

Two Subject Asymmetries in Defaka Focus Constructions

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1. Introduction

Defaka allows optional fronting of one XP in a clause; this fronting carries with it some type of discourse prominence, and is taken here to be a process of focus movement. Interestingly, this movement can trigger special morphology in two different places, depending on what kind of phrase is focused. This results in two asymmetries between subjects and other types of phrases. First, focused local subjects are immediately followed by the particle *ko*, while other types of focused phrases are followed by the particle *ndo*. Second, if the focus-moved phrase is anything other than a local subject, a special post-verbal clitic *-ke* appears, obligatorily. These asymmetries are illustrated in the paradigm below: (1) is a discourse-neutral sentence; (2) focuses the subject (which appears clause-initially, followed by the particle *ko*), while (3) focuses the object (which appears clause-initially, followed by the particle *ndo*, and the clitic *-ke* appears after the verb and its tense/aspect/mood clitics).

- (1) ì Bòmá ésé-kà-rè
I Boma see-FUT-NEG
'I will not see Boma' (discourse-neutral)
- (2) ì **kò** Bòmá ésé-kà-rè
I **F.SBJ** Boma see-FUT-NEG
'I will not see Boma' (focused subject)
- (3) Bòmá **ndò** ì ésé-kà-rè-**kè**
Boma **FOC** I see-FUT-NEG-**KE**
'I will not see Boma' (focused object)

A relationship between movement and specialized morphology is not unexpected. A common analysis of focus movement is that focused XPs obligatorily raise to the specifier of FocP, a functional projection dedicated to focus, located in the left periphery of the clause (Brody 1990, Rizzi 1997, among others). The movement is driven by Foc^o, the head of FocP, which bears an uninterpretable [+Focus] feature that is rendered interpretable by moving a [+Focus] phrase (the focused XP) to its specifier (Aboh 2004, Rizzi 2006). If Foc^o were overtly realized, it would show up as a particle immediately following focused & fronted XPs, and some languages are known to have overt particles with exactly this distribution, such as Gungbe (Aboh 2004). The particles *ko* & *ndo* in Defaka both appear only in focus constructions, and in exactly the linear position where we expect Foc^o to be, which suggests they are overt realizations of the Foc^o head, in a structure as in (4).

- (4) [_{FocP} [_{Focused XP}]_i [_{Foc^o} *ko/ndo*] [_{TP} ... t_i ...]

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The puzzle in Defaka is that a focus movement analysis leaves some curious questions behind. First, why should there be focus morphology somewhere *other* than FocP? In other words, where does the extra clitic *-ke* go, and why is it there? Second, why should the form of the Foc^o head depend on the type of phrase being extracted? Why should there be any difference between *ko* and *ndo*?

The central proposal of this paper is that the vP phase (Chomsky 2000, 2001) provides the answer to these questions. The morphological patterns in Defaka focus constructions show a split between focused local subjects, and other types of focused phrases. The vP phase creates asymmetries between local subjects and other phrases: subjects are introduced in spec,vP (Kratzer 1996), which means they start off in the edge of the vP phase. By contrast, objects (and various other types of non-subjects) originate below v^o, which means they start off inside the vP phase.

This difference in position relative to the phase boundary has consequences for movement: subjects can move to FocP directly, whereas objects must move to the edge of the vP phase first before moving higher. We analyze the Defaka clitic *-ke* as a reflex of this intermediate movement.

The same phase-induced asymmetry also has consequences for the checking of other features, such as case. Objects need to resolve their case requirements inside the vP phase, but (local) subjects (being in the phase edge) do not need to. As such, they check their case features in the next phase – in the same phase when focus features must be resolved. We analyze the distinction between *ko* & *ndo* as a result of this difference in derivational timing. The subject-specific focus particle *ko* is a syncretic head (Giorgi & Pianesi 1996), which bundles [+Focus] together with the features responsible for licensing subjects. When this syncretism is not possible, the default focus head *ndo* is used instead.

2. Background about Defaka

Defaka is an Ijoid language (Jenewari 1983; Connell et al. 2010, forthcoming), spoken in a single village in the Niger Delta region of southern Nigeria. The language is highly endangered: there are estimated to be approximately 50 fluent speakers, but none use Defaka as their primary language, and inter-generational transmission is reported in only one household.

