

# The Clause Structure of Iraqi Arabic

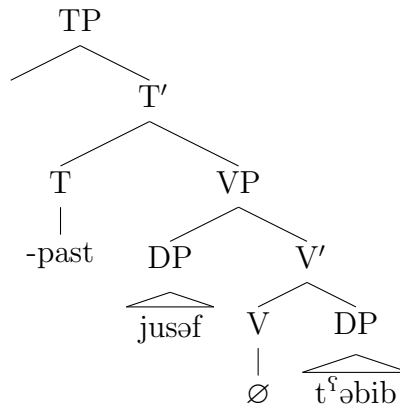
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May 1, 2011

Languages that are relatively lax about their word order are of great interest to linguists because they really put the theory of Universal Grammar to the test. The Arabic language has a unique and interesting way of dealing with verb placement in a sentence. It provides us with an excellent opportunity to dig into the behavior of SVO and VSO clauses, because it allows for both. Arabic also provides us with an opportunity to gain some insight on verbless clauses. In this paper, I explore the syntactic structure of various types of Iraqi Arabic clauses. I do this by identifying the relevant Universal Grammar parameters for SVO and VSO sentences, making the case for the presence of a TP in Arabic, and finally making the case against the presence of VP in verbless sentences.

It makes sense to start studying the syntax of a language by examining its most basic sentences. The simplest kind of sentence to a native speaker of Arabic is actually verbless. If we were to naively generate the sentence using a VP it might go something like this:

- (1) *jusəf tʕəbib*  
Yusuf Doctor  
'Yusuf is a Doctor'



It would be very unsatisfying to continue this way. It immediately begs the question: Is there *really* a covert verb there? Or is this some new structure to explore? The answer to this question may provide us with some deeper insight into the structure of Arabic tense. We will leave these verbless clauses for now and turn our attention to sentences that are simplest to a student of English syntax.

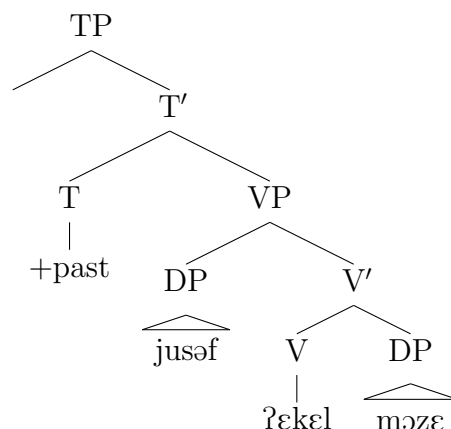
## 1 SVO and VSO

Standard and Iraqi Arabic both allow for so-called “nominal sentences” (2) and “verbal sentences” (3).

(2) *jusəf ʔekəl mɔzɛ*  
 Yusuf 3ms.eat.past banana  
 ‘Yusuf ate a banana.’

(3) *ʔekəl jusəf mɔzɛ*  
 3ms.eat.past Yusuf banana  
 ‘Yusuf ate a banana.’

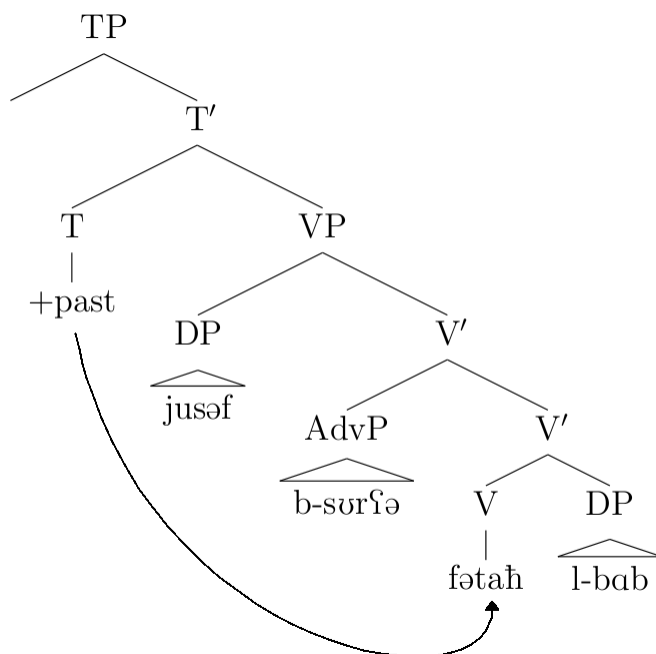
(2) and (3) are manifestations of the same sentence, one in SVO and the other in VSO. In Iraqi Arabic the SVO form is preferred for this sentence; (2) is considered a more natural thing to say. But that is not to say that (3) is ungrammatical. The VSO order, although less natural, can be used if a speaker intentionally wishes to emphasize the verb of a sentence. We will therefore treat sentences like (2) and (3) on equal syntactic footing. The D-structure of (2) and (3) can be generated as follows:



The natural question is then whether  $V \rightarrow T$  or  $T \rightarrow V$  movement applies. As usual, we answer this by looking at the placement of adjuncts in the verbal projection.

