Focus strategies in Limbum¹

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Abstract. Limbum exhibits two morphologically marked focus strategies involving the particles \dot{a} and $b\dot{a}$. We show that the two focus markers differ in their functional complexity. While \dot{a} introduces an existence presupposition operating on focus alternatives, $b\dot{a}$ additionally encodes an exhaustivity presupposition as well as a mirative component. The latter makes it possible for Limbum to show the mirror image of what is traditionally observed as a markedness distinction between information focus and contrastive focus: focus \dot{a} marking is accompanied by syntactic fronting while $b\dot{a}$ marked constituents can be left in-situ. Limbum, furthermore, shows that focus by itself does not presuppose existence, since this restriction is only present when accompanied by the particle \dot{a} , which must be left out if the context does not satisfy this presupposition.

1 Introduction

Limbum – a Grassfields Bantu language, spoken in Cameroon – shows a very extensive focus marking system, involving particles as well as syntactic re-ordering. Its basic word order is SVO, with TAM markers preceding the verb. Like most African languages, Limbum is a tone language and has three level tones (High, Mid, Low) and five contour tones (High-Mid, High-Low, Mid-Low, Low-Mid, Low-Low) which are contrastive and are marked on syllables.

 ŋwè fō àm tíh ŋgū man DET PST3 cut wood 'The man cut the wood.'

Focus signals the presence of alternatives (Rooth 1992, Krifka 2008). Typical contexts for focus are given in (2)-(4), where (2) triggers *information focus*, while (3) and (4) are instances of *contrastive focus*. The latter is standardly distinguished from the former by adding semantic and/or pragmatic conditions on the alternatives, be it exhaustivity (Szabolcsi 1981, Kiss 1998, Vallduví and Vilkuna 1998, Horvath 2010, 2013), exclusivity (Beaver and Clark 2008, van der Wal 2011, Orenstein and Greenberg 2013, van der Wal 2014), or unexpectedness (Zimmermann 2008, Skopeteas and Fanselow 2009, 2011, Frey 2010).

(2)	A:	Who stole the cookie?	
	B:	$[PEter]_F$ stole the cookie.	Q-A congruence
(3)	A:	Mary stole the cookie.	
	B:	(No,) [PEter] $_F$ stole the cookie.	correction
(4)	An	$[AMErican]_F$ farmer talked to a $[CaNAdian]_F$ farmer.	contrast

While information focus is often encoded by means of a canonical focus structure, the contrastive

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focus is realized with a relatively more marked focus strategy. Depending on the language, this difference can manifest itself in the opposition of in-situ vs. ex-situ structures (Hartmann and Zimmermann 2014, Fiedler et al. 2010), different levels of prosodic prominence (Bolinger 1961, Alter et al. 2001, Katz and Selkirk 2009), or the opposition of prosodic prominence and reordering/clefting (Skopeteas and Fanselow 2009). From a pragmatic point of view, the different levels of complexity receive an explanation by the observation that contrastive information often comes with an unexpectedness flavour, which, thus, requires the more marked focus strategy in order to facilitate common ground update (Skopeteas and Fanselow 2009, Zimmermann 2008, 2011, Zimmermann and Onea 2011).

Focus by itself can be left unmarked in Limbum, see (5). Note that wh-words behave completely parallel to focused constituents, supporting the hypothesis that they are intrinsically focused (Beck 2006, Haida 2007).

- (5) A: wè bí kōnī ndā you.SG FUT1 meet who 'Who will you meet?'
 - B: mè bí kōnī Ngàlá
 I FUT1 meet Ngala
 'I will meet NGALA.'

The two marked strategies are shown in (6) and (7). The \dot{a} strategy seems similar to cleft constructions, where the focus marker appears clause initially, followed by an optional complementizer,² and the focused constituent. In contrast, the particle $b\dot{a}$ co-occurs with focused constituents in-situ.

