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Focus excluding alternatives: Conjoint/disjoint marking in Makhuwa

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ABSTRACT

A prevalent definition of focus is that of alternative semantics: focus evokes a set of alternatives that are relevant for the interpretation of the sentence. This paper examines a focus marking mechanism in the Bantu language Makhuwa-Enahara. Of two alternating verb forms in this language (named conjoint and disjoint), the conjoint verb form evokes and excludes alternatives for the referent of the element directly following the verb. The different grammaticality judgements for the conjoint form with focus particles 'even' and 'only', with quantifiers and in alternative questions, as well as the use of the conjoint form in contrastive, selective and corrective environments suggests that the element following the conjoint verb form may be interpreted as exhaustive (excluding all alternatives) but must at least form a proper subset (excluding some alternatives). Analyses like underspecification of the focus interpretation or a predicative procedure face difficulties, and hence it is concluded that it is possible to encode in the grammar the notion of focus as excluding alternatives.

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1. Introduction

1.1. Focus interpretation

The term 'focus' has been used in a variety of ways in linguistic literature. In all these different uses of the term, a basic distinction can be made between the notion of focus as referring to the marking or encoding by linguistic means (focus marking) and the notion referring to a category in information structure (focus interpretation). It is important to keep apart these different notions of focus, as it is assumed that the interpretation of focus as a semantic-pragmatic category may be a universal, but the way it is encoded is not consistent crosslinguistically: different languages find different grammatical means to express focus. But even in terms of interpretation there are different opinions and definitions of what focus is.

A well-known theory about the nature and interpretation of focus is that it evokes alternatives. Krifka (2007:18) states that "focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions". For example, in the sentence *we ate* PANCAKES, the focus is on the pancakes. This focus implies that we could also have eaten something else than pancakes, by evoking alternatives like broccoli or strawberries. When all the alternatives evoked are rejected, the term 'exhaustive focus' is used: the proposition that we ate pancakes is the only true proposition in the set of alternatives that is formed by replacing the focused constituent PANCAKES with comparable alternatives. Focus then has truth-conditional effects.

It has been proposed that there are various types of focus, referred to with terms such as new information focus, contrastive focus, selective focus etc. The terms identificational focus and contrastive focus have often been used to refer to focus in the definition of alternative semantics. The term 'new information' is used to refer to the focus in the answer to a *wh*-question, and it

is often distinguished from identification or contrastive focus (e.g., É. Kiss, 1998). New information focus is reminiscent of the term 'comment', which refers to one part of the topic-comment division of a sentence. If every sentence is divided into a topic (what the sentence is about) and a comment (what is said about the topic), then the comment logically contains the new information about the topic. New information focus can include the whole comment, or part of the comment. I will not use the term 'new information focus' in this paper, but I do assume a division topic-comment. Within the comment some element may be focused, being defined as explicitly excluding relative alternatives. Other "types" of focus, like selective and corrective focus, I take to indicate a *context of use* rather then a different *kind* of focus. These could be referred to as pragmatic definitions of focus, whereas the alternative semantics gives a semantic definition of focus.

This paper concentrates on the semantic definition of focus as evoking relevant alternatives. Some of the questions concerning focus as alternatives are: How does the theory of alternative semantics relate to general communication principles? Can this notion of focus be encoded in the grammar? These questions are discussed in relation to the encoding of information structure in the Bantu language Makhuwa.

1.2. Encoding focus in Makhuwa

Focus, and information structure more generally, is an important factor in the grammar of Bantu languages. It can determine the word order, influence the phonological phrasing and even affect the conjugational system. For example, in Makhuwa a topical object preferably precedes the verb, like *miẃwá íye* 'those thorns' in (1), but a focused object is ungrammatical preverbally, like the *wh*-word *eshééní* 'what' in (2).[2]

(1)   miẃwá íye   koh-aálá,   nthíyán' óole   ko-ń-thélá…
       4.thorns 4.DEM 1SG.SM.PERF.DJ-plant 1.woman 1.DEM 1SG.SM.PERF.DJ-1OM-marry
       'those thorn bushes I planted, that woman I married'

(2)   *eshééní   o-náá-wéha?
       9.what   2SG.SM-PRES.DJ-look
       int: 'what do you see?'

A specific trait of some southern Bantu languages is the pairing of conjugational categories called 'conjoint' (CJ) and 'disjoint' (DJ). These verb forms are said to encode the same tense/aspect semantics, but differ in their relation with what follows the verb. For some languages (but not all) the use of the one or the other verb form is primarily determined by constituency (Doke, 1927; Van der Spuy,1993; Buell, 2006): the conjoint verb form is phrased together with an element that follows the verb within the same constituent, whereas the disjoint form is always constituent-final (although something may follow, placed outside that constituent). In all languages which display the alternation there are pragmatic effects attached to the choice for the one or the other verb form, where the element following the conjoint form is non-topical and may be focal, and the disjoint form is often described as "putting focus on the verb". However, for some languages the focal or non-focal interpretation of the element following the verb is essential in defining the alternation. The conjoint verb form then expresses that the focus is on the element following the verb, whereas this element is not in focus when the disjoint form is used. The CJ and DJ verb forms are illustrated for Makhuwa in (3). Both sentences indicate a present perfective tense, but nevertheless the morphology of the verb differs for the two verb forms. The formal and interpretational properties of the alternation are further discussed in section 3.

Makhuwa
(3)   a.   DJ   nthíyáná o-hoó-cá   nráma
                1.woman 1SM-PERF.DJ-eat 3.rice
                'the woman ate rice'

      b.   CJ   nthíyáná o-c-aalé   nramá
                1.woman 1SM-eat-PERF.CJ 3.rice
                'the woman ate *rice*'

This paper concentrates on Makhuwa, since in this language the conjoint/disjoint alternation is particularly noticeable. Makhuwa is a Bantu language spoken in the north of Mozambique and the south of Tanzania, classified as P.31 in Guthrie's (1948) classification of the Bantu languages. There are many variants of the language, but the total number of speakers of the

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[2] Abbreviations and symbols in the glosses: numerals refer to noun classes, or to persons when followed by SG or PL, APPL (applicative), CJ (conjoint), CONN (connective), DIM (diminutive), DJ (disjoint), DUR (durative), H (high tone), L (low tone), OM (object marker), PASS (passive), PERS (persistive), PL (predicative lowering), PLUR (plurative), SM (subject marker). High tones are indicated by an acute accent, low tones are unmarked. Examples without any tone marking were elicited by e-mail or telephone.

Mozambican variants is estimated at around 5 million (Sebastian Floor, personal communication). The variant of Makhuwa studied in this research is Enahara, spoken on Ilha de Moçambique and the surrounding coastal area. The canonical word order is SVO.

The rest of the paper is structured as follows. Section 2 further introduces the theory of alternative semantics and Wedgwood's (2009a,b) comments to it, section 3 describes the formal properties of the cj/dj alternation in Makhuwa and examines the use and interpretation of the cj form in the light of alternative semantics, and section 4 discusses underspecification and predication as alternatives to the encoding of alternative semantics. Some conclusions are drawn in section 5.

2. Alternative semantics

The semantic definitions of and approaches to focus usually refer to Jackendoff (1972), who in turn builds on Halliday (1967). Jackendoff takes as a basis the split in a sentence between presupposition and focus, where presupposition is defined as "the information in the sentence that is assumed by the speaker to be shared by him and the hearer" (p. 230). The focus of a sentence is thus defined as that part of the sentence which is *not* the presupposition. As Lambrecht (1994:213) puts it, focus is "the semantic component of a [..] proposition whereby the assertion differs from the presupposition".