- (4) *jusəf b-surfə fətaħ l-bab*  
 Yusuf with-quickness 3ms.open.past the-door  
 ‘Yusuf quickly opened the door.’
- (5) \**jusəf fətaħ b-surfə l-bab*  
 \*Yusuf 3ms.open.past with-quickness the-door

We are tempted to immediately conclude from (4) that Iraqi Arabic is  $T \rightarrow V$ :



(4) and (5) both support this choice. However VSO structure can only be derived from  $V \rightarrow T$  movement! We are led to conjecture that Iraqi Arabic (like Standard Arabic) has a mixed system. SVO clauses have  $T \rightarrow V$  while VSO clauses have  $V \rightarrow T$ . We also know that <sub>[NOM]</sub> absolutely *must* be checked in the verbal specifier in VSO clauses because there is no DP-movement. This is consistent with Arabic being a null-subject language, as shown in (6).

- (6) *fətaħ l-bab*  
 3ms.open.past the-door  
 ‘He opened the door.’

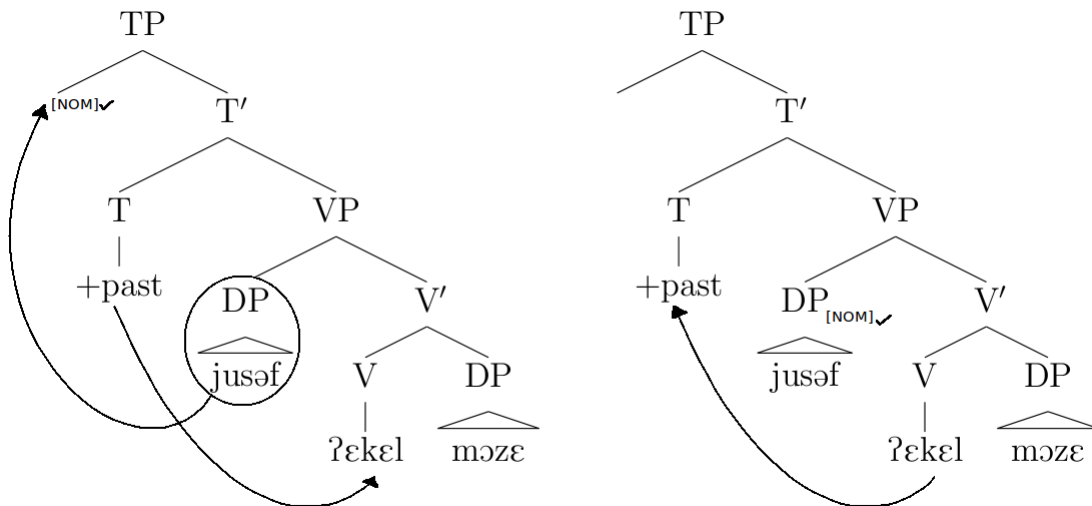
It doesn't seem like there is a reason to make  $[_{NOM}]$  work differently for SVO clauses, so we are tempted to generalize the rule that  $[_{NOM}]$  is checked in the specifier of VP to all clauses. But we will see in section 3.1 that Arabic SVO clauses have a dramatically different behavior from their VSO cousins. It isn't obvious yet, but  $[_{NOM}]$  will have to be checked in Spec T for SVO, and this demands a movement of the subject.

Given the rules we've identified so far, how would a VSO variant of (4) look?

- (7) *fətaḥ            jusəf   b-sʊrʕə            l-bab*  
 3ms.open.past   Yusuf   with-quickness   the-door  
 'Yusuf quickly opened the door.'

We are very pleased to see that (7) is grammatical, because it is exactly what happens when the direction of the movement in (4) switched!

