X₂, X'₂].

1i.



The final word order of this Arabic sentence is VSO as in (1j).

lj.



It is quite obvious that Arabic does not accept the past inflection in the subjunctive structure because the resulting sentence is incorrect as in [**'iqtarah tu 'anla darab-a 'amr-un zayd-an* 'I suggested that Amr do not hit Zaid]. Hence, [T''_2] indicates that the verb must be in the subjunctive and it can bear any [Agrs] marker as in the specimens: (i) *ta-driba* 'she hit', (ii) *'a-driba* 'I hit', (iii) *na-driba* 'we (fem and masc.) hit', (iv) *ta-driba* 'you (sg) hit', (v) *ya-driba* 'he/they hit' and (vi) *ya-drib-na* 'they (fem) hit'. In short, The theory of empty tense is applied to the embedded mandative subjunctive in Arabic syntax because it is a finite clause and [T''_2] is a must to be overt at spell-out. It is the only solution in syntax to assign the nominative case to the noun phrase because [Agrs] alone is incapable to guarantee the grammaticality of the sentence at LF. The mechanism of adjunction is also necessary to be applied to get VSO at LF.

B. Noun phrase (D-) and verb phrase (P-) as formal features

In theory, the grammatical categories [Ds-] have intrinsic agreement and interpretable features at numeration; they are attached to nouns at all levels of syntax. The grammatical categories [Ps-] have finiteness, non-finiteness and Agrs features that are attached to verbs at numeration and must be available in the structure at all levels of syntax to guarantee the

grammaticality of the sentence. For instance, in (1c), the noun phrases which are in the subjunctive clause in this work are represented by *‘amr-un* ‘Amr’ and *zayd-an* ‘Zaid’. The former is the subject of the subjunctive and carries the 3rd, sg and masculine agreement features in the lexicon, and the latter is the object of the verb *yadriba* ‘hit’ and carries the same features, too. Similarly, the verb *yadriba* ‘hit’ carries the intrinsic features of 3rd, sg and masc. due to the overt attachment of the [Ags] marker [ya]. Syntactically, the verb is to be inflected for each person used in the structure as Arabic is rich in its morphological realizations. In short, all [Ds-] and [Ps-] are [+interpretable] at LF because they are inflected to morphology in Arabic.

C. The complementizer [C] ‘anla ‘that not’ and the subjunctive marker [a] as formal features

The complementizer *‘anla* ‘that not’ and the subjunctive marker [a] are formal features in the mandative subjunctive structures in Arabic syntax, they have [+interpretable] power at all levels of syntax. If any of them is missing, the resulting sentence is wrong as in (2).

2a. yajibu [C' [C' [C 'an ya- ktub- a 'amr- un
must be that 2nd, sg, masc. write subj Amr nom
darsa - hu]].
lesson his

' It must be that Amr write his lesson'

2b. * yajibu [C' [C' [C 'an ya- ktub- 'amr- un darsa -
must be that 2nd, sg, masc. write Amr nom lesson
hu]].
his

' It must be that Amr write his lesson'

2c. * yajibu [C' [C' [C ya- ktub- a 'amr- un darsa -
must be 2nd, sg, masc. write subj. Amr nom lesson
hu]]].
his

' It must be Amr write his lesson'

(2a) is grammatical because the complementizer 'an 'that' and the subjunctive marker [a] are overt. (2b) is an ungrammatical sentence because the subjunctive marker [a] is deleted and the complementizer 'an 'that' alone cannot produce a grammatical sentence at LF. (2c) is also incorrect because the complementizer 'an 'that' is omitted and the subjunctive marker [a] alone cannot make the sentence correct. In short, both of the formal features have to be overt in mandative subjunctive in Arabic syntax as in (2a). Similar examples of the category are written in (3-6).

3a. yuḥarrimu zayd- un [C' [C' [C 'an tashrab- a hind- un
prohibits Zaid nom that drink subj. Hind nom
al- khammra]]].
det wine

‘Zaid prohibits that Hind drink wine’

3b.* yuḥarrimu zayd- un [C' [C' [C 'an tashrab hind- un
prohibits Zaid nom that drink Hind nom
al- khammra]]].
det wine

‘Zaid prohibits that Hind drink wine’

3c.* yuḥarrimu zayd- un [C"] [C' [tashrab- a hind- un
prohibits Zaid nom drink subj. Hind nom
al- khammra]]].
det wine

‘Zaid prohibits Hind drink wine’

4a. kariha zayd -un [C"] [C' [C 'an yal°ab- a °amr - un
hated Zaid nom that play subj. Amr nom
al- shatranj]]].
det chess

‘Zaid hated that Amr play chess’.

