International Journal of Linguistics, Literature and Translation
ISSN: 2617-0299 (Online); ISSN: 2708-0099 (Print)
DOI: 10.32996/ijllt
Journal Homepage: www.al-kindipublisher.com/index.php/ijllt

IJLLT
AL-KINDI CENTER FOR RESEARCH AND DEVELOPMENT

| RESEARCH ARTICLE

A Minimalist Account of Arabic 'Verbless' Sentences: Towards a Null Copula Hypothesis

Imane Errguig[1] ✉ and Malika Jmila[2]
[1]*Doctoral Researcher, Language and Society Laboratory, Faculty of Languages, Letters and Arts (FLLA), Ibn Tofail University (ITU), Kenitra, Morocco*
[2]*Professor, Language and Society Laboratory, Faculty of Languages, Letters and Arts (FLLA), Ibn Tofail University (ITU), Kenitra, Morocco*
Corresponding Author: Imane Errguig, **E-mail**: imane.errguig@uit.ac.ma

| ABSTRACT
This paper offers a critical analysis of Arabic null copular sentences or what is referred to as 'verbless' sentences. Building on Errguig and Jmila (2025), aspects of the limitation of the non-null hypothesis are discussed based on UG principles. First, we argue, drawing on X-bar theory that only a null copula structure [CP[C[TP[T[VP[$V_{[e]}$[NP/PP/AP]]]]] seems to be possible. Second, we demonstrate that T is specified for [+D, ±V], in addition to a [+finite] feature, following Rizzi (1997). Furthermore, tracing the directional mapping in a derivation having the structure [CP[C[TP[T[NP/PP/AP]]]]] is not feasible. As per learnability, facts show that children acquire null copular sentences before T and without any learning effort. Further evidence for the VP nature of the predicate, particularly through the coordination constituency test, strengthens the hypothesis of a null copula. Consequently, we suggest a fully-fledged null copula hypothesis upon exploring formal licensing and identification principles. The empty copula is formally licensed and identified under head government by strong [+finite] T. The significance of this study lies in proposing a uniform, and minimally constrained grammar for the Arabic T system. The findings imply that further research is needed to investigate the applicability of the null copula hypothesis to other languages.

| KEYWORDS
Null copula hypothesis, non-null hypothesis, verbless sentences, copular constructions.

| ARTICLE INFORMATION

ACCEPTED: 01 March 2025 **PUBLISHED:** 17 April 2025 **DOI:** 10.32996/ijllt.2025.6.4.20

1. Introduction

Null copular sentences, commonly known as 'verbless sentences', are the object of a serious polemic. Early Arab grammarians such as Sibawayh (1849) refer to these constructions as *al-Jumlah al-Esmiyah* Nominal Sentences. The verbal copula is absent in the present tense while it is realized in the past or future. The controversy remains unsolved regarding the existence or not of a null copula and the VP or SC (small clause) nature of these constructions. The hypotheses postulated to account for the 'verbless' sentences (Bahloul 1993, Bakir 1980, Jelinek 1981 and Mouchaweh 1980) are set into two main competing views: the null hypothesis defended by Fassi Fihri (1993) versus the non-null hypothesis adopted by Aoun et al. (2010) and Benmamoun (2000). In a comparative analysis of the two views, Errguig and Jmila (2025) refute the counterarguments against a 'zero' copula, thus demonstrating the weakness of the non-null hypothesis. Building on Fassi Fihri (1993), Errguig and Jmila (2025) propose a Revised Copula Spell-out Rule. The latter compensates for the lack of Fassi Fihri's rule to explain the 'zero' spelling out process. The present paper argues for the inadequacy of the non-null hypothesis based on UG principles and proposes a minimalist version of the null hypothesis. We suggest incorporating the *copula spell-out effect* into the clustering structures associated with the pro-drop parameter (Chomsky 1981, Jaeggli 1982, and Rizzi 1982).

1.2 Competing hypotheses

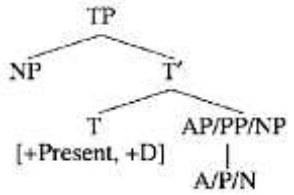
Based on the Government and Binding Theory (GB) (Chomsky, 1981), Fassi Fihri (1993) argues for a TMA (Tense, Aspect, and Mood) system in reaction to the one-value Tense/Aspect view of Arabic. The TMA system accounts for the 'visibility of the copula' in stative and locative constructions under the Copula Spelling out Rule (Fassi Fihri, p. 156):

1) **Copula Spelling Out Rule:**
   Spell out the copula as *kwn* when Mood, Aspect, and/or Tense are specified, otherwise spell it out as zero.