In this section we have found that the major classes of Arabic sentences, nominal and verbal, are in essence the difference between  $T \rightarrow V$  and  $V \rightarrow T$  (and a DP-movement that will be explained in section 3.1). Then (2) and (3) are simply:



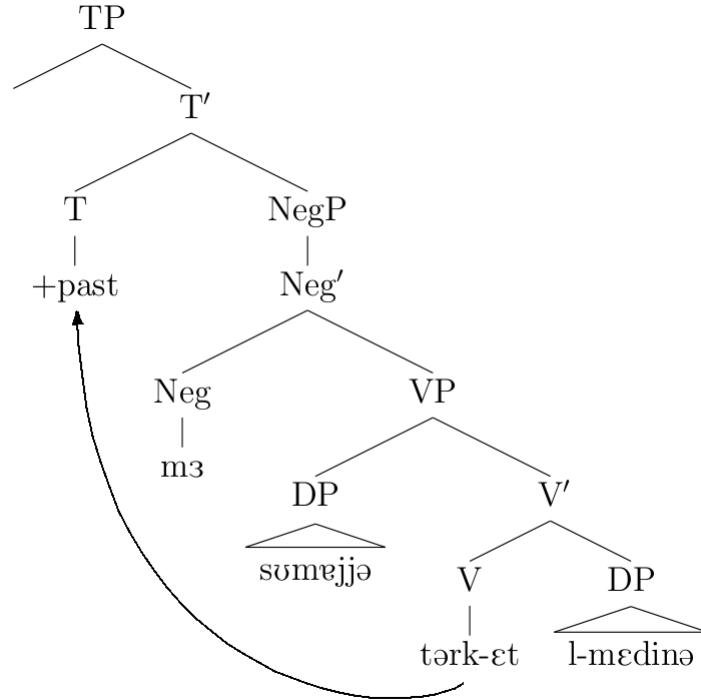
Will this system hold up to something trickier than just adverbs?

## 2 Negation

Let us examine a verbed clause, negate the verb, and look at the behavior of adverbs and different choices of movement. Such a study might help verify the choice of head movement rules given above. Consider the following data:

- (8) *suməjjə tər̄k-εt l-mɛdinə*  
Sumayya leave.past-3fs the-town  
'Sumayya left the town.'
- (9) *suməjjə m3 tər̄k-εt l-mɛdinə*  
Sumayya neg leave.past-3fs the-town  
'Sumayya didn't leave the town.'
- (10) *\*tər̄k-εt m3 suməjjə l-mɛdinə*  
\*leave.past-3fs neg Sumayya the-town

Example (8) is a basic nominal sentence to which negation is applied in (9). I am used to seeing negatives implemented as their own projection that dominates the verb. If this were the case for Iraqi Arabic, then we should be able to move the verb to T to obtain a VSO variant of the sentence. However it seems that such an implementation of the negative *m3* is not enough; because the following derivation produces an incorrect sentence (10):



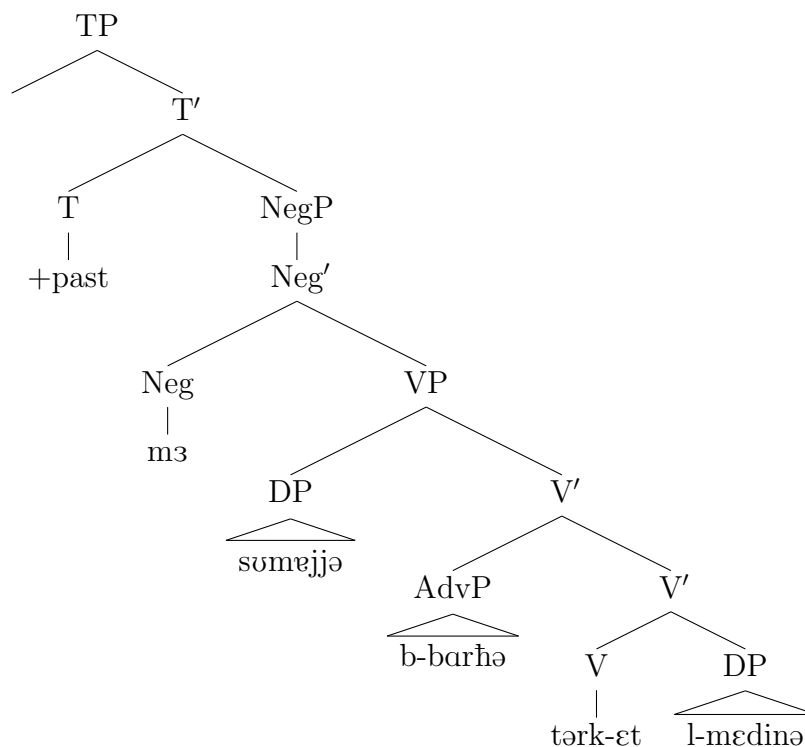
In fact, (11) indicates that the negative *m3* is intimately linked to the verb it negates. To get the right VSO version of (9), the negative has to move with the verb. So if it still heads its own projection, it would have to be dominated by the verb. But because  $V \rightarrow T$  movement should really be *head-to-head* movement, I'm going to let *m3* simply be a clitic that is phonologically tied to the verb. This is tricky because Arabic orthography clearly distinguishes the negative as a separate word. We're going to keep the Neg projection but let the 'm3' head move to the verb. There could be some feature that motivates this, but we do not need to dive into the specific details for our purposes. It's similar to the movement of 'n't' in an English sentence like 'Didn't you do it?'. Example (11) then shows the correct movement for VSO.