Defaka shares a number of ‘big-picture’ syntactic characteristics with Ijò languages, such as: rigidly SOV word order, no obligatory wh-movement, and a lack of visible subject or object agreement on the verb (Jenewari 1983; see also Ndimele & Efere 2003, and Connell et al. forthcoming). Carstens (2002) argues that one such related language, Kolokuma Ijò, is actually head-initial, and that the surface SOV word order is derived by raising of vP to spec,TP. Defaka exhibits stronger evidence for head-initiality in the form of clause-initial complementizers (C^os at the left edge of CP) and pre-nominal determiners (D^os at the left edge of DP); as such, we assume the SOV order is also derived, in basically the same way as for Kolokuma Ijò. This gives the structure in (5), which we take as the basic skeleton of the clause in Defaka.

$$(5) \quad [_{TP} [_{vP} \text{Subject } v^o [_{vP} \text{Object } V^o]]_i \text{ T}^o \text{ t}_i]$$

It is worth noting that in this basic template, spec,TP is normally occupied by vP. As such, we assume that subjects in Defaka do not raise to the standard spec,TP position to receive nominative case (McCloskey 1997), but instead to some slightly higher functional projection, ‘SubjP’.¹ With this basic clausal template as our backdrop, we now turn to the facts of Defaka focus constructions in more detail.

3. The facts & generalizations about *-ke*, *ko*, & *ndo*

3.1. Clause-internal focus movement

¹ See (among others) Cardinaletti (2004), Rizzi (2006), and Rizzi & Shlonsky (2007) for independent arguments for a SubjectP.

The basic patterns noted in section 1 are repeated below: extraction of the subject of a clause to the front of the same clause (referred to here as ‘local extraction’) results in the pattern in (6), while extraction of an object results in the pattern in (7), with *ndo* instead of *ko*, and *-ke* after the verb.

- (6) Subject *ko* ... V-T/Asp
 (7) Object *ndo* ... V-T/Asp-*ke*

Intransitive subjects exhibit the same behavior as transitive ones, as seen in (8): the sole focused argument is followed by the focus particle *ko*, and the clitic *-ke* does not appear.

- (8) ònkpám ¹kó mbà-mà
 trouble F.SBJ stay-NFUT
 ‘The trouble persisted’

We know of no true ditransitive verbs in Defaka, but the language does have serial verb constructions with multiple objects, as in (9). In such constructions, either object can be extracted, and both cases follow the same pattern as transitive subjects (compare (10-11) below with (3) above).

- (10) Àmànyà ómgbìnyà sònò á àmà-mà kí'á 'tè?
 Amaya shirt buy her give-NFUT market P
 ‘Amaya bought a shirt for her at the market.’
- (11) tári_{IO} **ndò** Àmànyà ómgbìnyà sònò t_{IO} àmà-kè kí'á 'tè?
 who **FOC** Amaya shirt buy give-**KE** market P
 ‘Who did Amaya buy a shirt for at the market?’
- (12) tàá_{DO} **ndò** Àmànyà t_{DO} sònò á àmà-kè kí'á 'tè?
 what **FOC** Amaya buy her give-**KE** market P
 ‘What did Amaya buy for her at the market?’

Focus extraction of non-DP phrases is also possible, as can be seen in the examples below. In (13), we see extraction of the VP complement to a verb; in (14), extraction of a full subordinate clause; and in (15-16), extraction of a PP adjoined to VP. In all of these cases, we find the same extraction pattern used for objects (not subjects): the focused phrase is followed by *ndo*, and *-ke* follows the verb.

- (13) [ɲmgbóò nám] **ndò** Tónyè kára-rè-kè
 fishing.net mend **FOC** Tonye want-NEG-**KE**
 ‘Tonye does not want to mend the fishing net’
- (14) [Bruce á ésé-mà] **ndò** Bòmá jíri-kè
 Bruce her see-NFUT **FOC** Boma know-**KE**
 ‘Boma knows (that) Bruce saw her’
- (15) [ándù kikià] **ndò** à èbèrè rì bòi-mà-kè
 canoe under **FOC** the dog RE hide-NFUT-**KE**
 ‘The dog is hiding under the canoe’
- (16) [Bòmá káà] **ndò** Gògó ándù sònò-kè
 Boma from **FOC** Gogo canoe buy-**KE**
 ‘Gogo bought a canoe from Boma’

These examples show that the asymmetry is not between subjects & object DPs in particular, but rather between subjects on the one hand, and a general range of other types of phrases on the other.