However, the copula spelling out rule is language-specific and fails to explain the 'zero' spelling out process. Fassi Fihri's analysis makes it challenging to address the issues observed with the missing copula.

On the other hand, Aoun et al. (2010) and Benmamoun (2000), among others, argue for a non-null copula in Arabic verbless sentences. Verbless sentences lack a verbal head; instead, only a tense phrase (TP) is projected. These structures thus have the representation in (2):

2)



Evidence supporting this claim revolves around four main counterarguments[1]: i. nominative case assignment; ii. an imperfective form of the copula in the present tense; iii. modal selection; iv. minimality effects Aoun et al. (2010) and Benmamoun (2000). One solution to these issues is to posit that a VP is unnecessary in these constructions. Deictic present T in Arabic is only specified for one feature namely the [+D] feature which is checked by the subject. Having no [V] feature, T does not need a VP complement to match with.

This paper offers a critical analysis arguing for the inadequacy of the non-null hypothesis and proposing a fully-fledged model of the null hypothesis. Accordingly, this paper is organized as follows. Section two sketches the framework adopted in this analysis namely the Minimalist Program (MP). Section three discusses aspects of the limitation of the non-null hypothesis based on UG and provides a minimalist account of the empty copula spell-out process. Section four sets the ground for the null copula hypothesis by addressing the licensing and identification conditions. In the conclusion, we discuss the major implications of the study. The main thesis of this paper is that our minimalist null copula hypothesis, including the Revised copula spell-out rule offer a grammar that is consistent with UG principles.

2. Theoretical framework: the Minimalist Program

A linguistic theory under Universal Grammar must meet the following criteria: it must be universal, explanatory, and maximally constrained (i.e. limited). Previous approaches and theories in syntax, such as the Principles and Parameters (PP) or Government and Binding (GB), often involved complex grammar and principles. The Minimalist program (Chomsky, 2015) offers a theoretical tool to minimize language analysis (Radford, 2004). Chomsky's ultimate aim is to develop a theory of Universal Grammar (UG) that generalizes from the grammar of specific I-languages to encompass the grammar of all possible natural I-languages. UG is 'the theory of human I-languages . . . that identifies the I-languages that are humanly accessible under normal conditions' (Chomsky, 1986b, p. 23). Accordingly, the Minimalist Program (MP) provides the tools to test such adequacy criteria regarding the (non) null copula hypothesis.

One of the fundamental conditions to minimize linguistic analysis is Economy. As such economy of derivation" stipulates that the application of UG principles is prioritized over language-particular rules whenever possible "least effort". Since UG principles are innate and thus intuitive, they are "less costly" than language-specific rules that are contingent upon parametric variation. As a consequence, the S-Structure and PF output of more costly derivations will be eliminated. However, the less costly derivation applies only as far as it is legitimate to yield an S-Structure and, ultimately, a PF output.

Moreover, the "least effort" condition is more than a simple count of derivational steps. Economy of derivation has it also that LF movement (covert move) is preferred over overt movement, this is referred to in MP as *Procrastinate*. The underlying concept is that LF operations function by intuition, acting mechanically and with no directly observable effects. The system attempts to reach the PF level "as fast as possible," minimizing overt derivation. In English-type languages, for instance, the overt raising of [V – Infl] is not obligatory for convergence; therefore, it is blocked by economy principles. Conversely, the operation Merge, as Chomsky (2015) concludes, must be overt, except for one case: "covert insertion of an item **α** lacking phonological features, necessarily at the root" (p. 268). Although this exception was reserved for the category of complementizer C, we assume that the null copula is merged in a similar process. Covert insertion is beneficial on grounds of economy, since Procrastinate applies to Merge as well.

At the core of the economy of representation is the principle of Full Interpretation (FI). At PF, each symbol must be interpretable within articulatory and perceptual systems cross-linguistically. Similarly, every element that appears at LF must be interpretable cross-linguistically within the intentional-conceptual systems. In other words, FI states that only items that are properly "licensed" can appear in a representation. This leads us to speak about legitimate elements, which according to FI are licensed at LF. Chomsky (2015) distinguishes between deletable and undeletable elements based on their role at LF. As such, elements that play no role at

[1] We refer the reader to Errguig and Jmila (2025) for a critical analysis of these counterarguments

LF (trace of Arg) must be deleted, while elements that do play a role at LF (trace of V) must not be deleted. Deletion can be considered a 'last resort' operation that is applicable only to save a derivation from crashing.