- (11) *m3-tərk-εt*      *suməjjə*    *l-mədinə*  
 neg-leave.past-3fs    Sumayya    the-town  
 'Sumayya didn't leave the town.'

We end this section with an example tree for (12) and its VSO companion, (13).

- (12) *suməjjə*    *b-barħə*    *m3-tərk-εt*      *l-mədinə*  
 Sumayya    yesterday    neg-leave.past-3fs    the-town  
 'Sumayya didn't leave the town yesterday.'

- (13) *m3-tark-εt suməjjə b-barħə l-mədinə*  
 neg-leave.past-3fs Sumayya yesterday the-town  
 ‘Sumayya didn’t leave the town yesterday.’



The underlying tree (above) is the same for both sentences. The difference again reduces to the direction of the arrow in the tree.  $T \rightarrow V$  generates (12) and  $V \rightarrow T$  generates (13). The *m3* has to move and join the verb in both sentences.

### 3 Verbless Sentences

Let us return to the most basic of arabic sentences. Often called “nominal sentences,” these are clauses that contain only a subject and a predicate. The classical description of the grammar of Standard Arabic refer to the ‘subject’ and the ‘predicate’ as the *mubtəḍəʔ* and the *ḫəbər*. These words mean ‘subject’ and ‘a piece of information about it,’ which is an excellent description of the semantic role of the verbless predicate. That piece of information could manifest itself<sup>1</sup> as a noun phrase, an adjective phrase, or a prepositional phrase, as in the Iraqi Arabic examples that follow.

<sup>1</sup>Classical Arabic grammar also allows the predicate to be a “verbal sentence” with a null subject, thereby creating an SVO sentence. So any SVO sentence would be described as a subject-predicate clause like the

- (14) *l-ʃeməs nɛdʒmɛ*  
 the-sun star  
 ‘The sun is a star.’
- (15) *χaləd təʃban*  
 Khalid tired  
 ‘Khalid is tired.’
- (16) *l-kɪtab ʕɛlɔ l-mɛz*  
 the-book on the-table  
 ‘The book is on the table.’

Reading the glosses and the translated sentences makes it very tempting to do what was proposed at the beginning of this paper, assume a null verb. But it may not be so simple if we dig deeper. In this section I will explore the possibility of having a VP with a null head, and of having no VP at all. Before I consider the presence of VP, I had better justify the TP that I’ve so far included in every derivation.

### 3.1 TPs and CPs

The usual assumptions that minimalist syntacticians have when they approach an unfamiliar language is that individual sentences have a lexical layer and a functional layer. One chunk of the derivation of a sentence is subject to lexical relations and constraints such as theta grids, and looming over it is a functional layer that provides landing sites for movement. The functional layer takes of things like case agreement, tense, expletives, and *wh*-movement. This section will justify the presence of a functional layer in Arabic sentences.

The Standard Arabic language from which Iraqi Arabic is derived has completely overt case (see (17) and (18)). If the assumption that case agreement is handled in the functional branches holds, then this calls for having a TP.

- (17) *jusəf-u ʔekɛla mɔzət-ɛn*  
 Yusuf-NOM 3ms.eat.past banana-ACC  
 ‘Yusuf ate a banana.’

(Standard Arabic)

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ones shown here, with the predicate being a VSO sentence that has a null subject. We will have to see how accurate that description of SVO is.



