

SUBJECT AGREEMENT AND THE EPP IN BANTU AGREEING INVERSION*

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ABSTRACT It has been claimed that in Bantu languages Agree and Move are related, i.e., that Agree has a movement trigger (EPP feature). Exceptions to this generalisation are languages that have Agreeing Inversion, whereby the verb agrees with a postverbal subject. This paper re-examines the Agreement Parameter as proposed by Collins (2004) and its variants in Carstens (2005) and Baker (2003, 2008), suggesting that it can (at least partly) distinguish between two types of Agreeing Inversion: in the one type subject agreement not associated with a movement trigger/EPP feature (Matengo, Makwe, Matuumbi), and in the other type the agreeing subject is in fact moved, but there is remnant movement of the verbal complex to derive the inverted order (Makhuwa). This has many consequences, influencing word order (VSO or VOS), the form of the verb (conjoint or disjoint) and the interpretation (non-topic or also focus).

1 LINKING AGREE AND MOVE

Although in the Minimalist programme Agree and move are independent of each other, scholars like Collins (2004), Carstens (2005) and Baker (2003, 2008) claim that the two cannot be separated in Bantu languages. That is, the element which determines agreement on the verb must always end up in a structurally higher position. This is most obvious in a canonical SVO sentence, where the subject marker on the verb agrees with the preverbal subject in noun class: in (1), both *ba* and *abasaadha* "men" are in class 2. The subject marker is obligatory in inflected verbs, as shown in (1a), and it allows the lexical subject to be omitted, i.e., Bantu languages generally exhibit pro-drop, as in (1b).

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- (1) LUSOGA:
- a. *Abasaadha *(ba)-gula amatooke.*
 2.men 2SM-buy 6.bananas
 "The men buy bananas."
- b. *Ba-gula amatooke.*
 2SM-buy 6.bananas
 "They buy bananas."

The motivation for proposing a close link between Agree and move is also found in the cases where the logical subject does not move. These are inversion constructions like Default Agreement Inversion and Locative Inversion, illustrated in (2) and (3), respectively. The logical subject appears in a postverbal position, which can be shown to be structurally low (inside the verb phrase) and the subject marker does not agree with it. In Default Agreement Inversion the subject marker takes a default form, class 17 *ho-* in (2), and in Locative Inversion the subject marker agrees with the preverbal locative, which is class 18 *mu* in (3). This shows that the subject agreement on the verb is not always determined by the logical subject, and in fact is impossible if the "subject" does not move.

- (2) SESOTHO (Demuth 1990:239)
- Hó-tswalá lipó:li.*
 17SM-give.birth 10.goats
 "There are goats giving birth."
- (3) NDEDEULE (Ngonyani 1996:210)
- Mu-ki-liḽa mu-tumbuk-í li-holo.*
 18-7-well 18SM-fall.into-PERF 5-tortoise
 "Into the well has fallen a tortoise."

The agreement with the preverbal locative in Locative Inversion can be seen as a more general pattern, where the subject marker on the verb agrees with any element in preverbal position. This can be a locative which is not formally marked as locative (Semantic Locative Inversion in (4)), a theme argument (Subject Object Reversal in (5)), an instrumental (Instrument Inversion in (6)) or a question word (Complementiser Agreement in (7)).¹

- (4) ZULU (Buell 2007: 110)

¹ Not all of these inversion strategies are simultaneously found in one language.

Lesi sikole si-fund-ela izingane ezikhubazekile.
 7.this 7.school 7SM-study-APPL 10.children 10.handicapped
 "Handicapped children study at this school."

- (5) RUNDI (Ndayiragije 1999)

Ibitabo bi-á-som-ye Yohani.
 8.books 8SM-PST-read-PERF 1.John
 "JOHN read the books."

- (6) ZULU (Zeller 2012: 134)

a. *U-John u-dla nge-sipunu.*
 1a-1a.John 1aSM-eat with-7.spoon
 "John is eating with the spoon."

b. *I-sipunu si-dla u-John.*
 7-7.spoon 7SM-eat 1a-1a.John
 "John is using the spoon to eat." (Lit. "The spoon is eating John.")

- (7) KILEGA (Carstens 2005: 220)

a. *Bábo bíkulu b-á-kás-ílé mwámí bikí*
 2.DEM 2.women 2SM-T-give-PERF 1.chief 8.what
mu-mwílo?
 18-3.village
 "What did those women give the chief in the village?"

b. *Bikí bi-á-kás-ílé bábo bíkulu mwámí*
 8.what 8SM-T-give-PERF 2.DEM 2.women 1.chief
mu-mwílo?
 18-3.village
 "What did those women give the chief in the village?"

These agreement patterns lead Collins, Carstens² and Baker to postulate that agreement and movement are tied together. In more formal terms, Collins and Carstens say that the head responsible for subject agreement not only has uninterpretable ϕ features which probe for any suitable goal, but it also has

² Baker (2008) proposes a different analysis in which languages are parameterised as to whether agreement is "downward" (with a c-commanded element) or "upward" (with an element c-commanding the agreeing head), where Bantu languages in general have an "upward" setting.

a movement trigger (usually called an EPP feature) which is responsible for moving the agreed-with goal to the specifier of that head.

Collins (2004: 116) proposes the Agreement parameter for Bantu languages:

- (8) **Agreement Parameter** (minimally adapted):
 Let Agree (X, YP), where X contains the probe (uninterpretable phi-features) and YP contains the goal, then X has an EPP feature that is satisfied by YP

As movement/EPP features are never a probe themselves, they must be dependent on other uninterpretable features. Carstens (2005: 266) formulates the dependency of Agree and Move as the Feature-linking parameter: in Bantu languages, EPP is a subfeature of uninterpretable ϕ -features. Both authors set this parameter for "Bantu" such that subject agreement necessarily always goes together with movement. Thus, they predict the impossibility of agreeing subject inversion where the subject appears in a postverbal position but the subject marker still agrees with the subject.

As is to be expected in a language subfamily that covers around 500 languages (Nurse and Philippson 2003:2), there are exceptions to the proposed Agreement parameter setting, and Agreeing Inversion is in fact encountered. As I showed in Van der Wal (2008), there is at least one Bantu language that allows subject agreement with a (linearly) postverbal subject: Makuwa. This agreement pattern is illustrated in (9), where the subject marker *ni-* agrees with the postverbal subject *nláikha* "angel" in class 5.³

³ In any of the Bantu languages, as far as I am aware, it is possible to dislocate the subject to the right, resulting in a Verb-Subject order with subject agreement on the verb, as in i. This is a different construction, in interpretation (subject is afterthought) as well as prosody (usually a pause between verb and subject), which will not be discussed in this paper. Northern Sotho (Zerbian 2006:127) → compare to (2)

- | | | |
|-----|--------------------------|---------|
| | ó-a-só:ma | mo:-nna |
| (i) | 1-PRES-DJ-work | 1-man |
| | "he is working, the man" | |

(9) MAKHUWA⁴

DJ *Ni-hóó-wá* *n-láíkha*.
 5SM-PERF.DJ-come 5-angel
 "There came an angel."

Further research into this type of subject inversion has brought to light extra data for Makhuwa, and some other languages with Agreeing Inversion have come to my attention. These force me to revise my (2008) analysis for Makhuwa, and at the same time adopt that abandoned analysis for (some of) the other Agreeing Inversion languages. It thus appears that there are two types of inversion constructions in which the subject marker agrees with the postverbal subject. These will be examined in this paper, focussing on the theoretical question of whether or not there is a phonologically null element in the preverbal position.

2 THE EPP AND NULL EXPLETIVES

The Bantu inversion constructions in general, and Agreeing Inversion in particular, trigger many questions in the domains of syntax, information structure and their interfaces. One of these is whether or not the preverbal position is empty. The reason that this is debated is the proposal of a universally valid Extended Projection Principle (EPP), requiring the subject position to be filled. This section first briefly explains the EPP and its challenges as a universal principle (2.1), then assesses the underlying syntactic structure of subject inversion in Bantu languages like Matengo (2.2) and finally discusses 4 analyses of Agreeing Inversion (2.3).