4b.* kariha zayd - un [C"] [C' [C 'an yal°ab °amr- un
hated Zaid nom that play Amr nom
al- shatranj]]].
det chess

‘Zaid hated that Amr play chess’.

4c.* kariha zayd - un [C"] [C' [yal^cab- a ^camr - un
 hated Zaid nom play subj. Amr nom
 al- shatranj]]].
 det chess

‘Zaid hated that Amr play chess’.

5a. yūṣi zayd- un [C"] [C' [C 'an yudkhul- a ^camr- un
 recommends Zaid nom that enter subj Amr nom
 al- jāmi^cata]]].
 det university

‘Zaid recommends that Amr get admitted to the university.’

5b.*yūṣi zayd- un [C"] [C' [C 'an yudkhul ^camr- un
 recommends Zaid nom that enter Amr nom
 al- jāmi^cata]]].
 det university

‘Zaid recommends that Amr get admitted to the university.’

5c. *yūši zayd- un [C" [C' [yudkhul - a °amr- un
 recommends Zaid nom enter subj. Amr nom
 al- jāmi°ata]]].
 det university

‘Zaid recommends that Amr get admitted to the university.’

6a. yakhāfu zaid- un [C" [C' [C 'an yaqūd- a
 fears Zaid nom that drive subj.
 al- sayyarat- a]]].
 det car acc

‘Zaid fears that he drive the car.’

6b* yakhāfu zaid- un [C" [C' [C 'an yaqūd
 fears Zaid nom that drive
 al- sayyarat- a]]].
 det car acc

‘Zaid fears that he drive the car.’

6c.* yakhāfu zaid- un [C' [C' [yaqūd- a
 fears Zaid nom drive subj.
 al- sayyarat- a]]].
 det car acc

‘Zaid fears that he drive the car.’

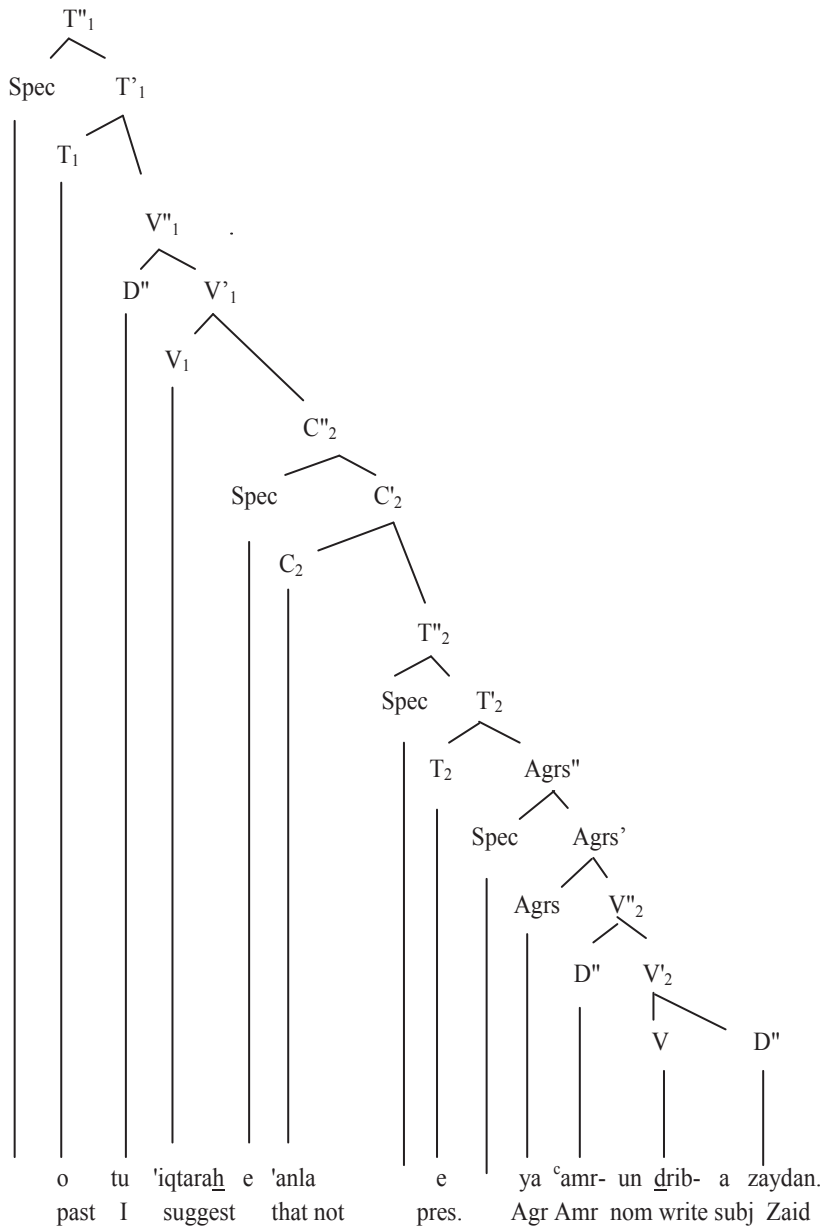
(3b, 4b, 5b and 6b) are ungrammatical due to the deletion of the subjunctive marker [a]. However, (3c, 4c, 5c and 6c) are ungrammatical because the complementizer 'an 'that' is deleted. In short, formal features are to be checked whether [T] is overt or covert in Arabic because they are needed for correct interpretations of the structure at LF.

