

UNIVERSITY OF KWAZULU-NATAL

A Comparative Study of SV/VS word order in Arabic and Bantu.

By

Mohammad Gaseem Shakhatreh

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University of KwaZulu-Natal (Howard College)

Supervisor: Professor Jochen Zeller

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DEDICATION

To the love of my life. Till death do us apart.

DECLARATION

I, Mohammad Gaseem Shakhatreh, declare that

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Signed

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ABSTRACT

A Comparative Study of SV/VS word order in Arabic and Bantu.

This thesis studies the SV/VS word orders in Bantu languages and Arabic dialects. This word orders alternation is correlated with other grammatical features as well as semantic/pragmatic readings of the constituents.

The main grammatical feature associated with the SV/VS word order dichotomy discussed in this thesis is: subject-verb agreement and realization of agreement on the verb. If the subject precedes the verb, the verb bears full agreement with the subject; in person, number and gender in Arabic and in noun class in Bantu. However, when the subject follows the verb, the verb bears partial agreement with the subject; in gender (and sometimes person) in Standard Arabic, and full agreement in the modern dialects of Arabic while it bears a default agreement in Bantu.

The position of the subject (post-or pre-verbal) also affects the pragmatic reading of the subject. In the SV word order, in most Bantu languages as well Standard Arabic, the subject is interpreted as *topic*. However, in some modern Arabic dialects, it can be interpreted as *focus*. In the VS word order, a focus reading is available for the subject in Bantu (and sometimes obligatory), while in Arabic, the whole sentence is presented as all new-information (presentational focus).

The study shows that, although both SV/VS word orders in these two language groups can have a unified analysis for their derivational properties and the syntactic operations responsible for deriving both SV/VS word order (Fassi Fehri 1993, Benmamoun 2000, Soltan 2006, Zeller 2006, 2008, Halpert 2012 and many others), it cannot however provide a unified analysis to capture the formal grammatical features such as agreement, and pragmatic ideas such as *topic* and *focus* that are correlated with SV/VS word orders in both Bantu and Arabic dialects.

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LIST OF ABBREVIATIONS

1 st :	first person
2 nd :	second person
3 rd :	third person
ACC:	accusative case
Agr:	agree
Asp:	aspect
AUG:	augment
CAUS:	causative
CONJ:	conjoint
D:	dual
DISJ:	disjoint
EXPL:	expletive
F:	feminine
FinP:	finiteness phrase
FV:	final vowel
GEN:	generic case
IMF:	imperative
IMPF:	imperfective
LOC:	locative
M:	masculine
NAR:	narrative

NOM:	nominative case
Num:	number
P:	plural
Pers:	person (in trees)
PL:	predicative lowering
PERF:	perfective
PRES:	present
PRN:	pronoun
PST:	past
REL:	relative
RM:	remote past tense
S:	singular
SM:	subject marker
Sng:	singular (in trees)
Spec:	specifier
T:	tense
u-:	unvalued/ uninterpretable

Arabic numbers in the examples indicate the noun class of the noun/s in the sentence.

1. INTRODUCTION

1.1. Introduction

This thesis investigates the SV(O) and VS(O) word order alternation in Arabic and some Bantu languages. I will discuss the derivation of both orders, the position of the subject (pre-verbal or post-verbal), and the grammatical features and interpretational properties that correlate with this alternation. I will also explore to what extent Arabic and Bantu parallel each other regarding these properties despite the fact that these language groups are typologically and genetically different.

1.2. The Principles and Parameters Theory

1.2.1. Universal Grammar

Traditionally, the task of linguists was believed to be a classificatory one, in which grammarians and linguists describe the constituents in a sentence according to their grammatical category called parts of speech. For example, a sentence like *the boy left* would be analyzed as consisting of the noun phrase *the boy*, and the verb *left*. Under this taxonomy (as it is called in the relevant literature) (Radford 2004), constituents are classified based on their semantic properties as well as grammatical functions (Radford 2004). For example, *the boy* is described as a phrase headed by a singular noun which denotes an entity, and *left* is a verb that denotes an action which is also in the past tense. The sentence *the boy left* is called a clause, which is finite, since it denotes a time in which the event has happened. Besides the semantic properties of constituents, in traditional syntax, constituents are also assigned grammatical functions based on the position in which they appear in the sentence. Therefore, *the boy* is given the status of the subject of the sentence with the past verb *left* being the predicate (Radford 2004, Carnie 2013).

In contrast to the traditional taxonomic approach, Chomsky (1965) adopted a scientific approach in studying language. For Chomsky, the study of language and grammars is much more than a classificatory approach to constituents. He believes that humans are endowed with an innate language faculty, a Universal Grammar (UG). According to this view, language is an instinctive property of humans governed by innate principles. According to Chomsky, the task of a linguist is to explain why it is that native speakers gain knowledge of their own language at an early age (even before school) (see Chomsky 1965, 1978, 1989c, Radford 2004, Carnie 2013 for more motivations regarding the UG).

UG entails that there are certain aspects of grammar that are tacit and built into our brains which all humans share. Those aspects came to be known as UG principles, which are applicable to every human language (hence the name "universal").

To illustrate, one of the principles of UG can be termed the *Locality Principle*: "Grammatical operations are local" (Radford 2004:15). The *Locality Principle* can be explained by looking at English wh-questions, which involve two operations. Consider the question in (1):

(1) You can play what instrument?

The question in (1) is called in the relevant literature *wh-in-situ-question*,¹ however, the question can be paraphrased as in (2):

(2) What instrument can you play?

The question in (2) differs from that in (1). In (2) the wh-phrase *what instrument* has moved from its canonical position as the direct object of the verb *play* to the beginning of the sentence in an operation called wh-movement. Second, the auxiliary *can* is now preceding the subject *you* in an operation called subject-auxiliary inversion (typically the way yes/no questions are derived) while in (1) the subject *you* preceded the auxiliary *can*.

However, wh-movement and subject-auxiliary inversion are subject to the *Locality Principle* and do not apply to any wh-phrases or auxiliaries in the sentence. Consider the examples in (3a-d):

- (3) a. She had said he will play music.
- b. She had said he will play what?
- c. She had said who will play what?
- d. Who had she said will play what?

(3b) is *wh-in-situ-question* since the wh-phrases stayed in its place and replaced the direct object *music*. However, (3d) is different in the sense that, *who* has moved to the beginning of the sentence, and the auxiliary *had* precedes *she* unlike (3a-c). The question in (3d) is derived via the same two

¹ Wh-in-situ questions in English appears in so-called echo questions, quiz-contexts. Furthermore, in multiple wh-constructions, one wh-phrase is in-situ in English.

operations mentioned above: wh-movement and subject-auxiliary inversion. However, this time the sentence contains two wh-phrases (*who*, *what*) and two auxiliaries (*had*, *will*), and only the first wh-phrase and auxiliary have moved, namely, (*who*, *had*). As a matter of fact, if we try to move the second of either of them the question would be ungrammatical as in (4a, b):

- (4) a. *What had she said will play who?
 b. * Who will she said had play what?

The generalization that can be deduced from the above example is that wh-movement and subject-auxiliary inversion are allowed only for the closest (local) wh-phrase and auxiliary. And that is a result of the *Locality Principle* mentioned above. Violating the locality principle would mark the question ungrammatical as in (4) above.

The *Locality Principle*, according to the theory of UG, is innate and native speakers do not have to learn it when acquiring the grammar of their own mother language.

1.2.2. Parameters

Since all natural languages are not the same, some aspects of individual grammars have to be learnt. Parameters are responsible for language-particular variation and explain why grammatical systems differ from one language to another. For example, one parameter that makes English and Arabic different is the *null subject* parameter. Consider the examples in (5a, b) from English and (6a, b) from Standard Arabic:

- (5) a. Laura writes a letter.

- b. *writes a letter.

- (6) a. Laura ta-ktub resalah
 Laura 3rd.F.S-write. letter
 ‘Laura writes/is writing a letter.’

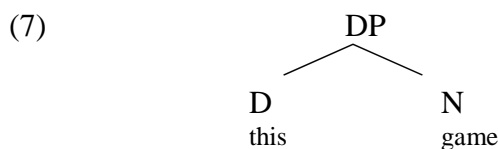
b. ta-ktub resalah
 3rd.F.S-write letter
 ‘(She) writes/is writing a letter.’

The English example in (5b) is ungrammatical because the sentence does not contain an overt subject (i.e. a subject which has a phonetic form). However, its Arabic counterpart in (6b) is grammatical, albeit there is no overt subject (the subject is null; it doesn’t have a phonetic form). This means that finite verbs in English require an overt subject, whereas Arabic finite verbs can have a null subject. English and Arabic differ in this respect, due to the setting of the null subject parameter: English has this parameter set to "off" and is a non-null-subject language, whereas Arabic has this parameter set to "on" and is a null-subject language.

According to the Principles and Parameters (P&P) Theory (Chomsky 1981,1989a) the parameter settings for languages work as binary options (e.g. a language either does or doesn’t have null subjects), thus limiting the grammatical (syntactic) operations in the target language being acquired and/or learnt. Throughout this thesis, I will be adopting the P&P theory.

1.2.3. Merge and sentence structure

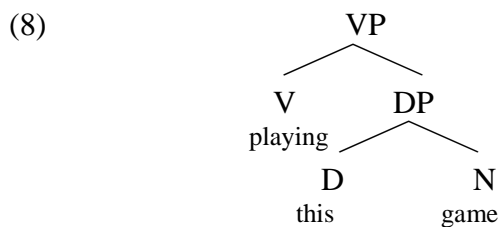
Syntax is concerned with sentences and how are they constructed (built), but words play a key role in any syntactic analysis. Chomsky (1995), has introduced the operation *Merge* which joins two constituents (words or larger units) to form a bigger unit (i.e. phrase). For example, a phrase like *this game* is said to be a result of the operation Merge, where the demonstrative determiner *this* is merged with the noun *game* deriving the determiner phrase *this game* in (7):



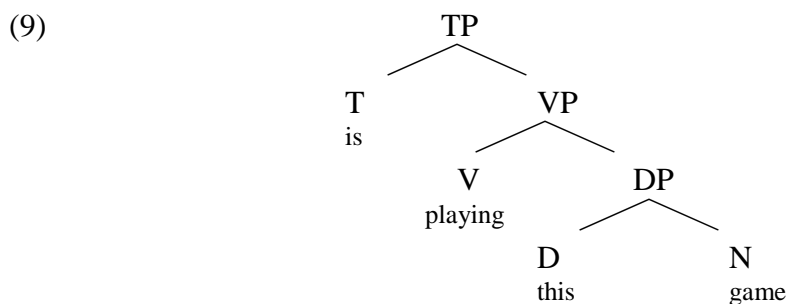
The tree shows that *Merge* does not only apply to words belonging to the so-called *lexical* categories (parts of speech such as nouns, verbs, adjectives, adverbs and prepositions) but also to *functional* categories, such as D in (7). Functional categories are those parts of speech that have

grammatical functions and serve a functional purpose by joining the lexical parts of speech. Some functional categories are determiners (D), complementizers (C), negation (Neg), or Tense (T)(see Radford 2004, Carnie 2013 for more discussion). In (7), the phrase formed by merging D and N is a determiner phrase DP, a projection of the functional category D, its *head*.

Merge can apply recursively to its own output. Therefore, the DP in (7) can be merged with another word, such as e.g. the verb *playing*, to form a verb phrase (VP), with the verb being the head of this phrase. This VP can be represented by the labeled tree structure in (8):



What (8) tells us is that the merging of the verb *playing* and the DP *this game* results in a VP (*verb projection*). This projection can be embedded into another bigger phrase like *is playing this game*, a clause which has the representation in (9):



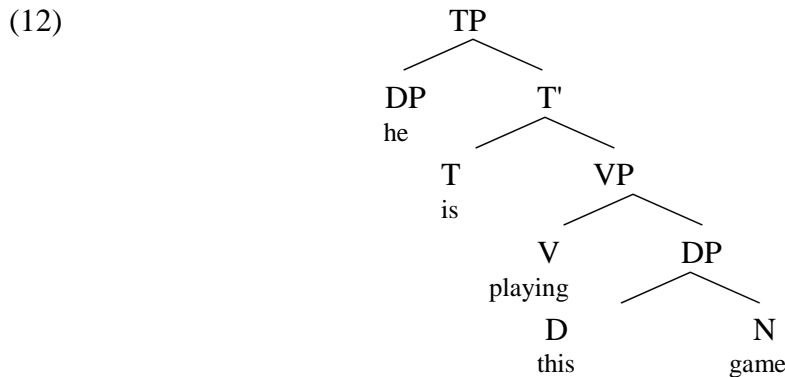
In (9) the auxiliary (AUX) *is* is heading the TP projection (since AUX is a sub-category of T=Tense) and is merged with the VP.

There are two principles that can be deduced from the examples above outlined below from Radford (2004:70):

(10) Headedness principle: Every syntactic structure is a projection of a head word.

(11) Binary principle: Every syntactic structure (tree structure) is binary-branching.

However, *is playing this game* is not yet a complete sentence. The subject is missing, which must be overt in English, as we have seen in section 1.2.2. Chomsky (1982) suggested that every TP projection like the one in (9) must contain a subject in its projection as the specifier of TP. The principle came to be known as the Extended Projection Principle (abbreviated as EPP). Using this principle, we can say that T will merge with a subject deriving a sentence like *He is playing football*. This TP has the syntactic representation in (12):²

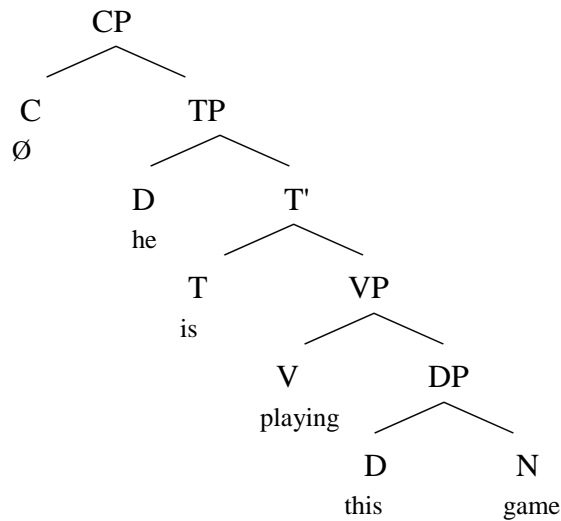


The tree in (12) shows that TP is the maximal projection of the head T. T' is an intermediate projection of T. V and the DP *this game* are *sisters* (no constituent is intervening between them and both are the daughters of VP). The sister of a head is called a *complement*, so the DP *this game* is the complement of V. The sister of an intermediate projection is called a *specifier*, so the subject D(P) *he* in (12) is called the *specifier* of T. The theory that accounts for these projections is called X-bar theory (Chomsky 1970, Jackendoff 1977, Stowell 1981). According to the X-bar theory, the architecture of all phrases in natural languages is determined by the principles that give rise to (12).

According to the phrasal architecture of the P&P theory, a TP is not yet a complete sentence. A complete sentence is formed by merging the TP with a complementizer head C, which is null in English main clauses. The whole sentence is therefore a complementizer phrase CP. This CP has the syntactic representation in (13):

² In section 1.2.4, I will introduce the so-called VP-internal subject hypothesis (VPISH), according to which the subject DP is first merged inside the VP and *moves* to a higher position inside the TP-projection. The VPISH will be thoroughly discussed in detail in chapter 2.

(13)



1.2.4. Movement, Move and Agree

So far, we have seen that a phrase built by Merge (e.g., a VP) can be merged with a new word (e.g. a T-auxiliary) taken from the lexicon. Chomsky (1995) calls this *external Merge*, in the sense that it combines phrases with words that are selected externally (from the lexical basket) to form new phrases and clauses. Another merging operation is introduced here, namely, *internal Merge* (Move). This operation merges a constituent with another constituent that is already present internally to the structure built thus far and therefore allows these constituents to "move around" in a sentence (informally speaking). Consider the interrogative clause in (14):

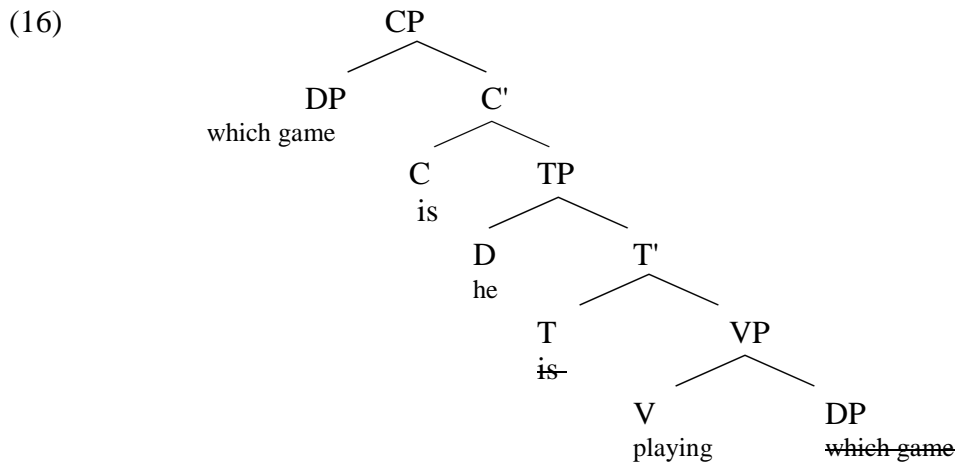
(14) He is playing which game?

As noted above, this is a *wh-in-situ* question (compare (3) above), where the *wh*-expression *which game* is the complement of the verb *playing* (just like the DP *this game* in (8) above), and the auxiliary *is* is positioned in its canonical place in T as in (12) above. However, the same question can be paraphrased as in (15):

(15) Which game is he playing?

The difference between the question in (15) and the *wh-in-situ* one in (14) is that the *wh*-expression in (15) has moved to the front of the interrogative clause preceding the subject *he* and the auxiliary

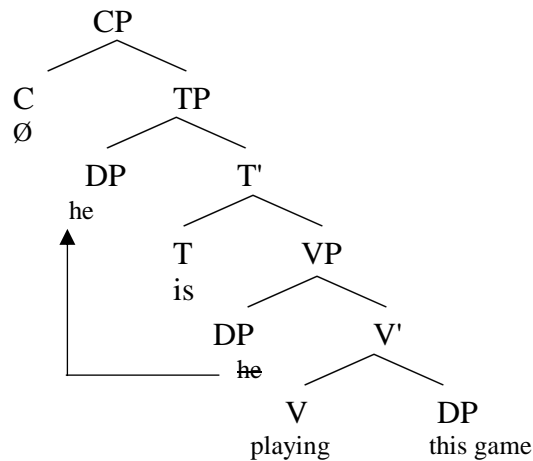
is. In addition, the auxiliary now precedes the subject (subject-auxiliary inversion; see section 1.2.1). These two differences can be captured by internal Merge. The tree diagram in (16) below is the structural presentation of (15):



As can be seen in (16), there are two movement operations (= two applications of internal Merge). First, the *wh*-expression DP (quantifier/determiner *which* and the N *game*, not shown here) has moved from its canonical place as the complement of the verb *playing* to the front of the clause, where it merges with a projection of C to form the specifier of CP. Second, the auxiliary *is* has moved from its canonical place in T to the head of the projection of CP in C. The first movement is known in the literature as *wh*-movement, and the movement of a constituent from T to C is called Head-to-Head movement (and in this particular case, T-to-C movement).

So far, the examples above show the subject DP, as generated in the specifier of TP (Spec-TP), but this does not account for languages with VSO order like Arabic. The VP-Internal Subject Hypothesis/VPISH (Koopman and Sportiche 1991, Radford 2004, Carnie 2013) offers a solution for this. It is assumed under this hypothesis that subjects also undergo movement. The assumption is that subjects are generated inside a projection under TP and move to Spec-TP. In particular, subjects are merged first inside VP's specifier and move to the specifier of the higher functional projection TP. The diagram in (17) is a revisited syntactic representation for the sentence in (12):

(17)



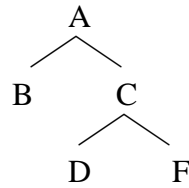
In Chapter 2 of this thesis, I will motivate for the VPISH, and present two pieces of evidence that back this hypothesis. At this point it is relevant to the discussion made so far and the discussion that follows that subjects originate inside the VP and move to the specifier of a higher functional projection TP.