In conclusion, economy principles are part of a more inclusive program with the descriptive and explanatory power to account for particular linguistic phenomena. We assume the analysis provided in this paper provides a uniform and minimal grammar for Arabic null copular sentences.

3. The limitations of the non-null hypothesis

Advocates of the non-null hypothesis argue that the various approaches failed to account for the 'true' nature of 'verbless' sentences because of the anchor belief that T needs a VP to host its features. Counterarguments against the null hypothesis were all linked to the stipulation that 'verbless' sentences contain a VP projection with a null verb as its head. Thus, a new approach to analyzing the Arabic tense system is necessary for adequately explaining such constructions. Consequently, the idea that all tenses are specified as [+V] and [+D] is dispensed with. A VP is unnecessary in present-tense Arabic clauses because the latter only has a [+D] feature that is checked by the subject (Aoun et al., 2010; Benmamoun, 2000). As such, the feature structure of the functional category T in Arabic is not "uniform" (Benmamoun, p. 50) and is given in (3):

3) Feature structure of T:
   - Present [deictic]: [+D]
   - Present [generic]: [+D, present]
   - Past: [+D, +V]
   - Future: [+D, +V]

Benmamoun (ibid, p. 64) further claims that when T is present, "VSO order is less preferred, probably because the movement of the NP only involves the necessary feature [+D] while the movement of the verb involves the movement of a superfluous feature [+V]".

However, there is reason to believe that the non-null hypothesis lacks adequacy and consistency. Aspects of contradiction revolve around the claim that there is no VP projection and the implications this has on the linguistic theory proposed herein. Regarding the suggested Arabic Tense rule system, it violates UG principles first by stipulating that the TP has an NP/AP/PP as a complement/adjunct of T°; and second by positing that T is only specified for a [+D] feature. Drawing on X-bar theory, we argue, that the structure [CP[C[TP[T[NP/PP/AP]]]]] is barred. Furthermore, based on Rizzi (1997), arguments will be provided in support of a [+finite] feature in T in addition to its [+D, ±V] features. Further aspects of the limitation of the non-null hypothesis are also discussed, specifically directionality and learnability.

3.1 X-bar based Evidence

The inventory of functional categories a language includes is contingent on parametric variation within the principles of UG. These functional items have specific features and selectional properties, namely the kind of complements each FC takes, and whether or not it takes a specifier. Abiding by X-bar theory, a clause structure is headed by a complementizer C, projecting a CP. The specifier is optional, but a complement of C is not. It is, more precisely, an IP (Inflectional Phrase) with an obligatory VP as its complement (Chomsky, 2015, p. 49).

Let us analyze the structure of the non-null clause [CP[C[TP[T[NP/PP/AP]]]]], considering the claim that T is specified solely for [+D], which is primarily checked by the subject. The head T° must be adjoined to the NP/PP/AP somehow. Supposing the NP/PP/AP is the complement of T° (whether by substitution or by adjunction is irrelevant at this point). There is no way this can be done, neither through feature checking because T has only one feature [+D] that is checked by the subject and is deleted[2], nor through θ-marking since FCs do not enter θ-relations. As per Case assignment, T assigns nominative Case to the subject not to the complement (not to be confounded with the nominative Case the NP takes as a by-product of agreement with the subject (Errguig and Jmila, 2025)). Another possibility for T and the NP/PP/AP to be joined is that the latter projects. In this case, T is either the specifier or the complement/adjunct of NP/PP/AP, neither can be true. By virtue of its non-optionality, T cannot be a specifier. At the same time, the state of being a complement/adjunct is barred by the Projection Principle (Chomsky, 1981).

All these facts dissolve when we posit covert Merge of the copula giving the structure [CP[C[TP[T [VP[$V_{[e]}$[NP/PP/AP]]]]]][3]. Present T is specified not only for [+D] but also for [-V] feature[4] that is checked by LF merge of [*e*] copula. When T is aspectual or moodal, further heads project and the copula is overt. An example of this is the negative copula *laysa* and aspectual copula *maazala* in SA, where negation selects the copula to be overt even in different morphology, and the same can be said about *maazala* and Asp.