(6) A:	á ndá wè bí kōnī	(7) A: wè bí kōnī bá ndá
	FOC who you.SG FUT1 meet 'Who is it that you will meet?'	you.SG FUT1 meet FOC who 'Who (if not X) will you meet?'
B:	á Ngàlá (cí) mè bí kōnī FOC Ngala (COMP) I FUT1 meet 'I will meet NGALA.'	B: mè bí kōnī bá Ngàlá I FUT1 meet FOC Ngala 'It is Ngala whom I will meet.'

We will show that the \dot{a} strategy is compatible with information focus, while the $b\dot{a}$ strategy shows signs of contrastive focus, i.e. exhaustivity and unexpectedness. The pattern, thus, instantiates the exact mirror image to the standard dichotomy, which is that contrastive focus tends to be more marked than new information focus. Pragmatic reasoning can therefore not be the source of different levels of markedness in Limbum. Hence, we propose that the notion of unexpectedness is directly encoded in the focus marker $b\dot{a}$. Section 2 will demonstrate how unmarked focus differs from focus marked by the particle \dot{a} , while section 3 develops an analysis for the particle $b\dot{a}$. In section 4 we compare contexts which in principle should allow for both marked strategies but where only one of them is felicitous. Section 5 wraps up.

²Glossing ci as COMP is an oversimplification. See Becker et al. (to appear) for a syntactic analysis that takes ci as the head of a left peripheral focus projection.

2 Existence focus

Both unmarked focus and \dot{a} marked focus are compatible with question-answer contexts, an additional example is given in (8).

- (8) Context: Tata comes across a dead animal in the backyard. He shows it to Yaah and asks:
 - Tata: (á) **ndā** à zhvu nyà FOC **who** 3SG kill animal 'Who killed the animal?'
 - Yaah: (á) **Nfò** à zhvū nyà FOC **Nfor** 3SG kill animal 'NFOR killed the animal.'

We conclude that the presence of alternatives does not have to be marked morphologically.³ The subtle difference between the strategies lies in the presence of an existence presupposition with the latter, but not with the former. The following context ensures that the proposition is true for at least one alternative, thus an existence presupposition is satisfied. The particle \dot{a} is required in such a case.

- (9) **Context**: Tata comes across a dead animal in the backyard. The animal appears to have been killed by someone since it shows multiple knife wounds. He shows it to Yaah and asks:
 - Tata: (á)[#] ndā à zhvū nyà FOC who 3SG kill animal 'Who is it that killed the animal?'
 Yaah: (á)[#] Nfò à zhvū nyà FOC Nfor 3SG kill animal 'NFOR killed the animal.'

Following the work of Rooth (1985, 1992), we implement this observation in the framework of *alternative semantics*, see (10). Focus marker \dot{a} associates with focus alternatives and introduces an existence presupposition that operates on those alternatives.⁴

(10)
$$\llbracket \mathbf{a} \phi \rrbracket^o = \lambda w : \exists p [p \in \llbracket \phi \rrbracket^f \land p(w) = 1]. \llbracket \phi \rrbracket^o(w) = 1$$

For intonational languages such as English, the possibility of an existence presupposition is still under debate (Dryer 1996, Rooth 1999, Geurts and van der Sandt 2004, Büring 2004). The dialogue in (11) tests for presupposition status and suggests that focus on its own cannot introduce an existence presupposition. Since the context assures that Peter doesn't know if somebody saw John, an existence presupposition would not be satisfied, nevertheless intonational focus is felicitous. The control structure is a cleft which uncontroversially introduce an existence presupposition (Percus 1997, Velleman et al. 2012) and is, thus, infelicitous.

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³Another context in which one would expect focus marking to occur obligatorily is under the scope of focus sensitive adverbs such as only. Again, \dot{a} is optional, as will become apparent in the next section, see (18)A.

⁴Another way to introduce an existence presupposition is by forming the disjunction of the propositions in the alternative set: $[\![a \phi]\!]^o = \lambda w : \bigcup [\![\phi]\!]^f = 1. [\![\phi]\!]^o(w) = 1$

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(11) Did anyone see John?

Peter: I don't know. I know MARY didn't see him. Peter': I don't know. # I know it wasn't MARY that saw him.