In sentences such as (17), the (third person-singular) subject DP *he* agrees with the auxiliary [BE] in person and number features; as a result, [BE] is realized as (third person-singular) *is*. According to Chomsky (1995, 2001), agreement and movement of the type shown in (17) are closely linked; movement is the result of the operation *Agree*. It was assumed under the Government-Binding (GB) framework that agreement is established as a result of a configurational relationship between a specifier of a functional projection and its head (Kayne 1989, Koopman 1992, Koopman & Sportiche 1991, Chomsky 1991). Thus, in a sentence like the one in (12), agreement between the subject *he* (which occupies the specifier of TP) and the auxiliary *is* (which is the head of TP) is believed to be the result of a relation between the specifier of TP and the head T, since *he* is third person-singular which licenses a verb [BE] that is a third person-singular i.e. *is*. However, since Chomsky (2000, 2001), movement is assumed to be the result of the operation *Agree* between a functional head and the closest³ phrase in its c-command domain.

C-command is a syntactic relation between constituents in the structure, which can be described as follows from Radford (2004: 91):

³ *Agree* is constrained by the Locality Principle discussed in 1.2.1.

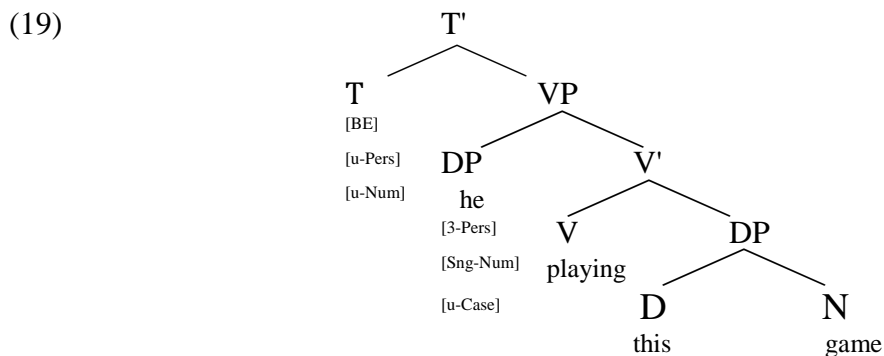
- (18) C-command (constituent-command): a constituent X c-commands its sister constituent Y and any constituent Z which is contained by Y.



As we can see from the tree above, B c-commands C and all the nodes contained by C (D, F). A, however, does not c-command any nodes since A does not have any sisters. B and C are said to be sisters, therefore, B c-commands its sister C and all the nodes under C.

Agree works as follows: When a functional head has uninterpretable (unvalued) features, it acts as a *probe*. The probe searches in its c-command domain for a matching constituent (the *goal*) that has matching interpretable features. When this goal is found, agreement is established. The features that enter an Agree-relation (person, number, gender) are called ϕ -features.

Thus, a sentence like *He is playing this game* would have the following derivation. The determiner *this* merges with the noun *game* to form the DP *this game*. Next, the verb *playing* merges with this DP to form V', which in turn is merged with the subject *he* (according to the VPISH) to form VP. This VP merges with the auxiliary [BE], forming T', as shown in (19):

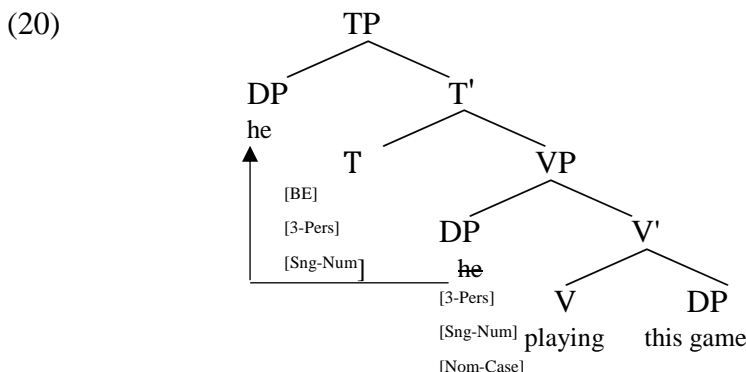


As shown in (19), the ϕ -features of the subject are interpretable and have values (third person-singular), but the corresponding features of the T-head are uninterpretable and therefore unvalued.⁴ The auxiliary [BE] therefore acts as a *probe*; it needs to agree with a *goal* which it c-commands to

⁴ Uninterpretable = unvalued. Interpretable = Valued (Chomsky 2000, 2001).

value its unvalued phi-features. Consequently, T will find the subject DP *he* as the closest DP it c-commands. Since *he* is a third person-singular DP, Agree values the features of T as a third person-singular, and T will be spelled out as the third person-singular form of [BE] i.e. *is*.

There are two other feature valuation processes associated with Agree in (19). First, when merged inside VP, the DP *he* has an unvalued *case* feature. This feature can be valued by T in the process of Agree as nominative case. Consequently, the subject is spelled out as *he* in Spec-TP. Second, T is assumed to have an EPP feature (related to the Extended Projection Principle; see section 1.2.2 above), which attracts the DP that T agrees with. Because of the EPP-feature, the subject DP will move from Spec-VP to Spec-TP after Agree has taken place. This is shown by the tree diagram in (20):



It is noteworthy that agreement between T and the subject-DP is possible even when the subject does not move to Spec-TP. This is illustrated by so-called expletive constructions, in which the subject has remained inside the VP, and the EPP-feature is checked by an expletive pronoun *there* which is merged in Spec-TP:

- (21) a. There are many people playing this game.
b. There is only one person playing this game.

The same can be observed about other languages where the movement of the subject is optional, as for example in some varieties of Arabic. In the modern dialects (like Moroccan and Jordanian Arabic), the verb can bare full agreement with a post-verbal subject in all ϕ -features (number, gender and person). In contrast, many Bantu languages show a clear correlation between subject

agreement and movement, with noun class agreement being possible only when the subject has moved out of VP. This correlation between agreement and movement will be dealt with later in this thesis.

1.3. Arabic

1.3.1. Background

Arabic is a Semitic language that belongs to the Afro-Asiatic family of languages (Ibrahim 2009:7). It is the native language of an estimated 400 million speakers throughout the Middle East, Arabian Peninsula and North Africa. Although the standard form of Arabic (Standard Arabic; SA hence after) is not spoken by Arabs in their daily lives, it is still used for formal letters, political speeches, books, state-owned TV and radio stations as well as newspapers. In addition to SA, many vernaculars have emerged which are exclusively spoken by the people residing in a particular country and/or region having it acquired at home with mutual intelligibility decreasing or increasing between regional varieties depending on the geographical distance between them. However, SA is still a *lingua franca* for all Arabic speakers (Aoun, Benmamoun & Choueiri 2010 (henceforth ABC), Ibrahim 2009).

1.3.2 Standard Arabic and non-standard varieties.

There are many differences between SA and the colloquial varieties of Arabic. Those differences can be very significant in terms of the lexical variations between SA and the modern-day dialects to a degree that modern day Arabic speakers would refer to the thesaurus in order to understand a word or a term they stumble across while reading a text written in the standard form of Arabic. There are also phonological and grammatical differences. For example, overt case marking on nouns and adjectives is lost in the modern dialects (ABC 2010). Consider the examples in (22a, b):

- (22) a. al-awlad-u nam-u (SA)
 the-boys-NOM slept-3rd.M.P
 ‘The boys slept.’
- b. al-awlad nam-u (JA)
 the-boys slept-3rd.M.P
 ‘The boys slept.’

In this thesis, I will concern myself with one major syntactic difference that can be observed between SA and the modern colloquial varieties of Arabic, namely, subject-verb agreement that is correlated with word order.

Although the unmarked word order for Standard Arabic is VS(O) (Soltan 2007:34), SV(O) word order is also attested:

- (23) al-awlad-u akal-u al-tufaht-a (SVO)
 the-boys-NOM ate-3rd.M.P the-apple-ACC
 ‘The boys ate the apple.’

- (24) akal-a al-awlad-u al-tufaht-a (VSO)
 ate-3rd.M.S the-boys-NOM the-apple-ACC
 ‘The boys ate the apple.’

Both orders can carry roughly the same meaning (see Chapter 4).⁵ However, this word order alternation is correlated with a subject-verb agreement asymmetry. While the subject fully agrees with the verb in all phi-features in the SV(O) order as in (23) above, in the VS(O) word order on the other hand, the verb agrees with the subject only in person and gender and not in number. Benmamoun (2000: 121) calls this "partial agreement". Partial agreement holds only in SA; in the modern dialects, the verb fully agrees with the subject, regardless of the word order being used. This issue will be thoroughly addressed in chapter 3, where I will discuss both SA and some of the modern-day varieties including, Moroccan Arabic (MA), as well as my Levantine variety of Arabic i.e. Jordanian Arabic (JA).

1.3.3 Verb morphology and agreement realization in Arabic.

Arabic dialects have a rich verb-subject agreement system in which the verb agrees with the subject in gender, number and person (see above). This agreement is realized via morphemes (*affixes*) attached to the root of the verb, as we can see from the examples in (23, 24) above and in (25):

⁵ The slight difference in meaning will be explored in chapter (4).

- (25) akal-at al-bent-u (SA)
 ate-3rd·F.S the-girl-NOM
 ‘The girl ate.’

In Arabic, there are two verb forms, namely, the perfective and the imperfective. The perfective is usually used to denote past tense and the imperfective denotes present when used on its own without being preceded by any particles.⁶ The two forms also differ from each other in agreement realization. In the perfective, all agreement morphemes are suffixal morphemes attached to the end of the verb (see (25) above) (Benmamoun 2000: 19) as shown in Table 1 with the verb *akal* ‘eat’ in SA:

Table 1-1 Agreement morphemes in the perfective form in SA

Person	Number	Gender	Suffix	Verb + suffix
1	S	M&F ⁷	-tu	akal-tu
2	S	M	-ta	akal-ta
2	S	F	-ti	akal-ti
3	S	M	-a	akal-a
3	S	F	-at	akal-at
2	D	M&F	-tumaa	akal-tumaa
3	D	M	-aa	akal-aa
3	D	F	-ataa	akal-ataa
1	P	M&F	-naa	akal-naa
2	P	M	-tum	akal-tum
2	P	F	-tunna	akal-tunna
3	P	M	-uu	akal-uu
3	P	F	-na	akal-na

As for the imperfective form, agreement is realized via both prefixal and suffixal morphemes. For example, prefixes carry person (and number in the case of first person plural in SA). While number is mostly suffixal, gender is expressed by the person prefix (see 6b above) (except in the second-

⁶ The future tense is realized by pre-verbal particles (*sawf* and *sa*) that precede an imperfective form of the verb. The imperfective can also denote past tense if preceded by the negation particle *lam* (see Benmamoun 2000 for more details).

⁷ The same morpheme is used, whether the subject is masculine or feminine.

person feminine and the third-person plural feminine where it is realized by a suffix Benmamoun (2000:19)).

Table 2 demonstrates agreement realization in the imperfective with the verb *akal*, ‘eat’:

Table 1-2. Agreement morphemes in the imperfective form in SA

Person	Number	Gender	Affixes	Prefix+verb
1	S	F&M	a-	a-ktub
2	S	M	ta-	ta-ktub
2	S	F	ta-i	ta-ktub-i
3	S	M	ya-	ya-ktub
3	S	F	ta-	ta-ktub
2	D	M&F	ta-aa	ta-ktub-aa
3	D	M&F	ya-aa	ya-ktub-aa
1	P	M&F	na-	na-ktub
2	P	M	ta-uu	ta-ktub-uu
2	P	F	ta-na	ta-ktub-na
3	P	M	ya-uu	ya-ktub-uu
3	P	F	ta-na	ta-ktub-na

1.4. Bantu languages

1.4.1. Background

Bantu languages are one of the subfamilies that make up the Niger-Congo language family, the largest language phylum in the world (Nurse 2001:2). There is a dispute on the exact number of Bantu languages. According to Nurse and Philippson (2003), there are approximately 500 Bantu languages spoken by 240 million people residing in 27 African countries. Guthrie (1971) classified Bantu languages by using a combination of letters and numbers, with the letters corresponding to sixteen geographical zones (A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S) and the numbers which coded with digits in tens stand for the groups in a zone e.g. A10, A20, B10, B20 etc. and each group contains up to 9 languages which is coded with a second digit from 1-9 (Grollemund & Hombert 2012). (However, see Maho 2003 for an updated version). Zulu, for example, (a language spoken in South Africa, mainly in KwaZulu-Natal and Gauteng) belongs to the Nguni subgroup and is given the classification (*code*) of S42 (Halpert: 2012: 27). S stands for the languages of Zimbabwe, Mozambique, Botswana, South Africa, Swaziland and Lesotho, and the number 40

stands for the Nguni group of languages spoken in these countries (see Gowlett 2003 for a complete list of the zone S languages and respective number of speakers).

1.4.2. The Bantu noun class system

Bantu languages have a variety of up to 24 noun classes. Noun class is marked by grammatical morphemes on nominal stems and on dependent elements (modifiers, verbs, pronominals etc.). Noun classes serve as concordial agreement prefixes where elements of the sentence in Bantu agree with the head noun in its class features (Demuth 2000). Consider the examples in (26):

- (26) i-ncwadi i-fik-ile (Xhosa)
 9-9letter 9SM-arrive-DISJ
 ‘A letter arrived.’

[Carstens & Mletshe 2015: 187]

The subject *incwadi* (letter), in (26) belongs to class 9 in Xhosa. Consequently, the verb *i-fik-ile* is prefixed with the subject marker (subject agreement) *i-* of class 9 that expresses noun class agreement with the preverbal subject.

Bantu languages typically do not use all 24 noun classes. For example, Zulu nouns are classified into 14 different noun classes. Table 3 below represents the noun classes for Zulu from Halpert (2012; 31):^{8, 9}

Table 1-3. Zulu noun classes

Class	Prefix
1	mu-
2	ba-
3	mu-
4	mi-
5	(li)
6	ma-
7	si-
8	zi-
9	N-
10	ziN-
11	lu-

⁸ This table is a simplified version of the table provided by Halpert (2012).

⁹ I will not discuss augments (AUG) throughout this thesis. However, I will acknowledge their presence in the glosses.

14	bu-
15	ku-
17	ku-

The usage of the noun class system in Bantu languages ranges from none to 23 noun classes. Ganda, for example, a language spoken in Mozambique has the highest number of noun classes of 23 noun classes (Katamba 2003).

Aside from the morphological and grammatical features of noun classes, there are also semantic features noun classes serve. However, there is no consensus upon the criteria for class membership. Most noun classes have lost their semantic productivity in some languages (see Demuth 2003 for more details). Nevertheless, the semantic basis of noun classification is certain. For example, class 1 includes human beings. Class 1a however, has a semantic content of proper names, kindship terms, personifications (see Katamba 2003; 115-116 for a complete list of the semantic contents of noun classes).

1.4.3. Word order and agreement in Bantu

In contrast to Arabic, the canonical word order in most Bantu languages is SV(O) (Nurse and Philippson 2003). Nevertheless, the VS(O) order is also possible in particular contexts. Parallel to Standard Arabic, the use of VS(O) word order has consequences for the realization of grammatical features involved in subject-verb agreement. In many Bantu languages, when a VS(O) order is used, a default agreement marker appears which does not match the noun class of the subject. This can be seen from the Xhosa examples in (26) repeated in (27) and (28) below from Carstens and Mletshe (2015: 187,188):

(27) i-ncwadi i-fik-ile (SV)
9-9letter 9SM-arrive-DISJ
‘A letter arrived.’

(28) ku-fik-é i-ncwadi (VS)
17SM-arrive-CONJ 9-9letter
‘A letter arrived.’

The post-verbal subject in (28) *incwadi* is a typical noun class 9 subject. However, the verb is prefixed with the default noun class 17 subject marker *ku*. This default marker always appears in VS(O)-constructions of this kind,¹⁰ regardless of the noun class of the subject. For example, when the subject DP belongs to noun class 1, the verb agrees in class 1 in the SV-word order as in (29a), but when the subject appears post-verbally, again *ku*- must be chosen, as in (29b):

- (29) a. uZinhle u- ya-pheka (Zulu)
 AUG.1aZinhle 1SM-DISJ- cook
 ‘Zinhle is cooking.’
- b. ku- pheka uZinhle (Zulu)
 17SM- cooking AUG.1aZinhle
 ‘Zinhle is cooking.’

[Halpert 2012: 245,246]

Even though most Bantu languages display this type of pattern, there are also Bantu languages in which agreement does not seem to be sensitive to word order and the position of the subject, and full agreement is realized regardless of whether the SV(O) or the VS(O) word order is used. For example, Van der Wal (2009) shows that in Makhuwa, post-verbal subjects also show full noun class agreement with the verb:

- (30) a. aletto a- naa- phiya wakisirwa
 2.guests 2SM- PRES.DISJ- arrive 16.island
 ‘The guests arrived on the island.’
- b. wakisirwa a-naa-phiya aletto
 6.island 2SM-PRES.DISJ.arrive 2.guests
 ‘On the island the guests arrived.’

¹⁰ VSO word order in many Bantu languages can also be derived via right dislocation of a subject, in which case the post-verbal subject agrees with the verb in noun class. In this thesis, I am concerned with non-agreeing VS(O) word order that is derived by leaving the subject in its base-generated position inside the VP (see section 1.1.4 and chapter 2).

(30b) is a locative inversion construction with a locative DP (marked by class 16 noun class morphology) in subject position. However, subject agreement is with the post-verbal subject, i.e. in class 2. We therefore find that with respect to the correlation between agreement and word order, most Bantu languages are parallel to SA (subject agreement between a verb and a post-verbal subject is deficient), while some languages such as Makhuwa pattern with the Arabic dialects in showing full agreement in both word orders. These parallels will be discussed thoroughly in this thesis, with special emphasis on the question to what extent Arabic dialects parallel Bantu languages with respect to formal aspects such as subject-verb agreement, or interpretational aspects such as Information Structure.

1.5. Outline of the thesis

Chapter 2 of this thesis will discuss the fact that subjects are first merged inside the VP. This will set the starting point for the analysis for the SV/VS word orders in both Bantu languages and Arabic dialects and the syntactic operations responsible for deriving these word orders.

Chapter 3 deals with the agreement phenomena that emerge from VS/SV word order alternations, and answer the question of whether these phenomena can have a unified analysis which explains the agreement pattern found in these two languages.

Chapter 4 will discuss the correlation between VS/SV word order and information structure, and whether notions like Topic and Focus have an effect on deriving those two word orders.

Chapter 5 provides a conclusion to the thesis, as well as a summary of findings discussed in the previous chapters.

2. THE SYNTAX OF SV(O) AND VS(O) IN ARABIC AND BANTU

2.1 Introduction

In this chapter I will discuss the syntactic operations that derive the SV(O) and VS(O) word orders. I will introduce the notion that subjects are generated inside the VP projection and move out to a higher position. While some languages have a fixed word order, Arabic and Bantu appear to have a more variable word order. This alternation of word order has an impact on other aspects of the grammar. However, in this chapter I will concern myself with the syntactic properties of the derivations resulting in these word order alternations.

2.2. The VP-internal subject hypothesis (VPISH)

I assumed in chapter 1 that subjects do not originate in the specifier of the functional projection TP. Rather, they end up there via movement. The main assumption of the VP-internal subject hypothesis (VPISH) is that subjects are generated in a projection lower than Spec-TP. The hypothesis goes back to Koopman & Sportiche (1991), who assume that subjects are originally generated inside the VP.

A first piece of evidence supporting this claim comes from *idioms*.¹¹ Radford (2004) defines idioms as: "expressions which have an idiosyncratic meaning which is not a purely compositional function of the meaning of their individual parts...only a string of words which form a unitary constituent can be idioms" (Radford 2004:246-247). Consider the example below from Radford (2004: 246):

- (1) The president must *bite the bullet*.

The italicized phrase in (1) above is an idiomatic expression which consists of a verb and a complement, which form a unitary constituent i.e. V'. However, the subject *the president* and the auxiliary *must* are not part of the idiom. This can be seen by replacing the subject *the president* by *the student* and the idiom will not lose its idiosyncratic meaning:

¹¹ See Koopman and Sportiche (1991) for more empirical evidence supporting their claim.

- (2) The students must *bite the bullet*.