In addition to the [+V] feature, T is specified for another feature that the non-null hypothesis omits: [±Finite]. Rizzi (1997) proposes that the complementizer expresses some properties of the verbal layer within a CP. In other words, C reflects Tense distinctions and specific verbal inflection but more basically, it expresses finiteness. Rizzi assumes that the C° has a specification for finiteness

[2] **Earliness Principle:** An uninterpretable feature must be marked for deletion as early in the derivation as possible (Pesetsky & Torrego, 2000, p. 31)

[3] Simplified structure by omitting intermediate projections

[4] In non-copular sentences, the [-V] feature is checked by LF raising of the verb from the head of AspP position

that selects an IP (TP) with a corresponding [±Finite] feature. The [+finite] value for T is strong and the [-finite] value (infinitive) is weak. Following Chomsky (2015), when T is [+finite], "we have either overt raising to [+finite] or LF raising to the position of its

trace" (p.130) implying V-raising. Null copular sentences clearly express finiteness as their temporal reference is specified for deictic present, as the contrast in (4) shows:

4) a. lbənt mriḍa
the-girl ill
(the girl is ill)
b. lbənt mriḍa daba / *lbarəħ
the-girl ill now / *yesterday
(the girl is ill now)

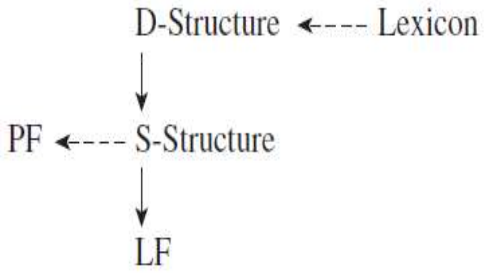
Thus, even though the verb is an empty category, it plays a role at LF both in terms of finiteness and in terms of meaning (semantics).

3.2 Further Evidence

The non-null hypothesis faces strong challenges according to the arguments above. Unless the relevant linguistic theory provides principled accounts to meet these conditions, answers should be found elsewhere. Moreover, it seems that descriptive and explanatory adequacy are not the only aspects of limitation of the non-null model. Further observations can be made in terms of two important dimensions: directionality and learnability.

Directionality, as Chomsky (2015) argues, describes the relations among the levels of representations for a derivation from D-structure to LF as in (5):

5)



Specifically, it is assumed that the mapping is indeed directional: from D-Structure to S-Structure, then (independently) to PF and LF. It is somehow difficult to trace the directional mapping in the derivation of a non-null clause having the structure [CP[C[TP[T[NP/PP/AP]]]]]. It appears that the mapping cracks at one level or another (probably at LF).

As per learnability, a linguistic theory of UG should be able to explain how children acquire their grammar without explicit instruction. Since the principles of UG are 'wired-in' in the child's brain/mind, they do not have to be learned. L1 acquisition partially involves setting parameters, triggered by the input a child is exposed to (White, 2003). The non-null structure above involves a rule that is language specific, which the child needs to acquire upon exposition to the Arabic language. We raise the question as to how is the linguistic theory proposed in the non-null paradigm to account for the learnability of 'verbless' sentences. As Chomsky (2015) emphasizes "UG principles are (…) 'less costly' than language-specific principles. We may think of them, intuitively, as 'wired-in' and distinguished from the acquired elements of language, which bear a greater cost." (p.127). Facts reveal that small children get to produce perfect null copular sentences by the age of two showing evidence of UG principles regarding clause structure. On the contrary, it is observed[5] that, at the age of four, the category of T is still under "maturation" (Chomsky, ibid, p. 27). In addition, White (2003, p. 10) discusses three potential sources of crosslinguistic variation concerning functional categories:

i. The inventory of FCs may differ from one language to another (Japanese does not instantiate the category Det).
ii. FCs may or may not have a feature in a language ([Gender] feature of Agr is not instantiated in English.
iii. Feature strength may vary cross-linguistically: a feature can be strong in one language and weak in another (strong Infl in French versus weak Infl in English).

These facts have many implications. First, this implies that assuming a language-specific rule for Arabic T as lacking the [V] feature in the present seems to be unfounded. Second, this strengthens our hypothesis of an empty copula, not only because it preserves the uniformity of clause structure under UG, but it also respects all aspects of cross-linguistic variation.