Again, Limbum seems to make a clear distinction in that the \dot{a} strategy patterns like the cleft in (11). In (12), Yaah's answer is infelicitous if focus marker \dot{a} is present because the existence presupposition contradicts the fact that Yaah answers the question if someone is playing the drums with *I don't know*. In other words, the existence presupposition is stable under negation.

- (12) Shey: mè shī yō? yū mō?. ŋwè mō? shī bō? ncùh à 1SG PROG hear thing one person one PROG play drum Q 'I heard something. Is somebody playing the drums?'
 - Yaah: mè rhŋ kā? mè shī kwà?shī nē ([#]á) **Nfò** í shì bō? ncùh kâ? 1SG know NEG 1SG PROG think that FOC **Nfor** 3SG PROG play drum NEG 'I don't know. But I don't think NFOR is playing the drums.'

A similar projection test can be constructed with a modal operator, see (13). As above, the presence of \dot{a} renders the answer infelicitous.

(13)	Shey:	ŋwè	mō? à	mū	lō	yá	sài	e á	
		person	one 3s	g pst2	borrow	w 1sg.1	POSS cut	lass Q	
		'Did so	omeone l	orrow	my cut	tlass?'			
	Yaah:	mè riț) kā?	kàdé?	$b\bar{a}n\bar{\epsilon}$	(#á) N	lfò à	mū	lō
		1sg kn	IOW NEG	can	be that	t foc N	Ifor 3sg	PST2	borrow
		'I don't know. It is possible that NFOR borrowed it.'							

Additional evidence comes from the fact that *á* cannot scope over quantifiers that denote the empty set. This is predicted since such an assertion would contradict an existence presupposition.

(14) (*á) ŋwè mε mū yε ká?
FOC person 1SG PST2 see NEG
'I saw NOBODY.'

This section has shown that focus itself does not have to be morphologically marked. The particle \acute{a} introduces an existence presupposition that operates on the alternatives of the focused constituent. Limbum, thus, provides a unique window into the discussion of existence focus, in that it ties the existence presupposition to an additional marker – a counter-argument to theories that take focus alone to be the reason for the presupposition (Geurts and van der Sandt 2004).

3 Exhaustive, mirative focus

A good way to illustrate how $b\dot{a}$ is different from \dot{a} and unmarked focus is by comparing the context in (15) to the contexts in (8) and (9). The context in (15) introduces an unexpectedness component, both on the hearer's and on the speaker's side. The $b\dot{a}$ strategy is the only option here – a pattern that clearly contrasts with (8) and (9) where the $b\dot{a}$ strategy is excluded.

(Dryer 1996: 490)

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(15) **Context**: Tata comes across a dead animal in the backyard. He immediately suspects Shey to have killed the animal but it turns out that Shey is not the culprit. Shey knows that Tata suspected him although it was Nfor who killed the animal. Tata shows the animal to Shey and asks:

Tata: #(á) ndā à zhv ū nyà	Tata':	à zhv ū bá ndā nyà
FOC who 3SG kill animal 'Who is it that killed the animal?'		EXPL kill FOC who animal 'Who (if not you) killed the animal?'
Shey: #(á) Nfò à zhvū nyà FOC Nfor 3SG kill animal 'NFOR killed the animal.'	Shey':	à zhv u bá Nfò nyà EXPL kill FOC Nfo animal 'It is Nfor who killed the animal.'

The exhaustive component can be exemplified with correction scenarios and co-occurrence restrictions with additive particles such as *also* (see Becker and Nformi 2016). A correction context requires an utterance with an explicit alternative, followed by another alternative in a second utterance, automatically canceling the first one. In such contexts, the *bá* strategy is obligatory.

(16) **Context**: Ndi bought a pair of shoes. Njobe does not remember correctly and tells Tanko that Ndi bought a dress. Ndi corrects Njobe saying that she bought shoes (instead).

Njobe: í bá yū bcè? she PST2 buy dresses 'She bought dresses.'