Nevertheless, there are some idioms in which the choice of subjects is fixed. Consider the example in (3):

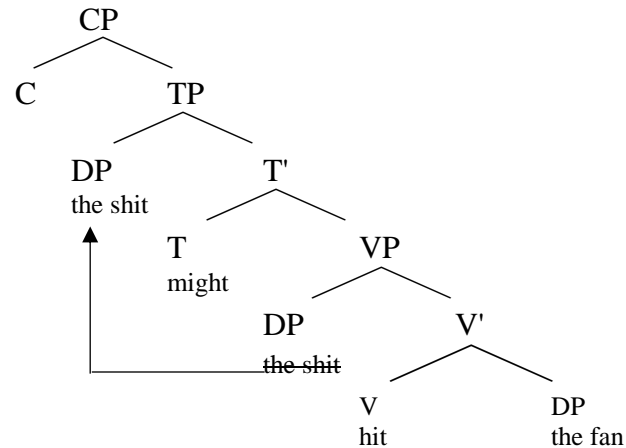
- (3) The shit hit the fan.

Changing any constituent in the idiom in (3) leads to a loss of the idiomatic meaning. That is because the subject, the verb and the complement form a *unitary constituent* which according to Radford (2004) is a constraint on forming an idiom. At first sight, one could suspect that this unitary constituent is the whole sentence in (3), i.e. TP or CP, since the idiom includes the preverbal subject in Spec-TP. However, an auxiliary can be inserted into a position between the subject and the verb as in (4):

- (4) The shit might hit the fan.

Although the auxiliary *might* interrupts the combination of the phrase *hit the fan* and the subject *the shit*, which are fixed parts of the idiom, the sentence in (4) still retains its idiosyncratic meaning. This means that there must be a node which includes the phrase *hit the fan* and the subject, but excludes the auxiliary. This is predicted by the VPISH, because according to the VPISH, idioms like that in (4) which have a set choice of words are assumed to form a VP containing the subject, the verb and the complement. Therefore, the idiom in (4) requires the subject *the shit* as the specifier of the VP and the verb *hit* as the head of that VP, with the DP *the fan* as its complement. Using the right terminology, we would say that the DP *the fan* merges with the verb *hit* to form the V'. This V' is then merged with the subject *the shit* as its specifier to form the VP. This complex VP corresponds to the idiomatic meaning in (3) and (4). The VP then merges with the auxiliary *might* to form T'. The subject *the shit* then moves to Spec-TP to check the EPP feature of T. The sentence in (4) hence has the syntactic representation in (5):

(5)



Another piece of evidence in support of the VPISH comes from the syntax of *floating quantifiers*. Consider the following example:

(6) The boys should *all* play outside.

The subject *the boys* is assumed to be positioned in Spec-TP (via movement), however, it serves as an antecedent to the quantifier *all* which is positioned after the auxiliary *should*. The fact that the floating quantifier *all* is semantically related to the subject in the sense that it modifies the subject suggests that quantifier *all* in (6) and the DP *the boys* formed a constituent in the derivation. The VPISH explains the word order in (6), because the constituent *all the boys* would have started in Spec-VP. Then the subject DP *the boys* has moved to occupy its position in Spec-TP, stranding the quantifier *all*. Therefore, (6) has the derivation in (7), as suggested in Hornstein, Nunes & Grohmann (2005:87):

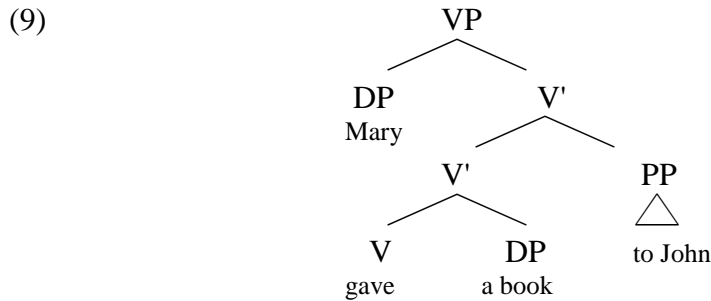
(7) [IP¹²[the boys]_i [I' should [VP [QP all t_i] play outside]]]

So far, the VPISH postulates that subjects originate in the specifier of VP. However, this analysis fails to account for the properties of sentences with ditransitive verbs, which contain two objects. Consider the examples below:

(8) Mary gave a book to John.

¹² Hornstein, Nurse & Grohmann refer to TP as IP and T as I.

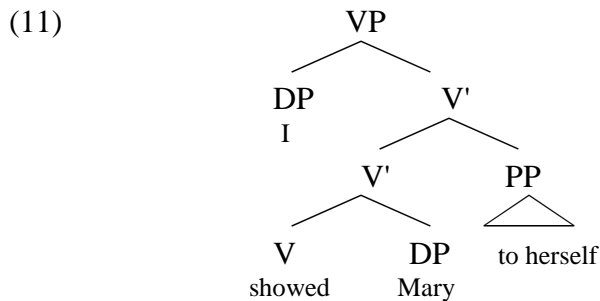
According to the VPISH, the VP of the sentence in (8) would have the representation as in (9):



At first glance the representation in (9) seems to be right. However, things are different when an anaphor is used in the position of the preposition's complement, as in (10), from Hornstein, Nunes and Grohmann (2005:93):

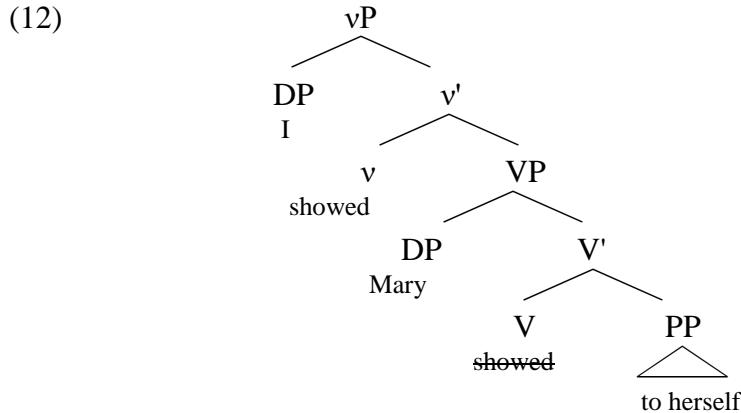
(10) I showed Mary to herself.

If (9) is the correct representation of ditransitive constructions, then the VP of the sentence in (10) will have the representation in (11):



However, the structure in (11) cannot account for the grammaticality of the sentence in (10) since the reflexive anaphor violates principle A of Binding Theory, in the sense that the reflexive *herself* is not c-commanded by *Mary*, and would therefore not be bound. Larson (1988), Chomsky (1995), Hornstein, Nunes and Grohmann (2005), Radford (2004) and Carnie (2013) therefore suggest an alternative analysis for sentences like that in (8). The main assumption is that VP is split into two projections. The main VP, which in (8) includes both internal arguments of the verb, is the

complement of a higher verbal head, which projects a verbal "shell" (Larson 1988). In recent Minimalist work, this VP-shell is analyzed as a vP headed by a light verb *v*. The subject is the specifier of the light verb projection; the main verb undergoes head movement to *v*. Thus, the structure for the sentence in (10) is (12):



The structure in (12) no longer violates Binding Theory. The anaphor *herself* is c-commanded by the DP *Mary*. This analysis assumes that the subject (the external argument) is generated in Spec-vP, whereas the direct object (the internal argument) is generated in Spec-VP.

The VPISH forms the basis for the discussion in the next sections. There I will discuss the syntax of SV(O) and VS(O) word orders in both Arabic and Bantu. For more discussion on the VPISH and the verbal shells analysis, see Barss & Lasnik (1986), Larson (1988), Hornstein, Nunes and Grohmann (2005), Radford (2004), Carnie (2013), and many others.

2.3. Arabic VS(O)

The VS(O) word order is considered the unmarked canonical word order in Arabic (Fassi Fehri 1993).

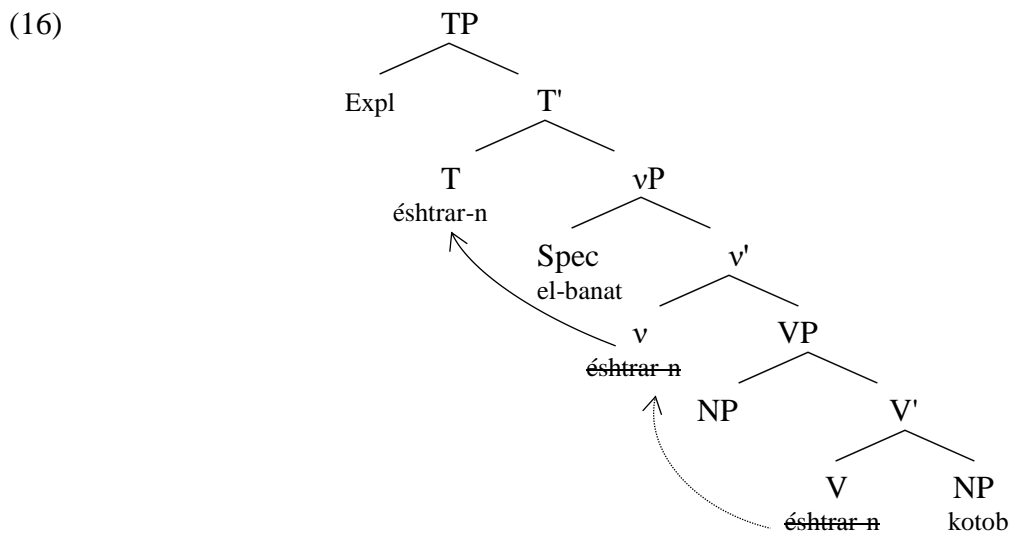
- (13) akal-a al-awlad-u al-tuffaht-a (SA)
 ate-3rd.M.S the-kids-NOM the-apple-ACC
 ‘The kids ate the apple.’

- (14) kla-w le-wlad al-tuffahah (MA)

ate.3rd.M.P the-kids the-apple
 ‘The kids ate the apple.’

- (15) éshtrar-n el-banat kotob (JA)
 bought.3rd.F.P the-girls books
 ‘The girls bought books.’

Fassi Fehri (1993) and Mohammad (1989, 2000) suggest that the VS(O) word order is derived via raising of the verb from V to T,¹³ while the subject stays in situ in its base position, the specifier of vP/VP (see 2.1 above). The specifier of TP is filled with a null expletive. The representation in (16) is based on Fassi Fehri (1993:16):



This derivation in (16) will be crucial for the discussion in the next chapter. Alternative analyses might be needed to account for the configuration of agreement in the VS(O) word order particularly in the modern Arabic dialects (see Chapter 3).

¹³ Fassi Fehri refers to this functional head as INFL (I) I will refer to it as T throughout this thesis.

2.4. Arabic SV(O)

Although the canonical word order in Arabic is VS(O), Arabic also exhibits an SV(O) order, which is widely used SA and in the modern dialects as well. Consider the following examples:

- (17) al-awlad-u nam-u (SA)
the-children-NOM slept-3rd.M.P
'The kids slept.'

- (18) el-banat akal-n (JA)
the girls ate-3rd.F.P
'The girls ate/ The girls have eaten.'

The status of the pre-verbal subjects in Arabic has been a controversial issue among Arabic linguists (Fassi Fehri 1993, Aoun, Benmamoun & Sportiche 1994, Benmamoun 2000, Aoun, Benmamoun & Choueiri (ABC thereafter) 2010, Soltan 2001, 2006, 2007). It is believed by the traditional Arabic grammar scholars that the pre-verbal subject is not a genuine subject, but rather, a left-dislocated element or topic occupying the pre-verbal position (Soltan 2007).¹⁴ However, Fassi Fehri (1993) argues that pre-verbal subjects and topics have referential properties that set them apart. He argues that, in Arabic, topics must be definite as in (19a) below:

- (19) a. al-tufaha-tu akal-tu -ha
the-apple-NOM ate-1st.S PRN.3rd.F.S¹⁵
'The apple, I ate it.'

- b. *tufahat-un akal-tu -ha
apple-NOM ate-1st.S PRN.3rd.F.S

¹⁴ See Chapter 3 for a more detailed discussion of Soltan's (2007) analysis.

¹⁵ In Arabic, humans, fruits, animals and things can be either feminine or masculine. The apple here takes a feminine agreement morpheme.

al-tufaha in (19.a) is a topicalized object which functions as an antecedent to the resumptive pronoun *ha* attached to the verb. The subject is *pro* (since Arabic is a *pro* drop language) and the *tu-* on the verb *akal* in (19.a) is an agreement realization of the *pro* subject (first-person singular).

Fassi Fehri (1993) suggests that there is a condition responsible for the ungrammaticality of sentences like that in (19.b), where the topicalized phrase is indefinite. The condition in (20) is as stipulated in Fassi Fehri (1993, 29):

(20) "The antecedent of a resumptive pronoun has to be referentially strong."

According to this condition, the sentence in (19.b) is ungrammatical since the resumptive pronoun (*ha*) cliticized to the verb *akal-tu* is not linked with a definite antecedent, as *tufahat-un* is indefinite, in contrast to the sentence in (19.a).

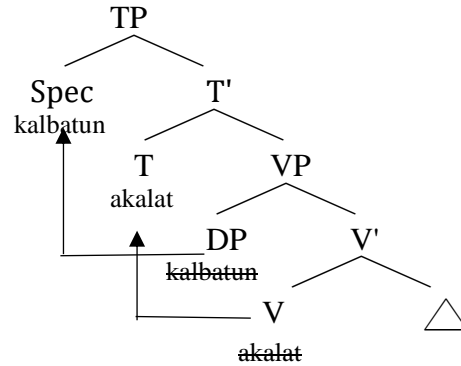
In contrast, even though pre-verbal subjects must be specific, generic, or bound by a quantifier, they can be indefinite as in (21), suggesting that they behave differently from topics:

(21) *kalbat-un* *akal-at*
 dog-NOM ate-3rd.F.S
 ‘A (female) dog has eaten.’

In (21) *kalbatun* is a preverbal subject occupying Spec-TP with the verb agreeing with it. However, since *kalbatun* (a dog) is indefinite, it cannot be topicalized or be interpreted as a topic for the fact that indefinite preverbal DPs cannot be topics. Subjects must therefore be treated differently from topics in Arabic.

With this said, Fassi Fehri (1993) and Benmamoun, Aoun & Sportiche (1994) suggest the following analysis of the syntax of SV(O) word order. Fassi Fehri argues that the verb moves from the head of VP to the head of a higher projection (T). The subject DP moves from its base position inside the vP/VP, the specifier (Spec-VP or Spec-vP) where it receives its thematic role, to a higher position Spec-T, as shown in (22) (a simplified representation, ignoring vP):

(22)



Facts from agreement in Arabic support this analysis, which will be discussed thoroughly in Chapter 3, where I will present various analyses accounting for agreement patterns observed in Arabic dialects, and how the position of the subject affects other formal grammatical features like agreement.

2.5. Bantu SV(O)

In contrast to Arabic, the canonical word order of (most) Bantu languages is SV(O) (Nurse & Philippson 2003, Bearth 2003, Marten 2007, Gowlett 2003).

(23) Kinyarwanda

Umugoré a-teets-e inyama
woman1 SM1-cook-Asp meat9
'The woman is cooking meat.'

[Zeller, 2008b: 407]

(24) Zulu

uZinhle u- ya- pheka
AUG.Zinhle1 1SM YA- cook
'Zinhle is cooking.'

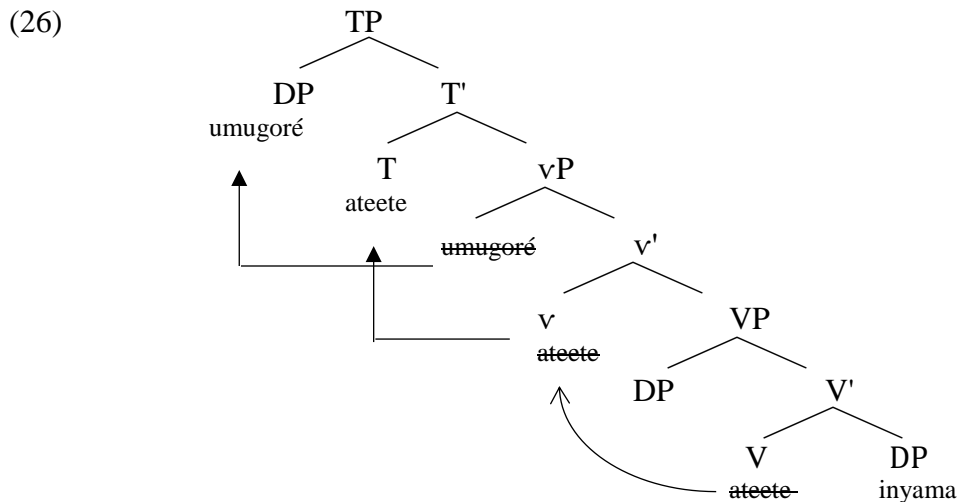
[Halpert 2012: 246]

(25) Lubukusu

e-nyuni y-emba
9-bird 9SM-sang
'A bird sang.'

[Diercks 2010: 43]

There is a consensus that the SV(O) word order in Bantu is derived via movement of the verb to a higher functional head, while the subject moves from its base position inside the vP/VP to the specifier of a higher preverbal position (Bearth 2003, Zeller 2008a, 2008b, Ngoboka 2016). In the remainder of this thesis, I assume that the verb moves to T and the subject to Spec-TP, as illustrated by the diagram in (26) below, for the Kinyarwanda example in (23):



(22) and (26) show that Bantu and Arabic parallel each other as far as the syntactic operations are concerned which derive the SV(O) word order.

2.6. Bantu inversion constructions

Bantu also allows VS(O) word order in certain contexts, which are often called "inversion constructions". In inversion constructions, the subject is preceded by the verb and typically some other phrase (e.g. a locative, as in the so-called locative inversion construction in (30), or the thematic object in the so-called subject reversal constructions). VS(O) constructions are also possible with the preverbal position i.e. Spec-T either being analyzed as empty or as filled with an expletive (see Marten & Van Der Wal 2014 for an overview of different inversions in Bantu). Consider the following sentences:

(27) Xhosa

Ku-fik-é	i-ncwadi
17SM-arrive-CONJ	9-9letter
‘A letter arrived.’	

[Carstens & Mletshe 2015: 188]

(28) Zulu

ku-	pheka	uZinhle
17SM-	cook	AUG.1Zinhle
‘Zinhle is cooking.’		

[Halpert 2012: 245]

(29) Tswana

gó	tsámá-ilé	Mpho
SM17	go-PERF.CONJ	Mpho
‘There has gone Mpho.’		

[Marten & Van Der Wal 2014: 33]

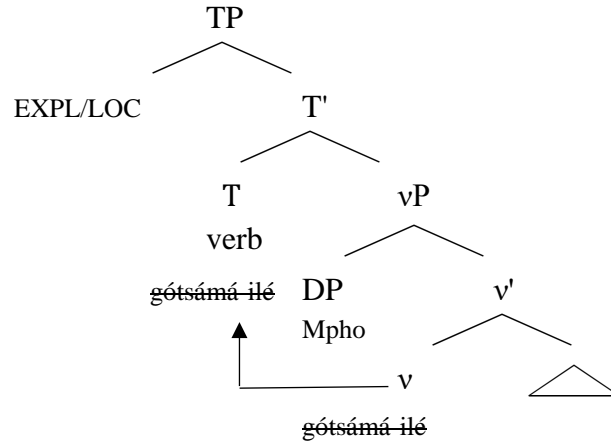
(30) Chichewa

m-chitsîme	mwa-a-gwera	mbûzi
18-well	18SM-PERF-fall	9.goat
‘Into the well has fallen a goat.’		

[Bresnan & Kanerva 1989: 16]

The standard analysis for the syntactic operations responsible for deriving the inverted structure is that the verb has again moved to a higher position to head a functional projection (i.e. T), while the subject DP stays in its base-generated position inside the vP. The preverbal subject position Spec-T is then filled with either an expletive, or with another phrase, e.g. a locative, as in the Chichewa example in (30) (Baker 2003, Zeller 2008a, 2008b, Halpert 2012, Ngoboka 2016):

(31)



It is worth noting, however, that Zulu (and other Bantu languages) also allow for another type of inversion construction in which the subject DP also appears post-verbally. If there is an object, the subject can then also follow the object. Consider the following sentence:

- (32) u-fund-isa isiZulu uSipho
 1SM-learn-CAUS AUG.7Zulu AUG. 1SM.Sipho
 ‘Sipho teaches Zulu.’

[Buell 2009: 24]

However, in (32) the subject *uSipho* is not assumed to be in its base position inside the vP/VP, but is considered to be right-dislocated, and therefore located outside the vP (see e.g. Van der Spuy 1993; Buell 2009). Evidence is that, in contrast to the VS-construction in (28), the post-verbal subject in (32) still agrees with the verb in noun class, and that the word order in (32) is VOS, rather than VSO. In the remainder of this thesis, I will not consider right dislocation constructions such as (32) and focus exclusively on the non-agreeing VS-constructions such as (28), in which the subject is located in vP/VP.