- (18) *ʔekɛla jusəf-u mɔzət-ɛn*  
 3ms.eat.past Yusuf-NOM banana-ACC  
 ‘Yusuf ate a banana.’

Furthermore expletives are known to be managed in English by the T category, specifically as a side effect off EPP for T. Iraqi Arabic can also make use of expletives, even though it doesn’t always need them. They are required in verbless clauses that have a common noun subject with no determiner, as seen in the Iraqi Arabic example (19).

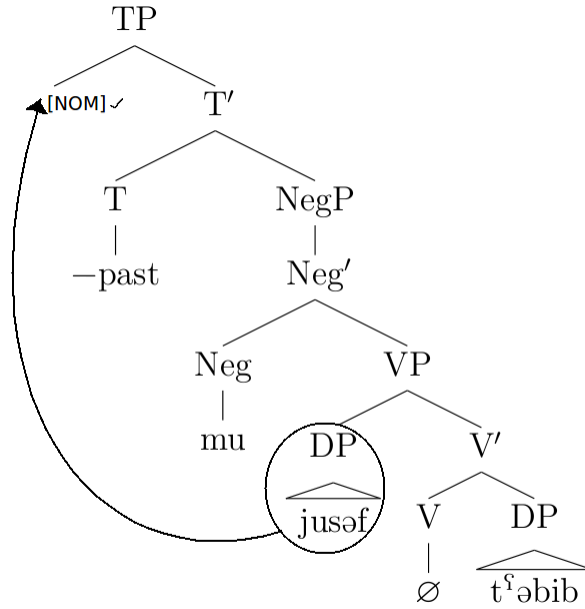
- (19) *ʔku wəsʔaχɛ ʔəl l-mez*  
 there dirt on the-table  
 ‘There’s dirt on the table’

But the strongest evidence for a TP in Arabic is the need for DP-movement of subjects in verbless clauses! This becomes apparent when the sentential negative is used, as shown in examples (20) and (21).

- (20) *\*mu jusəf tʔəbib*  
 \*neg Yusuf Doctor

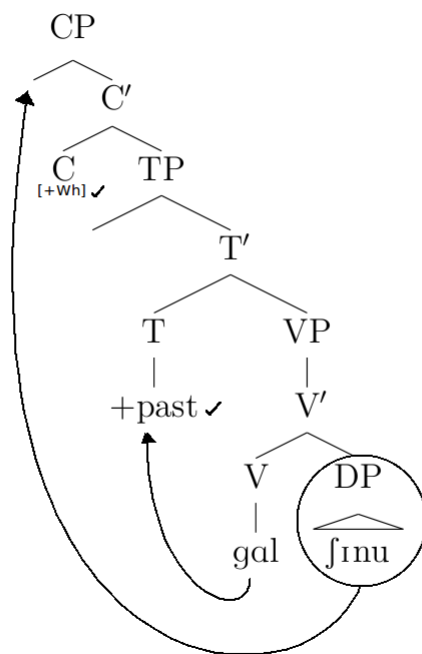
- (21) *jusəf mu tʔəbib*  
 Yusuf neg Doctor  
 ‘Yusuf is not a Doctor’

The subject cannot precede the negative unless there is some kind of movement. This is typically accomplished by raising the subject to the functional part of the tree, Spec T. The following derivation shows the movement with a TP, but it deals with the verbless predicate (*χəbər*) using the temporary solution of a VP with a null head. It also requires that we let <sub>[NOM]</sub> be checked in Spec T.