Rooth (1992, 1996) takes this view on focus a bit further and formalises it in his theory of alternative semantics. According to Rooth, the general function of focus is to evoke alternatives for the focused referent. That is, the focus adds a focus semantic value to the ordinary meaning of the proposition. By substituting the focused phrase with alternatives of the same type, a set of alternative propositions is formed, where the presupposition remains the same. For example, the sentence 'I'm eating PANCAKES' can evoke alternative propositions of the form 'I'm eating X', such as 'I'm eating broccoli', 'I'm eating ice-cream', etc. These alternatives facilitate the interpretation of the proposition in which the focused element occurs.[3]

In his search for a unitary notion of focus, Wedgwood (2009b) criticises the alternative semantics-approach to focus. He states that focus cannot be defined by evoking alternatives. Alternatives are always involved in the interpretation of any utterance, since the information that a sentence contributes to the discourse is measured exactly by looking at the alternatives. If there were no possible alternatives, saying the sentence would not be informative, or, as Wedgwood puts it: "Put simply, there is no point my telling you something that could not conceivably have been otherwise". If the evocation of alternatives is that fundamental to communication, focus cannot be a primitive of human language. He concludes that "it would be intuitively odd for human language(s) to contain a grammatical primitive that encodes one of the fundamental preconditions on communication. This must at least cast doubt on the alternative semantics approach" (Wedgwood, 2009b:4).

At first sight it indeed seems difficult to see why and how language would make use of a special grammatical formalism in order to code something that should come for free with the basic principles of communication. Nevertheless, other concepts that are essential for communication as well can also be encoded in language. Concepts like old and new information are basic to communication, as there is always something new in a sentence (otherwise it would be irrelevant to utter the sentence) and very often there is also something old in the sentence (otherwise the hearers would quickly get lost in the new and unlinked information). In the same way the concept of 'topic' can be seen as a fundamental to communication: every sentence must naturally be "about" some referent. Yet, these concepts do have a place in linguistics, and specific languages can be shown to use these concepts in their grammar and encode them in their sentences.

Wedgwood's criticism of the alternative semantics can thus be challenged. Three further remarks can be made with respect to alternatives as a notion of focus. First, as Krifka notes, "focus indicates the presence of alternatives *that are relevant* for the interpretation of linguistic expressions" (emphasis mine). This is where focus differs from non-focus interpretations. Every utterance indeed implies that the state of affairs described might have been different and that other utterances might have been used as well.[4] Thus, every assertion evokes a general, wide set of alternatives. With regard to focus, however, the alternatives referred to are only those that are found relevant in the context of the preceding discourse and the presupposition. If the object is in focus, only the alternatives for the referent of the object are relevant in the theory of alternative semantics, not those for the whole utterance or other parts of it. Second, although one may think it odd for (a particular) language to encode an implication that should always be there, what is not strange is to explicitly evoke *and exclude* relevant alternatives and encode this explicitly. The background knowledge that "things could have been different" tells us that we *may* infer alternatives, whereas focus tells us explicitly that we *must* infer alternatives. Furthermore, if with this background knowledge alternatives are evoked from a general set, these alternatives are left unassessed, without a truth value. The (implications of) the general knowledge do not tell us whether these alternatives also hold or not. As I understand the definition of alternative semantics, focus does exclude alternatives, that is, it evaluates (at least a part of) the alternatives as 'not true'. It is thus necessary, first, to evoke relative alternatives for the focused referent (because otherwise there is nothing to exclude), and then to limit the proposition to a smaller set of referents, or just one referent, by excluding alternatives. This explicit and necessary evocation and exclusion of alternatives can very well be encoded in grammar. Third,

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[3] Only the basic semantic analysis is used here; I will not be concerned with the specifics of Rooth's formalisation and theory.

[4] This is also why 'new information focus' can be seen as a default status, which may be the reason why it is usually unmarked or less marked than focus that excludes alternatives (see also Selkirk (2008) who claims that 'given' is marked, rather than 'new').

focus does more than just saying that something is as presented and not otherwise. By demonstrating that the relevant alternatives are evoked (and excluded) for a referent, the focus informs us about the attention of the speaker and hearer and structures the discourse. In short, there is more to focus than the general, always-available alternatives that are basic to communication.

Wedgwood (2009b) also criticises the term 'identificational focus'. É. Kiss (1998) uses this term to refer to focus as a function that identifies the exhaustive referent for which the predicate phrase holds, being a subset of the elements for which the predicate potentially holds. Identification thus comes about by evoking alternatives and excluding these. Wedgwood claims that identificational focus is not focus at all and that it is not "necessarily encoded directly in the grammar (as opposed to being partly inferred on the basis of some other encoded meaning)". He illustrates his claim by discussing the formal and interpretational properties of the Hungarian syntactic pre-verbal focus position and the English *it*-clefts (Wedgwood, 2005, 2007, 2009a). Although his arguments may hold for the constructions that are said to encode focus in Hungarian and English (but see e.g., Szendröi, 2003; Brody, 1995, and various papers by É. Kiss), that does not mean that identification is always due to inference on the basis of other meaning. Section 4 discusses other approaches to the identificational interpretation, but Makhuwa does appear to encode focus, defined as the evocation and exclusion of alternatives (thereby identifying the focused element).

For Hungarian, Kenesei (2006) shows that the pre-verbal focus position induces an exclusive reading. He first shows that focus is an instantiation of identification in both the preverbal and the postverbal position in Hungarian. There is an existential assertion of a referent in both positions, but the difference between the two is in the relation with the set from which they are identified. The postverbal position identifies a referent as a subset of alternatives, whereas the preverbal focus position identifies the referent as a *proper* subset. This preverbal type of focus, which É. Kiss (1998, 2006) refers to as 'identificational', Kenesei calls 'contrastive'. The important characteristic of the preverbal focus, Kenesei argues, is not that it identifies a referent, but rather that it is contrasted to some alternative. Contrastive focus identifies a referent, but also "implies that there is at least one individual other than [the intended referent] for whom the proposition does not hold" (Kenesei, 2006:147). As I explain in section 3.3, I think that 'contrastive' is not the most appropriate term either, and in this paper I use 'exclusive' to refer to the interpretation of focus as evoking alternatives and identifying a proper subset by exclusion.

Exclusivity hence differs from exhaustivity. For É. Kiss (1998) focus is bound by an exhaustive operator. The focused element then refers to all and only those referents for which the predicate is true. There are two versions of exhaustivity, weak and strong (as explained by Beck and Rullmann, 1999, who refer to Bäuerle and Zimmermann, 1991). Weak exhaustivity names all the referents for which the predicate is true, and strong exclusivity names those referents and additionally gives the information that this is the complete set, that is, it implies or asserts that all alternatives are not true. Kenesei (2006) shows that (weak or strong) exhaustivity cannot be the correct characterisation of the focus position in Hungarian. What matters is that some alternative be excluded. For exclusivity one could also define two versions, weak and strong. Weak exclusivity means that there is at least *some* other referent to which the predicate does not apply (see also Molnár, 2002). Note that this does not imply that *not all* alternatives are excluded. Strong exclusivity is the same as strong exhaustivity: for *all* other referents the predicate does not hold. Strong exclusivity thus entails weak exclusivity: if all the alternatives are excluded, then logically some of the alternatives are excluded. For most of the data in Makhuwa, I cannot prove that a strongly exclusive (or: exhaustive) interpretation is intended or understood. What I can prove is that at least some part of the set of alternatives must be excluded, remaining ignorant with respect to the rest of the set of alternatives, which may also be excluded. When using 'exclusivity' I thus refer to weak exclusivity, but in some cases the interpretation can be strongly exclusive (i.e., exhaustive). In both cases, a proper subset is formed.