Based on the previous discussion, it appears that, as far as their analysis in the syntactic theory is concerned, Bantu word order alternations appear to be derived in the same way as the corresponding Arabic structures, which is predictable from a syntactic theory that claims to be cross-linguistically applicable.

The SV-VS word order alternation and movement of the subject away from its base-generated position is correlated with other aspects of the grammar. In the next chapter, I will discuss the word

order alternation and the relation between the position of the subject and the realization of agreement in both Bantu and Arabic.

3. AGREEMENT AND WORD ORDER

3.1. Agreement and agreement asymmetry

This chapter discusses agreement patterns observed in Arabic and Bantu. The main issue here is subject-verb agreement and the relationship between the position of the subject and agreement features in both SV and VS word orders. The chapter is divided into two sections. Section one addresses agreement patterns found in Arabic (both SA and the modern dialects) and discusses different analyses to account for agreement in these languages. Section two presents an overview of agreement phenomena in different Bantu languages and the different analyses that have been put forward to account for such phenomena. Section three will discuss agreement with two coordinated DPs.

3.2. Agreement and word order in Arabic

As mentioned earlier in Chapter 1, Arabic (SA and the modern dialects) has a rich agreement system. Subjects agree with verbs in gender, number and person when the SV word order is used (I will call this *full* agreement. See section 1.3.3). Consider the following examples:

- | | | | |
|-----|-------------------------------|----------------------------|------|
| (1) | al-awlad-u | nam-u | (SA) |
| | the-boys-NOM | slept-3 rd .M.P | |
| | ‘The boys slept/ are asleep.’ | | |

- | | | | |
|-----|-----------------------|--------------------------|------|
| (2) | lə-wlad ¹⁶ | kla-w | (MA) |
| | the-boys | ate-3 rd .M.P | |
| | ‘The boys ate.’ | | |

- | | | | |
|-----|-------------------------------|----------------------------|------|
| (3) | el-banat | nam-n | (JA) |
| | the-girls | slept-3 rd .F.P | |
| | ‘The girls slept/are asleep.’ | | |

¹⁶ Case is not spelt out in modern day dialects.

- As can be seen from (4) and (5) above, verbs agree with subjects in gender and person but not in number. Instead, a default singular number appears on the verb although the subjects are in the plural.¹⁸

Partial agreement, however, is not observed in the modern dialects. In modern dialects of Arabic like JA and MA, subjects agree with verbs in person, number and gender whether the subject appears pre- or post-verbally. This can be seen in the following examples:

- [Benmamoun 2000: 121]

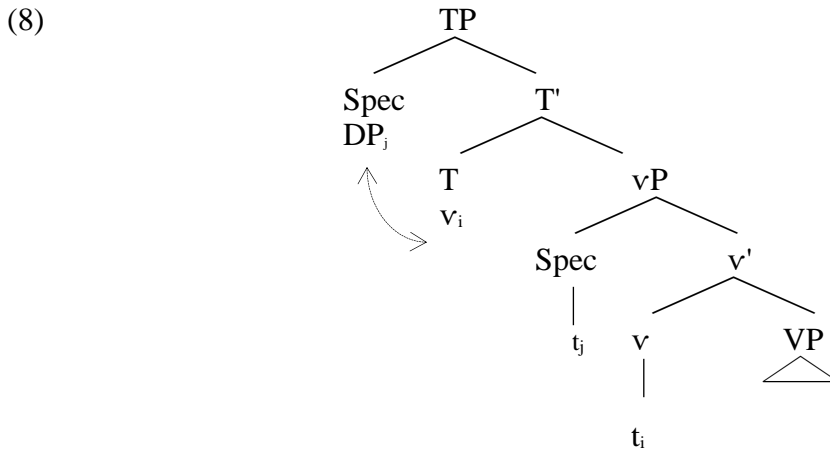
- (7) nam-n el-banat (JA)
slept-3rd.F.P the-girls
'The girls slept/are asleep.'

¹⁸ Standard Arabic also allows dual agreement.

Different analyses have been put forward to account for subject-verb agreement in Arabic. In this chapter I will discuss the most recent ones.

3.2.1. Agreement as a Spec-Head Relation

Mohammad (1990, 2000)¹⁹ and Fassi Fehri (1988) discuss agreement in Arabic. Their analysis is straightforward. Agreement under this analysis is a configurational relationship between the subject DP in the specifier of TP (Spec-TP) after raising from its base-generated position in the vP, and the verb in T,²⁰ as in (8) below:



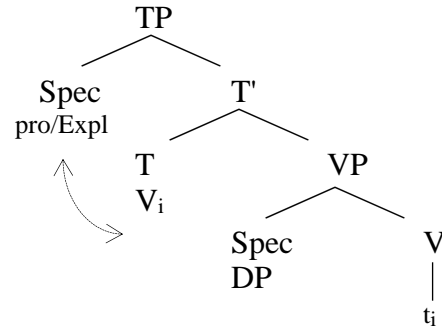
Under this analysis, partial agreement in the VS order in SA is assumed to be licensed by a *null expletive pro* occupying the position of Spec-TP. This null expletive has the default features third person singular. Therefore, according to Mohammad (1990) there are two subjects in VS sentences in Arabic, one is the thematic subject in Spec-VP and the other is a null *pro* in Spec-TP (Mohammad 1990: 98).

Thus, partial agreement in the VS word order according to Mohammad (1990) is actually a relationship between T and the third-person singular expletive *pro* occupying Spec-TP which has default values as third-person singular. See below:

¹⁹ Mohammad considers Arabic to be an SVO languages.

²⁰ Refer to 1.1.4 section for more details regarding this approach.

(9)



The *null expletive* analysis however is problematic. First, it assumes the null expletive to have fixed features (third-person singular), which is an unjustified assumption, given that in Arabic, overt expletives in certain contexts have to be plural with different gender values. Fassi Fehri (1993) points out that in verbless sentences (sentences without verbs) expletives can be plural as in (10-11):²¹

- (10) *hum* *al-awlad-u*
 they.3rd.M.P the-boys.NOM
 ‘They/there are the boys.’

- (11) *hun* *al-banat*
 they.3rd.F.P the-girls
 ‘They/there are the girls.’

In (10&11) *hum* and *hun* are overt expletives with plural number values that agree in gender, number and person with the subjects they precede. According to Fassi Fehri (1993), pronouns like *hum*, *hun* and *huwa* (12) are also considered expletives. He supports his claim from the fact that they behave like the expletive *it* in English, since they can be subjects of an identification sentence:

- (12) *huwa* *l-kasal-u*
 he the-laziness
 ‘It is the laziness.’

[Fassi Fehri 1993: 118]

²¹Arabic lacks copulas in nominal sentences in the present tense (see Alsaeedi 2015 for more discussion).

Therefore, restricting expletives to have default values as third-person singular is an unjustified assumption for Arabic (Fassi Fehri 1993).

Second, as noted above, in modern dialects of Arabic, the verb bears full agreement with the subject in the VS word order. This fact does not follow from the null expletive analysis:

- (13) nam-n el-banat (JA)
 slept.3rd.F.P the-girls
 ‘The girls are asleep/slept.’

Thus, the null expletive analysis does not account for partial agreement in VS word order in Arabic. Furthermore, it assumes a fixed value for pronouns in Arabic as third-person singular which we saw above is not the case in Arabic.

A variation of this analysis is proposed in Aoun, Benmamoun and Sportiche (1994). They assume that full agreement obtains in both SV and VS word orders under the Spec-Head relation. In SV word order, the subject in Spec-TP agrees with T. However, in the VS word order, the verb moves further up from T to a higher head they call (F), leaving the subject in Spec-TP, and agrees only in gender but not in person or number. According to their analysis, in modern day languages (e.g. JA and MA) agreement is retained on the verb after raising to a higher head than TP, but this is not the case in SA. The latter fact is explained as follows.

Building on work by Kayne (1989) on an English dialect, they suggest that agreement loss can be observed in English as well. Consider the following examples:

- (14) The people who Clark think are in the garden.

[Aoun, Benmamoun and Sportiche 1994: 205]

In the relative clause in (14), the verb *think*, which according to Kayne has moved to C, agrees with the plural wh-operator *who*, which is in Spec-CP. According to Kayne, since the verb agrees with the wh-operator, singular number agreement with the subject Clark in Spec-TP is missing or lost.

According to Aoun, Benmamoun and Sportiche (1994), the same happens in SA, the verb moves further up to a higher position deriving the VS word order, leaving the subject in Spec-TP, which causes agreement to be lost. But why is the loss of agreement selective, i.e. why is gender agreement retained, but person and number can be lost?

Aoun, Benmamoun and Sportiche (1994) present an answer to the questions above, building on Bahloul and Harbert's (1992) observation for Arabic. Bahloul and Harbert (1992) observe that in SA, in contrast to post-verbal non-pronominal subjects (which show only partial agreement), post-verbal *pronominal* subjects show full agreement in person and gender as well as number:

- | | | |
|----------------------------|------|------|
| (15) naamuu | hum | (SA) |
| slept.3 rd .M.P | they | |
| 'They slept.' | | |

[Aoun, Benmamoun and Sportiche 1994: 205]

According to Bahloul and Harbert (1992), the reason why pronouns fully agree with verbs even in VS-constructions is because pronouns are intrinsically specified for gender, person and number, whereas in the case of non-pronominal subjects, the number feature is not intrinsic. The idea is that, when the verb in F agrees with a post-verbal subject, it agrees only with the intrinsic features of the post-verbal subject. If the post-verbal subject is a pronominal, it has to agree with the full set of ϕ -features of the pronoun. But if the post-verbal subject is non-pronominal, number is no longer part of agreement, since the number feature is not intrinsic, and agreement is retained with only the intrinsic features of the post-verbal subject. This led Aoun, Benmamoun and Sportiche (1994) to formulate the generalization in (16):

- (16) "Agreement must be retained for intrinsic features but not for grammatical features".

[Aoun, Benmamoun and Sportiche 1994: 206]

That is, when the verb raises to the head F, it retains agreement with only the intrinsic features of the post-verbal subject, and since number feature is not intrinsic, it is lost when the verb moves to F.

3.2.2. The incorporation analysis

Benmamoun (2000) argues that the reason there is no number agreement in VS-constructions in SA is because the verb and the post-verbal subject merge to form a prosodic unit. He argues that the post-verbal subject acts as an exponent for the number feature; therefore, the number affix appearance is redundant and is not realized in the VS order. In the SV order however, the subject does not merge with the verb forcing the number affix to appear on the verb. Benmamoun argues that the merger of the verb and the subject applies in the post-syntactic component "... the component that interfaces with the syntactic component and spells-out the terminal element of the phrase marker" (Benmamoun 2000: 131). According to Benmamoun, the difference between SA and MA is purely morphological rather than syntactic: while SA has two options, to either spell-out number agreement in the SV word order, or subject merger in the VS word order, MA on the other hand has only one option, namely to spell-out number agreement regardless of the word order.

However, an argument against this analysis is presented in Aoun, Benmamoun and Choueri (ABC thereafter) (2010), who show that the verb and the subject in VS word order can be separated by the thematic object. Consider the following example:

- | | | | |
|----------------------------------|----------------|------------------|------------|
| (17) katab-a | al-risalata-a | al-awalad-u | (VOS) (SA) |
| wrote.3 rd .M.S | the-letter-ACC | the-children-NOM | |
| 'The children wrote the letter.' | | | |

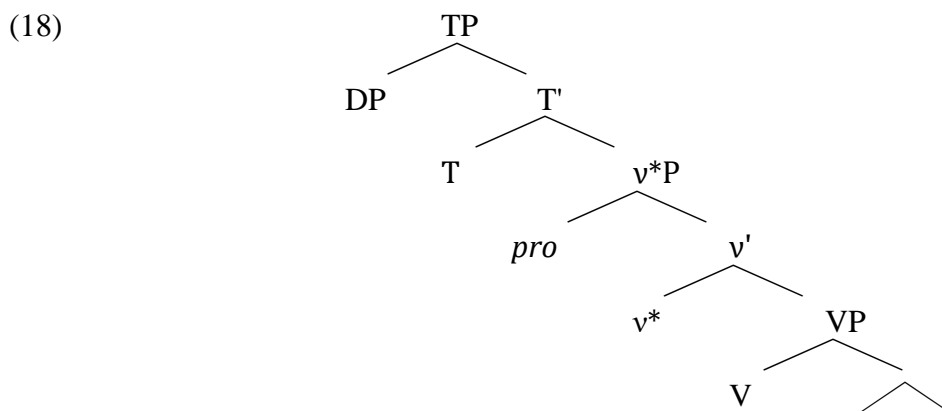
[ABC 2010: 84]

As can be seen in (17), the thematic object *al-risalataa* is intervening between the verb *kataba* and the subject *al-awaladu*, deriving the VOS word order. ABC however, tried to stipulate that in sentences like the one in (17), the verb, object and subject form a prosodic unit in Arabic, but they dispense this suggestion since in the modern Arabic dialects, full agreement is obtained in VS-constructions. Which clearly does not support Benmamoun (2000) claim. Therefore, ABC argue against the prosodic unit analysis.

3.2.3. Agree-based analysis (Soltan 2007)

Soltan (2007) presents an analysis to account for agreement and agreement asymmetries (partial agreement) found in SA, based on the Minimalist Program (Chomsky 2000, 2001) in which agreement is seen as a result of the operation Agree between a *probe* and a *goal* (Chomsky 2000, 2001; see section 1.2.4 of this thesis).

Before going into the details of his analysis, let me note that Soltan (2007) argues that the SV and the VS word order are not derived in the way discussed in the previous chapter (see 2.2.2). Instead of assuming that the subject DP in the SV-order moves from Spec-vP to Spec-TP, Soltan argues that the preverbal nominal DP is base-generated in Spec-TP in the same way as left-dislocated elements are. The DP is coreferential with a post-verbal null subject (*pro*) occupying the position Spec-vP, just like a left-dislocated element binds a resumptive pronoun:



Soltan's assumption about the existence of a *pro* is motivated by the fact, briefly discussed in section 3.1.1, that in SA, full agreement is always obligatory when the subject is pronominal, regardless of whether the pronoun appears pre- or post-verbally or whether it is overt or null. Consider the following examples:

- (19) (hum-u) qaraʔ-uu ʔal-dars-a (SA)
 They-NOM read-3rd.M.P the-lesson-ACC
 ‘They read the lesson.’

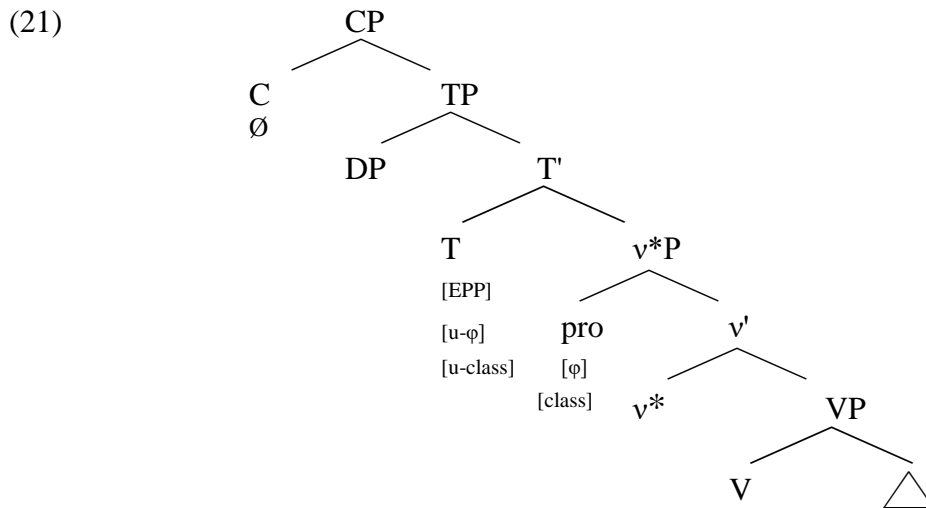
- (20) qaraʔ-uu (hum-u) ʔal-dars-a (SA)
 read-3rd.M.P they-NOM the-lesson-ACC

‘They read the lesson.’

[Soltan 2007: 61]

And since full agreement is obligatory in the SV word order, Soltan (2007) therefore assumes that full agreement in the SV word order in SA always indicates the presence of a null pronominal subject which is coreferential with a pre-verbal non-pronominal DP occupying the position Spec-TP.

With this said, full agreement in the SV word order is then established according to Soltan (2007) as follows: T (the probe) according to Soltan (2007) has the following uninterpretable features: (i) ϕ -features for person and number which can be default values (third-person singular). (ii) a class feature, which is realized as Gender and probes separately; (iii) an optional EPP-feature. T then probes to find a goal within its domain with interpretable features. The closest goal is *pro* in Spec- v^*P (if *v* is transitive). Consider the tree diagram in (21) Soltan (2007: 70):

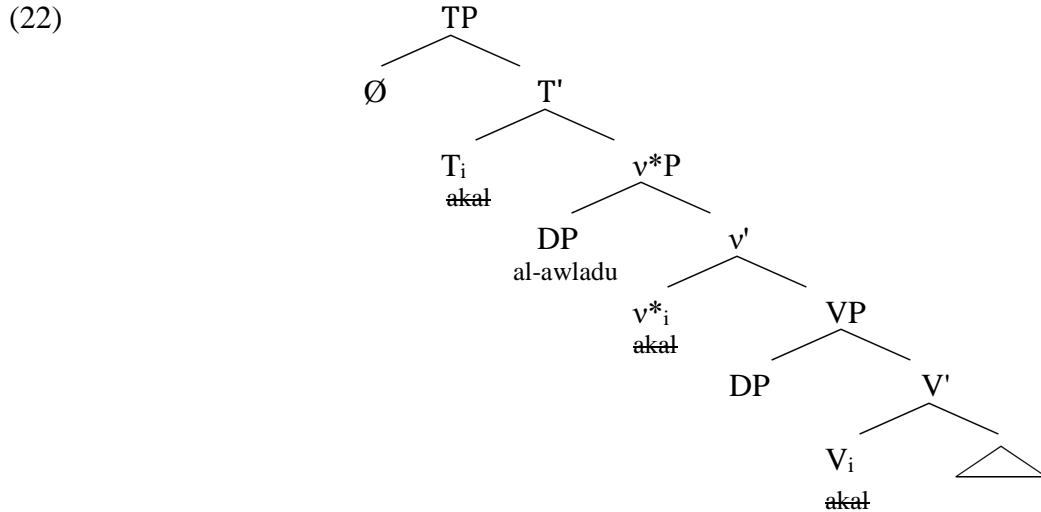


As can be seen in (21), Agree takes place between T and the *pro* inside v^*P . As a result, T's uninterpretable features (ϕ features and class) are valued, and the base-generated pre-verbal DP satisfies the EPP feature of T.

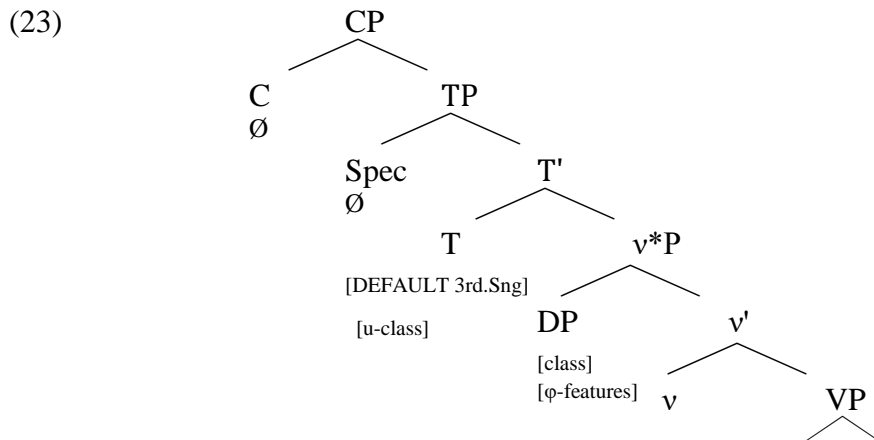
Soltan argues that full agreement in the SV word order obtains because of the *pro* subject in the specifier of v^*P , which according to *pro* theory has to be identified at the interface (the *pro*

identification requirement; Rizzi 1982, McCloskey 1986). Hence, full agreement is obligatory in the SV word order for *pro* to be identified (Soltan 2007).