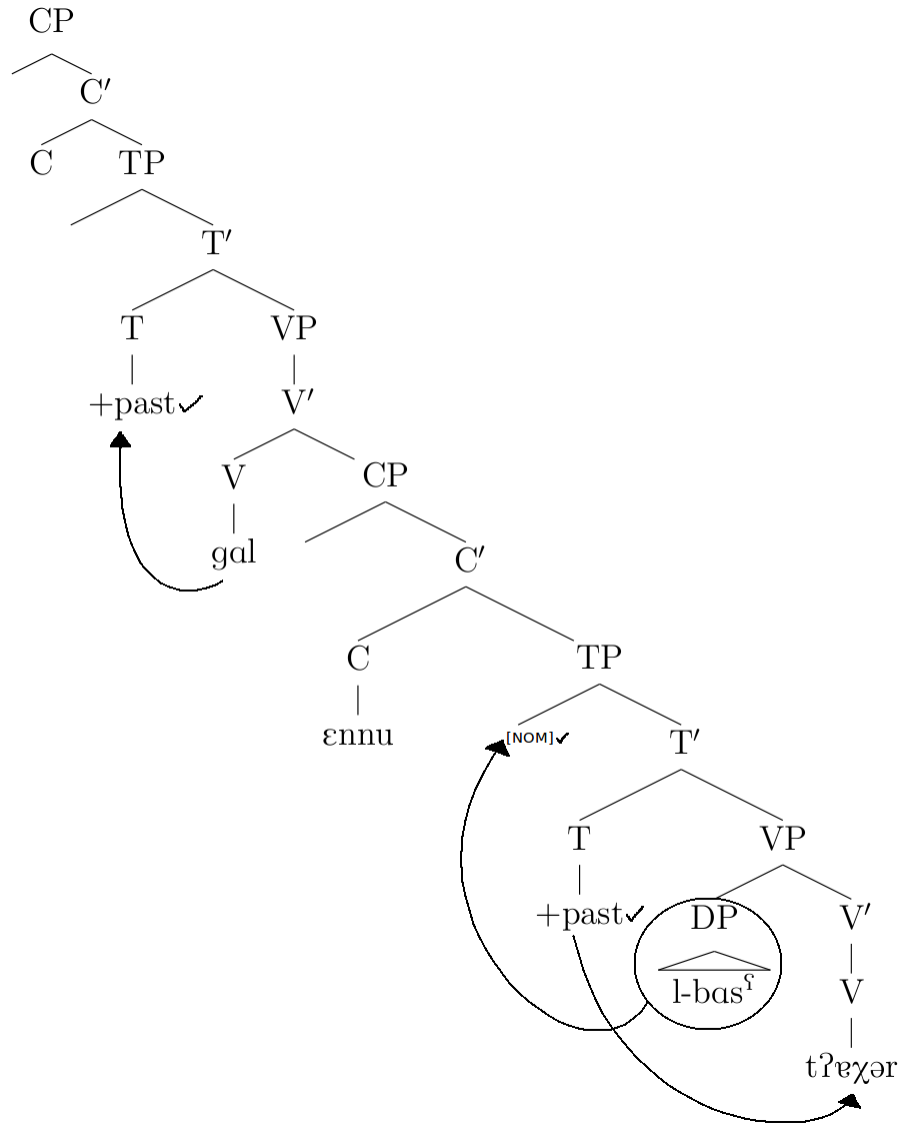


By now we have identified two radically different kinds of behavior: Nominal (SVO) sentences exhibit DP-movement and have  $T \rightarrow V$ , while verbal (VSO) sentences can just check  $[_{NOM}]$  in Spec V and have  $V \rightarrow T$ . The other piece of functional layer to talk about is the complementizer, C. This is motivated by *wh*-movement (22) and embedded complementizers (23).

- (22) *fɪmu gal*  
 what 3ms.say.past  
 'What did he say?'



- (23) *gal*            *ɛnnu* *l-bas<sup>f</sup>*    *tʔeχər*  
 3ms.say.past    that    the-bus    3ms.{be late}.past  
 'He said that the bus was late'



That last tree displays a lot of the bells and whistles we've developed so far in a fairly simple sentence. The embedded clause is of the SVO type, but the main clause is of the VSO type because it has a null subject. Now that no doubt is left as to whether Iraqi Arabic sentences should include a functional layer, we are ready to tackle verbless clauses.

### 3.2 To VP or not to VP?

Verbless sentences, like the one appearing in example (1) at the beginning of this paper, can be treated in one of two ways. One thing people have done is to presume that there is a covert