2.1 *Extended Projection Principle*

Based on the observation that sentences like those in (10) and (11) need a "meaningless" filler (there/it), Chomsky (1982:10) proposed the Extended Projection Principle: "Every clause must have a subject occupying the privileged subject position that features in all clauses, i.e. Spec-IP/TP." In an SVO sentence this position is filled by the subject, and in a presentational sentence with subject inversion, the EPP is satisfied by inserting an expletive.

(10) * (there) arose a problem

⁴ The Makhuwa data were collected during fieldwork on Ilha de Moçambique in the north of Mozambique in 2005, 2006 and 2008 as part of the NWO project "Word order and morphological marking in Bantu". Makhuwa is P31 in Guthrie's (1948) classification of the Bantu languages.

(11) * (it) is annoying that there are only 24 hours in a day

Even if the validity of the EPP is clear in English, this is not so for the languages with Agreeing Inversion: if the subject appears postverbally, the preverbal subject position is not overtly filled. This seems to violate the EPP as a universal principle (see in particular Alexiadou and Anagnostopoulou 1998, 1999; to be discussed in section 2.3.2). However, a more detailed look at the underlying syntactic structure is necessary in order to assess the validity of the EPP, as well as a careful examination of the analyses proposed to account for the subject inversion constructions.

2.2 *Low subject in Matengo type*

There is at least one logical flaw in the short explanation given above of the problem that Agreeing Inversion can cause for the EPP: the only observation we can make so far is that nothing *linearly* precedes the verb in an inversion construction like (9). This does not necessarily mean that *structurally*, the postverbal subject is not in the canonical subject position (specIP), satisfying the EPP. Although this is probably the case for Makhuwa, for languages like Matengo, Makwe and Matuumbi there is evidence that the subject has not raised and does occupy a low position.^{5 6}

This "low" position is somewhere in the vP, but at least under the verb, which I assume to have raised to just above vP. This partly-raised verb stem between TP and vP undergoes phonological merger with the prefixes on the verb, which are in the heads of the inflectional domain (see arguments in Julien 2002 who proposed this analysis, and in Buell 2005 for Zulu and Van der Wal 2009 for Makhuwa).

A first argument, then, for the low position of the subject comes from word order. If the subject is inside the verb phrase, we would expect a VSO word order when the verb is transitive.⁷ This is borne out, as shown in (12) and (13), and VOS order is not found.⁸

(12) MATENGO (Yoneda 2011:763)

⁵ I suspect Ngoni to be of the same type. Dciriku, Ndengereko, Mwera, Ngindo, Ndendeule, Makonde, Koti and Shangaci are languages where Agreeing Inversion is either already encountered or expected, but for which I do not have enough data to classify them as the Matengo (VSO) or the Makhuwa (VOS) type.

⁶ Matengo (N13) is spoken in the Southwest of Tanzania, Matuumbi (P13) in the East of Tanzania and Makwe (G402) in the North of Mozambique on the coast.

⁷ Transitivity restrictions in Bantu inversion constructions are also a worthwhile area of investigation, which is related to the issue of agreement, but as it is not the main focus of the paper I leave it to one side.

⁸ Unless with a right-dislocated subject, see footnote 2.

CJ *Ju-a-teleka* *María* *wâ:le*.
 1SM-PAST-cook/SF 1.Maria 9.rice
 "Maria cooked rice."
 ?* *juateleka wáli Marî:a*

(13) MATUUMBI (Odden 1996:75)

CJ *Aakátite Sinanduúgu kaámba*
 he.cut Sinanduugu rope
 "Sinanduugu cut rope." VSO
 * *aakátite kaámba Sinanduúgu* *VOS

A second argument is found in the form of the verb. Some southern and eastern Bantu languages display a morphological alternation in the verb, depending on the relation between the verb and the following element. The conjoint (CJ) verb form can only be used when followed by some element, whereas the disjoint (DJ) verb form may also appear sentence-finally.⁹ This is taken as an indication that for the conjoint verb to be grammatical, the verb and the following element must both be within IP (see Buell 2006, 2009), which means that if the verb and the following element are in the same "spine" the verb must c-command the following element (Van der Wal 2009). The two forms are illustrated for Matengo in (14): the conjoint form ending in *-aje* cannot occur sentence-finally, whereas the disjoint form ending in *-iti* can.

(14) MATENGO (Yoneda 2009, glosses adapted)

- a. CJ * *Samuéli ju-a-butuk-aje*.
 1.Samuel 1SM-PAST-run-CJ
- b. DJ *Samuéli ju-a-butuk-iti*.
 1.Samuel 1SM-PAST-run-DJ
 "Samuel ran."

In Agreeing Inversion, the verb in the Matengo type takes a conjoint verb form, as demonstrated by the *-aje* suffix in (15). If the conjoint form indicates that the verb c-commands the following element, this is a strong indication of the low position of the subject. Makwe and Matuumbi also allow a conjoint form in VS order.

⁹ The terms "conjoint" and "disjoint" were first used by Meeussen (1959), who described the verb forms as expressing a difference in the relation of the verb with the element following it. Hence the term conjoint (< French, "united") for a combination V X that is very close and the term disjoint ("separated") for a structure in which the verb does not have such a close relation with a following element – if such exists.

(15) MATENGO (Yoneda 2011:759)

CJ *Ju-a-lwal-aje* *mwaná gwa.*
 1SM-PAST-suffer-CJ 1.child 1.my
 (answer to "who was sick?") "My child was sick."

A third argument for analysing the postverbal subject in a low position is the interpretation. In Matengo, the inverted (VS) order can be used forthetic sentences, presenting the whole proposition as one piece of (new) information, but it is equally appropriate for subject focus, as indicated in the translations of (16). The grammaticality and felicity of inherently focused wh subjects and their answers is also expected, as in the Makwe data in (17).

(16) MATENGO (Yoneda 2011)

CJ *Ju-híkítí* *Marî:a.*
 1SM-arrive.PERF 1.Maria
 "Maria has come."
 as an answer to (a) "what happened?" (b) "who has come?"

(17) MAKWE (Devos 2004: 315)

Alilé *náani* | *Alile* *wáawe*
 1.eat.PRES.PERF 1.who 1.eat.PRES.PERF 9.father
 "Who has eaten? Father has eaten."

If it is true that the vP is somehow a focus domain, as suggested by Buell (2009) and Cheng and Downing (2011) for Zulu, or if the Immediately After the Verb focus position is a structural position linked with vP (Belletti 2004), then the possibility of a narrowly focused reading of the subject suggests that the subject occupies a low position inside vP.

A fourth test would be verbal negation, which is expected to scope over the postverbal subject if this is in a lower position than the verb. Unfortunately the relevant data are not available to me for any of the languages of this type (and as will be shown in section 3.3 this is a suggestive but inconclusive test). Similarly, no relevant data are available for the placing of adverbs, which could be used to see the edge of the vP/VP.

In summary, languages like Matengo, Makwe and Matuumbi have a subject inversion construction with the following characteristics: 1) there is no overt expletive, 2) the subject marker agrees with the postverbal subject, 3) VSO order is possible, VOS is not, and 4) the conjoint verb form can be used.

The low position of the subject in spite of subject agreement on the verb shows that these Bantu languages do not conform to the Collins/Carstens/Baker parameter setting which requires agreed-with elements to move. Unlike the Bantu languages they describe, Agree is clearly separate from move in Matengo, Makwe and Matuumbi, that is, it does not have an EPP feature/movement trigger. If there is no need to move the subject to a preverbal subject position, and the verb is the first (overt) element in the sentence, the question remains how the EPP is checked, and in fact whether the EPP holds at all as a universal principle. This is the topic of the next section.