The VS word order, on the other hand, is derived via movement of the verb from V to v^* to T:



Partial agreement in the VS word order is established when the subject is a DP which stays in-situ in Spec- v^*P . Since the subject is a full DP, it does not need to be identified in SA. T, however, does not have an EPP feature, so no movement to Spec-TP takes place. Furthermore, Soltan argues that T in SA's VS-constructions has default ϕ -features (third-person singular) as well as a *class* feature which is obligatory and probes separately. Therefore, in VS word order in SA, the verb bears default values as [third-person singular], while the class feature always probes to find a goal in its domain, resulting in agreement with gender only. This can be shown in the tree in (23):



According to Soltan (2007), the difference between SA and the modern dialects is that, in the VS word order, T in the modern dialects like JA and MA appears to have a full ϕ -features and class features but not an EPP-feature. This is why in the modern dialects full agreement appears on the verb even with this word order; even though the post-verbal DP is non-pronominal, agreement is still established. This according to Soltan (2007) is a parametric variation between the different dialects of Arabic. In SA, T does not allow an EPP feature without ϕ -features, while the modern dialects like JA and MA seem to allow complete ϕ -features on T without an EPP-feature (see Al-Horais 2009, Al-Shorafat 2012 for more discussion of Soltan's analysis and an Agree-based account of agreement in SA).

3.3. Agreement and word order in Bantu

As mentioned in Chapter 1, subject-verb agreement in Bantu is realized via the *subject marker* (SM) prefix on Bantu verbs. This subject marker on the verb matches the noun class of the subject. This can be seen from the following examples:

(24) Lubukusu

o-mu-seecha	ka-a-bona	ba-ba-ana
1-1-man	SM1-PST-saw	2-2-children

‘The man saw the children.’

[Diercks 2010: 46]

(25) Kinyarwanda

umugoré	a-teets-e	inyama
1woman	SM1-cook-Asp	9meat

‘The woman is cooking meat.’

[Zeller 2008b: 407]

(26) Zulu

uZinhle	u-xova	ujeqe
AUG.1Zinhle	SM1-make	AUG.1steamed.bread

‘Zinhle is making steamed bread.’

[Halpert 2012:34]

As the previous examples show, the verbs *bon-*, *teets-* and *xov-* are prefixed with subject markers that match the noun class of the preverbal subjects *omuseecha*, *umugoré* and *uZinhle* respectively.

However, when the subject follows the verb, many Bantu languages show no agreement between the verb and the subject. Instead, a default subject marker is present on the verb. Compare the following Kinyarwanda sentences from Ngoboka (2016: 11):

(27) a. a-ba-shyitsi ba-biri ba-a-a-z-ye
 AUG-2-guests 2-two SM2-came
 ‘Two guests have come.’

b. *ba-a-z-ye a-ba-ahyitsi ba-biri
 2SM.came AUG-2-guest 2-two

(27.b) is ungrammatical, although the verb *baazyé* is prefixed with a subject marker which matches the noun class of the post-verbal subject *abaahyitsi babiri*. However, (27.b) becomes grammatical with the post-verbal subject if the verb appears with a default SM *ha* as in (28):

(28) ha-a-z-ye a-ba-shyitsi ba-biri
 SM16-came AUG-2-guests 2-two
 ‘Two guests have come./ It is two guests who have come.’

[Ngoboka 2016: 12]

In (28) the verb *haazyé* is prefixed with a default subject marker *ha* which belongs to the locative noun class 16 in Kinyarwanda. This can also be seen in the examples below, adopted from Zeller (2008b: 223):

(29) umwaana a-ra-lir-a
 child1 SM1-PRES-cry-Asp
 ‘The child is crying.’

[Kimenyi 1980: 51]

- (30) ha-ra-som-a umwaana
 EXPL16-read-Asp child1
 ‘It’s the child who is reading.’

[Kimenyi 1980: 206]

Although the subject *umwaana* (child) in (30) is a class 1 noun, in the VS word order, the verb bears a default class16 SM *ha*. This is in contrast to (29), where the verb shows agreement with the subject in class 1.

Kinyarwanda however, is not the only Bantu language which shows default agreement with the post-verbal subject. Many Bantu languages use a default subject agreement marker on the verb when the subject is post-verbal. Consider the following examples:

(31) Zulu

- a. uZinhle u-ya-pheka
 AUG.1Zinhle SM1-YA-cook
 ‘Zinhle is cooking.’

[Halpert 2012:245]

- b. ku-pheka uZinhle
 SM17-cook AUG.1Zinhle
 ‘Zinhle is cooking.’

[Halpert 2012:246]

In (31.a) the preverbal subject *uZinhle* belongs to class 1, which forces the verb *uyapheka* to have an agreeing subject marker from class 1. In (31.b) on the other hand, the subject is post-verbal. With this word order, Zulu shows default agreement and the verb is prefixed with the default subject marker of class 17 *ku-*. In this, Zulu parallels Kinyarwanda, in the sense that the subject marker *ku-* appears on the verb irrespective of the noun class of the post-verbal subject. Consider the following example (33) from Zeller (2008a: 223), where the post-verbal subject belongs to noun class 9, but the subject marker is still *ku-*:

(32) ingane i-hlek-il-e
 child9 SM9-laughed-DIS-PST
 ‘The child laughed.’

(33) ku-hlek-e ingane
 SM17-laughed-PST child9
 ‘The child laughed.’

It therefore appears that Bantu languages such as Zulu and Kinyarwanda are, in fact, similar to Standard Arabic (SA). When the SV word order is used, the verb bears full agreement with the preverbal subject. In Bantu, this agreement is in noun class; in Arabic, the subject DP agrees in all ϕ -features. However, when the VS word order is used, agreement is impoverished. In SA, "impoverished" agreement means that the verb partially agrees with the post-verbal subject; it agrees only in gender and person, but not in number. In Bantu, "impoverished" agreement means that there is no noun class agreement at all, and instead of an agreeing subject marker, a default subject marker from a locative class must appear.

However, some Bantu languages appear to have a matching subject marker on the verb regardless of whether the subject is post-verbal or pre-verbal. This can be seen from the following sentences from Makhuwa, from Van der Wal (2009: 194, 195):

(34) aletto a- naa- phiya wakisirwa
 2.guests SM2-PRES.DISJ- arrive 16.island
 ‘The guests arrived on the island.’

(35) ts-aá-háa-vo enámá tsi-kínákú
 10-IMPF-stay-LOC 10.animals 10-other
 ‘There were other animals.’

In (34), the preverbal subject *aletto* is a class 2 noun and the verb *anaaphiya* consequently expresses agreement in noun class with the subject. However, in the expletive construction in (35),

where the preverbal position is arguably occupied by a null expletive, the verb still expresses agreement in noun class with the post-verbal subject. In this respect, Makhuwa contrasts with the Zulu and Kinyarwanda examples in (30) and (31.b) above.

Some Bantu languages however, can either have agreeing inversion construction (36) or default agreement (37). Consider the following examples from Swahili adopted from Marten (2011: 970):

- (36) u-ka-pit-a mu-da
 SM3-NAR-pass-FV 3-while
 ‘(And then) a moment passed.’/‘There passed a moment.’

- (37) pa-li-pit-a mu-da
 SM16-PST-pass-FV 3-while
 ‘A moment passed.’/‘There passed a moment.’

In the Swahili examples, the SM on the verb matches the noun class of the post-verbal subject in (36) but in (37), a default SM appears on the verb. It appears that in Swahili, verbs can either agree with the post-verbal subject in noun class or exhibit default agreement.

Bantu languages such as Makhuwa therefore seem to pattern with modern Arabic dialects such as JA and MA, where the verb fully agrees with the post-verbal subject in all ϕ -features. While in languages like Zulu, for example, the verb bears a default subject marker *ku-* with the post-verbal subject, we find that in Makhuwa, a verb shows full noun class agreement, even with a post-verbal subject.

Different analyses have been put forward to account for the agreement asymmetry in Bantu languages such as Zulu and Kinyarwanda (Collin 2004, Carstens 2005, Zeller, 2006, 2008, Marten 2007, Van der Wal 2009, 2012, Halpert 2012, Carstens and Mletshe 2015, Ngoboko 2016, and many others). In the following sections, I will provide an overview of the most recent ones.

3.3.1. Agreement and the EPP-feature

It has been argued that agreement in Bantu is linked to the EPP feature on T (Baker 2003, 2008, Collins 2004, Carstens 2005, Van der Wal 2012, Ngoboka 2016). This EPP feature forces the subject to move from its base-generated position inside the vP to occupy the position of Spec-TP.

Under this analysis, Agree and Move are correlated rather than separated as two distinct operations (Van der Wal 2012). The motivation for this analysis comes from the fact that pre-verbal subjects in Bantu always agree with the verbs in noun class. This led Baker (2003), Collins (2004) and Carstens (2005) to stipulate that movement of the subjects to their pre-verbal position is a part of the operation Agree, and is a result of an EPP feature on T. They argue that an EPP-feature on T in Bantu goes hand in hand with ϕ -features on T (and vice versa). That is, agreeing subjects in Bantu have to move into a pre-verbal position, and present an Agree-based analysis for agreement properties in Bantu languages.

According to Baker (2003) and Collins (2004), T in Bantu languages has an EPP-feature besides ϕ -features (which Baker (2003) calls (Agr) features). Therefore, an agreeing subject in Bantu has to fulfil the EPP-feature of T by moving into a pre-verbal position. Collins (2004: 116) proposed an agreement parameter concerning Bantu as follows:

(38) Agreement Parameter:

Let Agree(X, YP), where X contains the probe [uPhi], and YP contains the goal, then X has an OCC feature that is satisfied by YP.

According to Collins's parameter, agreement in Bantu is always associated with internal Merge (i.e. movement). In other words, a functional head with uninterpretable ϕ -features also has an uninterpretable EPP-feature (which Collins (2004) calls an "occurrence" feature OCC). Therefore, according to Collins (2004) an agreeing goal always moves in order to satisfy the occurrence (EPP) feature of the probe.

Based on Chomsky's (2000, 2001a, b) theory of feature valuation, Collins (2004) and Carstens (2005) assume that the head T in Bantu has an EPP-feature in addition to ϕ -features. This EPP-feature is valued when T probes its c-command domain to find an agreeing DP (goal) which can value T's ϕ -features, T's EPP-feature then raises the agreeing DP into Spec-TP. To illustrate, consider the sentence in (39):

(39) Kinande

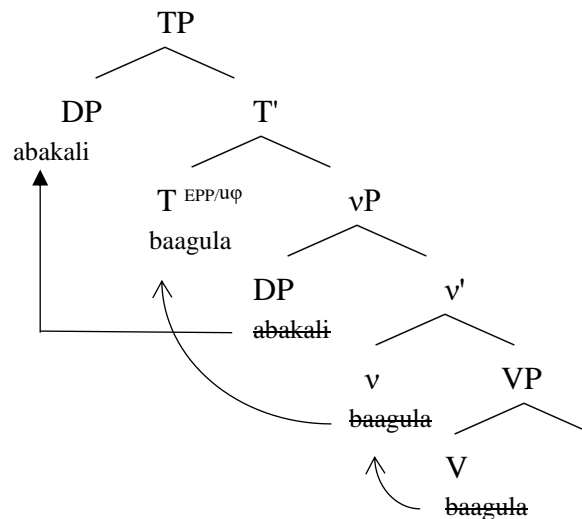
abakali	*(ba)-[a]-gul-a	eritunda
woman.2	2SM-T-buy-FV	fruit.5

‘The woman bought a fruit.’

[Baker 2003: 112]

As can be seen from the example (39) the verb *baagula* obligatorily agrees with the preverbal subject in noun class, which is a typical behavior for a Bantu language. Based on the discussion above, the representation for the sentence in (39) would be as follows:

(40)



The verb *baagula* in T has uninterpretable ϕ -features as well as an EPP-feature. T then probes to find a proper goal in its c-command domain vP. The subject DP values T's ϕ -features while the EPP-feature on T attracts the agreeing DP into Spec-TP. Therefore, under this analysis, the default agreement in Bantu is considered to be the result of T not having ϕ -features nor an EPP-feature. T is then prefixed by a default SM (for example *ku-* in Zulu or *ha-* in Kinyarwanda), as required by the morphology (see Baker 2003, Collins 2004, Carstens 2005, Ngokoba 2016). Baker (2008) proposes a slightly different but related argument. He proposes a parameter that governs agreement in natural languages which he calls The Direction of Agreement Parameter, which is postulated as follows adopted from Baker (2008: 215):

(41) The Direction of Agreement Parameter

(i) F agrees with DP/NP only if DP/NP asymmetrically c-commands F, or

- (ii) F agrees with DP/NP only if F c-commands DP/NP, or
- (iii) F agrees with DP/NP only if F c-commands DP/NP or vice versa.

Therefore, for Baker (2008) the verb in T agrees with the subject, if the subject asymmetrically c-commands T, or T c-commands the subject or vice versa. Baker claims that Bantu agreement phenomena emerge as a result of the third setting of the parameter in (41) being active in Bantu. Baker argues, that in Bantu agreement is upward, meaning that T agrees with the element c-commanding it (Baker 2008). This also explains why T in Bantu agrees with a pre-verbal locative in a locative inversion.

However, while this analysis may account for languages like Zulu and Kinyarwanda, it cannot explain the agreement properties of Bantu languages like Makhuwa. In Makhuwa, as we saw earlier, the verb bears agreement with the subject, regardless of whether this subject has moved to Spec-TP or stays in-situ as Spec-vP:

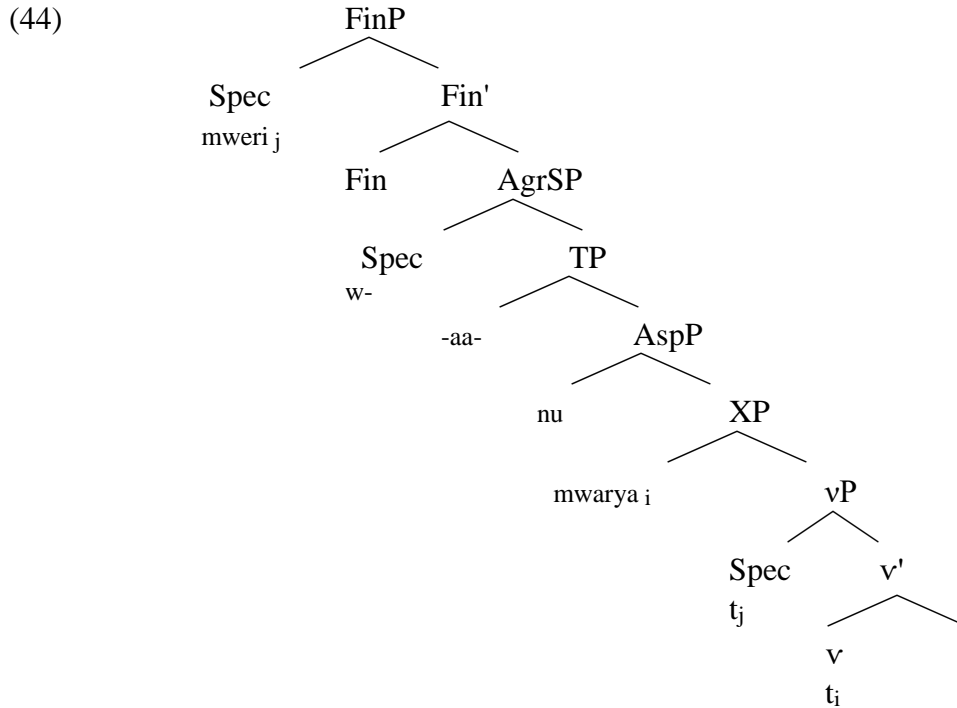
- (42) ni-hoó-wá n-láikha
 5SM-PERF.DISJ-come 5-angel
 ‘there came an angel.’

[Van der Wal 2012: 205]

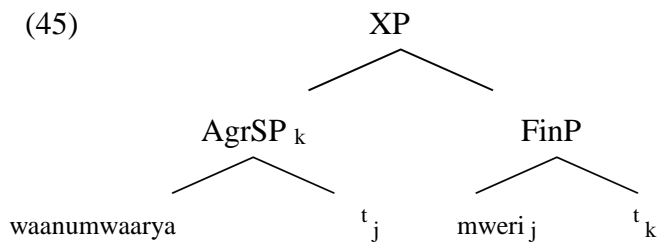
Therefore, at first glance, it seems that languages like Makhuwa challenge the EPP analysis to account for agreement. If the subject in (42) is still located in Spec-vP, then the example contradicts the claim that agreement in Bantu is directly correlated with movement. However, according to Van der Wal (2009, 2012), agreeing post-verbal subjects in Makhuwa have actually moved out of vP to a higher position she calls FinP where Agree is established with the verb in AgrsP, but she argues that in Makhuwa, the whole verbal complex has moved over the subject to an even higher position in a subsequent step. Consider the following Makhuwa sentence from Van der Wal (2012: 225):

- (43) waa-nú-mwááryá mweéri.
 3SM.PST-PERS-shine 3.moon
 ‘The moon was shining.’

According to Van der Wal, the sentence in (43) is built from the structure below:



According to Van der Wal, the subject *mweéri* first moves from its base-generated position in Spec-vP to a higher position Spec-FinP. Subsequently, the whole AgrSP, which includes the verb and inflectional material, is then moved further up to a position on top of FinP that Van der Wal (2012) calls XP, leaving the subject in a post-verbal position:



It appears then, that agreeing inversions in Makhuwa are consistent with the analysis provided for the agreement pattern noted for the other Bantu languages discussed above. Particularly, Move and Agree are also related in Makhuwa, as an agreeing post-verbal subject has indeed moved out of vP, according to Van der Wal's analysis. In other words, the EPP-feature seems to be associated with ϕ -features in Makhuwa as well, which is satisfied by the movement of the logical subject to

a higher position. However, unlike Zulu and Kinyarwanda, Makhuwa appears to allow for an extra internal-Merge operation in which the verbal complex AgrSP is moved to a position higher than the subject.

3.3.2. Spec-Head agreement

Based on Chomsky (1986a), Kinyalolo (1991) discusses agreement in Kilega from a Spec-Head relation perspective, in which features of a specifier of a functional projection XP are shared with the head of the functional head X. Kinyalolo bases his analysis on the fact that in Kilega, when a wh-phrase appears preverbally, the verbs show agreement with the wh-particle (46). However, when the wh-particle appears in-situ (47), the verb shows agreement with the preverbal subject. Consider the following examples:

- (46) bikí bi-á-kás-íl-é bábo bíkulu mwámí mu-mwílo?
 8what 8RM-A-give-IL-FV 2that 2woman 1chief 18-3village
 ‘What did those women give the chief in the village?’
 [Kinyalolo 1991: 21]

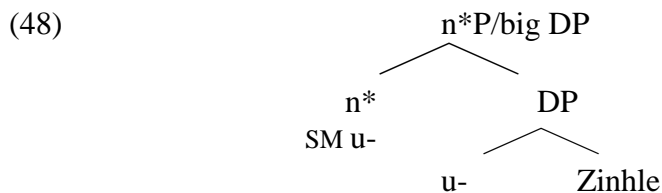
- (47) bábo bíkulu b-á-kás-íl-é mwámí bikí mu-mwílo?
 2that 2woman 2SM-A-give-PERF-FV 1chief 8what 18-3village
 ‘What did those women give the chief in the village?’
 [Kinyalolo 1991: 21]

According to Kinyalolo (1991), the verb *biákásílé* in (45) has moved from V to T and then moved further up to head the functional projection CP, in which the wh-phrase *biki* is the specifier of CP. Under this analysis, the verb bears agreement with the preverbal wh-phrase and inherits the features of the operator occupying Spec-CP.