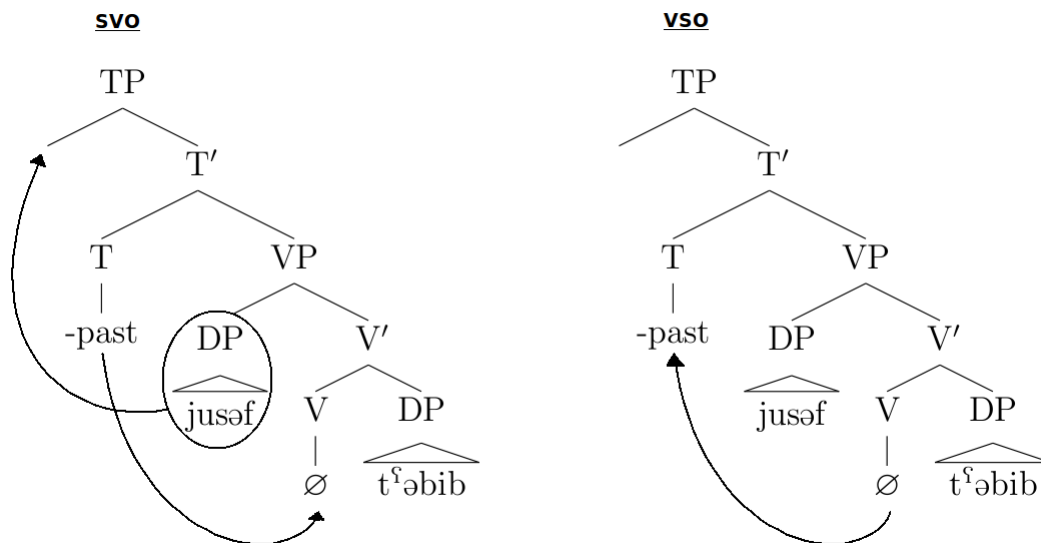
verb that couples the subject and the predicate of a verbless clause (Benmamoun 2008). This sounds like a reasonable assumption to someone who isn't a native speaker of Arabic, though it still begs for motivation. To a native speaker of Arabic, however, the verbless predicate is an entirely different object from the verbed predicate. This strong intuition comes from the heavy influence of Standard Arabic on the grammar judgments of most Iraqi Arabic speakers. Standard Arabic has completely overt case, as was shown in examples (17) and (18). In those examples of overtly verbed sentences we saw that the complement of V was given accusative case. But consider the following Standard Arabic examples:

- (24) *jusuf-u tʿɛbib-un*  
 Yusuf-NOM doctor-NOM  
 'Yusuf is a doctor.'

(Standard Arabic)

- (25) *ɛ-ʃʃɛms-u nɛdʒmɛt-un*  
 the-sun-NOM star-NOM  
 'The sun is a star.'

The words that would be complements to V in a covert-verb derivation take nominative case! This is the first indicator that something deeper is going on than just a covert verb. The failure of the covert verb solution becomes apparent when we try to implement the SVO and VSO movement rules discussed in section 1. At first, it appears that both types of movement have no effect on the generated sentence; the following trees would both be possible derivations of example (1) (the CP has been omitted):



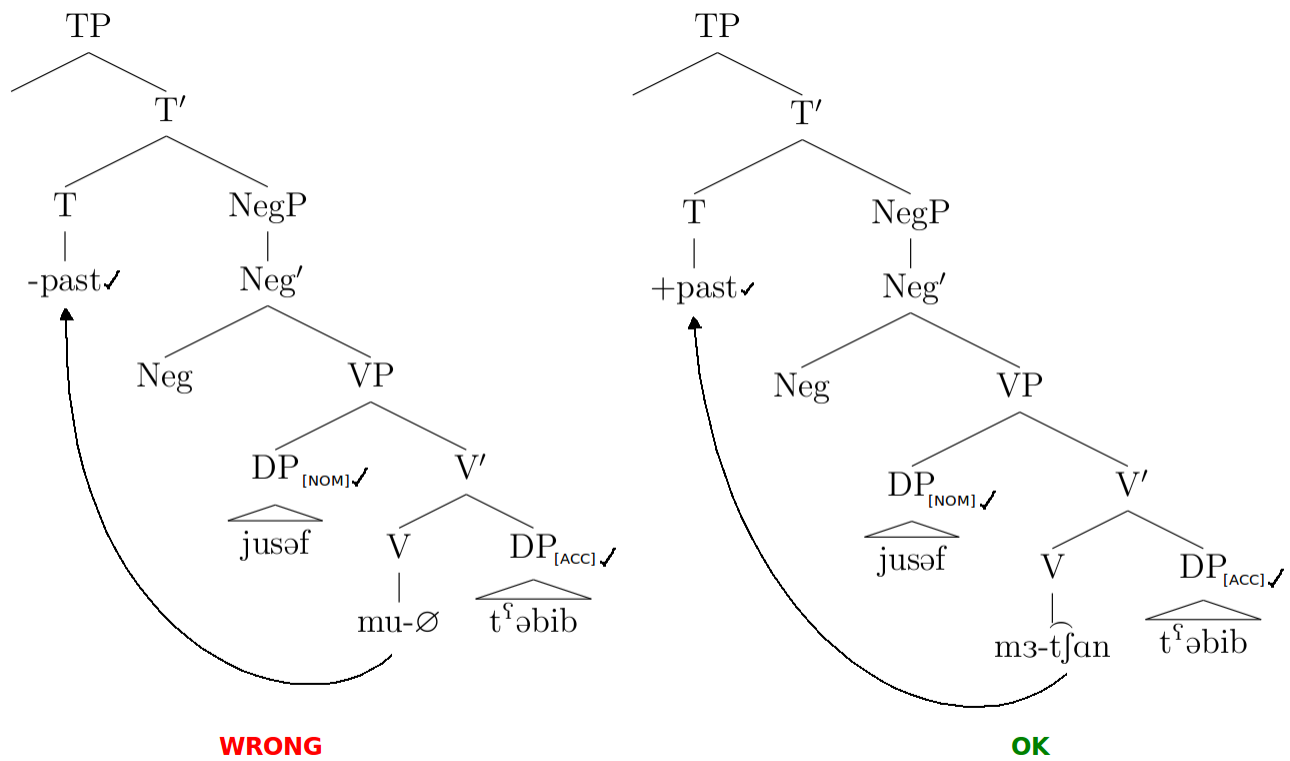
The two derivations diverge to produce different surface structures when a negative is introduced (Benmamoun 2008), shown in the examples below. It's the same kind of negative that was discussed in section 2, so it phonologically links itself to a verb and follows the verb when it moves.