2.3 Analyses of Agreeing Inversion

The Agreeing Inversion constructions as presented here for Bantu languages are more familiar from several Romance languages and Greek. Standard Italian, Spanish, European Portuguese and Greek all have inversion constructions in which the verb agrees with the postverbal subject and there is no overt expletive. Moreover, the inverted subject has been argued to occupy a vP/VP-internal position (Déprez 1990, Belletti 1999, Samek-Lodovici 1996, Alexiadou and Anagnostopoulou 1998, 1999), which makes it highly similar to the Matengo type of subject inversion. Therefore, we may expect the analyses proposed for these Romance languages to apply to Matengo as well, for now assuming that this also holds for Makwe, Matuumbi and possible other languages that show the same type of Agreeing Inversion. I will discuss four possible analyses of in-situ Agreeing Inversion, evaluating their merits and indicating problematic aspects in accounting for the attested morpho-syntactic properties. I will focus on the issue of the validity of the EPP as a universal principle (or, rephrased as a simple question: is there a null expletive or not?).

2.3.1 A null expletive checks the EPP

In some way, the easiest solution is to simply assume a null expletive, much like a phonologically empty counterpart of English "there". However, the presence of invisible elements should only be stipulated if we can see clear syntactic effects that cannot otherwise be explained or if this element has some influence on the interpretation. The mere compliance with a stipulative principle such as the EPP should not be sufficient for postulating the existence of a phonologically null element.

Interestingly, Pinto (1997) claims that the null element in Italian presentational VS constructions actually has some semantic content. Instead of a completely empty and hence truly expletive null element, she proposes that there is a null *loco/temporal* argument. There are various reasons for assuming

such a LOC argument in Italian.

Crucially, this LOC argument can only check EPP if indeed the sentence isthetic (or "has wide focus" in Pinto's (1997) terms) and if the sentence refers to the here-and-now.¹⁰ This is illustrated in (18). One of the predictions is that inversion constructions cannot cooccur with a temporal or locative expression which does not refer to the "here and now", as is the case in (19b,c). In Matengo, this restriction could account for the infelicitous use of the inversion construction in (22b), where the adverb "yesterday" is not compatible with the "here and now". Instead, the SVO order in (20a) is used.

(18) ITALIAN (Pinto 1997:128, 130)

- a. *Irene e arrivata a Milano.*
Irene arrived at Milan
- b. *Irene e arrivata.*
Irene arrived (somewhere)
- c. *LOC e arrivata Irene.*
(here/at this place) arrived Irene

(19) a. *Irene e arrivata a casa.*

Irene arrived at home

- b. **E' arrivata Irene a casa.*

arrived Irene (here/at this place) at home

- c. **A casa e arrivata Irene.*

at home arrived Irene (here/at this place)

(20) MATENGO (Yoneda 2011:760)

To explain the reason for borrowing a cooking pan from someone.

- a. *Mwaná ju-kájwi puluke:la.*
1.child 1SM-break/PF 18.morning
"My child has broken (it) this morning."

¹⁰ From a semantic-pragmatic perspective, Erteschik-Shir (2007:15) states that in order to calculate the truth value of a sentence, we evaluate a proposition within the frame set by the topic. Every sentence with a truth value must hence have a (pragmatic) topic, which functions as the "pivot for truth value assessment". Thetic sentences are defined as "topicless" (Lambrecht 2000), which means that they do not have an overt *topic expression* in the sentence, but does not mean that there is no *topic* present. The topic on which the whole thetic proposition forms a comment is the "here and now", what Gundel (1974) calls a "stage topic". A question is whether this is the same loco/temporal argument Pinto proposes is present in the syntax.

- b. #*Ju-kájwi* *mwaná puluke:la.*
 1SM-break/PF 1.child 18.morning
 "My child has broken (it) this morning."

Another argument often referred to for null expletives is the presence of definiteness effects (DE). Assuming that covert and overt elements differ only in their phonological representation and otherwise have the same effect, we may expect the presence of a null expletive to trigger the same DE as observed in languages with an overt expletive, such as English (28): inversion is fine with an indefinite subject like "a dog", but weird with a definite subject like a proper name "Snoopy".

- (21) a. There came a dog into our street.
 b. ?* There came Snoopy into our street.

These clear effects are absent in Makwe and Matengo, as illustrated by the postverbal proper name in (22); see also (16).

- (22) MAKWE (Devos 2004:316)

- DJ *Aníúuma* *nakádímu.*
 1SM.PRES.PERF.come.out 1.giant
 "And so, (the giant) Nakadimu leaves."

It is known that the DE are generally not present in unaccusative construction in null subject languages (like Italian, and most Bantu languages). This has been attributed to the difference between true existential/presentational constructions, which do show the DE, and locative predicative constructions, which do not –see Leonetti (2008) for an overview of locative and existential constructions, DE and analyses for why this may be the case.¹¹ Crucially, however, the DE re-appears in presentational sentences with an overt locative argument, that is, in VSX order. This is why in Portuguese inversion is ungrammatical in such a context if the subject is a proper name (23c), but not if it is an indefinite non-specific noun (23b).

- (23) PORTUGUESE (Sheehan 2006: 149)

¹¹ Leonetti (2008) proposes a small-clause analysis for eventive existential constructions, where the small clause has its own topic-focus articulation. This would be responsible for the lack of DE in this kind of sentence. This may well work for existential structures, but it is doubtful whether presentational constructions with other verbs than "be"/"exist"/"have" would select a small clause.

- a. *O que é que aconteceu?*
 the what is that happened
 "What happened?"
- b. *Chegou alguém a-o colégio.*
 arrived someone to-the school
 "Someone arrived at school."
- c. **Chegou o Joao a-o colégio.*
 arrived the Joao to-the school
 int. "Joao arrived at school."

Sheehan (2006, 2010) claims that these effects support the presence of a null non-locative expletive: if neither the subject nor the overt locative raises to check the EPP, there must be a null expletive which triggers the same DE as in English, where the same expletive "there" is overt. In the data Yoneda provides for Matengo, this does not seem to work the same way. Instead, in a thetic sentence that has more than one participant, the subject is moved to a preverbal position, even if it is indefinite (24a). It is ungrammatical in such a sentence to leave both the (indefinite) subject and the locative in postverbal position (24b). Note that in the same context, VS order is allowed and in fact preferred if no other elements are present (24c,d).

(24) MATENGO (Yoneda 2011:761)

As an answer to "what happened?"

- a. *Mundu ju-hikití ku-nyu.mba.*
 1.someone 1SM-arrive/PF 17-9house
 "Someone has come to the house."
- b. **Ju-hikití mundu ku-nyu.mba.*
 1SM-arrive/PF 1.someone 17-9house
- c. *Ju-hikití mu.ndo.*
 1SM-arrive/PF 1.someone
 "Someone has come."
- d. #*Mundu ju-hikí:te.*
 1.someone 1SM-arrive/PF

These data suggest that the restriction on multiple postverbal elements in a thetic sentence may be due to another -possibly pragmatic- restriction in Matengo, rather than showing the presence of a null locative.

Furthermore, there are several problematic aspects with the view that this null locative is an argument, as Pinto (1997) claims. The most disturbing one is why LOC would only be present in some cases but not others. I present two cases in which this runs into problems. First, the class of verbs that can take a LOC argument is restricted to some specific intransitive verbs (but both unaccusative and unergative). The split between verbs that do and that don't take this extra argument is not entirely clear, and it does not seem to be motivated for Matengo: why would "break" in (25) need a location or time any more than "shout" which in Italian does not take LOC? Or how could "yesterday" in (22) be an argument at all?

- (25) MATENGO (Yoneda 2011: 759)
 (To explain the reason for borrowing a cooking pan from someone.)
Ju-kájwi mwá:na.
 1SM-break/PF 1.child
 "My child has broken (it)."