The notion of exclusivity, in the sense of evoking and excluding alternatives, plays a significant role in the grammar of Makhuwa. The choice of basic verbal conjugations in Makhuwa determines the (non-)exclusive interpretation of the following element in the sentence. Hence, the language demonstrates how morphosyntactic means can be used to encode the necessity of alternatives (and their exclusion) for a correct interpretation. The next section describes the formal properties of the basic conjugations in Makhuwa, and discusses their interpretation. It will be shown that the existence of relevant alternatives, and the exclusion of at least some of them, is indicated by the form of the conjugation in the grammar of Makhuwa.

3. Makhuwa grammatically encodes exclusion of alternatives

3.1. Conjoint/disjoint alternation

In several southern and eastern Bantu languages there is an alternation between two verb forms, called conjoint and disjoint, forming pairs of conjugations. These verb forms do not differ primarily in their TAM semantics, but in the relationship with the following element.[5] In Makhuwa the conjoint (CJ) and disjoint (DJ) verb forms occur in four basic tenses

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[5] The CJ form has a strong relation with the element in the Immediate After Verb position, which has been identified as a focus position for other languages as well. In Makhuwa, the IAV position as a focus position is tied to the use of the CJ form. For reasons of space I do not discuss the IAV position in this paper, but more information can be found in Van der Wal (2009:225-227).

(present, present perfective, past imperfective and past perfective).[6] They are formally distinguishable by their segmental morphology, their sentence-final distribution and the tonal pattern on the object. These characteristics are illustrated for the present tense in (4). The CJ form is marked by the prefix *–n–* (4a) and may not be sentence-final, i.e., some element must follow (4b). The DJ form is marked by the prefix *–náá–* and is allowed to occur in sentence-final position (4c), but some element may still follow (4d). The tonal pattern of the following element also differs according to the preceding verb form. After a DJ verb form the tonal pattern is as in citation form, LHL in (4d,e), whereas following a CJ verb form it loses the first H (which in this example is the only H) and adds a boundary H tone on the right, resulting in the pattern LLH in (4a). See Stucky (1979) and Van der Wal (2006) for more information on this tonal process.

(4) a. CJ ki-n-lówá   ehopá
             1SG.SM-PRES.CJ-fish 9.fish
             'I catch fish'

     b. CJ *ki-n-lówa

     c. DJ ki-náá-lówa
             1SG.SM-PRES.DJ-fish
             'I am fishing'

     d. DJ ki-náá-lówá ehópa
             'I catch fish'

     e.   ehópa
             'fish'

This alternation does not encode a difference in tense or aspect (Buell, 2006 for Zulu and Van der Wal, 2009 for Makhuwa), as is illustrated in (5). One would expect a question and answer to have the same tense and aspect, but the CJ form must be used in the question in (5a), and the DJ form is obligatory in this answer. The alternation does not encode a difference in transitivity or valency, either: both forms exist for transitive as well as intransitive verbs, as the CJ form may be followed by an object or an adjunct.

(5) a. CJ ashinuni yiir-al'   esheeni?
             2.DIM.birds 2SM.PAST.do-PERF.CJ 9.what
             'what did the birds do?'

     b. DJ ashinuni yaahi-vava
             2.DIM.birds 2SM.PAST.PERF.DJ-fly
             'the birds flew'

Instead, the difference in interpretation between the CJ and DJ verb forms is related to focus. More specifically, I propose that the CJ verb form in Makhuwa encodes an exclusive interpretation of the referent of the following element.[7] The next section provides evidence for this proposal, discussing the grammaticality and interpretation of objects and adverbs appearing after the CJ verb form.[8]

3.2. Evidence for an exclusive interpretation after the conjoint form

The exclusive interpretation of the element following the CJ verb form is evident in examples with the focus particles 'even' and 'only'. The particle 'only' emphasises that the predicate is exclusively (and exhaustively) true for the referent of the object. In (6) the buying only applies to tomatoes and not to other things. If the object is modified by *paáhi* 'only', it may only follow a CJ verb form and not a DJ form, which indicates that the CJ verb form encodes exclusivity. Moreover, the particle *hata* 'even' entails that more events have happened and that the object modified by 'even' is the least likely in the set of alternatives to make the predicate true. It is thus incompatible with the CJ verb form, but grammatical following a DJ verb form (7).

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[6] The alternation is not present in the conjugations used in relative clauses.

[7] Another focus hypothesis is that the DJ form expresses focus on the verb. See Buell (2006) and Van der Wal (2009, chapter 5) for arguments why this hypothesis does not hold in Zulu and Makhuwa. As mentioned in the introduction, in other languages constituency is a bigger factor in the use of the verb forms, and (non-)topicality may be more relevant for the interpretation than focus on or after the verb.

[8] Subjects in Makhuwa cannot appear after a CJ verb form. Focused subjects must occur in a cleft or copular construction; see Van der Wal (2008) and (2009:227-231).

(6)   a.   CJ   ki-n-thúm'   étomati   paáhi
                1SG.SM-PRES.CJ-buy 10.tomatoes only
                'I buy only tomatoes'

     b.   DJ   *ki-náá-thúma   etomátí   paáhi
                1SG.SM-PRES.DJ-buy 10.tomatoes only

(7)   a.   CJ   *áshííná   a-ni-ń-khúúrá   hatá mwálápwa
                2.Chinese 2SM-PRES.CJ-1OM-eat even 1.dog
                int: 'the Chinese eat even dogs'

     b.   DJ   áshííná   a-ná-ń-khúúrá   hatá mwálápwa
                2.Chinese 2SM-PRES.DJ-1OM-eat even 1.dog

The exclusive interpretation of the element following a CJ verb form is also present without the use of the focus particle 'only'. This is visible in elements with the quantifier *kata* 'every'. Since 'every cake' includes all relevant referents, an exclusive reading is impossible, and indeed the CJ form may not be used before 'every' (8a). However, when the quantified object is modified by a restrictive relative clause, it becomes possible to form alternatives and exclude these. Hence, in this case it is grammatical to use the CJ verb form, as in (9).

(8)   a.   CJ   *o-lawih-alé   kat'   epoólu/epoolú
                1SM-taste-PERF.CJ every 9.cake
                int: 'he tasted every cake'

     b.   DJ   oo-láwíhá   kat'   epoólu
                1SM.PERF.DJ-taste every 9.cake
                'he tasted every cake'

(9)   CJ   Kaásímú oon-alé   kút'   éfiílímé
                1.Casimo 1SM.see-PERF.CJ every 9.film
                e-thum-iy-é   n' itáát'   ááwe
                9-buy-PASS-PERF.REL by 1.brother 1.POSS.1
                'Casimo watched every film bought by his brother'

The same holds for nouns modified by the quantifier *oteene* 'all'. These can only be preceded by the DJ form (10a). The CJ form is less grammatical or ungrammatical (10b), unless a relative clause is added (10c), which restricts the reference of the noun and hence opens the possibility for alternatives. When the whole set of referents indicated by 'all' is contrasted to another set, a proper subset can be formed again (within the set of things one can buy) and the CJ form is appropriate (11), as expected.