- |  |  |
|--|--|
| <p>(26) <i>jusəf mu tʰəbib</i><br/>         Yusuf neg doctor<br/>         ‘Yusuf is not a doctor.’</p> <p>(27) <i>l-bet mu ʔεχdʰər</i><br/>         the-house neg green<br/>         ‘The house is not green.’</p> <p>(28) <i>l-kətab mu ʔəl l-mez</i><br/>         the-book neg on the-table<br/>         ‘The book is not on the table.’</p> | <p>(29) <i>*mu jusəf tʰəbib</i><br/>         *neg Yusuf doctor</p> <p>(30) <i>*mu l-bet ʔεχdʰər</i><br/>         *neg the-house green</p> <p>(31) <i>*mu l-kətab ʔəl l-mez</i><br/>         *neg the-book on the-table</p> |
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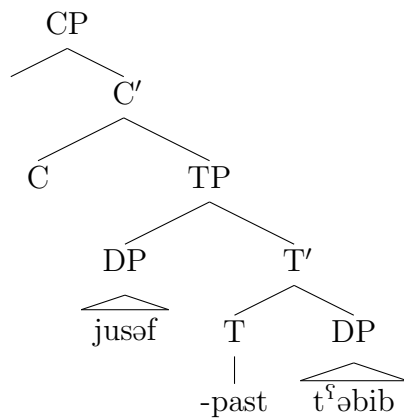
(26), (27), and (28) could derive from the SVO-style movements we established. But if there was truly a covert verb in verbless sentences then we would be able to perform VSO-style movement to derive (29), (30), and (31) as well. Furthermore, we can introduce a verb (32), throw in negation, and see that the SVO (33) and VSO (34) derivations are both okay:

- (32) *jusəf tʃan tʰəbib*  
 Yusuf 3ms.was doctor  
 ‘Yusuf was a doctor.’
- (33) *jusəf m3-tʃan tʰəbib*  
 Yusuf neg-3ms.was doctor  
 ‘Yusuf wasn’t a doctor.’
- (34) *m3-tʃan jusəf tʰəbib*  
 neg-3ms.was Yusuf doctor  
 ‘Yusuf wasn’t a doctor.’

The correct derivation of (34) and the crashed derivation of (29) are shown in the following trees (with CP omitted):



It should now be clear that verbless clauses cannot have a covert verb, and that they in fact have no VP at all. We end with the proper underlying structure of example (1):



## References

- [1] Benmamoun, Elabbas (2000) *The Feature Structure of Functional Categories: A Comparative Study of Arabic Dialects*; New York, Oxford University Press
- [2] Benmamoun, Elabbas (2008) *Clause Structure and the Syntax of Verbless Sentences*. In R. Freidin, C. Peregrn Otero & M. L. Zubizarreta (Eds.) *Foundational issues in linguistic theory: essays in honor of Jean-Roger Vergnaud*; Cambridge, Mass., MIT Press
- [3] Carnie, Andrew (2007) *Syntax. A Generative Introduction*; Oxford, UK, Blackwell Publishing