Second, what happens when the subject is in narrow focus? It would be strange if suddenly the same verb does not have its extra LOC argument. Yet this would have to be assumed if we take into account the grammatical VS, VSX and even VSOX sentences in (26) and (27), where focus is on the subject. If LOC would be present in these examples, we cannot explain its compatibility with a different time/place than the here-and-now.¹²

- (26) MATENGO (Yoneda 2011: 760)
 (Answer for the question "Who has broken it?")
- a. *Ju-kájwi mwá:na.*
 1SM-break/PF 1.child
 "My child has broken (it)."
- b. *#Mwaná ju-kájwi:le.*
 1.child 1SM-break/PF
 "My child has broken (it)."
- c. *#Mwaná ju-kájwi puluke:la.*
 1.child 1SM-break/PF morning
 "My child broke (it) this morning."

¹² Pinto explains that the LOC argument can cooccur with certain adverbs (i.e. not locative arguments of the verb) that are compatible with the "here and now" interpretation. Judging from her examples, this would have to hold for "morning" as well, as it is interpreted as "this morning". Nevertheless, it is not allowed in Matengo.

- d. *Ju-kájwi mwaná puluke:la.*
 1SM-break/PF 1.child morning
 "My child broke (it) this morning."

(27) MATENGO (Yoneda 2011:765)

- Ju-a-tina María nhánzu lí:so.*
 1SM-PAST-gather 1.Maria 10.firewood yesterday
 "Maria gathered firewood yesterday" (answer to "who gathered
 firewood?")

Taking these data into account, positing a loco/temporal null element does not seem to explain the subject inversion constructions in Matengo. If a null element is present at all to check the EPP, this would presumably have neither argument status nor a specific semantic interpretation, which makes it more like a true expletive element. A strong, always-present EPP thus seems to be the only reason to posit the presence of a (meaningless unpronounced) expletive in the preverbal position in Matengo, which is not the strongest basis for an analysis.

2.3.2 Verbal inflection checks the EPP

A second analysis of Agreeing Inversion posits that the EPP is satisfied not by a phrase in SpecIP, but rather by the verbal inflection. Alexiadou and Anagnostopoulou (1998) propose that the EPP can be checked either by merging an XP (like in English and other non-null subject languages) or by merging/moving an X head with nominal features. In null-subject languages, this head is instantiated by the verb that moves to T. As mentioned, I take the verb in these Bantu languages to have moved only to just above vP, that is, it does not move all the way to T (unlike Greek, for which Alexiadou and Anagnostopoulou propose their analysis). Even if the verb does not head-move to I/T in Bantu languages, the EPP can still be checked by the head containing the subject marker. Alexiadou and Anagnostopoulou's account nicely connects the null subject property to the availability of subject inversion (see Rizzi 1982), in the following way: if the EPP can be satisfied by the nominal feature on the (richly inflected, moved) verb, then there is no motivation to move the subject and hence it can stay in situ. Furthermore, because the EPP is satisfied by the head, no null expletive *pro* needs to be posited, which is an advantage, as we want to keep the number of postulated invisible elements to a minimum. However, there are a number of problems for their account in general, and also when applied to Bantu Agreeing Inversion.

One of the predictions of this analysis is that there is no A position in the preverbal domain, that is, any preverbal elements are moved there for reasons other than the EPP. This means that they have been A-bar moved to the preverbal domain, or are base-generated there (clitic left dislocation). Alexiadou and Anagnostopoulou (1998) show that this is indeed the case for Greek, but Sheehan (2006) advances several arguments to show that not all preverbal elements in Romance languages are dislocated and that there must be a preverbal A position. Although many of the arguments are not replicable for our Bantu case study (for lack of data, or because of different structural properties), the grammaticality of an indefinite subject in preverbal position, as in (28), does suggest the presence of a preverbal position for non-dislocated elements.

(28) MATENGO (Yoneda 2011:761)

Mundu ju-hikití ku-nyú:mba.
 1.person 1SM-arrive.PERF 17-9.house
 "Someone has come to the house."

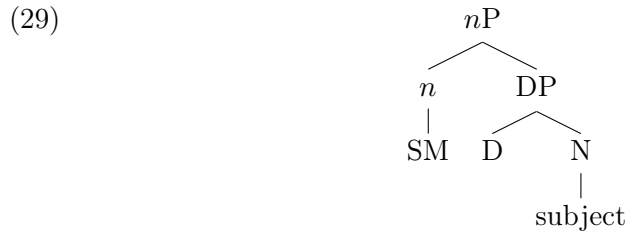
Another theoretical question concerns the status of the head that checks the EPP. According to Alexiadou and Anagnostopoulou (1998), the inflection on the verb has a nominal D feature which has the same properties as a pronoun in English. This has two consequences (that A&A themselves do not go into). First, the inflection must be argumental and hence able to take a theta role. This is unexpected, not only because theta roles are normally borne by NPs, but also because either the postverbal subject in a VS construction does not have a theta role (violating the theta criterion) or the theta role is variable in whether it is assigned to the subject or the inflection. This would entail having two types of inflection: one fully argumental and one "expletive", which is undesirable in a theory of agreement.¹³ Alternatively, one could assume the presence of a null referential pronoun if the theta role is not to be borne by the inflection, which would cancel the gain of having no expletive pronoun.

A second consequence of a D feature in the inflection is that the inflection is referential (see also Holmberg 2005, 2010). Having established the position of the inverted subject as inside the vP and hence c-commanded by the verb in the same domain, this violates principle C of the Binding Theory, which states that a referential expression cannot be in the same domain as a coreferential pronoun. In our case, it means that the postverbal DP subject cannot be in

¹³ It remains to be seen how a theory fares that analyses theta roles as features (Hornstein 1999)

the same domain as the pronominal inflection on the verb.¹⁴ Considering that the conjoint verb form shows that the subject is in the same domain as the verb, the conclusion must be that the subject marker cannot be a referential pronoun, but must rather be true grammatical agreement.

These problems for theta roles and binding can perhaps be circumvented by assuming a "big DP" analysis (Cechetto 1999), as Zeller (2008) proposes for Zulu. He suggests that the subject marker originates in one DP with the subject, as illustrated in (29a). The subject marker then moves out of this subject phrase to "incorporate into the functional head which hosts the verb" (Zeller 2008:222). The whole big DP gets one theta role, which is hence the same (shared) role for the subject marker and the subject, and as they are part of the same referent, there would not be any problem in referentiality and binding.¹⁵



However, the subject marker in such a proposal is more like a pronominal clitic, Zeller argues, whereas it has just been shown that the obligatory use of the conjoint verb form in Matengo suggests that the subject marker functions as an agreement marker, rather than a pronominal clitic. Furthermore, Zeller proposes that the subject marker can be present or absent in a certain DP. This is needed to account for cases in which there is no agreement with the logical subject (as in Locative Inversion or Default Agreement Inversion, see (2) and (3) above). Zeller observes that in Zulu non-agreeing subject inversion 1) the subject is in focus and 2) there is no agreement with the postverbal subject, from which he concludes that the subject marker indicates the non-focused, or topical, status of the subject, that is, the subject marker must have a specification [–FOC]. Whether or not the subject marker is present, then, depends on whether or not the subject is a topic. If it is a topic, the [FOC] subject marker is present, and if not, the subject DP appears without the subject marker. In Matengo, the subject marker always agrees with the subject, whether the subject is the topic or not, and hence the analysis of the

14 A deletion analysis of null arguments, whereby *pro* is a fully specified pronoun that is simply not pronounced (Holmberg 2005, Roberts 2007, 2010), runs into the same problems.

15 The D head in the tree below is lexicalised in Zulu by the augment; a nominal morpheme which is not present in the Bantu languages treated in this paper.

subject marker as antifocus marker does not make the correct predictions for Matengo.

In conclusion, there are theoretical as well as empirical arguments against an analysis of Agreeing Inversion where the verbal inflection/subject marker is argumental and checks the EPP.