(10)   a.   DJ   koo-soma   eliivuru   tsooteene
                1SG.SM.PERF.DJ-read 10.books   10-all
                'I read all the books'

     b.   CJ   ?? ki-som-ale   eliivuru   ts-ooteene
                1SG.SM-read-PERF.CJ 10.books   10-all
                int: 'I read all the books'

     c.   CJ   ki-som-ale   eliivuru   ts-ooteene
                SG.SM-read-PERF.DJ 10.books   10-all
                tsi-lep-aly-aawe   Antonyo
                10-write-PERF.REL-POSS.1 1.Antonio
                'I read all the books that Antonio wrote'

(11)　CJ　nki-thum-ale　　　　enanahi　　　ts-ooteene,
　　　　　NEG.1SG.SM-buy-PERF　10.pineapples　10-all

　　　　　ki-thum-ale　　　　　epaphaya　　　ts-ooteene
　　　　　1SG.SM-buy-PERF.CJ　10.papayas　　10-all

　　　　　'I didn't buy all the pineapples, I bought all the papayas'

A similar case is presented in (12). It is grammatical for an indefinite non-specific object *ntthu* 'person/someone' to follow a DJ form (12a), but the sentence is unacceptable with a CJ form (12b). When a modifier is added, the object becomes specific and alternatives can be formed and excluded, and therefore the CJ form can correctly be used (12c). The CJ form is also possible when *ntthu* is interpreted as a generic, as in (12d), when exclusion can take place on the generic level, as a proper subset of species.

(12)　a.　DJ　ko-ḿ-wéha　　　　　　ńtthu
　　　　　　　1SG.SM.PERF.DJ-1OM-look　1.person
　　　　　　　'I saw someone'

　　　b.　CJ　*ki-m-weh-alé　　　　ntthú
　　　　　　　1SG.SM-1OM-look-PERF.CJ　1.person
　　　　　　　int: 'I saw someone'

　　　c.　CJ　ki-m-weh-alé　　　　ntthu　　a-vir-áká　mu
　　　　　　　1SG.SM-1OM-look-PERF.CJ　1.person　1-pass-DUR　18.LOC
　　　　　　　'I saw a certain person passing here'

　　　d.　CJ　ki-m-weh-alé　　　　ntthú,　nki-weh-álé　　enáma
　　　　　　　1SG.SM-1OM-look-PERF.CJ　1.person　NEG.1SG-look-PERF　9.animal
　　　　　　　'I saw a person/human being, not an animal'

More anecdotal evidence, implying an exhaustive interpretation, is found in the explanation of (13). The sentence in (13) was found to be illogical in a situation where you have actually caught three types of fish. My informants explained that if you were to use the sentence in that situation, then you want to keep it a secret that you have also caught other types of fish. Using the CJ form thus evokes the presence and exclusion of alternatives.

(13)　CJ　ki-low-alé　　　　enttaaré
　　　　　1SG.SM-fish-PERF.CJ　9.ntare
　　　　　'I caught *ntare*' (kind of fish)

As a last indication of the exclusive nature of the element following the CJ verb form, yes/no questions are examined in different contexts of use. Normally, yes/no questions take a DJ form (14a) and not a CJ (14b).[9] However, the CJ form can be appropriate for a yes/no question in a context where there is a clear exclusion of another referent. The question in (15) is posed in the physical context of a room that has an electrical lamp. Rather than switching on that light, someone has lit an oil lamp. The person posing the question does not want to inform after whether or not some event of lighting a lamp has happened, but she wants to know why precisely the oil lamp is lit, and not the alternative of the electrical light. As such, the CJ form is more appropriate to use, in order to sort that effect.

(14)　a.　DJ　woo-váríhélá　　　　ekanttíyéro?
　　　　　　　2SG.SM.PERF.DJ-light　9.oil.lamp
　　　　　　　'did you light the oil lamp?'

　　　b.　CJ　#o-varihel-alé　　　ekanttiyeró?
　　　　　　　2SG.SM-light-PERF.CJ　9.oil.lamp

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[9] Yes/no questions are in some sense always exclusive, in a certain way, since only 'yes' or 'no' can be true. The ungrammaticality of the CJ form in (non-alternative) yes/no questions suggests that the CJ form indicates the exclusion of relevant entities on a sub-sentence level.

(15) CJ o-varihel-alé   ekanttiyeró?
2SG.SM-light-PERF.CJ 9.oil.lamp
o-ttip-íh-é   o-m-párihel-é   lampát' ooyó!
2SG.SM-put.out-CAUS-OPT 2SG.SM-1OM-light-OPT 1.lamp 1.DEM.II
'Did you light the *oil lamp*? Put it out, switch on that (electrical) light!'

The same applies to the yes/no questions in (16). The habitual tense in (16a) is used for a neutral yes/no question (the DJ present tense form could be used here as well), to ask someone who has not yet thought of getting married, whereas (16b) is used when the speaker is surprised that the addressee wants to marry a specific girl (as opposed to someone else), and doesn't think too positive about it.

(16) a.   o-nni-pheela   othela?
2SG.SM-HAB-want 15.marry
'do you want to marry?'

b.   CJ   o-m-pheela   o-n-thela   ole?
2SG.SM-PRES.CJ-want 15-1OM-marry 1.DEM
'do you want to marry HER?'

These examples all indicate that the CJ verb form can only be used felicitously in contexts where at least some relevant alternatives, and possibly all, are excluded. The correct interpretation of the CJ verb form and the following element can thus only be reached when alternatives for the focused element after the CJ verb form are evoked and excluded. Also in contexts which have been said to encode other 'types' of focus, the unified characterisation of the meaning of the CJ verb form is the exclusion of alternatives, forming a proper subset. This is shown in the next section.

3.3. Exclusivity in different pragmatic contexts: contrastive, corrective and selective focus

Three of the many pragmatic types of focus are contrastive focus, corrective focus and selective focus. Although these refer to different pragmatic contexts, they all presuppose an exclusive reading of the referent and are all expressed by the same means in Makhuwa (and many other languages).

The term 'contrastive focus' has been used with various definitions. In one use, contrastive means "contrasting with alternatives" (see Molnár, 2002; Kenesei, 2006), for which the term 'exclusive' is used in this paper. Contrastiveness is alternatively defined as a property that explicitly contrasts one referent with another in the direct context. This is the definition Lambrecht (1994) uses, stating that "contrastiveness [...] arises from particular inferences which we draw on the basis of given conversational contexts" (Lambrecht, 1994:290, 291). Contrast is thus not a type of focus, but a pragmatic context. Hence, a contrastive interpretation is not just found with focal elements, but with topics as well. As can be seen in (17) and (18), a topical subject (*amáká* 'muslims') or topical object (*olávíláví* 'trick') can be interpreted as contrastive, but only when a following or preceding phrase indicates the contrast.

(17) amáká   a-n-ró   onsíkítthí
2.muslims 2SM-PRES.CJ-go 17.mosque
ni   makríś'táó a-n-ró   okeréca
and 6.christians 2SM-PRES.CJ-go 17.church
'the muslims go to the mosque and the christians go to the church'

(18) (Hare proposed to sell a trick to someone, who now comes to get it: "I came here to pick up the trick."
The woman said:)
olávíláví woo-phwánya só apátthány'   aáwé   khaá-vo
14.trick   2SG.SM.PERF.DJ-meet only 2.friend 2.POSS.1 NEG.1SM-LOC
'the trick you've found, but its friend is not here'

The same holds for focal contrasted elements: it is the context which defines the contrastive interpretation. In a context where a focal element is contrasted, the CJ verb form is used. In (19) the object *ephwetsá* 'octopus' is contrasted with *ehópá* 'fish' and it obviously has an exclusive interpretation as the mentioned alternative is negated. Similarly in (20) the cameleons are contrasted with the fish, and the CJ form is used.