[5] Observing children in the family. Also, observing my son (Rayan) who started talking at one year and a half, and - by the age of two - could produce null copular sentences such as "ana zwi:n" (I'm handsome) "mama fə-kuzina" (mummy is in the kitchen), etc. However, Rayan is now four years old and still produces sentences like: "**ɣ**ədda ana kunt kanebki" (tomorrow I was crying, meaning yesterday I was crying) showing that T is still not fully acquired.

We conclude this section by adding further evidence for the existence of a null V and thus the VP nature of the predicate in null copular constructions based on the basic coordination test. It is well known that only constituents of the same category can be coordinated. In Arabic, this condition applies as well, as the constructions in (6) show:

6) a. ʕumar ka-yəqra wə ka-yəktəb məzyan MA
Omar read.3m.asp and write.3m.asp well
(Omar reads and writes well)
b. * ʕumar ka-yəqra wə ka:tib məzyan
Omar read.3m.asp and writer well

If we apply this condition to null copular sentences, the same result is observed:

7) a. ʕumar dki wə ka-yəqra məzyan MA
Omar intelligent and read.3m.asp well
(Omar is intelligent and is a good student)
b. ʔalwaḍʕu ṣaʕb-un wa yaħta:ʒu litadaxxul-in ʕa:ʒil SA
the-situation difficult and need.3m.asp to-intervention urgent
(the situation is difficult and necessitate urgent intervention)
c. filisṭi:nu ʔabiyyat-un wa sa-tataħarraru ʔin ʃa:ʔa lla:h
Palestine proud and will-liberate.3f if Will God
(Palestine is proud and will be liberated God willing)

The grammaticality of the constructions in (7) stipulates that there is a null verbal constituent that is coordinated with the Aspectual verb. Otherwise, the APs [dki] [ṣaʕb-un] [ʔabiyyah] cannot be coordinated with the VPs [ka-yəqra] [yaħta:ju] [sa-tataħarraru] respectively.

4. Towards a null copula hypothesis

4.1 Licensing and Identification Principles

So far, we have been attempting to prove the existence of an empty verbal head in null copular sentences. However, there remain two fundamental conditions every empty category needs to meet to yield legitimacy. Assuming the stipulation in Rizzi (1990), null elements need to satisfy two requirements, namely formal licensing and a principle of identification. Formal licensing can be regarded as the condition allowing the EC to occur in a specific environment. On the other hand, identification refers to the means by which the null element content is recovered. Consequently, the present section explores these requirements as a final touch to proposing a null copula hypothesis. We imply that the *copula spell-out effect* should be incorporated into the clustering syntactic structures associated with the pro-drop parameter (Chomsky 1981, Jaeggli 1982, Rizzi 1982).

One notable observation in the analysis of copular sentences is that the subject is mandatory in null copular constructions, while it is optional in their overt copula counterparts. This can be shown in the following sentences:

8) a. (ħməd) kan ṭbib
(Ahmed) be.3m.past a doctor
(Ahmed was a doctor)
b. (ħməd) kan mriḍ
(Ahmed) be.3m.past ill
(Ahmed was ill)
c. (ħməd) kan fə-l-kuzina
(Ahmed) be.3m.past in the kitchen
(Ahmed was in the kitchen)

9) a. *(ħməd) ṭbib
(Ahmed) be.e a doctor
b. *(ħməd) mriḍ
(Ahmed) be.e ill
c. *(ħməd) fə-l-kuzina
(Ahmed) be.e in the kitchen

Thus, to discern the licensing condition for a null copula, it would be wise to explore what licenses a null subject and investigate any link or complementarity between the two elements.

According to Rizzi (1982 and 1986), pro is licensed in a Spec-head relation with a "strong" AgrS, or when it is governed by specific verbs. In X-bar terminology, pro is licensed only in the Spec-head relation i.e. [$_{Agr}$ α Agr], where **α** is [+tense] or V, Agr strong or V = Verb (Chomsky, 2015). As these conditions cannot apply to an empty V in the head position of a VP, we have recourse to proper government which is considered an even stronger relation than government (Chomsky, 1986 a). Initially, proper government of ECs holds only for A-bound and A'-bound traces, but we follow Stowell (1981) who includes the empty C to the list (we follow the claim that the empty copula is merged in the same way as empty C (Errguig and Jmila, 2025)). Rizzi (1990, p. 62) confirms this fact by proposing the conjoined ECP in (10):