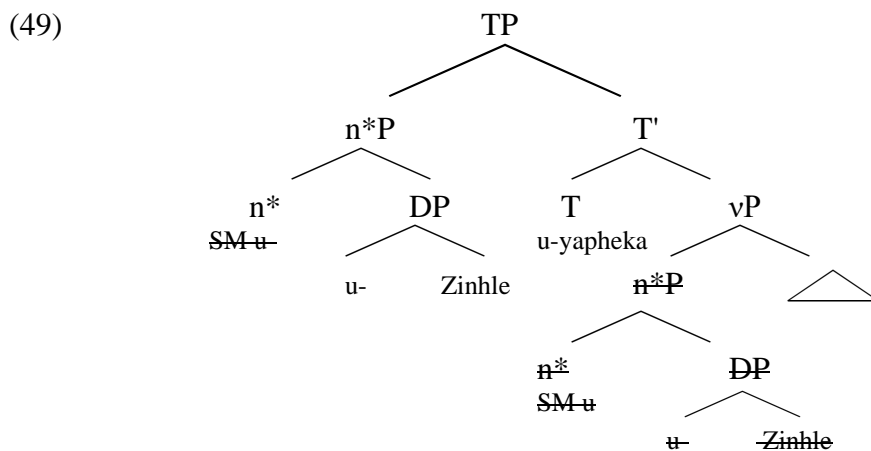
Kinyalolo’s (1991) Spec-Head agreement analysis offers a straightforward account for the VS-SV agreement asymmetry. When a subject moves to Spec-TP and the verb to T, they are in Spec-head relation, and agreement can be realized. In contrast, post-verbal subjects cannot agree with the verb in T, since the subject has stayed inside the vP as its specifier (see Kinyalolo 1991 for more discussion).

3.3.3. The subject marker as an antifocus marker

Zeller (2008a) presents an analysis of default agreement in Bantu in the VS word order. He assumes that the SM and a preverbal subject DP start out as one constituent and split in the derivation. According to Zeller, the SM is a pronominal clitic rather than a realization of agreement between T and the subject DP in Spec-TP. He suggests that the subject DP and the SM form a projection he names n^*P which is headed by the SM, which takes the subject as its complement, forming what is also known as a *big DP*. Thus, the subject *uZinhle* in a sentence like (31a) above (*uZinhle uyapheka*, ‘Zinhle is cooking’) would have merged first with the SM *u-* before moving to Spec-TP:



Assuming that the subject is base-generated in Spec-vP, the projection n^*P is according to Zeller merged inside the vP. This n^*P moves to Spec-TP deriving the SV word order; the subject will appear in its landing position Spec-TP and the SM is then incorporated into T where it combines with the verb:

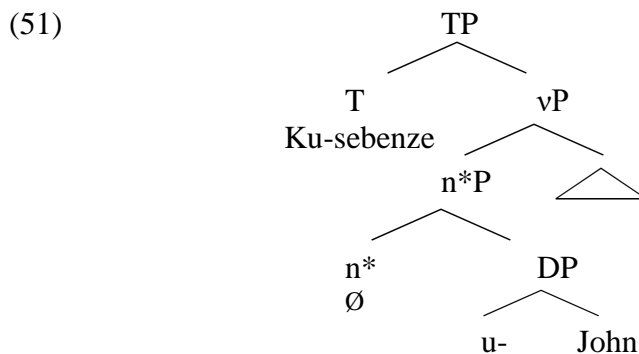


However, according to Zeller, not all subjects are n*Ps headed by a SM. There are subjects which are headed by a null n* head. In this case, the n*P does not move to Spec-TP and stays in-situ, deriving the VS word order with a default SM on the verb. Consider the following sentence:

- (50) ku-sebenz-e uJohn
 EXPL17-work-PST John1
 ‘John worked.’

[Zeller 2008a: 229]

According to Zeller’s analysis, the subject of the sentence in (50) is not headed by the SM. The subject then does not move and stays in-situ inside the vP. The expletive marker *ku-* is then inserted at PF to attach to the verb in T (Zeller 2008a: 229):



The question arises why subjects which move to Spec-TP are n*Ps with n* realized by a SM, while in situ subjects are n*Ps with null heads.

Zeller answers this question by arguing that, when n* is realized by the SM in Bantu, it marks the subject as [-Focus]. Since the vP is the domain for focused elements in Bantu, an n*P with a head realized by the SM cannot remain inside the vP and must move to Spec-TP. The reason for this movement is motivated by the fact that T in Bantu bears an uninterpretable [+Focus]-feature which needs to probe to seek a possible goal (the focus of the sentence) in T’s c-command domain i.e. vP. However, the subject inside the vP blocks this, since the subject is marked [-Focus] which intervenes between the probe and its matching goal (which can be a focused object, for example). Therefore, the subject has to be moved in order for Agree to take place between the uninterpretable [+Focus]-feature of T and the interpretable [+Focus]-feature of a focused constituent inside the vP.

3.4. Agreement with coordinated DPs

(52) nama-t Sarah wa Khalid (SA)
slept-3rd.F.S Sarah and Khalid
'Sarah and Khalid slept/are sleeping.'

[ABC 2010: 85]

(54) *nama Sarah wa Khalid (SA)
slept-3rd.M.S Sarah.F and Khalid.M

55

(55) nam-a al-awlad-u wa al-rijal-u (SA)
 slept-3rd.M.S the-boys-NOM and the-men-NOM
 ‘The boys and the men slept/are sleeping.’

(56) nam-at al-banat-u wa al-niswa-tu (SA)
 slept-3rd.F.S the-girls-NOM and the-women-NOM
 ‘The girls and the women slept/are sleeping.’

In the SV(O) word order on the other hand, the verb shows no agreement with a particular conjunct. Rather, it shows number agreement (plural (58) or dual agreement as in (57)) and person agreement, and a default masculine gender when the conjunct DPs are from different genders:

(57) Zayd-un wa Hind-u ja-a’a (SA)
 Zayd-NOM and Hind-NOM came-3rd.D
 ‘Zayd and Hind came.’

[Soltan 2007: 80]

(58) Zaid w Hind ej-u (JA)
 Zaid and Hind came-3rd.S.P
 ‘Zayd and Hind came.’

When the conjoined DPs are both singular feminine, the verb agrees with the conjoined DPs in gender, person and dual number:

(59) Hind-un wa al-taliba-t-u nama-ta (SA)
 Hind-NOM and the-student-F-NOM slept-3rd.D.F
 ‘Hind and the female student slept/ are sleeping.’

slept.3rd.M.P Ali and Khalid in the-house
'Ali and Khalid slept in the house.'

Table 3-1 First conjunct agreement patterns in Arabic dialects

Interestingly, first conjunct agreement is also attested in the VS-constructions in some Bantu languages. Marten (2000) presents data from Swahili in which the verb agrees with the post-verbal first conjunct DP. Consider the following Swahili example from Marten (2000):

[Marten 2000: 88]

57

with two singular conjoined DPs in the post-verbal position. This can be seen from the following example:

- (62) wa-li-kuja Haroub na Naila
 SM2-PST-come Haroub1 and Naila1
 ‘Haroub and Naila came.’

[Marten 2000: 88]

In (62), the verb shows plural agreement of class 2 with two singular conjoined DPs and does not agree with the first conjunct DP. The same happens to modern Arabic dialects like JA, as shown in (60) above. However, in SA, the verb must agree with the first conjunct DP in the post-verbal position in the same way it agrees with a non-conjoint post-verbal DP i.e. in person and gender but not in number (see section 3.2).

In Bantu SV-constructions on the other hand, the verb shows plural agreement with a pre-verbal conjoined noun phrases if the two conjoined DPs are both singular class 1 DPs. Consider the following examples:

- (63) Zulu
 udokotela no-nesi ba-ngen-a e-sibhedlela.
 doctor1a and-nurse1a SM2-enter-FV LOC-hospital7
 ‘The doctor and the nurse go into the hospital.’

[Zeller 2008a: 233]

- (64) Swahili
 mwalimu na mwanafunzi wake wa-li-kuja.
 teacher1 and student1 his SM2-PST-come
 ‘The teacher and his student came.’

[Marten 2008: 80]

In (63) and (64) respectively, the conjoined DPs are class 1 nouns (which is singular in Bantu), and the subject marker SM on the verb appears in the plural form of class 2 (*ba* in Zulu and *wa* in Swahili). This agreement, according to Marten (2000), is characterized as "morphological agreement" (see Marten 2000 on Swahili).

However, in contrast to Arabic, in the case of pre-verbal conjoined DPs in Swahili, the verb can also agree with the second conjunct DP. This can be seen from the following example:

(65) Swahili

Mguu wa meza na kiti ki-mevunjik-a.
 leg3 of table7 and chair7 SM7-be.broken-FV
 'The leg of the table and the chair are broken.'

[Marten 2008: 85]

The facts presented above about agreement with conjoined DPs in Bantu point to another difference with regard to the facts presented above in Arabic. While in SA agreement with the first conjunct is obligatory in the VS-constructions (in gender and in person), it is by no means obligatory in modern Arabic dialects like JA. In Arabic modern dialects as we saw earlier, the verb can either agree with the first conjunct (full agreement) or show plural agreement with the two conjoint singular NPs. This was also attested in Bantu (as presented from Swahili), which shows a similar pattern with the Arabic data.

In the SV-constructions however, there seems to be a difference between Bantu and Arabic dialects. In Arabic (SA and the modern dialects) the verb obligatory shows plural agreement with the pre-verbal conjoined DPs. In a Bantu language like Swahili, on the other hand, the verb can also agree in noun class with the second conjunct DP.

The data presented above illustrate that agreement with conjoined NPs is also sensitive to the SV/VS word order alternation in Bantu and Arabic. Nevertheless, unlike the agreement patterns discussed in sections (3.2. and 3.3.), Arabic dialects show a slightly different pattern of agreement with conjoined DPs than the pattern found in Bantu, particularly in the SV-constructions. With regard to first conjunct agreement in the VS-constructions, it appears that some Bantu languages

(as represented by Swahili) and Arabic dialects share some properties which may have a unified explanation.

3.5. Unifying the analysis?

In the following subsections, I examine to what extent the different analyses that have been proposed for either the Arabic or Bantu agreement and word order facts can be applied to the respective other language group. Specifically, I will test whether Van der Wal's (2009, 2012) analysis of full agreement in VS-construction in Makhuwa can be applied to the modern Arabic dialects (section 3.5.1), whether Soltan's (2007) analysis of SV word order in Arabic can be applied to Bantu (section 3.5.2), and whether the idea of an agreement directionality parameter in the style of Collins (2004) and Baker (2008) can be put to use for Arabic (section 3.5.3).

3.5.1. Movement of the verbal complex

It appears that Modern dialects of Arabic like JA and MA act in the same manner as Makhuwa as far as subject-verb agreement is concerned, in the sense that agreement is established regardless of the position of the subject (pre- or post-verbally). However, as we saw earlier, Van der Wal (2009, 2012) argues that in languages like Makhuwa, the verbal complex including the verb and agreement material moves into a position higher than the subject. The question is then, do Arabic dialects behave the same as Makhuwa?

Van der Wal (2012) motivates for the movement of the verbal complex into a position higher than the subject from the fact that VOS constructions are grammatical in relative clauses in Makhuwa. Consider the following sentence:

- (66) e-m-mor-alé Puráhímu ekanetá
 9SM-1OM-fall-PERF.REL 1.Ibrahim 9.pen.PL
 'Ibrahim's pen fell.' Literally . 'what fell on/from Ibrahim is a/the pen.'

[Van der Wal 2012: 225]

As can be seen from (66), the verb *emmorale* precedes the subject and the object. Van der Wal (2012) takes these constructions as evidence for the movement of the verbal complex into a sentence initial position higher than the subject.

If we assume that the same movement happens in modern Arabic dialects, then we would expect the same word order to be grammatical in JA or MA. That this seems indeed to be the case can be seen from the grammaticality of the sentence in (67) from JA:

- (67) akal tuffahah Ali (VOS)
 ate.3rd.M.S apple Ali
 ‘Ali ate an apple.’

It seems that VOS constructions are also grammatical in the modern dialects of Arabic. The hypothesis is therefore that full agreement in the modern Arabic dialects is the result of the subject moving to Spec-TP, where it triggers full agreement, followed by verbal complex (AgrsP and the direct object) to a higher position.

However, if we adopt Van der Wal’s analysis, we would not expect the VOS order to be possible in SA, where the post-verbal subject does not agree with the verb in all features. But VOS constructions exist in SA:

- (68) daxal-a makaatib-a-hum haa?ulaa?i r-rijaal-u
 entered-3rd.M.S. office.P-ACC-their these the-men-NOM
 ‘These men have entered their offices.’

[Fassi Fehri 1993: 47]

Interestingly, as can be seen from (68), VOS word order is possible in SA, but the verb still does not show number agreement with the post-verbal subject: it has default values [third-person singular], while the subject *rijaalu* ‘men’ is plural.

It is possible that VS-constructions in JA and MA are derived in the same way as agreeing VS-constructions in Makhuwa; the verbal complex moves to a higher position than the subject in Spec-TP. Unlike SA and other Bantu languages like Zulu, the verb moves from V to T, leaving the subject in situ in Spec-vP. The same can hold for the VOS-constructions, if we assume that the verbal complex including the verb (with agreement material) and the internal argument (the object) have moved to a higher position as Van der Wal (2012) argues for the Makhuwa can also be the

right derivation for VOS in Arabic dialects like JA and MA. However, in SA this is not true, as we saw in (68), the verb still does not agree with the post-verbal subject in all ϕ -feature.

With this said, we can conclude that Van der Wal's (2012) analysis for Makhuwa cannot be extended to the facts found in Arabic dialects.

3.5.2. Agreement with a null subject *pro*

As we saw earlier for Bantu non-agreeing inversions, various authors (such as Baker 2003, Collins 2004, Carstens 2005) assume that T in inversion constructions has no ϕ -features, and since the EPP-feature is dependent on ϕ -features, or is a sub-feature of ϕ -features (Carstens 2005), there is no agreement between the subject and verb when the subject has to stay inside the vP. This analysis is in some respects comparable to Soltan's analysis of SA VS word order. Soltan (2007) assumes that T in SA VS-constructions has no EPP-feature; therefore, subjects do not move. While this situation leads to the total absence of agreement in Bantu, there is still partial (gender) agreement in SA, due to the gender-feature of T which probes independently.

However, for the SV word order, Soltan assumes the existence of a null pronoun, i.e. *pro*, which occupies Spec-vP and is coindexed with the pre-verbal subject in Spec-TP. This analysis is different from the standard account of SV word order in Bantu, according to which the subject moves to Spec-TP. But is it possible that Soltan's analysis can be carried over to Bantu SV word order?

Soltan (2007) motivates this idea that pre-verbal subjects are linked to a *pro*-subject in Spec-vP by the fact that in Arabic (both in SA and in modern dialects) verbs agree with a pronominal subject, regardless of whether it appears pre-verbally or post-verbally, and whether this pronoun is overt or null.

(69) (hum-u) nam-u fi al-beet-e (SA)
 They.3rd.M.P-NOM slept-3rd.M.P in the-house-GEN
 'They (the men) slept/ have slept in the house.'

(70) nam-u (hum-u) fi al-beet-e (SA)
 slept.3rd.M.P they.3rd.M.P-NOM in the-house-GEN
 'They (the men) slept/have slept in the house.'

- (71) nam-n (hun) bi al-beet (JA)
slept-3rd.F.P they.3rd.F.P in the-house
‘They (the women) slept/have slept in the house.’

Based on the examples in (69-71), Soltan (2007) stipulates that full agreement in Arabic is an indication of the existence of a null pro, which has to be identified based on the *pro identification requirement* (Rizzi 1982, McCloskey 1986).

However, while this account may work for Arabic, it cannot be true for Bantu. In Bantu, agreement with pronominal subjects is also sensitive to word order. Bantu shows full agreement with null pronouns (72), which are unarguably always in Spec-TP. However, when the pronoun is overt, only the pre-verbal pronoun can agree with the verb (73), while post-verbal pronominal subjects show no agreement:

- (72) a-teets-e inyama. (Kinyarwanda)
SM1-cook-Asp meat₉
‘(S)he is cooking meat.’
[Zeller 2008b: 407]

- (73) wena u-sebenz-ile (Zulu)
PRN.you2 SM2-work-PST
‘You worked.’

- (74) a. ku-sebenz-e wena (Zulu)
17SM-work-PST PRN.2nd.S
‘You worked.’

- b. *u-sebenz-e wena
SM2-work-PST PRN.you2

This indicates that stipulating the existence of a null pronoun in Spec-vP in the SV-structure of Bantu would not explain the correlation with full agreement, since agreement with Bantu pronouns, unlike Arabic pronouns, is sensitive to word order in the same way as agreement with full DPs subjects. Soltan's (2007) analysis does not offer a unified explanation for the agreement facts found in Arabic and Bantu.

3.5.3. Agreement in Arabic is upward/downward

With this said, it seems that none of the above-mentioned analyses can have an explanation for the agreement facts presented in this chapter for both Bantu and Arabic dialects. However, it is apparent that the EPP-feature plays a major role in Bantu and Arabic dialects with respect to the agreement configuration. One possibility is based on Baker's (2008) proposal (section 3.3.1), under which agreement in Bantu is *upward*, since agreeing subjects in Bantu c-command verbs i.e. they are always in a structurally higher position. This idea could also be applied to SA's SV(O) constructions. As seen earlier, full agreement with the subject is only licensed when the subject DP in SA is in the pre-verbal position, which is higher in the structure than the verb. Since the upward-downward agreement dichotomy is subject to parametric variation between languages (agreement in one language might be upward, while it may be downward in another; Baker 2008), agreement in Arabic modern dialects like JA and MA could then be said to be downward, and therefore, as shown before, post-verbal subjects fully agree with the verb that c-commands them in VS(O) constructions. However, one problem that remains are VS-constructions with pronominal subjects in SA: an "upward"-setting of Baker's directionality of agreement-parameter for SA still does not explain the fact that full agreement with pronominal subjects is obligatory in SA, even when they appear post-verbally.

To conclude, it is apparent that the theories discussed in this chapter cannot be applied to agreement phenomena in both Arabic and Bantu. While these two language families appear to have superficially similar grammatical parallels on the surface, however, as far as agreement is concerned, a unified theory for both Bantu and Arabic is still not established.

In the next chapter, I will discuss the relationship between SV/VS word order in these two language families and another aspect of grammar, namely, Information Structure.

4. WORD ORDER AND INFORMATION STRUCTURE

So far, I have discussed the SV/VS word order alternation from a grammatical and derivational perspective. However, the variation of word order can be extended to other aspects of the grammar, namely, Information Structure. There is robust evidence that the SV and VS word orders are semantically different. In this chapter, I will not discuss the underlying structures that derive SV/VS word orders, instead, I will discuss the relationship between this alternation and Information Structure (IS) in Arabic dialects and Bantu. The main goal of this chapter is to illustrate how the pragmatic component of sentences is derived from the syntactic configurations, and how concepts of information structure like Topic and Focus are interpreted from the position of the constituents in the sentence.

4.1. SV(O) in Arabic as Topic-Comment structure

Lambrecht (1994: 118) defines Topic as "...the thing which the proposition expressed by the sentence is about". It is different from the topic of the conversation. For example, in a conversation about Wall Street, the topic is Wall Street itself, however, in a sentence like (*the gold price is up today*) it is *the gold price* that is the Topic of this sentence.

Although the literature on the information structure and the SV/VS word order variation in Arabic is scarce, Arabic SV(O) word order has always been analyzed as a topic-comment structure consisting of a pre-verbal subject (the topic) followed by a predicate functioning as a comment (new information) about the DP (Fassi Fehri 1993, Soltan 2007). Even for the old traditional Arabic grammarians who argue that the SV(O) is not a genuine structure in Arabic, sentences that are DP-initial are called *jumal esmeyeh* 'nominal sentences', which consist of a preverbal DP referred to as *mobtadaà* 'topic', whereas the following clause is called *khavar* 'comment' (see Bakir 1979, Moutaouakil 1989, Soltan 2007, Ford 2009, Fakih 2016).

Consider the following examples in which the underlined pre-verbal subject is considered the topic:

- | | | | |
|---------------------------|---------------------------|----------------|------------|
| (1) <u>al-walad-u</u> | akal-a | al-jazarat-a | (SVO) (SA) |
| the-boy-NOM | ate.3 rd . M.S | the-carrot.ACC | |
| 'The boy ate the carrot.' | | | |

(2) al-awalad-u nam-u (SV) (SA)
 the-boys-NOM slept.3rd.M.P
 ‘The boys slept/ are sleeping.’

(3) le-wlad klaw (SV) (MA)
 the-boys ate.3rd.M.P
 ‘The boys ate.’

In (1) for example, the preverbal subject *al-waladu* ‘the boy’ is considered to be the topic of the sentence, in that the preverbal subject *al-waladu* is the presupposed information. Whereas the predicate *akala al-jazarata* ‘ate the carrot’ is the comment made about the pre-verbal subject *al-waladu*, as (1) can be the answer to a question like *what did the boy do?*

Another topic-comment construction with pre-verbal subjects is the one formed with the particles *amma...fa* in SA. The element *amma* ‘as for²²’ precedes the pre-verbal subject to give the subject a topical reading, and the marker *fa*²³ is prefixed to the comment-like property of the verbal clause that follows, marking the VP complex a comment reading:

(4) amma al-walad-u fa-akal-a al-jazara-ta (SVO) (SA)
 as for the-boy-NOM ?-ate.3rd.M.S the-carrot-ACC
 ‘As for the boy, he ate the carrot.’