Ndi: #mè bá yū blábá? I PST2 buy shoes 'I bought SHOES.' Ndi": mè bá yū bá **blábá?** I PST2 buy FOC **shoes** 'It is shoes that I bought.'

Ndi': #á **blábá?** (cí) mè bā yú FOC **shoes** (COMP) I PST2 buy 'I bought SHOES.'

Exhaustivity also prevents $b\dot{a}$ from co-occurring with the focus sensitive adverb $f\dot{3}\eta$ 'also', since additives⁵ require a proposition to be true for at least one non-selected alternative, whereas $b\dot{a}$

- (i) (*á) ká? (*á) Ngàlá (*á) mè bí kōnī FOC even FOC Ngala FOC I FUT1 meet 'I will meet even NGALA.'
- (ii) *mè bí konī (*bá) ká? (*bá) Ngàlá (*bá)
 I FUT1 meet FOC even FOC Ngala FOC
 'It is even Ngala whom I will meet.'

In (iii) we show that topics in general need to be fronted and can optionally leave a resumptive pronoun – both of which is true for constituents under the scope of $k\hat{a}$?, see (iv) and (v). Focused constituents marked with \hat{a} require fronting as well. A resumptive pronoun, however, is not allowed to show up, see (vi).

⁵The scalar additive $k\dot{a}$? 'even' seems to be restricted to topics rather than foci since it cannot co-occur with \dot{a} or $b\dot{a}$ and is, thus, untestable for our hypotheses. As (i) shows, $k\dot{a}$? has to precede the focused constituent, while \dot{a} is illicit independent of where exactly in the left periphery the particle occurs. A similar pattern can be shown for $b\dot{a}$, albeit with the additional restriction that constituents under the scope of $k\dot{a}$? have to undergo fronting, see (ii).

requires all non-selected alternatives to be false.

- (17) Shey: Nfò à mū yū rkār. Nfor 3SG PST2 buy car 'Nfor bought a car.'
 - Ndi: í mū yū **ntùmntùm** fóŋ. Nfor PST2 buy motorbike also 'He bought a MOTORBIKE also.'
 - Ndi': á **ntùmntùm** (cí) í mū yū fóŋ. FOC motorbike COMP 3SG PST2 buy also 'He bought a MOTORBIKE also.'
- Ndi": *í mū yū bá **ntùmntùm** fóŋ. 3SG PST2 buy FOC motorbike also 'It is a motorbike he also bought.'

To show that mirativity is at work independently of exhaustivity, we show the behaviour of $b\dot{a}$ under the scope of another exhaustive operator $c\dot{a}?c\dot{a}?$ 'only'. If one ensures exhaustivity with $c\dot{a}?c\dot{a}?$, $b\dot{a}$ becomes licit only if the selected alternative is also unexpected.

- (18) **Context:** Shey is looking for Ngala and Tanko who are supposed to be at the market. Shey tells Ndi to go find Ngala and Tanko and bring them back.
- (iii) mbǎ fō, wōyè ớ \emptyset fā (zhí) nì yē wéé money DET they 3PL PERF give it.RES PREP 3SG already 'The money, they already gave it to him/her.'
- (iv) ká? Ngàlá mè bí kōnī (yē) even Ngala I FUT1 meet 3SG.RES 'I will meet even NGALA.'
- (v) *mè bí konī ká? Ngàlá
 I FUT1 meet even Ngala
 'It is even Ngala whom I will meet.'
- (vi) á Ngàlá mè bí kōnī (*yē) FOC Ngala I FUT1 meet 3SG.RES 'I will meet NGALA.'

We take this as evidence that $k\dot{a}$? can only scope over topics. Hence, $k\dot{a}$? is incompatible with the \dot{a} strategy, which is shown in (i). Since topics have to be fronted, (ii) is unacceptable, independent of the presence of $b\dot{a}$.