2.3.3 Subject moves but is spelled out low

As an alternative to checking the EPP by the AgrS head or a null expletive, we can imagine that the subject does in fact move to check the EPP. It would thus seem to behave like the Bantu languages described by Collins' (2004) Agreement Parameter where agreement with the subject forces it to move as well. The Verb-Subject order would then be generated either by VP movement around the subject position, or, if we assume a copy theory of movement (Chomsky 1995), by spelling out a lower copy of the subject. The former is not likely, because we would predict VOS order to be possible in Matengo, contrary to fact (see section 3 for this analysis for Makhuwa). The latter has been proposed for Italian V(O)S inversion with subject focus (Sheehan 2010).

If the subject is moved (or actually: copied) to specIP, the EPP is satisfied and no null expletive has to be assumed. But what would motivate spelling out a lower copy of the subject, where normally the highest copy is pronounced? This unusual spell-out is warranted in order to "save" a derivation if a mismatch occurs between syntax and the PF interface (see Bošković 2001 and Bošković and Nunes 2007 for discussion). For Spanish and Italian, the mismatch occurs when the subject contains new information and does not occur in the position where stress is assigned via the Nuclear Stress Rule (Cinque 1993). As focal elements are required to be prosodically most prominent (Samek-Lodovici 2005), the focused subject should appear in the position that is assigned stress by the NSR, or otherwise a marked stress rule should apply. In Italian and Spanish, the NSR places stress in sentence-final position. Hence, if the focused subject raises to a preverbal high position, there is a mismatch between syntax ("subject should raise to check the EPP") and PF ("subject should be in final position for prominence"). Under these circumstances, as various authors have claimed (most influentially Zubizarreta 1998), the prosodic requirements "win out" over the syntactic ones, influencing the surface word order. Sheehan (2010) proposes that this is when a low copy can be spelled out in Italian.

This motivation cannot be readily applied to the Matengo type of inversion, as Matengo, Makwe and Matuumbi have a tone system, rather than a stress system. If we see phonological phrasing as the equivalent of the NSR, for example requiring a focal element to be phrased together with the verb, we

would only be able to account for the postverbal appearance of the narrowly focused subject, not that of the subject in athetic sentence.¹⁶ In (29) the postverbal subject *nyóóka* "snake" is in narrow focus and is phrased together with the verb, but in (30) the postverbal detopicalised subject *upéépo* "wind" is in a phonological phrase by itself. The right boundary of a phonological phrase in Makwe is marked by penultimate lengthening; in this example indicated by |.

MAKWE (Devos 2004:316):

(29) *Yaámbi* | *aida* *nyóóka* |
 now 1SM.come.PRI 1.snake
 "And then a snake came."

(30) *Unkupúúna* | *upéépo* |
 11SM.PROG.blow 11.wind
 "The wind is blowing."

Even if a PF-driven analysis would not work for the Matengo type of inversion, if the spell-out of copies can be determined at the interface with the phonological component, we may hypothesise that it can also be determined at the interface between syntax and information structure. The motivation for spell-out of a lower copy would then be found in the mapping between the structure generated by syntax and the semantic-pragmatic interpretation (cf. also Diesing's 1992 Mapping Hypothesis). For Matengo, Yoneda shows that the postverbal domain is restricted to non-topical and focused elements. We can imagine that a non-topical subject is syntactically perfectly fine in a (high) preverbal position, but that the interface requires the same subject to appear in the domain after (under) the verb.¹⁷

With respect to the Collins/Carstens/Baker parameter for linking Agree and move, this analysis may be the only one to uphold the strong link for this type of language. If spell-out of a low copy were possible in other languages as well, however, the data that first inspired the Agreement Parameter would have to be accounted for in a different way. Therefore, there must be some extra factor that influences the agreement patterns. This could for example be that subject marking involves a topic or [-focus] feature (see Zeller 2008) in the languages that have non-agreeing -locative/default agreement- inversion, or vice versa it could be that agreement is linked to (abstract) Case in Matengo. I leave this as a question for further research.

¹⁶ This objection can be overcome, as there could be reasons for derivingthetic sentences and subject focus in distinct ways, as Sheehan (2010) does for Italian.

¹⁷ It remains to be seen whether it is the hierarchical structure or the linear order which is relevant at this interface.

A syntactic prediction made by this low-copy analysis is that the subject should still take scope as if it were in the raised position, even if it surfaces in a low one. This could be tested with negative verbs and quantifiers, but unfortunately these data are not available. Therefore, although this analysis is not incompatible with what we know of Agreeing Inversion in Matengo, Makwe and Matuumbi, more research is needed for confirmation.

2.3.4 *No obligatory EPP*

A last logical possibility to analyse Agreeing Inversion and tackle the EPP "problem" is to simply assume that EPP is not always active. That is, the movement trigger is not obligatorily present on the head establishing subject agreement. This would allow the subject to stay in situ when there is no trigger, while the EPP would not form an obstacle to the wellformedness of the sentence. If, on the other hand, the movement trigger is present, the subject agrees and moves to appear in a preverbal position. However, optionality is not supposed to be possible in an economical derivational system. In Reinhart's (1996, 2006) approach to economy she explains how apparent optionality is possible, but only if the result of absence/presence is a difference in interpretation at the interfaces. In Matengo, Makwe and Matuumbi, we do find a difference in interpretation between a (moved, +EPP) preverbal subject and a (in situ, -EPP) postverbal subject, as illustrated in (31): preverbally, *ńkongu* "tree" is interpreted as the topic, whereas postverbally it is non-topical.

(31) MATENGO (Yoneda 2011:756)

- a. *ńkongu gu-hábwi:ke.*
 3.tree 3SM-fall/PF

(As a comment on a particular tree) "The tree has fallen down."

- b. *Gu-hábwiki ńko:ngo.*
 3SM-fall/PF 3.tree

(As athetic sentence) "A tree has fallen down."

(Answer for "What has fallen down?") "A tree has fallen down."

Assuming an optional movement trigger/EPP implies that the interpretation comes about at the interface, just as suggested in the previous subsection. The other option for non-obligatory EPP would be to *never* have a movement trigger associated with ϕ agreement, but always one with a topic feature hosted by an independent head (topP) in the left periphery. Subjects (and other elements) could hence only end up in a preverbal position if attracted by the

topic head, which account for the restriction of the preverbal domain to topical elements as suggested by Yoneda (2011) for Matengo.¹⁸

2.4 Conclusion

On the basis of the current data, we can conclude that in Matengo – and by extension Makwe and Matuumbi – 1) the subject is in a low position, 2) the subject marker is an agreement marker rather than a pronominal clitic, which rules out an analysis in which the SM values EPP, 3) there are no clear indications of the presence of a locative null expletive (leaving open the possibility for a true null expletive, which would have to be stipulated for theoretical reasons), 4) if some interaction with the interface is necessary anyway, a derivation with less movement operations should be preferable, which would argue for an analysis without an obligatory EPP instead of an analysis with subject movement and spell-out of a low copy. Needless to say, more data and insights are needed for the languages which display this type of Agreeing Inversion, in order to further assess the syntactic, prosodic and interpretational properties and draw a firmer conclusion on which account best captures the patterns.

3 MICRO-VARIATION WITHIN AGREEING INVERSION

Whichever the best analysis may turn out to be for the in-situ inversion constructions discussed for Matengo, Makwe and Matuumbi, it would not work (the same way) for Makhuwa. Makhuwa displays fundamentally different properties in subject inversion, even if the subject marker does agree with the postverbal subject.

3.1 Differences: Matengo and Makhuwa

The first notable difference is that Makhuwa allows VOS word order, as shown in (32), but not VSO. This is unexpected if the subject is in situ, assuming the object does not scramble to a position between verb and subject –especially given the fact that VOS is athetic sentence without narrow focus on either subject or object.

(32) MAKHUWA

<i>Oo-vára</i>	<i>ephepélé</i>	<i>naphúl'</i>	<i>úule.</i>
1SM.PERF.DJ-grab	9.fly	1.frog	1.DEM.III

¹⁸ This would, however, create some difficulties in accounting for the preverbal subject in the SVX sentences in (24) and (28). As suggested earlier, this may have to do with a more general restriction on postverbal elements inthetic sentences.

"That frog caught a fly!"