The *amma...fa* constructions have no grammatical function besides marking a topic-comment reading on the sentence (Ford 2009). It is worth noting that the *amma...fa* particles are only grammatical in the SV(O) word order. This can be seen from the ungrammaticality of the VS(O) sentence in (5):

²² This gloss is as used by Ford (2013).

²³ I could not find a gloss for this particle. However, the particle has no grammatical function (as far as I know) on the verb other than to mark the constituent it attaches to as the comment. It can be attached to nouns as well as verbs:

(i) amma al-jazart-u fa-Khalid-un akala-ha
 as for the-carrot-NOM ?-Khalid-NOM ate.3rd.M.S-her
 ‘As for the carrot, Khalid has eaten/ate it.’

(5) *fa-akal-a	amma	al-walad-u	(SA)
ate.3 rd .M.S	as for	the-boy-NOM	

The fact that *amma...fa* particles which mark a topic-comment reading on the sentence can only be used in the SV(O) word order to mark a topical reading on the subject, support the claim that the SV(O) word order is used when the subject has a topic interpretation.

However, not all pre-verbal subjects are topics. Fassi Fehri (1993) argues that while pre-verbal subjects can be indefinite (7), topics on the other hand must be definite. However, he argues that pre-verbal indefinite subjects still have to be specific or generic, but can never be purely non-specific indefinites. In fact, Soltan (2007) and ABC (2010) argue that in Arabic, indefinite subjects cannot appear pre-verbally at all (however see Fassi Fehri 1993). This can be seen from the ungrammaticality of (6) and (7):

(6) *walad-un	kasar-a	l-baab-a	(SVO) (SA)
boy-NOM	broke-3 rd .M.S	the-door-ACC	
[Soltan 2007: 51]			

(7) *wəld	ja	(SV) (MA)
boy	came.3 rd .M.S	
[ABC 2010: 62]		

Arabic dialects allow for verbless sentences (sentences without an overt copular verb). Here the relevant sentence consists of a subject and a non-verbal predicate (e.g. an adjective as in (8) or a locative phrase as in (9)). Consider the following examples:

(8) <u>Zaid-un</u>	marid-un	(SA)
Zaid-NOM	sick-NOM	
‘Zaid is ill.’		

[Moutaouakil 1989: 86]

- (9) fi al-maktab-i Zaid-un muntazir-un (SA)
 in the-office-GEN Zaid-NOM waiting-NOM
 ‘Zaid is waiting in the office.’

[Moutaouakil 1989: 85]

According to Moutaouakil (1989), a topic reading is available for both the subject and the predicate. If the subject precedes the predicate as in (8) it is the subject that is marked as topic. However, when the prepositional phrase precedes the subject as in (9) it is the prepositional phrase that has a topic reading. These constructions are also governed by the definiteness constraint. Therefore, when an indefinite nominal predicate appears before the subject, no topic reading is available for the predicate and since the predicate is indefinite the sentences would be ruled out as ungrammatical. This can be seen from the ungrammaticality of (10):

- (10) *marid-un Zaid-un
 sick-NOM Zaid-NOM
 ‘Zaid is sick.’

The fact that indefinite subjects cannot appear pre-verbally in Arabic supports the claim that the pre-verbal position is the devoted position for topics in Arabic. However, as we will see in the next section, some Arabic dialects can host focused subjects in the SV(O) word order.

4.2. Subject focus in SV(O) word order.

Subject focus in Arabic is not discussed in the literature on information structure of Arabic that I have come across. Most of the literature on focus constructions in Arabic discusses object focus and sentential focus. In this section, I will provide some tests regarding the possibility of subject focus in Arabic.

Although subjects in the SV(O) word order in Arabic are usually considered to be topics (see section 4.1 above), subjects in constructions with SV(O) word order can have focus readings as well. In the literature, constituent questions and their answers are often used as tests for focus, given the assumption that a *wh*-phrase marks the focus of a sentence, and so does the respective constituent in the relevant answer (Sabel 2000, Sabel and Zeller 2006, Zeller 2008a, Buell 2009).

In my variety of Arabic (JA), an answer to a subject wh-question can have SV(O) word order. Consider the following examples:

- (11) meen akal tuffah? (JA)
 who ate.3rd.M.S apple
 ‘Who ate apples?’

In (11), the focused wh-phrase *meen* is in the pre-verbal position. Correspondingly, an answer to the question above can be the SV(O) sentence in (12) focusing the pre-verbal subject *Ali* printed in **bold**:

- (12) **Ali** akal tuffah (JA)
 Ali ate.3rd.M.S apples
 ‘Ali ate apples.’

As a matter of fact, an answer to the question posed in (11) in the VS(O) word order would be an infelicitous answer (see section 4.3):

- (13) akal Ali tuffaha (JA)
 ate.3rd.M.S Ali apple
 ‘Ali ate an apple.’

Rather, (13) can be a felicitous answer to a question such as "What happened?" (14), marking the whole sentence as all-new information. (13) can also express a focus reading on the in-situ object following a question like "What did Ali eat?" (see section 4.3). Nevertheless, it cannot have a subject focus.

- (14) sho ssar? (JA)
 what happened
 ‘What happened?’

As already noted, an answer to the question in (14) can be given with VS(O) word order as in (13) or (15), which express an all-new information interpretation on the sentence. In contrast, (16), with the SV(O) word order, is an infelicitous answer:

(15) fat harami be- beet-na (JA)
 entered.3rd.M.S thief in- house-ours
 ‘A thief entered our house.’

(16) harami fat be- beet-na (JA)
 thief entered.3rd. M.S in- house-ours
 ‘A thief entered our house.’

The impossibility of (16) as an answer to the question in (14) illustrates that the SV(O) word order in JA either produces a topic or a focus reading and cannot be used to express all-new focus. The SV(O) answer in (16) is infelicitous because an answer to a question like *What happened?* is all new information and neither the subject nor the object is topicalized.

The ability of pre-verbal subjects to be focused in JA can also be extended to contrastive subject focus, where the focused subject again appears pre-verbally in JA. This can be seen from the following examples:

(17) meen nam Ali aw Layla? (JA)
 who slept Ali or Layla?
 ‘Who slept/is sleeping? Ali? Or Layla?’

And the answer to this question typically exhibits SV(O) word order as in (18):

(18) **Layla** nam-at mesh Ali (JA)
 Layla slept-3rd.F.S not Ali
 ‘It is Layla who slept/is sleeping not Ali.’

The possibility for focused subjects to appear pre-verbally has also been noted for SA. Ford (2009) argues that subjects in SA can appear pre-verbally in an answer to a wh-subject question. Consider the following question-answer pair in (19):

- (19) a.man əshtr-a kitab-an? (SA)
 who bought-3rd.S.M book-ACC?
 ‘Who bought a book?’

- b. **al-talib-u** əshtr-a kitab-an (SVO) (SA)
 the-student-NOM bought-3rd.S.M book-ACC
 ‘It was the student who bought a book.’

Ford however, does not provide any further discussion of this matter. He notes that traditional Arabic grammarians never allowed for the SVO-constructions to be valid in SA at all, therefore rejecting the idea of having a pre-verbal subject.

Another piece of evidence for the possible focus reading of the pre-verbal subject comes from the focus particle *bas* (‘only’)²⁴ in JA. This particle expresses a focus reading on the constituent it modifies. When the particle modifies the subject, the SV(O) word order is used. This can be seen from the example below:

- (20) **bas** **Ali** eja
 only Ali came.3rd.M.S
 ‘Only **Ali** came.’

Notice, *bas* can follow or precede the constituent it modifies. Therefore, it can appear after or before the subject, nevertheless, the word order is still SV(O).

- (21) **Ali** **bas** eja
 Ali only came.3rd.M.S
 ‘Only Ali came.’

²⁴ The word *bas* can also mean ‘as soon as’ in JA, but I am using it here with the meaning ‘only’.

Using the VS(O) word order in *bas*-constructions is unacceptable. This can be seen from the ungrammaticality of the sentences in (22a, b):²⁵

(22) a. **bas* *eja* Ali
 only came.3rd.M.S Ali
 Intended: ‘Only Ali came.’

 b. **eja* *bas* Ali
 cam.3rd.M.S only Ali
 Intended: ‘Only Ali came.’

The focus of subjects in Arabic is hardly discussed in the literature on the basis of SV-VS word order alternation. Rather, the literature focusses on object focus and sentence focus. Furthermore, most Arabic linguists assume that Arabic focal interpretation is encoded via prosody (see Yeou, Embarki, and Al-Maqtari 2007, Alzaidi 2014).

What concerns my work here is the fact that the SV word order in Arabic dialects (as represented by JA) can have a focus reading on the subject which is also the case in SA as well. Not only that, but the SV word order is even the unmarked word order for subject focus. As I will show in section 4.5, this is a significant difference between Arabic and Bantu languages.

4.3. VS-constructions as focus constructions in Arabic.

There is a consensus that the unmarked VS(O) word order in Arabic is the default word order which yields athetic interpretation (Soltan 2007, Aoun, ABC 2010, Ford 2009). The VS word

²⁵ This sentence in (22a) is grammatical if *bas* is used here to mean ‘as soon as’. Note that *bas* can also appear in clause-final position in an SV-construction modifying the subject. However, in this case, a pause is required before *bas*:

(i) el-walad *eja* [pause] *bas*
 the-boy came.3rd.M.S only
 ‘Only the boy came.’

printed in **bold**:

- (VSO) (SA)

(VSO) (Lebanese Arabic)

(VSO) (SA)

- (VSO) (JA)

object has been fronted, deriving an OVS word order. Consider the following examples:

(27) **shay-an** sharib-a zayd-un (OVS) (SA)
 tea.ACC drank-3rd.M.S Zayd-NOM
 ‘It was tea that Zayd drank.’

[ABC 2010: 202]

(28) **tufahat-an** akal-a Ali (OVS) (SA)
 apple-ACC ate-3rd.M.S Ali
 ‘It was an apple that Ali ate.’

According to Moutaouakil (1989), the two constructions are different: while in-situ focus constructions like the ones in (23-26) either express presentational focus or can be used as answers to wh-object questions, the fronted object focus constructions in (27) and (28) express contrastive focus on the object (see Kiss 1998 for a discussion and distinction between information focus and contrastive focus). Hence, only (25) can be a felicitous answer to the question in (29):

(29) matha akal-a Khalid-un? (SA)
 what ate-3rd.M.S Khalid-NOM?
 ‘What did Khalid eat?’

On the other hand, the contrastive focus reading of (28) can be highlighted by the negative continuation of the sentence as in (30):

(30) **tufahat-an** akal-a Ali la burtugalah (SA) (OVS)
 apple-ACC ate-3rd.M.S Ali not an orange
 ‘It was an apple that Ali ate not an orange.’

Notice that OVS word order can also be used in order to topicalize an object in Arabic. Consider the following sentence:

(31) al-kitab-u al-wald-u eshtara-hu (SA)
 the-book-NOM the-boy-NOM bought.3rd.M.S-him
 ‘The book, the boy bought it.’

(32) al-tuffahat-u Khalid-un akala-ha (SA)
 the-apple-NOM Khalid-NOM ate3rd.M.S-her
 ‘The apple, Khalid ate it.’

The topicalized objects in OVS-constructions such as (31) and (32) differ from the fronted focused objects in OVS-constructions such as (27) and (28) in many ways: first, the topicalized object has nominative case while the fronted focused object in (28) has accusative case. Second, a pre-verbal topicalized object must be linked to a resumptive pronoun that is coindexed with it (*-hu* in (31) and *-ha* in (32)), but it is not possible with a pre-verbal focused object. Third, it was established earlier that topics in Arabic (including objects) must be definite, however, this is not the case with fronted focused objects, which can be indefinite, as (27) and (28) illustrate.

It is worth mentioning that Arabic does not allow *wh*-phrases to appear in object position. This condition seems to apply in both VS(O)/SV(O) word orders (33) and (34) respectively. Consider the following examples:

(33) *akal-a al-walad-u matha? (VS-wh) (SA)
 ate.3rd.M.S the-boy what?
 Intended: ‘What did the boy eat?’

(34) *el-walad akal sho? (SV-wh) (JA)
 the-boy ate-3rd.S.M what?
 Intended: ‘What did the boy eat?’

As can be seen from (33) and (34), placing a *wh*-phrase in object position leads to the ungrammaticality of the sentences in both SVO and VSO. The only possible place for *wh*-phrases

in Arabic is in the left periphery of the sentence preceding the verb and the subject, regardless of whether the wh-phrase is questioning the subject (35) or the object (36):²⁶

(35) **man** sharib-a shay-an?
 who drank-3rd.S.M tea-ACC?
 ‘Who drank tea?’

(36) **matha** sharib-a al-wald-u?
 what drank-3rd.S.M the-boy-NOM
 ‘What did the boy drink?’

In the following section I will discuss the relation between information structure and word order in Bantu. In contrast to Arabic, this correlation between the information structure and the syntactic position of subjects in Bantu is widely discussed in the literature.

4.4. SV-constructions in Bantu

As mentioned earlier, the unmarked word order of most Bantu languages is SV(O). The pre-verbal subject is often analyzed as a topic or non-focal; pre-verbal subjects in Bantu are usually never focused (Ndayiragije 1999, Zeller 2004, Sabel and Zeller 2006, Buell 2006, Zeller 2008a, van der Wal 2014, Carstens and Mletshe 2015). When the verb and the object function as the comment, the pre-verbal subject according to Van der Wal (2009: 5) may be underspecified as [-Focus], which means it is incompatible with a focus interpretation, without being necessarily interpreted as a topic. Zeller (2008a), argues that the pre-verbal subject is being marked as "antifocus" (see section 3.3.3 of this thesis. See also Ndayiragije 1999 on Kirundi).

²⁶ ABC (2010) show that in Lebanese Arabic (LA), wh-interrogative in LA can appear after the verb:

(i) sheft ayya mmasil b-l-mataám?
 Saw.2nd.M.S which actor in-the-restaurant
 ‘Which actor did you see in the restaurant?’

[ABC 2010: 128]

The fact that pre-verbal subjects in Bantu cannot be focused can be seen from the ungrammaticality of the sentences in (37-39) in which the pre-verbal subjects are focused by the focus particle *kuphela* ‘only’ in Zulu and *bonyíne* ‘only’ in Kinyarwanda:

(37) Zulu

*u-Sipho	kuphela	u-fun-a	i-qanda
AUG-1a.Sipho	only	1SM-want-FV	AUG-5.egg
‘Only Sipho wants an egg.’			

[Halpert and Zeller 2015: 12]

(38) *uJohn

	kuphela	u-fik-il-e
John 1a	only	SM1a-arrive-DIS-PST

[Zeller 2008: 240]

(39) Kinyarwanda

*Abáana	bonyíne	b-a-gii-ye
child2	only	SM-PST-go-Asp
‘Only the children left.’		

[Kimenyi 1980: 51]

Another piece of evidence comes from the fact that wh-phrases, which are inherently focused, cannot appear in the pre-verbal position in Bantu:

(40) Zulu

*ubani	u-fik-il-e?
who1a	SM1a-arrive-DIS-PST
‘who arrived?’	

[Sabel and Zeller 2006: 273]

(41) Kinyarwanda

*Ndé y-a-kó-ze?
who1 SM1-PST-work-Asp
'Who worked?'

[Zeller 2008a: 418]

The SV(O) word order however, can be used to express contrastive object focus (42a), and can also be used in a wh- object questions (42b) (see Ndayiragije 1999 for Kirundi, Zeller 2009 on Nguni). This is illustrated in (42) with examples from Northern Sotho:

(42) (Northern Sotho)

a. mokgalabje o nyak-a **ngaka.**
old.man1 SM1 look.for-FV doctor9
'The old man is looking for the doctor.'/ 'It is the doctor that the man is looking for.'

[Zerbian 2006a: 67]

b. mokgalabje o nyak-a **mang?**
old.man1 SM1 look.for-FV who1
'Who is the old man looking for?'

[Zerbian 2006a: 67]

The data in (42) illustrate an interesting contrast between Bantu and Arabic. The SA data from (23) above are repeated below as (43):

(43) Sharib-a zayd-un **shay-an** VSO (SA)
drank-3rd.M.S Zayd-NOM tea-ACC
'Zayd drank tea.'

[ABC 2010: 202]

(42) and (43) show that both Bantu and Arabic allow for in-situ object focus. However, while this reading requires the VSO word order in Arabic, SVO word order must be used for in situ object focus in Bantu.

Interestingly, in line with Arabic, Zeller (2009) reports that SVO word order in Zulu can be used to answer wh-subject questions. Consider the following example which can be an answer to question like "Who plays with the children?":

- (44) abafazi ba-dlal-a ne-zingane.
 woman2 SM2-play-FV with-child8
 'The women play with the children.'

[Zeller 2009: Not yet published]

In (44) the pre-verbal subject *abafanzi* agrees with the verb *badlala* in noun class which is a contradiction to Zeller's (2008a) theory in which subjects in the pre-verbal position in Spec-TP are incompatible with a focal reading (see section 3.3.3). According to Zeller (2008a), the SM on the verb marks the pre-verbal subject as antifocus. Therefore, non-focused subjects stay in situ in the VP domain. However, Zeller (2009) presents an explanation for sentences like the one in (44). Building on Kiss's (1998) work, he argues that a constituent which answers the wh-question can have information focus reading rather exhaustive (contrastive) focus. Thus, an agreeing pre-verbal subject can appear in a pre-verbal position if it has a presentational focus, which implies that the subject *abafazi* 'women' is still marked [-Focus] (Zeller 2009). This however, is compatible with the Arabic data presented in 4.2 above. As we saw in section 4.2, pre-verbal subjects can be an answer to a wh-subject question in SA, and are obligatory in JA.

4.5. VS-constructions as focus constructions in Bantu

The VS word order in Bantu is the dedicated word order for subject focus (Kimenyi 1980, Zerbian 2006, Zeller 2008a, Buell 2009, Cheng and Downing 2012). According to Zeller (2008a), the vP in Bantu is the designated domain for focused elements (see section 3.2.3 of this thesis). Therefore, a focused subject in Bantu must remain inside the vP deriving the VS word order. Subject focus is hence expressed by the so-called impersonal construction in which the subject appears post-verbally and the verb bears default agreement. It is illustrated by the Zulu examples below:

- (45) ngi-mem-e wonke umuntu, kodwa ku-fik-e **uJohn** kuphela.
 1stSG-invite-PST every1 person1 but EXPL17-arrive-PST John1a only

‘I invited everybody, but only John came.’

[Zeller 2009: 19]

- (46) a. Ku-sebenz-e **bani?**
EXPL17-work-PST who1b?
‘who worked?’

[Zeller 2009: 6]

- b. ku-hlek-e **ingane.**
EXPL17-laugh-PST child9
‘The child laughed.’

[Zeller 2009: 6]

As can be seen from (45), the focus particle *kuphela* in Zulu modifies the post-verbal subject *John* in the VS-construction. According to Zeller (2009), contrastive subject focus in Zulu is expressed in the VS word order such as (46b) in which the verb bears expletive agreement. The VS word order is also used in wh- subject questions as in (46a) and again the verb appears with a default expletive agreement. The fact that focused subjects and wh-phrases appear post-verbally in Zulu, led Buell (2009) to stipulate that focused elements in Zulu must appear in a position immediately after the verb, abbreviated in the relevant literature as IAV. This is illustrated in the examples below:

- (47) u-yi-theng-e **nini** ingubo entsha?
2SM-9-buy-PERF when 9.dress 9.new
‘When did you buy a new dress?’

[Buell 2009: 166]

In (47), the focused wh-phrase *nini* appears immediately after the verb in Zulu. Placing the wh-phrase into a position other than the IAV would lead to the ungrammaticality of the sentence. This is shown by the sentence below:

[Buell 2009: 166]

This illustrates a further difference between Nguni languages as represented by Zulu and the Arabic data discussed earlier. While focused subjects in Zulu are required to appear post-verbally (however see Zeller 2009, or end of the previous section 4.4), focused subjects in Arabic must appear pre-verbally and fully agree with the verb. Besides, as was established before, *wh*-subject questions cannot be formed with the subject appearing post-verbally in Arabic (however see footnote 26). The only focus readings available with the VS(O) word order in Arabic are either, presentational focus, marking the whole sentence as an all new information, or expressing focus on an in-situ object, which can also be an answer to a *wh*-object question.