10) A non-pronominal empty category must be:
    i. properly head-governed (Formal licensing)
    ii. Theta-governed, or antecedent-governed (identification)

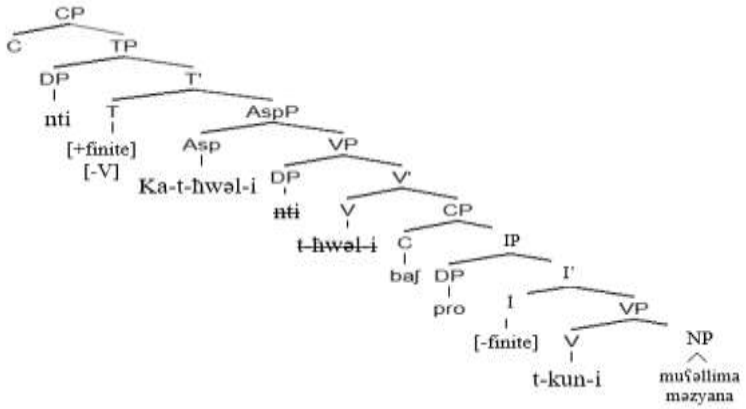
It is conjoined in the sense that it specifies (a) the conditions formally licensing the null element and (b) the mechanism by which the content of the null element is recovered from the phonetically realized environment.

Considering the empty copula, we assume Errguig and Jmila (2025) that the copula is merged at LF as consonantal roots, uninflected for ϕ-features but only inflected for finiteness. This implies that the strong Arg, which in the context of an overt copula licenses a null subject, is not available as a 'licenser' when the copula is empty (otherwise the derivation crashes). The reason is that the agreement inflections on a phonetically realized verb (be it a copula or not) serve to identify the content of a null subject. In the case of a null copula, the verb is not inflected for agreement, thus, the subject has to check Agr and enter an agreement with the post-verbal NP or AP (see Chomsky (2015, p. 160) for further details on multiple structural relations). Furthermore, we assume that since the null copula does not have any ϕ-features, we can hardly rely on agreement to recover its content. The only feature that licenses the copula to be merged at LF is finiteness. It appears then that a strong [+Finite] T serves as an identification for an [*e*] copula in [$_{vp}$ *e* NP] position. Finiteness is a primary condition for a copula to be null. Contra (Fassi Fihri, 1993, p. 153) who claims that "in Arabic, there are no bare verbs, no non-finite participles, and no infinitives." Consider the following sentence:

11) nti ka-t-ħawəl-i baʃ t-kun-i muʕəllima məzyana
    you asp.2s.try.fem for 2s.be.fem teacher good
    (you are trying to be a good teacher)

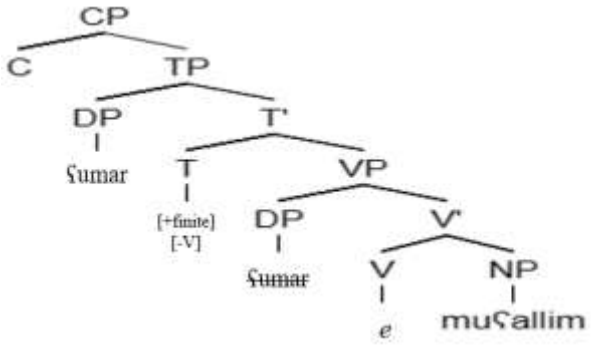
We claim that the copula *t-kun-i* in (11) is non-finite and is only inflected for agreement (ϕ-features, person (t-) number and gender (-i)). (11) has the following D-structure:

12)



Evidence for this comes from Chomsky (2015, p. 130) "If I is [+finite] (I = T = tense), then it presumably cannot be deleted, since a tensed phrase plays an LF role (…) There is, however, no strong reason to suppose that the same is true of [– finite]." Put simply, a finite I merges with T (either having a [-V] feature resulting in LF raising of the verb in present tenses or a [+V] feature forcing overt raising in past and future tenses). When I is non-finite, T will not be selected[6], and the verb will raise to check Agr[7]. As such, a finite null copular sentence like (1) will have the D-representation in (13):

13)



[6] When I is [+finite] T can be [±V] but when I is [-finite] T is 0 (i.e. neither [+V] nor [-V])

[7] We refer the reader to section 2.3.2 "*The Element I*" in Chomsky (2015, p. 130) for a detailed analysis of this specific point.