(19) nki-var-álé   ehópá, ki-var-alé   ephwetsá
NEG.1SG.SM-grab-PERF 9.fish   1SG.SM-grab-PERF.CJ 9.octopus
'I didn't catch fish, I caught octopus'

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(20) anámwáne y-aa-kunsh-é anamanriíyá m-matátá-ni,
2.children 2SM-2OM-carry-PERF.CJ 2.cameleons 18-6.hands-LOC
alópwáná a-kush-ants-é ehopá
2.men 2SM-carry-PLUR-PERF.CJ 10.fish
'the children held cameleons in their hands, the men held fish'

The exclusive reading is not only obtained with contrasted objects, but also with contrasted adjuncts, as is illustrated in (21).

(21) nki-c-aálé ni kuyérí, ki-c-aalé ni matáta
NEG.1SG.SM-eat-PERF with 1.spoon 1SG.SM-eat-PERF.CJ with 6.hands
'I didn't eat with a spoon, I ate with my hands'

Corrective focus refers to contexts in which some previously given information is corrected. For example, if it is felt that the information about the indirect object in (22a) is incorrect, the sentence in (22b) may be used as a reply, replacing and thereby correcting the statement; the sentence holds true for Maninha, not for *mwan'áwé* 'her child'. In this reply the CJ verb form is used and the object is interpreted as exclusive: the alternative *mwan'áwé* 'her child' is excluded. The corrective interpretation is again induced by the context.

(22) a. nthíyáná o-h-aápéya nrámá para mwan' áwe
1.woman 1SM-PERF.DJ-cook 3.rice for 1.child 1.POSS.1
'the woman cooked rice for her child'

b. kha-mw-aáp-éel-ale mwan' áwé,
NEG.1SM-1OM-cook-APPL-PERF 1.child 1.POSS.1
o-mw-aap-eel-alé Manínya
1SM-1OM-cook-APPL-PERF.CJ 1.Maninha
'she didn't cook (it) for the child, she cooked for Maninha'

A focus is called 'selective' when the set from which a referent is selected is explicitly mentioned in the context. In (23a) the choice is presented between tea or coffee, and the answer in (23b) selects one of these alternatives, to the exclusion of the other. In both the question and the answer the CJ verb form is used, just as in the alternative questions in (24b) and, with adverbs, (25). These alternative questions require the exclusive selection of a referent and hence the CJ verb from must be used. The DJ verb form is used in neutral yes/no questions, as in (24a) (see also (14)–(16)). The interpretation of 'focus' in these examples can again be described in terms of exclusion, and when alternatives are mentioned explicitly in the context this can be called 'selective focus'.

(23) a. CJ o-m-phéélá ekafé o-m-phéélá eshá?
2SG-PRES.CJ-want 9.coffee 2SG.SM-PRES.CJ-want 9.tea
'do you want tea or coffee?'

b. CJ ki-m-phéél' ekafe
1SG.SM-PRES.CJ-want 9.coffee
'I want coffee'

(24) a. DJ n-náá-phéélá o-ń-thélá?
2PL.SM-PRES.DJ-want 15-1OM-marry
'do you want to marry her?'

b. CJ mwi-m-phéélá o-n-thelá mwi-m-phéél' oshupishú?
2.PL.SM-PRES.CJ-want 15-1OM-marry 2PL.SM-PRES.CJ-want 15.bother
'do you want to marry her, or do you want to bother?'

(25) CJ anámwáne a-n-cá vákhaani vákháani,
2.children 2SM-PRES.CJ-eat slowly slowly
a-n-cá yaakúvíhatsaka?
2SM-PRES.CJ-eat hastened
'do the children eat slowly or quickly?'

Summarising, in the contexts of contrastive, corrective or selective focus the CJ verb form is used in Makhuwa, and the contrasted/corrected/selected referents all indicate an exclusive interpretation. Thus, the CJ verb forms seems to indicate exclusive focus on the following referent, defined as evoking and excluding alternatives, forming a proper subset.

3.4. Less straightforward cases: VP focus and wh-elements

The examples discussed so far show that objects and adjuncts after a CJ verb form are interpreted as exclusive. There are two cases where the exclusivity analysis is less straightforward: when the focus is on both object and verb, and when a wh-element follows the CJ form. These cases are discussed in turn.

When not only the object is in focus, but the object plus the verb (i.e., a verb phrase in a transitive sentence),[10] the CJ form is also used. This is illustrated in (26), where a question–answer pair is considered to indicate the domain of focus. The question in (26a) inquires not only after the object, but the whole verb phrase ('writing a letter'), and in the answer the CJ verb form is used (26b); the DJ is not appropriate (26c).

(26) a. CJ o-n-iír'   ésheeni?
              1SM-PRES.CJ-do 9.what
              'what is she doing?'

      b. CJ o-n-lép'   épapheló
              1SM-PRES.CJ-write 9.letter
              'she is writing a letter'

      c. DJ #o-náá-lépá   epaphélo
              1SM-PRES.DJ-write 9.letter

At first sight this seems to run counter to the analysis that the CJ form encodes an exclusive interpretation of the element following the verb. However, it can be understood as an instance of focus projection. Selkirk (1995:555) proposes a rule of focus projection to explain that in English the sentence stress on a word at the right boundary of the sentence is ambiguous in marking focus on the word itself or on a unit bigger than that word. The focus can thus project up, for example from the object to the VP (27). Selkirk uses abstract F(ocus)-marking in the formal description of the process, stating that F-marking of an internal argument ('pancakes') licenses F-marking of the whole phrase ('ate pancakes').

(27) a. (what did she eat?)
              she ate [PANCAKES]_foc

      b. (what did she do?)
              she [ate PANCAKES]_foc

Even if a language does not indicate focus by stress, or if a theory is preferred which does not use abstract F-features, the generalisation can still hold that focus on different domains in the sentence is expressed by the same linguistic means. In Makhuwa, focus on the object and focus on the VP are both indicated by the CJ verb form. The interpretation is still exclusive, but the context determines the element for which the alternatives are evoked and excluded: only the object/adjunct following the CJ verb form, or the verb phrase including the verb and the object/adjunct. The CJ verb form thus tells the hearer that the exclusion of alternatives is relevant in the interpretation of the sentence but leaves the scope for this focus underspecified.

The CJ form is also obligatorily used before wh-words and in the answers to (non-subject) wh-questions, and the DJ form is ungrammatical, as shown in (28) and (29). The question is how a wh-element can be interpreted as exclusive. Or, from a different perspective: if the element following a CJ verb form is interpreted as exclusive, what does this tell us about the interpretation of questions? Although I do not have a conclusive answer to these questions, I would like to make some suggestions.

(28) a. CJ a-n-aápéyá   esheení?
              2SM-PRES.CJ-cook 9.what
              'what are they cooking?'

      b. CJ a-n-aápéyá   nramá
              2SM-PRES.CJ-cook 3.rice
              'they are cooking rice'

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[10] When the verb is sentence-final with an intransitive predicate, the DJ form must always be used.