The latter possibility (object focus in a VSO-construction) seems to be ruled out in Bantu. In Xhosa, according to Carstens and Mletshe (2015), objects in the VSO-constructions cannot be focused. As a matter of fact, according to Carstens and Mletshe, subject focus is obligatory in VSO-construction (Carstens and Mletshe 2015: 190). Consider the following sentence:

[Carstens and Mletshe 2015: 190]

That the subject is focused in (49) is verified by the fact that (49) can be the answer to a question such as "Who speaks Xhosa?". The fact that this is the only available reading of VSO-constructions such as (49) in Xhosa means that, in contrast to Arabic, object focus is not available when the subject is post verbal.

Another word order which can also be used to focus the subject in some Bantu languages is the VOS-construction. According to Ndayiragije (1999), subject focus in Kirundi can be expressed in the VOS word order. Consider the following example:

(50) *ha-á-nyoye* *a-matá* ***a-bana.*** (Kirundi)
 SM16-PST-drink.PERF AUG-3milk AUG-1children
 ‘Children (not parents) drank milk.’

[Ndayiragije 1999: 400]

According to Ndayiragije (1999) the sentence in (50) has a contrastive focus on the subject. This seems to challenge the notion that constituents which come immediately after the verb are marked focus, since in (50) the object *amata* intervenes between the verb and the subject. Notice however, that verbs in the VOS-constructions still bear agreement with an expletive of class 16 *ha-* in Kirundi.

Bantu languages also allow for OVS word order in constructions known in the literature as Subject-Object reversal (Kimenyi 1980, Ndayiragije 1999, Henderson 2011, Morimoto 2013). in this construction the object appears pre-verbally and is marked as topic, in the same way topicalized objects appear pre-verbally in Arabic. However, unlike Arabic OVS-constructions, Bantu OVS word order obligatory expresses subject focus on the post-verbal subject. Consider the following example:

(51) *igitabo* *ki-som-a* ***umuhuúngu.*** (Kinyarwanda) (OVS)
 7book 7SM-read-Asp 1boy
 ‘The boy is reading the book.’

[Morimoto 2013: 163]

Notice that the pre-verbal object triggers agreement with the verb. As can be seen from (51) the verb agrees with the pre-verbal object (topic) in noun class. This in turn, illustrates another significant difference between Arabic and Bantu. Arabic dialects allow contrastively focused objects to appear pre-verbally (see section 4.3). Whereas in Bantu, it is obligatory for the subject to be focused in the OVS-constructions. However, Arabic and Bantu seem to be similar as far as

the OVS word order is concerned, in the sense that they both allow for objects that are topics to appear pre-verbally.

4.6. Conclusion

The discussion of Information Structure provided in this chapter has revealed some important differences between Bantu languages and Arabic dialects. While Bantu and Arabic dialects/ varieties may show some parallels regarding the derivation of the SV/VS word orders and the subject-verb agreement patterns correlated with the word order alternation, they differ from each other with respect to the semantic/pragmatic properties of the constituents in both VSO and SVO word orders. Table 1 summarizes some of the relevant properties discussed in this chapter:

Table 4-1 word order and information structure in Bantu and Arabic

Word order	SA	JA	Bantu
SV(O)	-The subject is topic if definite.	- Subject can be focused. - Subject is an answer to wh-subject questions.	-Topic reading (or "antifocus" reading) of the subject. - Answer to wh-object questions. -Identificational object focus. - No subject focus (unless the whole sentence is marked as information focus). - Can answer wh-subject question in Zulu.
VS(O)	-Presentational focus (all new information). - Answer to wh-object question.	-Presentational focus (all new information). - Answer to wh-object question.	- Subject focus. -Wh-subject questions. -Obligatory subject focus in VSO.

OVS	<ul style="list-style-type: none"> -Contrastive focus on the object (appears with accusative case). - Object is a topic (appears with nominative case and binds a resumptive pronoun). 	<ul style="list-style-type: none"> -Contrastive object focus. -Topical reading available for the object and binds a resumptive pronoun.²⁷ 	<ul style="list-style-type: none"> - Topic reading is available for the object which agrees with the verb in noun class. - Subject is obligatory focused.
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In both SA and Bantu languages, subjects with topic readings appear pre-verbally, but JA seems to allow focused subjects to appear pre-verbally too. I have provided examples in which focused subjects appear pre-verbally in JA. This was illustrated by the fact that wh-subject questions and their answers can be expressed by SVO word order in JA. Another piece of evidence was the use of the focus marker *bas* ‘only’ that can modify a subject in pre-verbal position. This possibility is not attested in the Bantu data presented above. In Bantu, as we saw earlier, wh-subject questions and their answers require VS word order (however, Zulu allows for wh-subject answers to have SVO word order). In addition, contrastively focused objects in Bantu stay in situ and appear in the SVO word order, which is also the word order used in wh-object questions. In Arabic however, contrastively focused objects appear pre-verbally in the OVS word order, while wh-object answers appear after the verb and the subject in the VSO word order. Using the VSO word order in Bantu to express a focus reading of the object is ungrammatical. As we saw from the examples in Xhosa, in the VSO word order it is obligatory for the subject to be focused.

The literature on subject focus in Arabic is rather scarce. Most of the Arabic grammarians discuss subject focus in terms of prosody and rhetoric and almost never in the syntax, which makes the task to draw a comparison between Bantu and Arabic a difficult one as there is not enough literature about this topic in Arabic, and most of the Arabic examples in this chapter are merely my own data for which I use my own judgment as a native speaker. Thus, there is a need for a systematic discussion of the possibility of encoding the information structure of Arabic via syntax.

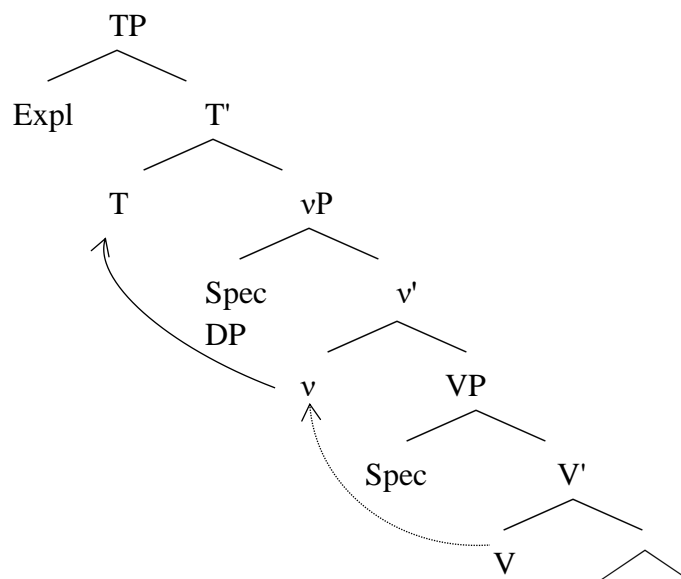
²⁷ Case is not spelt out in JA as is the case in all Arabic modern dialects.

5. CONCLUSION

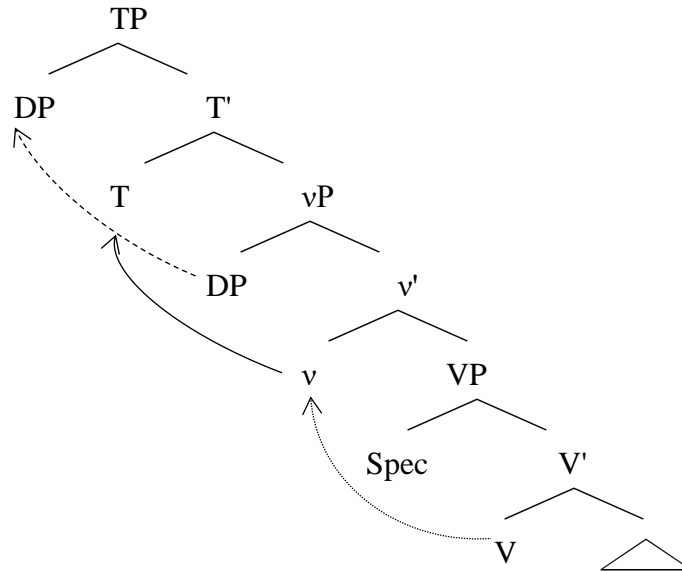
In this thesis I have discussed the properties of the SV(O) and the VS(O) word orders in Arabic dialects and Bantu and the fact that this word order alternation in these languages has an impact on other grammatical as well as semantic/pragmatic features of the constituents.

In chapter 2, I have discussed the VP-Internal Subject Hypothesis, which states that subjects are generated inside the verbal projection (Spec-VP) before moving into a higher position as Spec-TP. I then discussed the notion of verbal shells, and the fact that there are two verbal projections VP and vP. It was shown that the derivational properties of both SV(O) and VS(O) word orders in Arabic and Bantu can be captured by the same analysis (i.e. subject movement, V to T movement). In the VS(O) order (which is the unmarked word order for SA), the verb moves to T, while the subject stays in-situ i.e. inside the verbal projection vP as its specifier Spec- vP, while Spec-TP is filled with an expletive. The SV(O) order (which is the unmarked word order for Bantu and modern Arabic dialects) on the other hand, is derived by also moving the verb from V/v to T, and in addition, the subject is moved to Spec-TP to satisfy the EPP feature of T. The data provided in Chapter 2 showed that from a derivational perspective, Bantu and Arabic dialects do parallel each other as how to derive the SV(O) and VS(O) word orders.

(1) VS(O)



(2) SV(O)



The two syntactic trees above capture the syntactic derivation for both SV (O) and VS(O) word orders in Bantu and Arabic (however see Soltan's 2007 analysis for Arabic and section 3.2.3 of this thesis).

In Chapter 3 the relationship between the SV/VS word order alternation and agreement was thoroughly discussed. We saw that in Arabic SV(O)-constructions (both SA and modern dialects) the verb fully agrees with the pre-verbal subject in gender, number and person. In the VS(O)-constructions in SA however, the verb partially agrees with the post-verbal subject i.e. in gender and sometimes in person (when the person feature is realized by the gender affix), but it never agrees in number. This partial agreement however is not observed in the modern dialects of Arabic like JA and MA. As we saw, in modern dialects of Arabic like MA and JA, the verb fully agrees with the post-verbal subject in all features; gender, person and number.

The correlation between word order and subject-verb agreement is also observed in Bantu. In Bantu, the verb agrees with the pre-verbal subject in noun class in the SV(O) word order. In the VS(O)-constructions in Bantu on the other hand, the verb shows no agreement with the post-verbal subject. Instead, a default agreement marker is prefixed to the verb. For example, in Zulu's VS-constructions, the verb is prefixed with a default subject marker of class 17 *ku-* regardless of the noun class of the post-verbal subject. Of course, like in Arabic, there are exceptions to this

generalization. As we saw, in some Bantu languages, the verb bears full agreement regardless of whether the subject is pre-or post-verbal. Van der Wal (2009) shows that in Makhuwa, the verb bears full agreement in noun class with the post-verbal subject. Although Arabic and Bantu show that subject-verb agreement is sensitive to word order, nevertheless, after deep investigation into the different analyses presented for both languages, it was concluded that none of the analyses presented in Chapter 3 can be a unified explanation for the agreement patterns correlated with the word order alternation in both language groups. Agreement with pronominal subjects in Bantu and Arabic dialects was also discussed in section 3.5.2. In Arabic (both SA and modern dialects) the verb bears full agreement with pronominal subjects regardless of whether the pronoun is pre-or post-verbal and regardless of whether the pronoun is null or overt. Although Bantu verbs bear full noun class agreement with null pronominal subjects, default agreement still arises when the subject is an overt pronoun in the VS(O) word order. This illustrates another difference between Bantu and Arabic dialects as far as agreement is concerned. Bantu subject agreement patterns seem to be determined exclusively by word order rather than by the type of subject (full DP or pronouns).

Chapter 4 discussed the relationship between SV(O) and VS(O) word orders and information structure. It was shown that pragmatic concepts such as *topic* and *focus* can also have an impact on the position of the constituents within the sentence in Bantu and Arabic dialects. However, It was clear that Bantu and Arabic behave differently with regard to the relationship between word order and information structure. While the VSO word order in Bantu is the dedicated word order for narrow subject focus, the VS(O) word order in Arabic is considered to mark the whole sentence as all new-information into what is called a presentational focus. While, the VS-constructions in Bantu can also be used in the so-called presentational focus (see Demuth and Mmusi 1997), the difference between Arabic and Bantu is that, in the VS(O) word order in Arabic, the subject cannot be narrowly focused. The VSO word order in Arabic dialects can also be used to answer a wh-object question focusing the in-situ object, something which is not possible in Bantu. The fact that the VS(O) word order in Bantu is the designated word order for narrow subject focus is confirmed by the fact that wh-phrases appear post-verbally in Bantu; positioning a wh-phrase in pre-verbal position in Bantu leads to the ungrammaticality of the sentence. Another piece of evidence is that subjects modified by focus particles (such as *kuphela* in Zulu) also appear post-verbally (see section 4.4).

Another word order which involves post-verbal subjects is the OVS word order. As we saw, the OVS word order in Bantu (found in the so-called subject-object reversal constructions) is associated with a topic reading of the object, while a focus reading is obligatory on the post-verbal subject. However, this is not the case in Arabic dialects, where the OVS word order is used in two cases: first, OVS is used when the pre-verbal object is a topic, appears with nominative case in SA, and binds a resumptive pronoun on the verb. Second, OVS is used when the object is contrastively focused, in which case it appears with accusative case and does not bind a resumptive pronoun. However, subjects are never obligatory focused in the OVS in Arabic.

It was also shown in Chapter 4 that *wh*-subject questions and their answers appear pre-verbally in the SV(O) word order in Arabic. In addition, the focus particle *bas* in JA can modify a pre-verbal subject and mark it as focused. For Bantu on the other hand, many syntacticians have argued that pre-verbal subjects are considered to be topics or at least never focused, an observation which led Zeller (2008a, 2009) to use the term "antifocus" as a label for pre-verbal subjects. The SV(O) word order in Bantu however, can be used to answer *wh*-object questions, while in Arabic, it is the VS(O) that answers *wh*-object questions.

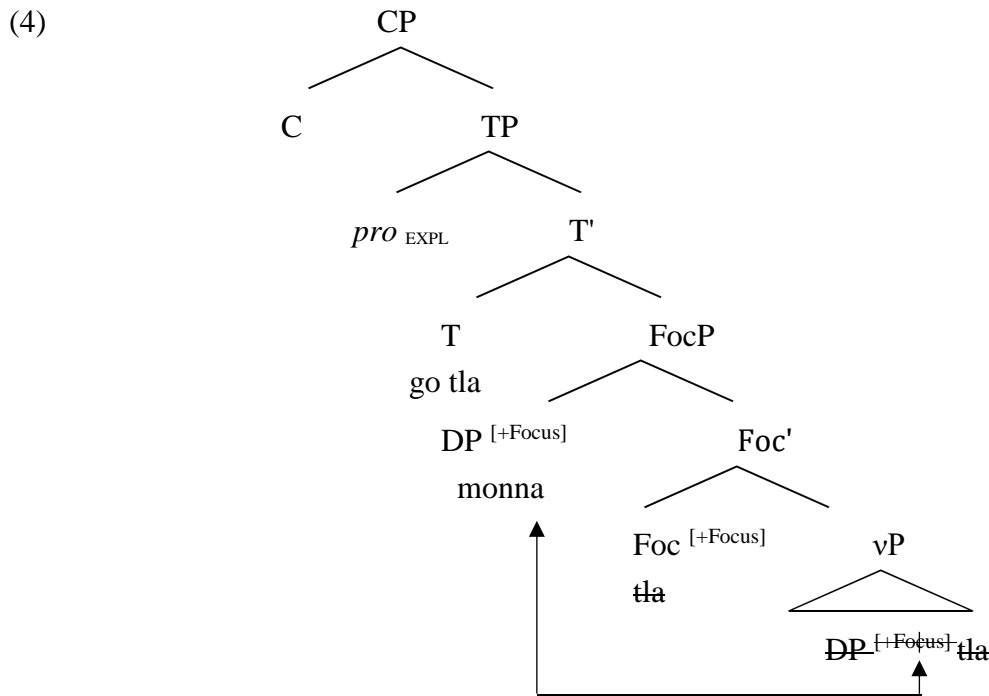
With this said, the differences between the SV(O) and VS(O) in Bantu and Arabic seem to be deep. Although the derivation of the SV(O) and VS(O) word orders can be captured under a unified analysis in both Arabic and Bantu, and although agreement patterns correlated with the SV/VS word order alternation are similar in Arabic and Bantu, it was shown in the discussion on information structure that both word orders do not encode topic and focus in the same way in both language families.

In the remainder of this chapter, I briefly discuss two more aspects of the syntax of VS word order which I consider worth exploring in future research. The first aspect concerns a particular theoretical proposal about VS word order in Bantu. Many Bantu syntacticians assume that there is a (low) focus phrase (FocP) in the syntax (Ndayiragije 1999, Zeller 2009, van der Wal 2014, Carstens and Mletshe 2015). Since the focus reading on a subject is present only when the subject is post-verbal, and since focused elements in Bantu must appear post-verbally, they assume that FocP is located between TP and vP, and that a focused subject moves into Spec-FocP.

According to this analysis, the structural representation of the sentence in (3), in which the subject is focused, will be as shown in (4), adopted from Zeller (2009):

- (3) go tl-a **monna.**
 EXPL.17 come-FV man1
 ‘There comes a man.’

[Zerbian 2006a: 84]



As can be seen from (4), the focused DP undergoes movement from its base position inside the vP into Spec-FocP. Zeller (2009) accounts for this movement on the basis of Chomsky's (2007) EPP-feature on the head Foc (see Zeller 2008a, Ndayiragije 1999 for Kirundi, see also van der Wal 2014, who suggests a different analysis for Makhuwa based on a [u-Topic] feature).

Proposing an analysis of VS word order based on subject movement into the specifier of a low FocP for Arabic is implausible however. Although a post-verbal object in Arabic can be focused, it was shown in Chapter 4 that a focused subject cannot appear post-verbally in Arabic. Therefore, stipulating a low focus phrase in Arabic would not be possible.

A possible analysis could be that, the focal reading of the subject in the VS word order is correlated with the presence vs. the absence of a low FocP. The focal reading of subjects in the VS word order in Bantu is a result of the low focus phrase located between TP and vP. In Arabic however, this focus phrase is absent ruling out the possibility of focusing a post-verbal subject. The fact that Arabic dialects do not have a low focus phrase opens the door for any future research regarding the information structure and syntax of Arabic dialects.

A second aspect of VS-word order that raises interesting questions for future research concerns the possibility of VSO word order i.e. the possibility to have an object in addition to the post-verbal subject. It has been pointed out by various researchers that the VSO word order in some Bantu languages is restricted to some type of verbs. For example, while Zulu and Xhosa allow for the object of transitive verbs to be realized together with post-verbal subjects, given rise to the VSO word order, Marten and Van der Wal (2014) argue that some Bantu languages have restrictions regarding the use of the VSO word order. Chichewa, Shona and Sesotho for example, do not allow transitive verbs in the VSO word order. Chichewa and Shona do not even allow unergative verbs to appear in VS-constructions (see Marten and Van der Wal 2014 for more discussion). Carstens and Mletshe (2015) note that in Xhosa, transitive verbs allow VSO word order, but experiencer verbs are not allowed in the VSO word order. This can be seen from the ungrammaticality of the following example:

- (5) *kw-a-bon-a u-m-fazi i-ntaka.
 17SM-CONJ2-see-FV 1-1-woman 9-9bird
 ‘(It was) a/the woman (who) saw the bird.’

[Carstens and Mletshe 2015: 190]

These restrictions however, do not appear in Arabic. In Arabic, the VSO word order is not restricted to any type of verbs or a specific interpretation.

To conclude, it seems that while Arabic and Bantu can have a unified syntactic analysis deriving the SVO and VSO word orders, other formal grammatical features like agreement cannot be captured in one analysis that explains the agreement pattern correlated with this word order alternation in these two language families. The same can be concluded for the information structure

of the SVO and VSO word orders, as we saw in Chapter 4, the difference deepens more between Bantu and Arabic. However, I strongly believe that there are more issues to be explored between Bantu and Arabic as far as the syntax is concerned.

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