Informal Features of Mandative Subjunctive in Arabic Syntax

Cases, Agrs and theta-marking

There are a few informal features that need to be checked in (1c) repeated here as (7) for the correctness of the subjunctive sentence at LF.

7.



Insofar as the informal features are concerned, they are illustrated by

(i) the nominative case, (ii) [Agrs''] and (iii) the theta role of [C'']. The

features must be visible at spell-out to guarantee the grammaticality of the structure at the subsequent levels. Such features are to be deleted at this level because they have [-interpretable] features at LF. For instance, in (7), the subject D'' *‘amr-un* 'Amr' is in a caseless position; consequently, it must move to the position of [Spec,T''] to get the nominative case by the empty tense [e] in order not to violate case filter (cf. Chomsky, 1995, p. 111). As far as the feature of [Agrs''] is concerned, it is visible by the marker [ya]. It is checked by the verb *drib* 'hit' after V-movement from the position of [V, V'] to the position of [Agrs, Agrs']. Insofar as the question of theta marking is concerned, the category [C''] [*‘an yaḍriba ‘amr-un zayd-an* 'that Amr hit Zaid'] is assigned the theta role of theme by the matrix verb *‘iqtarah* 'suggested'. In it, the subject *‘amr-un* 'Amr' is assigned the theta role of agent by the V'' [*yaḍriba zayd-an* 'hit Zaid']; however, the object D'' *zayd-an* 'Zaid' is assigned the theta role of theme by V *yaḍriba* 'hit' as it is the entity that undergoes the act of hitting'. The assignment of theta roles does not violate the mechanism of theta criterion that says 'each argument is assigned a theta role in exactly one theta position and each assignable theta role is assigned to one and only one argument' (c.f. Chomsky, 1981, p. 36). In short, cases, Agrs and the theta roles are essential syntactic and semantic requirements for the grammaticality of the sentence at spell-out in Arabic syntax. Such features are weak at LF; thus, they have [-interpretable] features. In short,

it is evident that checking such informal features are of great significance in syntax in the sense that a noun phrase cannot remain without a case in order not to violate case filter; likewise, [C''] must be assigned a theta role in order not to violate the main principle of theta theory, namely, theta criterion.

Conclusion

Mandative embedded subjunctive is a universal finite clause in which [T] poses a problem because the clause cannot stand without it at all levels of syntax. In (1c), it was filled in syntax with the category [e] which has syntactically the power of an overt tense as that of the indicative structure. Thus, the noun phrase *‘amr-un* ‘Amr’ is assigned the nominative case by it. [T] is visible at spell-out and other levels but it has [+interpretable] power at LF. Mandative subjunctive basically has the structure of (C’’) which is headed by the complementizer *‘an* ‘that’; its occurrence in the head position has created a barrier for V-movement in Arabic syntax to let the verb occupy the correct position to form the correct VSO word order at LF. The problem is solved with the help of the mechanism of “adjunction” as in (1e, 1f and 1j). The theory allows us to project a maximal projection that can allow the verb *yadriba* ‘hit’ to land there without disturbing any element in the structure. This maximal projection is a non – argument node and does not violate the principles of syntax, namely, the double branching of X-bar syntax, theta criterion and the structure preserving principle. The formal features of [D-], [P-], [T], [C] and the marker [a] are checked in a proper manner in this theory. For instance, in (1c), the noun phrase *‘amr-un* ‘Amr’ and the verb *yadriba*