3.2. Long-distance focus movement

In situations with multiple clauses, the two subject asymmetry patterns diverge. Material in an embedded clause can undergo focus movement to the focus position of the embedded clause, or to the focus position of the matrix clause. These two possibilities yield different patterns for the focus-related morphology.

When the subject of an embedded clause is focused, we find the same pattern seen with matrix clause subjects, as shown in (17). The focused subject appears at the left edge of the embedded clause, immediately following the complementizer *nà*, and is followed by the subject-focus particle *ko*. The verb is followed by the normal tense/aspect/mood clitics: *-ke* does not appear.

- (17) Bòmá fàà-mà [nà ìní ¹kó t_i ándù été-mà-è-(*kè)]_{CP}
 Boma say-NFUT that they **F.SBJ** canoe have-NFUT-E-(*KE)
 ‘Boma said that they have a canoe’ (‘Boma said that it’s a canoe that they have’)

It is also possible to extract an embedded subject to the focus position of the matrix clause, instead of the embedded one. This alternative yields a somewhat surprising difference, seen in (18). The extracted non-local subject behaves like objects do: it is followed by the focus particle *ndo* (not *ko*), and the matrix verb is obligatorily followed by the clitic *-ke*.

- (18) Bruce_i **ndò**/*kò Bòmá jíri-*(kè) [t_i á ésé-mà]_{CP}
 Bruce **FOC**/***F.SBJ** Boma know-**KE** her see-NFUT
 ‘Boma knows (that) Bruce saw her’

This example shows that long-distance (cross-clausal) extraction of a subject patterns like extraction of a non-subject. This means that the asymmetry is really a split between local (intra-clausal) subject extraction and other cases. We address this observation further in the next section.

Focus movement of an embedded clause object also offers a choice of landing site, either the embedded clause FocP or the matrix clause FocP. Extracting an embedded-clause object to the matrix clause FocP triggers *-ke* on *both* verbs:

- (19) Bòmá ì biè-mà [ì isò áyá jíkà sònó-mà]_{CP}
 Boma I ask-NFUT I ISO new house buy-NFUT
 ‘Boma asked me if I will buy a new house’
- (20) áyá jíkà_i **ndò** Bòmá ì bié-kè [ì isò t_i sònó-mà-kè]_{CP}
 new house **FOC** Boma I ask-**KE** I ISO buy-NFUT-**KE**
 ‘Boma asked me if I’m going to buy a new house’

However, extracting an embedded clause object to the FocP of the embedded clause triggers *-ke* only in the embedded clause:

- (21) ándù_i **ndò** Bòmá fàà-kè [ìní t_i été-kè]_{CP}
 canoe **FOC** Boma say-**KE** they have-**KE**
 ‘It’s a canoe that Boma said they have’ (object in matrix FocP)
- (22) Bòmá ¹kó fàà-mà-(*kè) [ándù_i **ndò** ìní t_i été-kè]_{CP}
 Boma **F.SBJ** say-NFUT canoe **FOC** they have-**KE**
 ‘Boma said it’s a canoe that they have’ (object in embedded FocP)

In (21), the object of the embedded clause has moved to the matrix clause FocP; it appears at the front of the matrix clause (followed by the focus particle *ndo*), and both the matrix verb *fàà* ‘say’ and

the embedded verb *été* ‘have’ are followed by *-ke*. In (22), the embedded object has moved only to the FocP of the embedded clause; here, the focused object appears at the front of the lower clause (again followed by *ndo*), but now the clitic *-ke* appears only following the embedded clause verb, not the matrix verb.