(29) a. cj   ni-n-iípá   tsayi?
               1PL.SM-PRES.CJ-sing how
               'how do we sing?'

      b. dj   *ni-ná-mwíipa   tsayi?
               1PL.SM-PRES.DJ-sing how

According to Hamblin (1973), a question denotes the set of propositions that can be possible answers to the question. Karttunen (1977) modifies the analysis to say that "questions denote the set of propositions expressed by their *true* answers" (Karttunen, 1977:10, emphasis in original). If the cj form in Makhuwa indicates exclusivity of the following element, the answer indicates not only for which referent the predicate is true but also that there is a referent for which it is not true. This implies that it is the answer rather than the question that makes the split "true vs. non-true", and that consequently the question must contain all the possible (true and non-true) answers in order for the answer to be able to make the split, contra Karttunen. On the other hand, it could be that both question and answer exclude the possible but non-true answers.[11] That is, the person asking the question indicates that she wants a true answer, excluding non-true possibilities, and the person answering the question indicates that the answer is indeed true, and reconfirms that there are referents for which the predicate does not hold, i.e., excluding non-true answers.

Beck and Rullmann (1999) modify Karttunen's (1977) approach, building on suggestions by Heim (1994) and Groenendijk and Stokhof's (1982) criticism that Karttunen cannot capture a (strong) exhaustive reading of questions. Proposing a more flexible approach to focus, Beck and Rullmann suggest that an answer must be maximally informative, and that the precise interpretation depends on the context. They conclude that the basic semantics of a question is non-exhaustive (following Hamblin, 1973), but depending on other factors the answer, and hence the question, may be interpreted as exhaustive (excluding all alternatives). Looking at the Makhuwa data from this perspective, three things can be observed. First, the Makhuwa data available so far cannot provide evidence in favour or against the interpretation of questions as necessarily exhaustive (as proposed by Groenendijk and Stokhof, 1982). Second, and related, the interpretation of the elements in post-conjoint position suggest that it is not so much the exhaustiveness that matters, but rather the exclusivity. Whether or not the answer is a complete answer seems to matter less than whether the answer is true in opposition to an alternative answer. And third, if *wh*-questions in Makhuwa ask for a set of propositions excluding other propositions with relevant alternatives, a completely un(der)specified account of questions such as that of Hamblin (1973) cannot account for the use of the cj form with *wh*-elements. In other words, if we want to keep a unified account of the interpretation of the element following the cj verb form, the denotation of *wh*-questions must be more specific than the set of possible answers. The alternative of an underspecified meaning is shown to be problematic in section 4.1.

From a pragmatic point of view, it should only be logical that speakers ask for a split in true and non-true propositions. In that sense, questions are always 'exclusive', except maybe for Sunday school questions like 'what did God create?'. Therefore, the use of the cj form in *wh*-question-answer pairs is in accordance with the Gricean maxims of quantity and manner: "make your contribution to the conversation as informative as necessary" and "avoid ambiguity" (Grice, 1975). In an answer one indicates the referent for which the predicate holds, excluding alternatives. The grammar of Makhuwa has a grammatical means to do this, using the cj form in an answer to a *wh*-question, and if such a means exists in the grammar of a language, it will naturally also be used in the question (even if it seems redundant). The cj/dj alternation is thus used in question-answer pairs in order to comply with the rules for good conversation.

A remaining issue with respect to questions is incomplete questions and answers. Not every question requires or desires a complete answer, as for example in the question 'where can I find a post office?'. Mentioning just the location of the nearest post-office will suffice as an answer. This 'mention-some' interpretation needs a separate explanation in analyses that take exhaustivity as (one of) the interpretation of questions. However, if not exhaustivity but exclusivity is most relevant in questions, it appears that the mention-some reading is not a counter-example: mentioning some referent as an answer can still exclude alternatives, even if it is not all alternatives. Regarding incomplete answers, it would be interesting to see whether a dj form could be grammatical in an answer to an object question, specifically in a situation where one wants to make explicit that the referent in the answer may not form a proper subset, i.e., when the predicate may also be true for all the alternatives. Unfortunately, I do not have these data for Makhuwa, and in addition question–answer congruence may also be an influence.

Summarising, the use of the cj verb form evokes alternatives for the element following the verb (or, by projection, the verb phrase), indicating that the proposition is true for the referent of that element and excluding at least one of the alternatives. The different grammaticality judgements for the cj form with focus particles 'even' and 'only', with quantifiers and in alternative questions, as well as the use of the cj form in contrastive, selective and corrective environments suggests that the element following the cj verb form may be interpreted as exhaustive (excluding all alternatives) but must at least form a proper subset (excluding some alternatives). The next section discusses whether this evocation and exclusion of alternatives is directly or indirectly encoded in the grammar, relating again to Wedgwood (2009a,b).

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[11] As long as the alternatives are formed on a sub-sentence level, since yes/no questions generally take a dj form.

4. Alternative accounts to alternatives

Whether certain grammars are sensitive to the notion of focus in encoding alternatives is not the core concern of Wedgwood (2009a,b). Rather, his two main points are that 1) he contests that there exists a universal notion of focus, and 2) he warns us not to blindly map meaning onto structure and thereby confuse effects and causes. With respect to the first point: whether focus really exists as a primitive and has a core semantic meaning or function, or whether focus can only be used as a cover term for related formal and interpretational phenomena is an interesting question that, in order to be answered, requires a better understanding of the diverse focus effects visible in different languages. Hence, I refrain from discussing the plausability of focus as a universal category (in whichever definition). I just observe that in the particular grammar of Makhuwa, the notion of focus as evoking and excluding alternatives is linked to the use of the CJ verb form, and propose that the CJ verb form is a linguistic means used to encode this notion of focus.

The second point is interesting to examine here. Just the fact that some construction has a certain interpretation cannot be taken as evidence that the construction is used *to express* that interpretation and that the interpretation triggers or generates the use of the construction (Wedgwood, 2009b). The focus effects should not be taken to be their own grammatical causes. It could be the case that what is encoded is actually a more basic linguistic operation, or that the meaning of a grammatical construction is underspecified, the focus effects being due to pragmatic inferences. For Makhuwa, this generates the question whether the use of the CJ form is indeed caused by the need to express exclusivity, or whether the exclusive interpretation is the effect of inferences. The interpretation encoded by the alternation could be underspecified (not necessarily exclusive), or the resulting interpretation could be due to inferences, while some other meaning is actually encoded. I consider the option of underspecification first and then discuss the alternative that Wedgwood (2005, 2007, 2009a,b) and É. Kiss (2006, 2007) propose for Hungarian focus, which is that the focal interpretation arises from applying a predicative procedure.

4.1. Underspecified focus interpretation

Beck and Rullmann's (1999) analysis of exhaustivity in questions leaves the interpretation and/or denotation of questions and answers underspecified. What is encoded semantically is that there are alternatives and that at least one is true, and whether or not the other alternatives are true as well is due to the interaction in the linguistic context. Such an analysis could be applied to focus as well. The position after the CJ form could be analysed as a general, underspecified focus position, where focus can be interpreted, for example, as anything that is not topical, as new information, or (when induced by context) as exclusive.