Where T and I project as one head and Agr is only checked by the subject and the post-verbal NP. The D-structure in (13) shows that the empty verb is properly governed by the finite T (head-government), which fills the formal licensing requirement in (10) (licensing in a head-head relation). As per recovery principles, comparative evidence reveals that while strong agreement serves to identify the content of a null subject, a strong finite feature in T suffices to recover a null copula.

4.2 Implications of the study

To the extent that this analysis is valid, the empty copula hypothesis should be applicable in other languages. Arche (2017) discusses the distribution of the Spanish copulas *ser* and *estar* (be) concluding that "a state-like behavior is shown when *estar* is involved and a twofold possibility, state and event-like, when *ser* is" (p.49). The researchers derive the different temporal interpretation from the structure of the copulas. The aim of the study is to propose a uniform treatment of Spanish copular sentences. If we compare the copular structures from Arche (p. 34):

14) a. Pedro es/*está lingüista
'Pedro is a linguist.'
b. Pedro *es/está en el jardín
'Pedro is in the garden.'
c. Pedro es/*está vegetariano
'Pedro is a vegetarian.'
d. Pedro *es/está descalzo
'Pedro is barefoot.'
e. Pedro *es/está haciendo los deberes
'Peter is doing his homework.'
f. Pedro es/está guapo
'Pedro is handsome.'
g. Pedro es/está perseguido
'Pedro is chased.'

We might venture to account for the distribution of *ser* and *estar* using a tentative form of the Revised Copula Spell-out Rule:

15) Tentative Spanish Copula Spell-out Rule:
Copula is spelled out as *ser* iff T is [-V] [-Asp] [- Mood] otherwise it is spelled out as *estar*.

Other languages like Hebrew seem to instantiate null copular sentences similar to the Arabic ones:

16) a. hakir lavon
(the wall is white)
b. hakir hia lavon
(the wall was white)
c. child hula
(the boy is sick)
d. child hia hula
(the boy was sick)
e. habanim bagina
(the boys are in the garden)
f. habanim you bagina
(the boys were in the garden)

Greenberg (2009) discusses the distribution of two pronominal copulas in Hebrew pronH realized as e.g. *hu* (masculine singular), and *hi* (feminine singular) and *PronZ* realized as *ze* (masculine singular) and *zot* (feminine singular). The distributional differences are attributed to grammatical, agreement and semantic contrasts i.e. the presence/absence of a [-human] feature, the direction of agreement, and the predicative or equative interpretation respectively. However, little is known about the obligatoriness (or non-obligatoriness) of these pronominal copulas.

Consequently, it seems that Null Subject Languages (NSL) display one of two possibilities. Arabic type languages allow an empty copula in deictic present sentences while Spanish type languages display two forms of the copula or -possibly- two variants of the same copula. These possibilities are not observed in Non-null Subject Languages like English and Frensh where only one form of the copula is possible, *be* and *être* respectively. Thus, we suggest including the *copula Spell-out effect* to the syntactic structures related to the pro-drop parameter (Chomsky 1981, Jaeggli 1982, Rizzi 1982). Further research is needed to widen the scope of applicability of our Revised Copula Spell out Rule.

5. Conclusion

In this paper, some aspects of the limitation of the non-null hypothesis were discussed. First, the claim that there is no VP projection was refuted based on UG principles. Thus, we argued, upon X-bar theory that the structure [CP[C[TP[T[NP/PP/AP]]]]] cannot derive and that only a null copula structure [CP[C[TP[T [VP[$V_{[e]}$[NP/PP/AP]]]]] is possible. Second, positing that the Arabic Present Tense

is only specified for a [+D] feature was proved unfounded as T is specified for [+D, ±V] features, in addition to a [+finite] feature based on Rizzi (1997). A further limitation of the non-null hypothesis turned out to be directionality. Where tracing the directional

mapping in the derivation of a non-null clause having the structure [CP[C[TP[T[NP/PP/AP]]]]] is not feasible. Finally, learnability was also discussed since facts show that null copular sentences are acquired at a rapid pace (by the age of two) without any noticeable effort from the child showing evidence of UG principles. On the contrary, the category of T needs more "maturation." Additional supporting evidence to the VP nature of the predicate, namely the coordination constituency test, strengthens the hypothesis of a null copula. In the second part, formal licensing and identification principles were explored as the two conditions every empty category needs to meet to yield legitimacy. As such, we suggest that the empty copula is formally licensed and identified under head-government by strong [+finite] T. These facts lead to posit a fully-fledged null copula hypothesis. Although not all null subject languages include null copular sentences, data from Spanish and Hebrew provide evidence for including the *copula spell-out effect* in the clustering syntactic structures associated with the pro-drop parameter (Chomsky 1981, Jaeggli 1982, Rizzi 1982). Research on more null subject languages is needed to widen the scope of applicability of the null copula hypothesis.