The doubling of *-ke* in long-distance movement (e.g. in (20)), together with the sensitivity to the distance of movement apparent from the difference between (21) & (22) is reminiscent of ‘successive-cyclic’ phenomena (McCloskey 2002): patterns where movement leaves visible morphological footprints, such as the well-known case of complementizers in Irish (McCloskey *ibid*)², in which the form of complementizers changes when they are in the path of an A-bar dependency. We take this intuition of cyclicity as the starting point for our analysis of the phenomena in Defaka, presented in the next section.

4. The clitic *-ke* as a footprint of movement through vP

The distribution of Defaka’s clitic *-ke* extraction parallels the cyclic effects of Irish complementizers, but with one key difference: *-ke* is sensitive to the difference between subjects and objects. This means that it the locus of the cyclic behavior must not be the clause, but instead some lower level, somewhere between the canonical position of subjects in spec,vP and that of objects in VP. The vP, being a phase, stands out as the most obvious candidate for a landing site of intermediate movement, and we turn now to the more precise formalization of this idea.

The vP is standardly assumed to be a phase, and as such is subject to the Phase Impenetrability Condition (PIC) (Chomsky 2000, 2001). The PIC dictates that only the edge of the phase (the phase head and any specifier(s)) remains visible into the next phase of the derivation; anything below the phase head becomes inaccessible after the phase is completed. Consequently, in order for a phrase introduced somewhere below v° to ultimately move to somewhere above v°, it must first move to spec,vP.

Movement is driven by feature checking (Chomsky 2000; see also McCloskey 2002, Rizzi 2006 on intermediate movements). Therefore, movement to the edge of the vP phase must be driven by some feature on v°, which effectively serves to license extraction from out of the phase domain. This featural difference means there are two distinct species of v° at play here: one that bears the extraction-licensing feature, and one that does not.

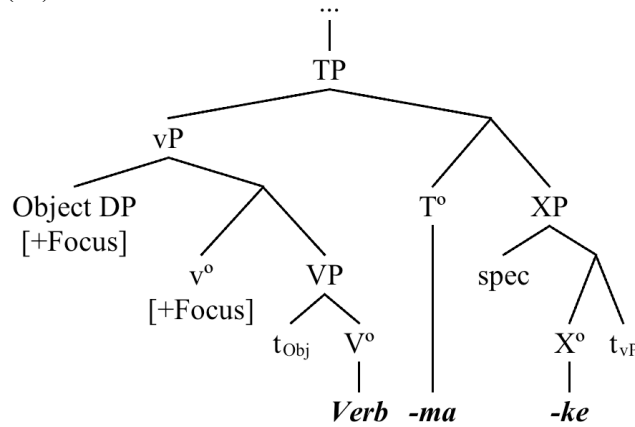
What this means for focus movement is that when a focused object (or some other focused phrase introduced below v°) moves to FocP, it must make an intermediate movement to spec,vP. This movement to spec,vP must be driven by a feature on v° – assumedly [+Focus]³. As such, focus extraction of an object requires the use of the [+Focus] version of v°. If this head is not selected, the derivation is doomed to crash: nothing will cause the focused object to move to spec,vP, so it will remain in situ, and be sealed off upon completion of the vP phase. This means that when Foc° is merged later on, in the next phase, there will be no way to move a [+Focus] XP into spec,FocP to resolve its uninterpretable [+Focus] feature. We claim that it is this featural distinction on v° that the clitic *-ke* in Defaka reflects.

We propose that *-ke* is a functional head immediately above vP, which selects for the [+Focus] version of v°. The relative position of the clitic falls out naturally from this explanation: when the whole vP raises to spec,TP (as is the norm in Defaka), *-ke* ends up after the verb, and after T° (the site of the tense/aspect clitics). This is shown below in (23).

² Other languages with successive-cyclic effects include Chamorro (Chung 1998), Scottish Gaelic (Adger & Ramchand 2005), Kikuyu (Clements 1984), and Wolof (Torrence 2005); in all of these cases, the effect is observed at the CP level.

³ It is not logically necessary for the feature on v° that drives intermediate movement of focused XPs to be the same as the feature that drives the later movement to FocP, but this is taken to be the null hypothesis (see McCloskey 2002 & Rizzi 2006 for discussion of this issue). If this feature were simply [+EPP] instead of [+Focus], then we would predict intervening phrases to block extraction, but this is not the case (cf. (11) and (12)).