This could work quite well for the CJ verb forms in some other Bantu languages. In Sotho and Zulu, for instance, the element following the CJ form can be interpreted either as non-topical or as narrowly focal. The non-topical interpretation, sometimes called 'presentational focus', can be seen in thetic sentences, which have a verb–subject order. These are sentences that can be used out of the blue, and that do not have a topic (other than the here-and-now), which means that the postverbal subject is interpreted as non-topical, as illustrated in (30) and (32a). The postverbal subject can also be interpreted as the focus, as is visible in (31) and the translation of (32b), which can be an answer to a subject question. Identical to Makhuwa, questioned objects (34) and objects modified by 'only' (32) must follow a CJ form in Zulu, as well. The interpretation of the element following the CJ verb form is more variable in these languages and hence , if the CJ/DJ alternation is to be related to focus, the definition of 'focus' is preferably left underspecified.

Northern Sotho (Zerbian, 2006: 48, 60)

(30) CJ   go-bina   basadi
            17 SM-dance 2.women
            'there are women dancing'

(31) CJ   go-binne   basadi   fela
            17SM-dance.PAST 2.women only
            'only women danced'

Zulu (Buell, 2008, adapted)

(32) CJ   ku-cula   abafana
            17.SM-sing 2.boys
            a. 'there are boys singing'
            b. 'the BOYS are singing'

(33) CJ   u-cul-e   iphi   ingoma?
            2SG.SM-sing-PERF 9.which 9.song
            'which song did you sing?'

(34) CJ ngi-bon-e   uSipho kuphela
          1SG.SM-see-PERF.CJ 1.Sipho only
          'I saw only Sipho'

However, an underspecified account of focus would encounter several problems if applied to Makhuwa. For one, it could not account for the ungrammaticality of the CJ form before i) an element modified by 'even' as in (7), ii) a quantified element like 'every' or 'all' as in (9) and (10), or iii) an unspecific noun as in (12). Even more problematic is the occurrence of the DJ form in Makhuwa before non-topical elements or new information. In Bantu languages like Sotho and Zulu, non-topical elements can appear after a CJ form, and what follows a DJ verb form is interpreted as a post-clausal topic (see Creissels, 1996 for Tswana). In Makhuwa, what follows the DJ verb form can be part of the comment.[12] This is especially clear in the thetic verb-subject order, which in Makhuwa does not take the CJ form, unlike Sotho and Zulu, but the DJ form, as shown in (35) and (36), where the post-verbal subject is presented as new information.

(35) DJ noo-khúmá   nikhúlé
          5SM.PERF.DJ-exit 5.mouse
          'there came out a mouse'

(36) DJ e-náá-phwány-íyá   ephóme
          9SM-PRES.DJ-meet-PASS 9.blood
          'blood was found'

An object following a DJ verb form can also be new information. In the story from which (37) is taken, there has not been mention of a goat or of blood before this passage and before both objects the DJ form is used. The same applies to (38): the story simply tells that Tortoise is fleeing from the fire and encounters a big branch.

(37) DJ o-h-iv́vá   epúrí oo-mwárísh-el-átsá   ephómé...
          1SM-PERF.DJ-kill 9.goat 1SM-PERF.DJ-pour-APPL-PLUR 9.blood
          'he killed a goat, he poured the blood out...'

(38) DJ oo-rówá,   oo-phwányá   nríntta
          1SM.PERF.DJ-go 1SM.PERF.DJ-meet 3.branch
          'he went, (and) he encountered a big branch'

Having seen these uses of the DJ form and their interpretations, it can be concluded that the position after the CJ verb form is not the only place where non-presupposed information can occur. If focus were underspecified to include non-exclusive interpretations (non-topical, new information), it would cover more than the use of the CJ form, and the question remains how to demarcate what the CJ form encodes. The conditions on the use of the CJ form are thus more restricted than those on the DJ form. The DJ form is used when there is no exclusive focus in the sentence: an elsewhere condition. This could explain the difficulty the speakers have in explaining the use of the DJ form. They indicate that the DJ form with a following object or adjunct is used to "just say it, simply give information". Stucky (1985:56) also notes for Makhuwa-Imithupi that the disjoint form "is simply used to indicate that the action took place".

An underspecified account of focus thus demonstrates to be less explanatory than an analysis in terms of exclusivity. Nevertheless, the exclusive interpretation could also be a side-effect of a more basic linguistic operation, as has been claimed for Hungarian.

4.2. Predication

Inspired by the fact that the direct preverbal position in Hungarian can host either a verbal particle or a focused noun (in complementary distribution), É. Kiss (2006) proposes that the syntactic position occupied by either element is a predicative projection. Wedgwood (2005, 2007, 2009a,b) argues for the same analysis of focussing as predication from a semantic point of view. In this analysis, the identificational interpretation of the Hungarian pre-verbal focus position is not the result of identification (as an operator) being encoded in the grammar. Rather, the identificational interpretation indirectly results from applying a predicative procedure to a non-verbal expression. That is, the noun in the preverbal focus position in Hungarian is the logical predicate of the sentence, triggered in generative syntax by its position in PredP. If a referential (non-predicational) element is read as a predicate, an identificational (Wedgwood) or specificational (É. Kiss) reading is brought

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[12] A noun following the DJ form can also be interpreted as an afterthought, especially when there is a pause between verb and noun, and when the noun is marked by a demonstrative.

about. When identifying or specifying something, there exists a presupposition that there is something to be identified or specified. This presupposition is formed by the rest of the sentence. A sentence like (39), for example, is then analysed as having 'Marit' as the predicate, since it occurs in the direct preverbal position, and by inference the rest of the sentence will be the term that this predicate is applied to. The sentence will thus have as a presupposition that there is someone that János will see, and that person is identified as Mari.[13] The identification and presupposition are compositionally realised in the English *it*-cleft (see the translation of (39)): the predication of the copula combined with the referential noun phrase result in identification, and the relative clause expresses the presupposition of the sentence.

Hungarian (Wedgwood, 2007:220)

(39)   János MARIT   fogja látni
         János Mari.ACC will   see.INF
         'It's Mari who János will see'

If we look at Makhuwa from this perspective, we find a striking property in the expression of the CJ verb form. The element following the CJ form has a different tonal pattern, as mentioned in section 3.1 and illustrated again in (40). In the changed pattern, an underlying (doubled) H tone disappears, and in addition a H boundary tone may be added. Interestingly, the same tonal form is also used when a noun forms a nominal predicate, as in (41). This tonal process is referred to as Predicative Lowering, a term coined by Schadeberg and Mucanheia (2000) for the neighbouring language Ekoti.

(40)   a.   mfálúme   [LHHL]
             'authority'
       b.   ánátúúfu a-m-veleel-alé   <u>mfalumé</u> oparása   [LLLH]
             2.dancers 2SM-1OM-accompany-PERF.CJ 1.authority 17.fortress
             'the dancers accompanied the president to the fortress'

(41)   a.   latáráu   [LHHL]
             'thief'
       b.   omáárí lataraú   [LLLH]
             omar   1.thief.PL
             'Omar is a/the thief'

The same form may indicate the same process, suggesting a predicative procedure to apply to the element after the CJ form. Alternatively, there may be no synchronic connection between the two forms, but rather a diachronic one, linking the two occurrences of the tonally lowered form by their indefinite and/or identificational reading (Van der Wal, 2006).

First, note that the predication analysis for Hungarian was motivated by the complementary distribution of the verbal particle and the focused noun in the preverbal position. In Makhuwa there is no complementary element to occupy the postverbal position in a sentence with a DJ verb form. One could argue that it is the DJ form itself that occupies the predicate position or has a predicate function, as Wedgwood also argues that the verb forms the predicate in a Hungarian sentence without identificational focus or verbal particle. The logical predicate would then be the postverbal element when the verb takes a CJ form, and the verb itself when the verb takes a DJ form. For Makhuwa, that will leave the question of what position the verb occupies when it takes a CJ form, or which function is fulfills. If the element following the CJ verb form is the identificational predication, and the rest of the sentence forms the presupposition, then the verb is part of that presupposition. In the case of focus projection to the verb phrase, this forms a paradox, since the verb cannot at the same time be presupposed and asserted.