Funding: This research received no external funding
Conflicts of Interest: The authors declare no conflict of interest.
ORCID iD: 0009-0002-3342-3440
Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

[1] Aoun, J. E., Benmamoun, E., & Choueiri, L. (2010). *The syntax of Arabic.* New York: Cambridge University Press.
[2] Arche, M. J., Fábregas, A., & Marín, R. (2017). Towards a unified treatment of Spanish copulas. In S. Perpiñán, D. Heap, I. Moreno-Villamar, & A. Soto-Corominas, *Romance languages and linguistic heory 11* (pp. 33-52). John Benjamins Publishing Company. doi:10.1075/rllt.11.02arc
[3] Bahloul, M. (1993). The copula in Modern Standard Arabic. In C. Holes, & M. Eid, *Perspectives on Arabic linguistics V* (pp. 209-229)
[4] Bakir, M. (1980). *Aspects of clause structure in Arabic. Doctoral dissertation.* Indiana University, Bloomington.
[5] Benmamoun, E. (2000). *The feature structure of functional categories.* Oxford: Oxford University Press.
[6] Chomsky, N. (1981). *Lectures on government and binding.* Dordrecht: Foris.
[7] Chomsky, N. (1986 a). *Barriers.* Cambridge, Massachusetts: MIT Press.
[8] Chomsky, N. (1986b). *Knowledge of language: Its nature, origin, and use.* Praeger.
[9] Chomsky, N. (2015). *The minimalist program.* Cambridge, Massachusetts: MIT.
[10] Errguig, I., & Jmila, M. (2025). Are Arabic verbless sentences 'truly' verbless? The inadequacy of the non-null hypothesis. *International Journal of Linguistics, Literature and Translation, 8*(3), 175-182. doi:https://doi.org/10.32996/ijllt.2025.8.3.20
[11] Fassi Fihri, A. (1993). *Issues in the structure of Arabic clauses and words.* Dordrecht: Kluwer.
[12] Fassi Fihri, A. (2004). Temporal/Aspectual interaction and variaion across Arabic heights. In J. Guéron , & J. Lecarme, *The Syntax of Time* (pp. 235-257). Cambridge: MIT press.
[13] Greenberg, Y. (2009). Predication and equation in Hebrew (nonpseudocleft) copular sentences. *Generative approaches to Hebrew linguistics*.
[14] Jaeggli, O. (1982). *Topics in Romance syntax.* Dordrecht: Foris.
[15] Jelinek, E. (1981). *On defining categories: Aux and predicate in Egyptian Colloquial Arabic. Doctoral dissertation.* University of Arizona, Tuscon.
[16] Mouchaweh, L. (1986). *De la syntaxe des petites prépositions. Doctoral dissertation.* Université de Paris VIII, Paris.
[17] Pesetsky, D., & Torrego, E. (2000). T-to-C movement: Causes and consequences. In M. K enstowicz, *Ken Hale: a Life in Language* (pp. 1-54). MIT Press.
[18] Radford, A. (2004). *Minimalist syntax.* Cambridge: Cambridge University Press.
[19] Rizzi, L. (1982). *Issues in Italian syntax.* Dordrecht: Foris.
[20] Rizzi, L. (1986, Summer). Null Objects in Italian and the Theory of pro. *Linguistic Inquiry*, pp. 501-557.
[21] Rizzi, L. (1990). *Relativized minimality.* Cambridge: MIT Press.
[22] Rizzi, L. (1997). The fine structure of the left periphery. In L. Haegeman, *Elements of Grammar, ed* (pp. 281-337). Dordrecht: Kluwer.
[23] Sibawayh, A. (1849). *Al-kitaab.* Beirut: Dar Eljeel.
[24] Stowell, T. (1981). *Origins of phrase structure. Doctoral dissertation.* MIT.
[25] White, L. (2003). *Second language acquisition and universal grammar.* Cambridge: Cambridge Univrsity Press.