(23)



Because the functional head *-ke* is what selects for the [+Focus] v° , we predict that it will obligatorily appear whenever there is focus movement that makes an intermediate stop in vP. This explains the key generalizations about the distribution of *-ke*.

Because subjects are introduced in spec,vP (Kratzer 1996), they originate in the phase edge. As such, there is no need for them to undergo any intermediate movement to vP en route to FocP – they start off in the landing site of such movement. Thus, we predict that (local) subject extraction should not trigger *-ke*, and indeed this is the case (as in (2)).

In the case of long-distance subject extraction, there are two vP phases in play. Extraction of the subject within an embedded clause (from its original spec,vP position) does not necessitate any intermediate movement. However, in order to move to the matrix clause FocP, the embedded subject must cross through the edge of the matrix vP phase. This does require intermediate movement, and we therefore predict *-ke* to appear following the matrix verb (as indeed it does, in (18)).

This analysis also explains the doubling of *-ke* when objects are extracted from a subordinate clause, as in (21). Extracting an object from an embedded clause to the matrix clause FocP involves crossing two vP phase boundaries: one in the embedded clause, and a second one in the matrix clause. Both of these crossings require intermediate movement, which means both trigger *-ke*. Consequently, we predict *-ke* after both verbs in the case of long-distance object extraction (21), and after only the embedded verb if the object is extracted only to the embedded clause FocP (22).

5. The syncretic subject-focus particle *ko*

The generalization about the focus particles *ko* & *ndo* observed in section 3 is that focused local subjects are followed by the focus particle *ko*, while any other type of focused phrase is followed by the particle *ndo*. This asymmetry follows the same split as the ‘footprint’ clitic *-ke* discussed above, so it would be ideal to attribute it to the same factor. As we show in this section, Giorgi & Pianesi’s (1996) notion of syncretic categories provides a way to make that analytical connection.

The Giorgi & Pianesi (1996) syncretic category system works as follows. There is a universal, ordered hierarchy of functional features, dictated by UG. Any of these features can head a functional projection; alternatively, a contiguous portion of the feature hierarchy can be bundled together into a single functional head. The choice between ‘scattering’ features as separate heads or combining them into syncretic bundles depends on the course of the derivation.

Suppose that the universal feature hierarchy is approximately that given in (24)⁴.

(24) Force > Topic* > Focus > Topic* > Fin > Subj > {Tense, Asp, Mood, ...} > (vP)

⁴ ‘Subj’ here represents whatever features handle nominative case assignment to subjects (whether that consists of a bundle of unvalued phi-features (a la Chomsky 2000), or a more direct notion of subjecthood (Cardinaletti 2004; Rizzi & Shlonsky 2007)). Other portions of the hierarchy depicted here are based on Rizzi (1997, 2004).

Somewhere in the middle of this hierarchy are the feature(s) responsible for licensing subjects, represented here as ‘Subj’. (For expository purposes, we regard ‘Subj’ as an uninterpretable [Nominative Case] feature, but this is not crucial for the logic of the argument). There are no phase boundaries between the [Focus] feature and the subject-licensing feature in ‘Subj’, so both features will be resolved in the same phase. In the case of a focused local subject, both of these features will be also be resolved by the same XP: the focused subject must go to spec,Subj to check the subject-licensing features (e.g. to receive nominative case), and it must also move to spec,FocP to check the uninterpretable [+Focus] feature. Under these conditions, both jobs can be done at once by combining the [Focus] and [Subj] features into a single head, realized by *ko*. This head bears both [+Focus] and [Subj] features, both of which are checked when the focused subject moves into its specifier. This is shown in (25).

(25) [_{Foc-Subj}P DP_i [{Foc-Subj}° [TP ... t_i ...

(26) [_{Foc}P DP_i [{Foc}° ... [_{Subj}P t_i [{Subj}° [TP ... t_i ...