A. Yaah comes back with Ngala.

Yaah: mè∅ kóní **Ngàlá** cà?cà? I PERF find **Ngala** only

- 'I only found NGALA.' n': á **Ngàlá** cà?cà? (cí) mè
- Yaah': á **Ngàlá** cà?cà? (cí) mè Ø kóní FOC **Ngala** only COMP I PERF find 'I found NGALA only.'
- Yaa": #mè Ø kóní bá **Ngàlá** cà?cà? I PERF find FOC **Ngala** only 'I only found NGALA.'

B. Yaah comes back with Njobe.

Yaah: mè Ø kóní bá **Njobe** cà?cà? I PERF find FOC **Njobe** only 'I only found NJOBE.'

Both the exhaustive and the mirative component seem to be non at-issue, as the following two tests suggest. For the continuations in (19) to be informative (and thus felicitous), exhaustivity – encoded by either $b\dot{a}$ or $c\dot{a}?c\dot{a}?$ – must be at-issue. As (19)i shows, the $b\dot{a}$ continuation is infelicitous, i.e. $b\dot{a}$ asserts the ordinary semantic value of the focused constituent, while presupposing an exhaustified focus alternative set. In contrast, (19)ii suggests that $c\dot{a}?c\dot{a}?$ asserts exhaustivity, similar to its English counterpart *only*.

(19)	mè r ì ŋ	nē Tata à	mū	zhē mŋgòmbé	é kāp kū yō? nē	
	1sg know	v that Tata 3sc	g pst2	eat plantain	but just hear that	
'I know Tata ate PLAINTAIN but I've just heard that'						

(i) <i>bá</i> : exhaustivity not at-issue	(ii) <i>cà?cà?</i> : exhaustivity at-issue			
#í mū zhē bá mŋgòmbé	í mū zhē mŋgòmbé cà?cà?			
3SG PST2 eat FOC plantain	3SG PST2 eat plantain only			
'it was PLAINTAIN she ate.'	'she only ate PLAINTAIN.'			

The non at-issue status of the mirative component is suggested by the fact that it can project out of the antecedent of conditionals. Compare (20) to (21), where adding $b\dot{a}$ in (21) lets the mirative interpretation of the selected focus alternative project through, so that it escapes cancellation in the consequent. This is not true for (20), due to the absence of $b\dot{a}$.

- (20) [kā? bā nē í mū nō mbrò?] mè lē? kā?
 if to.be that 3SG PST2 drink wine 1SG surprise NEG
 'If it is WINE that he drank, I'm not surprised.'
 Comment: The lack of surprise can be directed at the choice of beverage.
- (21) [kā? bā nē í mū nō bá blēē] mè lē? kā?
 if to.be that 3SG PST2 drink FOC blood 1SG surprise NEG
 'If it is BLOOD that he drank, I'm not surprised.'
 Comment: The lack of surprise can only be directed at the person, given that this person does unusual things all the time. It cannot be directed at blood.

Besides unexpectedness and exhaustivity, $b\dot{a}$ additionally encodes existence (just like \dot{a}), shown here by the inability to occur with a negative quantifier, see (22).

 (22) Tanko à mū yū bflăwà Ngàlá à yu (*bà) yū kā? Tanko 3SG PST2 buy flowers Ngala 3SG buy FOC thing NEG 'Tanko bought flowers but Ngala bought NOTHING.'

Existence is presupposed, since it can project through negation, compare (23) to (24). Once a focused constituent is preceded by $b\dot{a}$, the existence of the selected alternative cannot be denied, even if $b\dot{a}$ is embedded under negation.

- (23) [Tata à mū sɔ̄ mbàŋ ká?] àndʒɔ́? ŋwè mò? à mū sɔ̄ kā? Tata 3SG PST2 win game NEG because person one 3SG PST2 win NEG 'TATA did not win the game because nobody won.'
- (24) *[à mū sɔ bá Tata mbàŋ ká?] àndʒɔ́? ŋwè mò? à mū sɔ kā?
 EXPL PST2 win FOC Tata game NEG because person one 3SG PST2 win NEG 'It is not TATA who won the game because nobody won.'