Second, if the interpretation of the construction with a CJ verb form is derived by presupposition and identification, it would be unclear why Makhuwa also has several copular constructions. The more insightful translation of the meaning of the Hungarian focus construction is what comes out in English as a pseudocleft. Thus, (39) is interpreted as 'the one János will see is Mari', where the first part is bound by a definiteness operator and it is this semantic object which is identified as being Mari. Exactly this structure exists overtly in Makhuwa, as can be seen in (42) and (43). In this construction, a relative clause precedes a predicative noun (marked by the tonal pattern of predicative lowering), and the construction has an identificational function.[14] The reversed structure, a cleft, is also used in Makhuwa, as illustrated in (44) and (45). There is even a third copular construction with a segmental copula *ti* between the noun and the relative clause, as in (46) and (47).

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[13] See Wedgwood (2005) for the more precise description of the process and the exact semantic operators involved.
[14] The CJ/DJ alternation does not exist in the relative conjugations. For an analysis of Makhuwa relative clauses see Van der Wal (2010).

The free relative clause in each of these constructions explicitly marks the presupposition, and the identificational reading straightforwardly derives from the predicative procedure marked by the copula or Predicative Lowering.

(42)   o-n-iíyá   lataraú
         1-PRES-steal.REL 1.thief.PL
         'who steals is a thief'

(43)   o-ni-ḿ-phéel-áawe   Hacíra   mwalakhú
         1-PRES-1OM-want.REL-POSS.1 1.Hacira 1.chicken.PL
         'what Hacira wants is chicken'

(44)   ekokholá   tsi-vel-iy-é
         10.rubbish.PL 10-sweep-PASS-PERF.REL
         'it is (the) rubbish that was swept'

(45)   ehopa   íyá   tsi-low-aly-áaka
         10.fish.PL 10.DEM 10-fish-PERF.REL-POSS.1SG
         'it is these fish that I have caught'

(46)   namárókolo t'   ítthík-ale
         1.hare   COP 1.throw-PERF.REL
         'Hare was the one who threw'

(47)   eshímá paáhí t' íc-áaly-áaka   (nrámá nki-c-aále)
         9.shima only   COP 9.eat-PERF.REL-POSS.1SG 3.rice   NEG.1SG-eat-PERF
         'shima was the only thing I ate (rice I didn't eat)'

The precise syntactic and interpretational differences between these different copular constructions are not clear yet, neither are those between a sentence with a CJ verb form and any of these cleft constructions. Nevertheless, if these constructions transparently encode the predicative procedure proposed by Wedgwood, and if they indeed display the identificational reading suggested, it would be uneconomic and unexpected to analyse another linguistic construction (i.e., a sentence with a CJ form) as expressing the very same semantic procedure and interpretation. A possible difference between the copular constructions and the CJ verb form may be that the copular constructions induce an exhaustive interpretation. Since the free relative clause is presumably headed by a definite element, which introduces a maximality presupposition, the predicational part is interpreted as the only entity that can be identified to this maximal set (e.g., 'the maximal entity that Hacira wants is identical to chicken'). Unfortunately, this has to remain as a prediction, because we do not know the intricacies of the interpretation of the copular constructions yet. Another difference between the CJ form and the copular constructions is that in the copular constructions or clefts both parts of the construction are marked (as background and as predicate, respectively). The function of a cleft is twofold: by predication it identifies an argument or adverb, but it also explicitly backgrounds the rest of the utterance by expressing it in a free relative clause. Whereas the post-CJ object is still ambiguous in scope between focus on the object or the verb phrase, a cleft explicitly marks both the focused element and the presupposition.

It is interesting in this respect that Hungarian can also make a cleft structure with a relative clause, expressing identification (48). Wedgwood (2009a) mentions this construction but does not discuss it any further. It is not impossible that in Hungarian the cleft expresses the same type of identification as the preverbal focus construction, but the two constructions are then predicted not to coexist for a long time. Indeed, and unlike the commonly used Makhuwa copular constructions, the cleft in Hungarian is not frequently used and is not seen as the standard way to express an identificational (focal) reading (Anikó Liptak, personal communication). The possible differences in interpretation between the cleft and the preverbal focus construction in Hungarian can shed light on the underlying semantic processes, as can the diachronic changes in meaning and use of the two constructions.

Hungarian (Anikó Lipták, personal communication)
(48)   János az,   aki   kitörte az   ablakot
         János that who broke   the window.ACC
         'it is János who broke the window'

Summarising, an underspecified definition of focus would be unable to exclude some uses and interpretations of the DJ form and properly demarcate the interpretation of the CJ form. An analysis of the post-CJ element being the logical predicate of the

sentence presents difficulties in accounting for the focus projection and the unexpected commonly used copular constructions in Makhuwa. Although I am sympathetic to an analysis where less is coded in the grammar and more value is attributed to the pragmatic inferences, at the moment I do not see any other (more basic) semantic process whereby the exclusive interpretation of the CJ/DJ alternation could be explained.

5. Conclusion

From the evidence concerning the truth-conditional properties of the CJ verb form, as well as its use in certain pragmatic environments, I conclude that in Makhuwa-Enahara evoking and excluding alternatives is relevant for the interpretation of the proposition when a CJ verb form is used. The CJ verb form in Makhuwa encodes focus; more specifically, the focus interpretation is not just a pragmatic effect, but it has influence on the truth-conditional semantic values. In this semantic definition of forming a proper subset, focus can thus be encoded in the grammar of a language. This is not to say that alternatives are involved in every phenomenon that has been called focus. There may not even be one core notion that all variations and effects referred to as "focus" can relate to (Wedgwood, 2009a). As Rooth (1996:296) remarks, it might for now be a good idea to just discuss the semantics of a certain construction in a certain language.

It remains to be seen whether the semantic and pragmatic effects of the use of the CJ (or DJ) verb form can be accounted for indirectly, by reference to a more general process, be that a process within the grammar or a more general cognitive process. I have not found such a process for Makhuwa, but I have indicated that an analysis in terms of a predicative procedure faces difficulties like focus projection and the additional presence (and active use) of copular constructions in the language.

From the analysis presented, it appears that exclusivity plays a more important role than exhaustivity in the semantic definition of focus as evoking (and excluding) alternatives. This may turn out to be relevant for the interpretation of *wh*-questions and focus. It would be interesting to see whether different focus marking mechanisms within one language can differ just with respect to exclusivity or exhaustivity, for example that a postverbal position induces an exclusive interpretation and a preverbal position or clefted construction an exhaustive interpretation.

This paper focuses on Makhuwa, but we know that the CJ/DJ alternation functions differently in other Bantu languages, having different requirements, restrictions and interpretations. A comparative study of the CJ/DJ alternation in other Bantu languages may elucidate the intertwined mechanisms of prosody, word order (especially the Immediate After Verb position), constituency, verb form and pragmatic inferences, which are all related to the CJ/DJ alternation and its interpretations. More in-depth research is also needed on the precise use and interpretation of the conjoint/disjoint alternation in Makhuwa, such as the use of verb forms before embedded clauses and in idioms, and on the various cleft-like copular constructions.

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