The alternative to the focus-subject syncretism is a structure with separate projections for focus and subjecthood, as shown in (26). This structure can be ruled out on economy grounds. If the focus & subject-licensing features project separate heads, there are two projections instead of one, and two necessary movements. Given a choice between a derivation with one (syncretic) projection and one movement, or two projections and two movements, economy considerations clearly pick the former. This makes the syncretism obligatory whenever it is possible. Consequently, we predict that focused local subjects obligatorily occur with the subject-focus particle *ko* (and not with the general focus particle *ndo*), as is indeed the case (2).

Whenever the subject-focus syncretism is not possible, the [Focus] feature projects a separate head from [Subj]; this focus head is what the particle *ndo* realizes. This situation arises in any derivation where the [+Focus] feature and the [Subj] (= [Nom Case]) feature are necessarily checked by different XPs – i.e. when the focused XP is something other than a local subject.

We can observe this situation in the case of a focused object (e.g. as in (3)). Non-focused objects normally remain inside the vP phase, which entails that they check their uninterpretable case features during the vP phase. In the absence of compelling counterevidence, it must be assumed that case on focused objects is licensed in the same way. That stage of the derivation occurs upon completion of the vP – well before the [+Focus] feature (of Foc°) is merged. What this means is that a focused object leaves the vP phase without an active case feature. Consequently, focused objects lack the capacity to check the uninterpretable nominative case feature that comprises [Subj], and therefore cannot check all the features bundled together by the creation of a syncretic [Focus]-[Subj] head. Thus, we predict that assigning focused objects must occur with the default focus particle *ndo* (not the syncretic particle *ko*), which is the case (3).

This account also predicts the different behavior of local vs. non-local subjects. The subject of an embedded clause must check the uninterpretable nominative case feature [Subj] of the embedded clause. When this feature and the [+Focus] feature are in the same phase, syncretism is possible: this is why local extraction of the subject within an embedded clause (17) patterns like local extraction of a matrix clause subject (2). However, when the subject of an embedded clause undergoes long distance focus movement, this delicate state of affairs is disrupted. Because the embedded subject checks the [Subj] feature in the lower clause, it no longer has an active case feature when it enters the matrix clause. In this respect, it functions exactly like a focused object: it cannot receive nominative case, so it cannot check the [Subj] feature of the matrix clause. This makes the subject-focus syncretism impossible: the matrix clause [Subj] feature can only be checked by the matrix clause subject, while the [Focus] feature can only be checked by the subject extracted from the embedded clause. The result is that two separate projections are required. We therefore predict that non-local subjects pattern like objects: they should appear with the focus particle *ndo*, and this is what we indeed observe (18).

6. Summary & conclusions

In this paper, we have presented two respects in which focused subjects and focused objects pattern differently in Defaka. First, focused objects trigger an extra post-verbal clitic *-ke*, while focused subjects do not trigger *-ke*. Second, focused subjects appear with the focus particle *ko*, while focused objects appear with the particle *ndo*. As we showed in section 3, neither of these patterns are specific to focused object DPs: they also apply to focused VPs, CPs, and adjunct PPs, as well as to non-local focused subjects. As such, the patterns in Defaka are not really subject-object asymmetries; the differences between subjects and objects are merely part of a more general split between the focus extraction of a local subject, and extraction of any material lower down in the structure.

We have showed that the distribution of the clitic *-ke* exhibits traits of successive-cyclic phenomena (McCloskey 2002), and argued that it is best analyzed as a visible morphological reflex of (intermediate) successive-cyclic movement through the edge of the vP phase. That intermediate movement is necessary for anything introduced below v^o to move to the focus position in spec,FocP. This defines a split between local subjects (which are introduced in spec,vP) and objects, VP-ad adjuncts, and all material in subordinate clauses. This correctly predicts the appearance of *-ke* after the matrix verb in long-distance object extraction (18), and the doubling of *-ke* in long-distance object extraction.

The subject-specific focus particle *ko*, we have analyzed as a syncretic head, in the sense of Giorgi & Pianesi (1996): a bundling together of the focus and subject-licensing features in the left periphery of the clause, which would otherwise head separate projections. The syncretism is only derivationally useful if the same XP must check both [Focus] and [Subj], which is only the case for focused local subjects. Consequently, this analysis predicts that long-distance extracted subjects behave like objects in appearing with the default focus particle *ndo* instead of the syncretic subject-focus particle *ko*.

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