Since we would like to model the exhaustivity as well as the existence requirement as a presupposition, we run into the problem of making the entailed content look trivial – a problem which has been discussed for English clefts (Velleman et al. 2012).

(25) It was Mary who laughed.

a.	$\exists x [laughed(x)]$	existential presupposition
b.	$\forall x [laughed(x) \to (x=m)]$	exhaustive presupposition
c.	laughed(m)	entailed prejacent

An additional problem relates to the observation that the exhaustive presupposition does not project through negation. This is true for clefts (Velleman et al. 2012, Büring and Križ 2013), see (26), as well as for the $b\dot{a}$ strategy, shown in (27).

- (26) It wasn't Mary who laughed; it was Bill.
- (27) mè bí kōnī bá Ngàlá ká 1SG FUT1 meet FOC Ngala NEG 'It is not NGALA I will meet.'
 - ... mè bí kōnī bá **Nfò** 1SG FUT1 meet FOC **Nfor** 'It is NFOR that I will meet.'

We would like to follow Büring and Križ (2013) who offer a solution towards these problems by making the exhaustive presupposition dependent on the assertion. Thus, (25-b) has to be reformulated along the lines of *If Mary laughed, then nobody else did*. Büring and Križ (2013) make use of a *max* operator in their exhaustivity presupposition, which is based on mereological parthood, see (28) and (29). For the cleft in (30) for example, the *max* operator derives the sum of all invitees, given that all predicates are always closed under fusion and therefore each have a maximal element.

(28) $max(P) = \{ x \in P \mid \neg \exists y \in P[x \sqsubset y] \}$

(29) CLEFT:= $\lambda z.\lambda P: \forall x \in max(P) [z \not\sqsubset x].P(z)$

An example for a positive cleft is given in (30). Following the denotation of (29), the presupposition, given in (30-b), has two inferences: (i) Fred is the sole invitee, (ii) Fred is not invited. Given the assertion in (30-a), only (ii) is a licit inference. Hence, an exhaustive effect arises.

- (30) It was Fred she invited.
 - a. Ass: She invited Fred.
 - b. PRES: Fred is not a proper part of the sum of all invitees.

\swarrow	
Fred is the sole invitee	Fred was not invited at all

A negative cleft, thus, does not presuppose exhaustivity because that particular inference arising from the presupposition is blocked by the assertion in (31-a).

(31) It wasn't Fred she invited.

- a. Ass: She didn't invite Fred.
- b. PRES: Fred is not a proper part of the sum of all invitees.

~ ~ ~	\searrow
Fred is the sole invitee	Fred was not invited at all

We adopt this analysis for $b\dot{a}$, make it focus sensitive and add an existence presupposition and a scalar component, see (32). The first line encodes existence, the second exhaustivity, and the third mirativity.

(32)
$$\begin{split} \llbracket [\mathsf{b}\check{a} \ \alpha_F] \ P \rrbracket^o &= \exists x \ [x \in \llbracket \alpha \rrbracket^f \land \llbracket P \rrbracket^o(x) = 1] \land \\ \forall y \in \llbracket \alpha \rrbracket^f \ [y \in max(\llbracket P \rrbracket^o) \to \llbracket \alpha \rrbracket^o \not\sqsubset y] \land \\ \forall z \in \llbracket \alpha \rrbracket^f \ [z \neq \llbracket \alpha \rrbracket^o \to \llbracket P \rrbracket^o(z) \ge_{likely} \llbracket P \rrbracket^o(\llbracket \alpha \rrbracket^o)] \\ \llbracket P \rrbracket^o(\llbracket \alpha \rrbracket^o) \end{split}$$
(where for any $P \in D_{et}, max(P) = \{ x \in P \mid \neg \exists y \in P[x \sqsubset y] \}$

This section has developed an analysis for the focus marker $b\dot{a}$ – a particle that operates on focus alternatives, imposing an existence, an exhaustivity, and a mirative restriction on the non-selected alternatives. Evidence for the analysis comes from context tests, co-occurrence with other focus sensitive adverbs, and the projection behaviour.