A second difference is the impossibility for a focused subject to occur postverbally in a monoclausal sentence. In Matengo,¹⁹ focused subjects are perfectly grammatical in the position after the verb: an inherently focused wh subject can follow the verb (34), as can a subject which is accompanied by the focus particle "only" (33). In Makhuwa, these subjects cannot occur in the same VS construction as used in athetic sentence, as shown in the counterparts in (35) and (36).

MATENGO

- (33) *Ju-pomulé María pe:na.*
 1SM-rest/BF 1.Maria only
 "Only Maria is resting."

- (34) *Ju-pomulé nya:?*
 1SM-rest/BF 1.who
 "Who is resting?"

MAKHUWA

- (35) **O-náá-wóova árántáatsi páni?*
 1SM-PRES.DJ-fear 2.spiders 1.who
 int: "Who is afraid of spiders?"

- (36) a. **Aa-váh-íya ekanétá anámwáne paáhi.*
 2SM.PERF.DJ-give-PASS 10.pens 2.children only
 int: "Only the children were given pens."
 b. *Aa-váh-íya ekanétá anámwáne.*
 2SM.PERF.DJ-give-PASS 10.pens 2.children
 "The children were given pens."

Nevertheless, thethetic construction may not be the appropriate comparison for subject focus. In Makhuwa, athetic sentence uses the disjoint verb form, which indicates that the following element is not exclusively focused. But whereas in Matengo both forms can be used -disjoint to indicate theticity

¹⁹ I take Matengo as the example language for the in-situ type of Agreeing Inversion for comparison with Makhuwa, but I assume that the same holds for other languages that show these properties, such as Makwe and Matuumbi.

and conjoint for subject focus- this is not the case in Makhuwa. As I have argued in Van der Wal (2008, 2009), what appears to be a conjoint form followed by a subject, as in (37), is in fact a pseudocleft construction.

- (37) *E-n-khú má ettuurá.*
 9-PRES-exit.REL 9.ashes.PL
 "What comes out is ashes."

There are a number of factors and arguments contributing to the analysis as a pseudocleft. First, the subject relative verb form is identical to the conjoint verb form, compare (38b) and (38c).

- (38) a. DJ *Nlópwána oo-thípa.*
 1.man 1SM.PERF.DJ-dig
 "The man dug."
 b. CJ *Nlópwána o-thip-alé nlittí.*
 1.man 1SM-dig-PERF 5.hole
 "The man dug a hole."
 c. REL *nlópwána o-thip-alé*
 1.man 1-dig-PERF.REL
 "the man who dug"

A headless relative is formed by simply omitting the head noun. This is illustrated in the headless subject relative in (39c), which only differs from the relative in (39b) in the absence vs. presence of the head noun of the relative, *mwanámwáne* "child". What looks exactly like a CJ verb form may thus also be a headless relative verb.

- (39) a. DJ *Mwanámwáne o-hoó-khwa.*
 1.child 1SM-PERF.DJ-die
 "A/the child died."
 b. REL *Mwanámwáne o-khwa-alé o-rí owáani.*
 1.child 1-die-PERF.REL 1-be 17.home
 "The child who died is at home."
 c. REL *O-khwa-alé o-rí owáani.*
 1-die-PERF.REL 1-be 17.home
 "The one who died is at home."

Second, the tonal process called Predicative Lowering is applied to the object after a CJ form (compare citation form *nlitti* LHL with *nlittí* LLH in

(38b)). However, it is also used to change a noun into a nominal predicate (40).

- (40) mwanámwáne "child" (LHHL)
 mwanamwáne "it is a child" (LLHL)

Considering these properties of relativisation and predication in Makhuwa, the combination of a verb that resembles a CJ form and a following (tonally lowered) "subject" is actually a pseudocleft, as illustrated in (41). The syntactic construction is copular, consisting of a headless relative clause and a predicative noun.

non-relative conjoint form	<i>okhwaalé</i>	<i>mwanamwáne</i>	post-CJ form
relative	<i>okhwaalé</i>	<i>mwanamwáne</i>	predicative form

Table 1

- (41) "CJ" *O-khw-aalé* *mwanamwáne*.
 1-die-PERF.REL 1.child.PL
 "The one who died is a/the child."

Evidence in favour of the pseudocleft analysis comes from the use of a copula in the predicate. Most nouns take the PL form when used predicatively, which is the same tonal form they take when appearing after a CJ verb form. However, nouns which require a copula to function as a predicate, such as question words and pronouns, may undergo PL, but do not take this copula after a CJ form (42). The fact that they do take a copula in sentences like (43) shows that the logical subject is predicative, and the construction must be analysed as a copular construction.

- (42) CJ *Mwi-n-tthar-alé* (**ti*) *páni?*
 2PL.SM-1.OM-follow-PERF.CJ COP 1.who
 "Who did you follow?"

- (43) a. *O-wa-alé* *ti* *paní?*
 1-come-PERF.REL COP 1.who
 "Who came?", lit. "the one who came is who?"
 b. *O-wa-alé* *t'* *uíle*.
 1-come-PERF.REL COP 1.DEM.III
 "He is the one who came.", lit. "the one who came is that one"

Another argument is found in the scope of negation with a quantified noun. If inversion were a construction with the logical subject in the postverbal focus position, that subject would have to remain in a position lower than the verb. This implies that it should fall under the scope of negation in case the verb is negative, indicated by a negation morpheme on the verb. If the "subject" is modified by "all", the reading should thus be "not all". The example in (44) shows that this is not the case: the quantified noun takes scope over the negation, and the reading is "all>not". This shows that the logical subject cannot be in the (low) focus position. In the same way, the negative verb (45a) takes scope over the noun modified by "only", and the reading is "only not". The reading "not only" is obtained when using a DJ form (45b). The ungrammaticality of the negative polarity item in (46) also shows that the noun is not c-commanded by the verb, and that this construction cannot be analysed as a CJ verb form with a following subject. An analysis as copular construction predicts the correct readings.

- (44) "CJ" *Tsi-hi-tsiw-ále* *epoolu* *ts-ootéene*.
 10-NEG-be.sweet-PERF.REL 10.cakes.PL 10-all
 "What was not sweet were all the cakes."
- (45) a."CJ" *E-hi-ki-moír-é* *ekanetapaáhi*.
 9-NEG-1SG-fall-PERF.REL 9.pen.PL
 (*tsoo-kí-móra* *étthú ts-íncééne*)
 10SM.PERF.DJ-1SG.OM-fall only 10.things.10-many
 "What I didn't drop was just the pen (I dropped other things)."
- b. DJ *Khi-ki-mór-ále* *ekanétá paáhi (n'*
 NEG.9.SM-1SG.OM-fall-PERF.DJ 9.pen only and
úttthú tsi-kíná tsoo-kí-móra)
 10.things 10-other 10SM.PERF.DJ-1SG.OM-fall
 "I didn't drop just my pen (other things fell, too)."
- (46) CJ **O-hi-wa-ále* *ne* *ntthú*.
 1-NEG-come-PERF.CJ not.even 1.person.PL
 int. "Nobody came."

A final argument is found in the word order. If the subject is in situ, we would expect VSO order with a conjoint form to be possible. Instead, the linear order is VOS, which is actually a relative clause containing V and O, followed by a predicative S, as in (47).