'hit' have checked [+interpretable] at all levels of syntax as they are part of numeration; thus, they cannot be deleted. The intrinsic ϕ -agreement features which are attached to both of them must be maintained at all levels of syntax. Likewise, the grammatical category [T], [C] and the marker [a] must be available in the structure at all levels to guarantee the grammaticality of the sentence at LF. [T] position is filled with [e], [C] position is filled with 'an 'that' and the subjunctive marker is always visible at the end of the *yadrib-a (subj.)*. The informal features, namely, (i) the cases, (ii) Agrs" and (iii) the theta roles of [C"] have [-interpretable] features and have also been checked in syntax; for instance, in (7), the nominative case is checked by the case assignors [e] at the position of [Spec, T"]. As the case is a weak feature in syntax, it is not liable to interpretation at LF. Agrs is checked by the verb *yadriba* 'hit' after it moves from the position of [V, V'] to the position of [Agrs, Agrs']. With regard to theta marking of [C"] 'an *yadriba* 'amrun zaydan 'that Amr hit Zaid', it is assigned the theta role of theme by the verb of the matrix 'iqtarah' 'suggested' in (7). Thus, the hypothesis is proved to be correct.

To sum up, Chomsky's (1981, 1986a, 1986b and 1995) views of Minimalist Program and Radford's (1988) views of Empty Theory are fit to be applied in this kind of work in Arabic syntax. Adjunction as a mechanism of syntax allows us to create a maximal projection to absorb the movement of the verb outside the node [T"] without violating any

principle in syntax. The empty theory of tense is the only solution given in syntax to subjunctive constructions in which there is no tense affixation available. V-movement is essential in Arabic syntax because it is the correct mechanism through which we can get correct word order at VSO.

Abbreviations

Agrs'': agreement subjects phrase

Agrs': agreement subjects bar

Agrs: agreement subjects

Agr: agreement

AP: adjectival phrase

Φ - Agr : Abstract agreement features

C'' : complementizer phrase

C' : complementizer phrase bar

C: complementizer

Det : determiner

D'' : determiner phrase

D' : determiner phrase bar

D : head noun

D- : noun phrase

D- structure : Deep -structure

e : empty

EPP : extended projection principle

I'' : inflectional phrase

I' : inflectional bar phrase

I : inflectional head

LF : logical form

Masc. : masculine

NP : noun phrase

N' : noun phrase bar

N : noun

P- : verb phrase

P'' : prepositional phrase

Pl. : plural

PF: Phonetic Form

S- structure: surface structure

SVO: subject, verb, object

Sg. : singular

Spec : specifier

Subj. : subjunctive

T'' : tense phrase

T': tense bar

T: tense

t_i : trace_i

V'' : verb phrase

V': verb bar

V: verb

VSO: verb, subject, object

XP''₁: A maximal projection by adjunction equal to ZP i.e. (V'')

X': A maximal projection by adjunction equal to (V')

X: The head projection by adjunction equal to (V)

XP''₂: A minimal maximal projection equal to [C'']

XP'₂: A minimal maximal projection equal to [C']

XP''₂: The head projection equal to [C]

YP''. A maximal projection equal to [T'']

Y'. A maximal projection equal to [T']

Y. The head projection equal to [T]

ZP: A maximal projection equal to V''

Z': A maximal projection equal to V'

Z: The head projection equal to V

Transliteration Symbols of Arabic Consonants Phonemes

Arabic	Transliteration	Arabic	Transliteration
أ	ʾ	ض	d
ب	b	ط	ṭ
ت	t	ظ	ẓ
ث	th	ع	c
ج	j	غ	gh
ح	ḥ	ف	f
خ	kh	ق	q
د	d	ك	k
ذ	dh	ل	l
ر	r	م	m
ز	z	ن	n
س	sh	و	w
ص	ṣ	ي	y

Notice: the researcher has used the transliterated symbols merely while writing the Arabic phonemic segments in the text.(c.f. Oxford Journal for Islamic Studies)

Transliteration Symbols of Arabic Vowels Phonemes

	High	Central	back
	ī		ū
	i		u
Mid			
	a		
Low	ā		

(c.f. Oxford Journal for Islamic Studies)

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