4 Maximize presupposition

The correction context in (16) only allows for the $b\dot{a}$ strategy. The fact that the \dot{a} strategy is blocked in such contexts straightforwardly follows if we adopt the principle of *maximize presupposition* (Heim 1991, Percus 2006, Sauerland 2008). A definition is given in (33).

(33) Maximize Presupposition:

Do not use ϕ if a member of its Alternative-Family ψ is felicitous and contextually equivalent

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to ϕ .

- a. <u>Lexical alternatives</u>: Alternatives are only defined for lexical items. For any lexical item, the alternatives consist of all "presuppositionally stronger" items of the same syntactic category.
- b. Alternative-Family: Let the Alternative-Family of a sentence ϕ be the set of sentences that you get by replacing at least one alternative-associated expression in ϕ with an alternative.

(Percus 2006)

The focus particle $b\dot{a}$ belongs to the alternative-family of \dot{a} since it is presuppositionally stronger and of the same syntactic category, i.e. a focus particle that takes a focused constituent as its complement.⁶ Hence, it will block \dot{a} in correction contexts where it is felicitous. Other pairs of expression which belong to alternative-families are listed in (34). We would like to add $\langle b\dot{a}, \dot{a} \rangle$ to this list.

(34) $\langle the, a \rangle, \langle both, every \rangle, \langle know, believe \rangle, \langle SING, PLUR \rangle, \langle PAST, PRES \rangle, \dots$

The blocking pattern can be replicated for contrast and selection contexts. While the expression of contrast only obligatorily requires a $b\dot{a}$ marker if the selected alternative is truly unexpected, compare (35) to (36), the competing \dot{a} marker is never allowed to occur with the contrasted alternative, see (37) and (38).

- (35) Tánkó kí nō mndzīp, Ngàlá cí nō (bá) mbrò?mbvú Tanko HAB drink water Ngala but drink FOC palm.wine 'Tanko drinks water but Ngala drinks palm wine.'
- (36) Tánkó kí nō mndzīp, Ngàlá cí nō *(bá) blēē Tanko HAB drink water Ngala but drink FOC blood 'Tanko drinks water but Ngala drinks blood.'
- (37) *Tánkó kí nō mndzīp, á **blēē** cí Ngàlá nō Tanko HAB drink water FOC **blood** but Ngala drink 'Tanko drinks water but Ngala drinks blood.'
- (38) *Tánkó kí nō mndzīp, á **mbrò?mbvú** cí Ngàlá nō Tanko HAB drink water FOC **palm.wine** but Ngala drink 'Tanko drinks water but Ngala drinks palm wine.'

Selection contexts, where the alternative set is made explicit, present another environment where we see maximize presupposition at work. A selection context is given in (39), in the form of an alternative question. Note that $b\dot{a}$ cannot occur inside of a coordinate structure, so that the alternative question is in fact ambiguous towards which alternative Shey thinks is less likely. Just as in contrast contexts, $b\dot{a}$ becomes obligatory if the focused constituent expresses an unexpected alternative, which is the case in scenario B but not in scenario A. The \dot{a} strategy, however, is blocked in both scenarios.

⁶Again, see Becker et al. (to appear) for a syntactic analysis.

(39) **Context**: Shey is about to cook dinner. Shey knows that Yaah loves yams and assumes she will prefer it over fufu, but he asks her nevertheless.

Shey:à bí zhē bá **mbrè?** kè **bāā** à you FUT2 eat FOC **yams** or **fufu** Q 'Will you eat fufu or yams?'

A. Shey was right: Yaah prefers yams. Yaah **B.** Shey was wrong: Yaah wants to eat fufu. does not know what Shey thinks that Yaah Yaah knows that Shey knows what Yaah prefers. prefers. Yaah: mè bí zhē mbrè? Yaah: #mè bí zhē bāā FUT2 eat vams FUT2 eat fufu I Ι 'I will eat YAMS.' 'I will eat FUFU.'