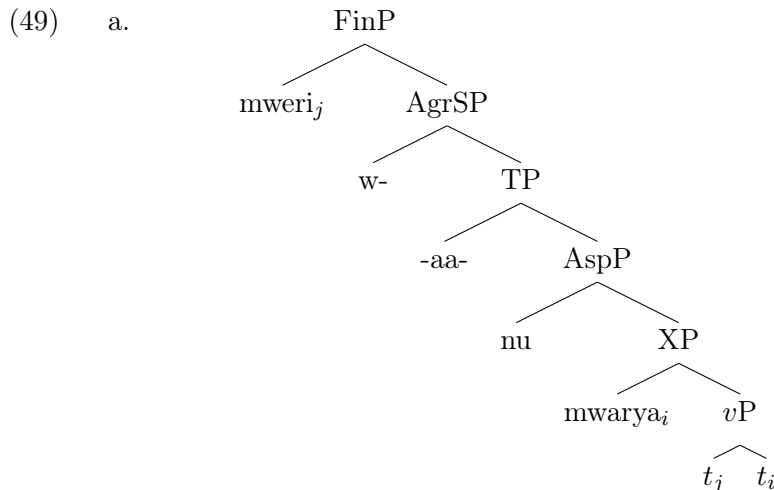
- (47) *E-m-mor-alé Puráhímu ekanetá.*
 9-1OM-fall-PERF.REL 1.Ibrahim 9.pen.PL
 "Ibrahim's pen fell.", lit. "what fell on/from Ibrahim is a/the pen"

In summary, what may appear to be a conjoint verb form followed by a (low) subject must be analysed as a pseudocleft. This means that even a focused subject cannot stay in the vP, which is unexpected if the same in-situ analysis as in Matengo were to hold in Makhuwa.

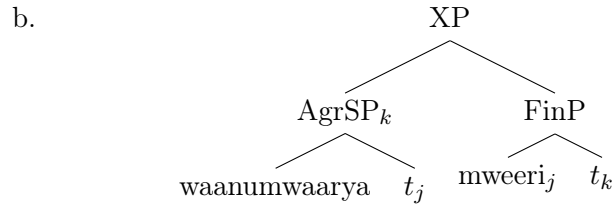
3.2 Subject moves in Makhuwa inversion ²⁰

If the inverted subject in Makhuwa cannot stay low, the alternative is that it has moved. I propose that it has in fact moved to a high subject position, and that the verbal complex has moved over it in order to derive the VS linearisation (as in Van der Wal 2009, and in contrast to the previous analysis in Van der Wal 2008). This analysis is illustrated for (48) in the trees in (49). First the subject *mweéri* "moon" moves from SpecvP to a high A position (49a). The exact position of the subject remains to be established, but it could be in FinP, as Julien (2002:196) proposes. After moving the subject, the remnant (AgrSP) is moved to a position higher than the subject (here indicated by XP, (49b)), resulting in a VS order.

- (48) *Waa-nú-mwááryá mweéri.*
 3.SM.PAST-PERS-shine 3.moon
 "The moon was shining."



²⁰ The analysis proposed here is largely based on and taken from Van der Wal (2009, chapter 4).



This analysis straightforwardly accounts for why the subject cannot be focused in situ, as it always raises too high to occur in the Immediate After the Verb focus position (Van der Wal 2009, 2011). As the preverbal domain does not allow for focused elements, like in many other Bantu languages (Zerbian 2006, Zeller 2008, Yoneda 2011), the only way a subject can be questioned or otherwise focused is by constructing a cleft or pseudocleft.

The analysis also explains why VOS word order is possible with the samethetic interpretation as VS order: if the whole remnant moves around the subject, the prediction is that this can contain just the verb, but also the verb and its complement (VO). Note also that if one assumes head-movement of V to I, rather than Julien's (2002) analysis for verb movement explained above, it would be more complicated to derive the VOS order.²¹

In the same way, we predict VSO order to be impossible, because it is not just the verb that moves (leaving the object in the VP). VSO order in Makhuwa is indeed only possible if the object is right-dislocated. The result is a VSthetic sentence with a dislocated O following, as in (50), where a pause is judged necessary before the object.

- (50) *Yaahí-thúma* *anámwáné* | *eníká* *iye*.
 2.SM.PAST.PERF.DJ-buy 2.children 10.bananas 10.DEM.III
 "The children bought (them), those bananas."

Finally, the remnant movement analysis explains in a natural way why the disjoint verb form is used and why the interpretation is that of de-topicalising the subject. The postverbal subject cannot be narrowly focused in Makhuwa but it cannot be topical either. Lambrecht (1994, 2000) explains that in a topic-comment articulation the subject is usually the topic. In athetic sentence, however, both the subject and the predicate are presented as the comment. In order to avoid the default reading of the subject as the topic of the sentence (as in a categorical sentence) the subject must be "detopicalised". In Makhuwa, the best strategy to avoid that reading is for the subject to appear

²¹ A predication made by the remnant movement analysis is that the object does not c-command the subject in VOS order. This remains to be tested with sentences that show the relative scope and binding.

postverbally. Placing the verb before the subject has exactly this effect: the subject is not topical (and not focal either). Now, the conjoint form can only be used if the verb is followed by some element it directly c-commands. As the postverbal subject is in a different constituent than the verb, only the DJ form can be used in VS order. However, in VOS order the verb is in the right configuration to have a conjoint form, which nevertheless does not happen. Perhaps the explanation is more functional in nature: if there is a narrowly focused element present in the sentence (triggering presuppositions), it cannot be the case that the whole sentence is presented as one piece of information. That is, if the object is focused, there is no possibility to detopicalise the subject.

Summarising, the VOS word order and the impossibility of a low focused subject lead me to propose a different analysis of subject inversion in Makhuwa in which the subject determines agreement on the verb and moves to a high position, after which the remnant moves over the subject to create a surface VS order.²²

3.3 Implications

Coming back to the issue of linking Agree and move, the proposed analysis suggests that the two are always related in Makhuwa, or in other words that the ϕ features probing for subject agreement have a movement trigger as a subfeature. The main difference between Matengo/Makwe/Matuumbi and Makhuwa would hence come down to whether or not subject agreement has a movement trigger. In both systems subject agreement is with the logical subject, irrespective of its status as topic or (part of the) comment, but in Makhuwa this Agree relationship is accompanied by movement of the subject, whereas in Matengo the subject is not required to move.²³ The simple presence or absence of a movement trigger can thus have far-reaching consequences for the underlying structure of inversion constructions, influencing the form of the verb (disjoint or also conjoint), the interpretation of the postverbal subject (thetic or also narrow focus) and the word order (VSO or VOS).

With respect to the question of null expletives, we can look at the Makhuwa system in two ways. The first is the one just described, where a movement trigger makes sure the EPP is always checked, and therefore there is no need for an expletive. A second approach looks at the motivation from the exact opposite point of view: because Makhuwa does not have an (overt or covert)

²² The analysis is hence the opposite of the one argued for by Costa (2002) for Portuguese, who shows that the subject in Portuguese VOS order is in situ and the object is scrambled.

²³ In Baker's (2008) analysis, which Diercks (2011) also shows to work for Lubukusu Disjoint Agreement Locative Inversion, this should be phrased as Makhuwa having a parameter setting for "upward" agreement, whereas Matengo/Makwe/Matuumbi is set differently.

expletive, the EPP must be checked by some other element. This ends up being the subject, either because it is the closest goal, or because it has nominative case. The conclusion that Makhuwa cannot have an expletive is motivated by the reasoning that it would be much less complicated to insert an expletive if such exist, rather than having subject raising and remnant movement.

Two difficulties for the proposed remnant-movement account are negation and the trigger for remnant movement. These are discussed here in turn.

Thethetic postverbal subject is in the scope of a negation if the verb is negative, as can be seen in (51), (52) and (53). The negative verb has scope over the quantified subject, and the readings are "not all" and "not every". Therefore, the negation in the verb should c-command the subject.

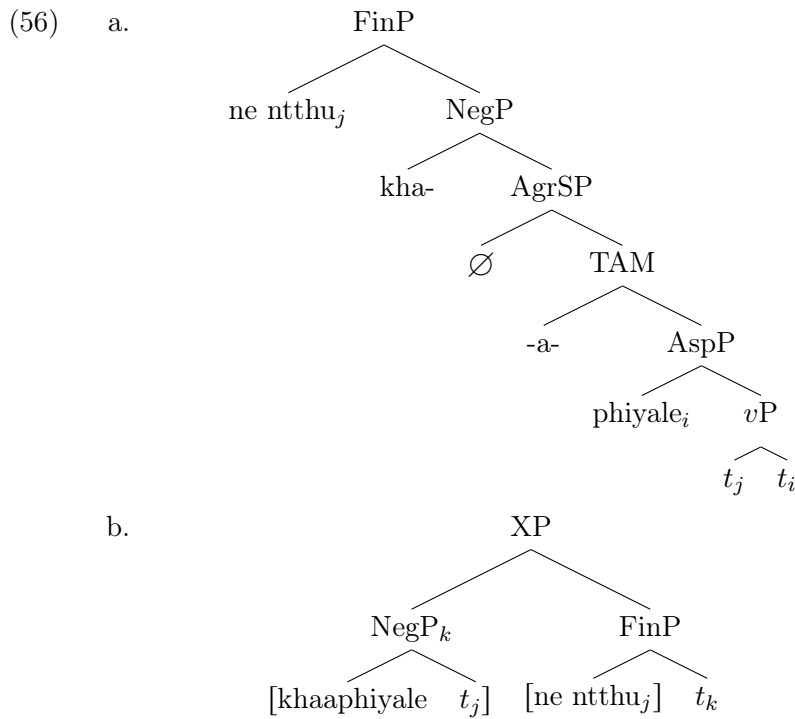
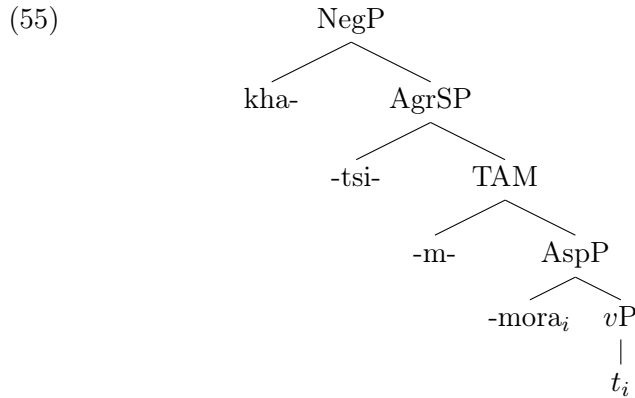
- (51) *Kha-tsi-khum-álé enámá ts-ootéene.*
 NEG-10.SM-exit-PERF.DJ 10.animals 10-all
 "Not all animals came out."

- (52) *Válé kha-ń-théreneya kata nítthú.*
 16.DEM.III NEG.1.SM-PRES-slip.DJ every 1.person
 "Not everyone slips there." (only children do)

- (53) *Kha-tsi-shukúl-álé ntháńka ekaláwá ts-ootéene.*
 NEG-10.SM-lower-PERF.DJ 5.sail 10.boat 10-all
 "Not all boats have unrolled their sail." (there is one who hasn't unrolled)

If the whole verbal remnant is moved to a position higher than the subject, as in the analysis proposed, how can verbal negation c-command the subject? In the structure of the affirmative sentence in (49) above, the highest node of the remnant is AgrSP, and after movement this maximal projection c-commands the subject. However, if the highest projection of this cluster is NegP, the subject can still be licensed by negation. In a negative sentence the position of the negative prefix on the verb suggests that NegP is the highest node of the verbal cluster: it is the first of all inflectional markers in Makhuwa, and it even precedes the subject marker, as can be seen in (54) and (55). The preverbal subject, which naturally precedes the negation marker on the verb, is thus in a higher position than the specifier of the subject agreement marker anyway. In (56) the subject is in the specifier of a high projection (FinP) and here it is possible to move NegP (and the rest of the remnant part dominated by it), as shown in (56b).

- (54) *Kha-tsi-ń-móra.*
 NEG-10.SM-PRES-fall.DJ
 "They didn't fall."



Even if a negative head does not itself c-command the negative polarity item (NPI) *ne ntthu* "anyone", we find other cases in which non-direct c-command seems possible. This is the case in (57), for example, where "no" is embedded inside a PP, but still licenses the NPI "any".

- (57) At no point did she make any pancakes. (Leston Buell, p.c.)

Interestingly, the morphology of the Makhuwa verb has two places for negation. Some negative conjugations are marked by the pre-initial negative prefix *kha-* and others have the post-initial negative prefix *hi-*. If prefixes correspond to functional projections, there are two projections for negation: one preceding the subject agreement and one following it. With the second negation morpheme (*-hi-*), NegP is not the highest node of the verbal cluster, and it would not c-command the subject after remnant movement. However, in VS constructions only the disjoint conjugations are found, which use the highest NegP (*kha-*). Therefore, NegP is always the highest node of the negative verbal cluster which is moved around the subject.

A more difficult issue is the motivation for remnant movement. It is unlikely that the verbal complex moves in order to get a certain interpretation for itself; instead it seems to move so that the subject can avoid a topical interpretation. This "altruistic" movement "cannot be caused by an attraction of a head that bears information structure features - unless one is willing to assume that negative specifications can serve this purpose as well" (Fanselow 2003:211). The only alternative the theory gives us at this point is to resort to the interpretive interface, where the derivation only converges if the subject of athetic sentence does not appear in the preverbal domain, as the preverbal domain is mapped to a topical interpretation at the interface. Considering that altruistic movement is a more fundamental challenge for current generative syntax in general, I shall leave this question for further research.

4 CONCLUSION AND FURTHER IMPLICATIONS

Even if it is not yet clear what would be a satisfying analysis for Agreeing Inversion in Matengo, Makwe and Matuumbi, we can draw the conclusion that agreement in these languages must somehow be different from the superficially similar agreement in Makhuwa. One way of accounting for this parametric variation is to say that the languages differ in whether or not subject agreement, that is, the ϕ features on I/AgrS, is associated with a movement trigger/EPP feature. This is essentially the Agreement Parameter as proposed by Collins (2004) and its variants in Carstens (2005) and Baker (2003, 2008). Such an account brings up certain questions.

First, if Makhuwa has essentially the same parameter setting (Agree = move) as the languages with "non-agreeing" inversion, what distinguishes Makhuwa from those languages? Or: why does Makhuwa not have Locative Inversion or Default Agreement Inversion? A second question concerns the other half of Carstens' and Baker's account, which states that if agreement in a language is not related to movement, then it is related to Case. Even though Makhuwa does not show morphological case marking, we know that

syntax makes use of abstract Case. The fact that subject agreement is always with the logical subject in languages with Agreeing Inversion, makes one suspicious of whether it could be that subject agreement is in fact sensitive to the nominative Case of the subject and hence always agrees with the subject. If the presence of abstract Case features in subject agreement is parameterised, as argued by Perez (1985) and more explicitly stated in Diercks (2012), then both Matengo and Makhuwa would have Case, but languages like Zulu and Sotho, which do not have Agreeing Inversion, would not have Case. This seems to be a worthwhile strand of research to explore.

Another option worth examining is the linking of information structural features to agreement. Morimoto (2000, 2006) suggests that subject marking in the Bantu language Kirundi is really more like topic marking. Combining this view with Zeller's (2008) idea of the subject marker as an antifocus marker and Miyagawa's (2010) proposal that T can have a [-FOC] feature, we can speculate that the difference between Zulu/Sotho on the one hand and Makhuwa on the other comes down to whether or not agreement is linked to a discourse feature like [-FOC]: In Zulu/Sotho, subject agreement would always be connected to such a feature *and* to movement, whereas in Makhuwa agreement is connected to movement but there is no discourse feature involved.

With respect to the EPP, it remains to be seen how much it contributes to understanding the inversion data from Matengo and similar languages. In this respect it would be interesting to compare the in-situ type of Agreeing Inversion with Default Agreement Inversion, where the subject marker is usually a locative class marker, at least historically (e.g. class 17 *ho-* in Sesotho). If Default Agreement Inversion developed out of Locative Inversion (cf. Marten 2010, Creissels 2011), the covert presence of the locative seems a natural stage in the diachronic process, and hence Pinto's (1997) hypothesis of a null locative argument may turn out to make the correct predictions.

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