Yaah': #á Yaah': #á mè bí mbrè? (cí) mè bí **bāā** (cí) zhē zhē FOC yams (COMP) I FUT2 eat FOC **fufu** (COMP) I FUT2 eat 'I will eat YAMS.' 'I will eat FUFU.' Yaa": Yaa": mè bí zhē bá mbrè? mè bí zhē bá **bāā** FUT2 eat FOC yams I FUT2 eat FOC **fufu** I 'It is yams I will eat.' 'It is fufu I will eat.'

At this point, it is worth asking whether the unmarked focus strategy can qualify as a competitor for maximize presupposition. Following the definition in (33), it might not since alternatives are only defined for lexical items. However, having the unmarked strategy instantiated as a competitor could potentially explain why it is illicit in (9) on the hand and in (15) and (16) on the other hand, where in the former it loses against the á strategy and in the latter two it loses against the *bá* strategy. The selection and contrast contexts, given in this section, then clearly show that the unmarked strategy is an option so long as mirativity is not established between speaker and hearer. Future research is needed to verify the patterns.

5 Summary

In this paper, we have shown that focus does not need to be morphologically marked in Limbum. The two attested focus particles \dot{a} and $b\dot{a}$ do not encode focus interpretation per se, but rather require focus alternatives to operate on. The focus marker \dot{a} imposes an existence restriction on the alternatives, while the focus marker $b\dot{a}$ additionally (i) exhaustifies over the non-selected alternatives and (ii) restricts the selected alternative to be the least likely. Since we hard-wire mirativity into the semantics of $b\dot{a}$, unexpectedness as a pragmatic concept is not reflected by the opposition of an unmarked and a marked structure. This is why the \dot{a} strategy can be more marked (particle + fronting) but impose less semantic restrictions, while the $b\dot{a}$ strategy is less marked (only particle) and imposes more semantic restrictions. Limbum, furthermore, provides novel evidence against the assumption that the background, triggered by focus marking, introduces an existence presupposition. At least for Limbum, it can be shown that an additional focus particle is required, i.e. focus marking by itself cannot trigger such a presupposition.

Abbreviations

1,2,3	1st, 2nd, 3rd person	PL	Plural
1-,2-,5-,	Noun classes	PREP	Preposition
COMP	Complementizer	PRV	Preverb
СОР	Copula	PST1	Recent past tense
DET	Determiner	pst2	Distant past tense
DEM	Demonstrative	pst3	Remote past tense
EXPL	Expletive	REL	Relative pronoun
FOC	Focus marker	SG	Singular
FUT1	Near future tense		
HAB	Habitual		
INCL	Inclusive		
PERF	Perfective		

References

- Alter, K., Mleinek, I., Rohe, T., Steube, A., and Umbach, C. (2001). Kontrastprosodie in Sprachproduktion und -perzeption. In Steube, A. and Umbach, C., editors, Kontrast - lexikalisch, semantisch, intonatorisch, volume 77, pages 365–403. Linguistische Arbeitsberichte, Leipzig.
- Beaver, D. and Clark, B. (2008). Sense and Sensitivity: How Focus Determines Meaning. Explorations in Semantics. Wiley-Blackwell.
- Beck, S. (2006). Intervention Effects Follow from Focus Interpretation. Natural Language Semantics, 14:1–56.
- Becker, L., Driemel, I., and Nformi, J. (to appear). Focus in Limbum. In Proceedings of ACAL 48. Language Science Press, Berlin.
- Becker, L. and Nformi, J. (2016). Focus and verb doubling in Limbum. Linguistische Arbeitsberichte, 93:57–84. Universität Leipzig.
- Bolinger, D. (1961). Contrastive accent and contrastive stress. Language, 37:83-96.
- Büring, D. (2004). Focus suppositions. *Theoretical Linguistics*, 30:65–76.
- Büring, D. and Križ, M. (2013). It's that, and that's it! Exhaustivity and homogeneity presuppositions in clefts (and definites). Semantics and Pragmatics, 6:1-29.
- Dryer, M. (1996). Focus, pragmatic presupposition, and activated presuppositions. Journal of Pragmatics, 26:475–523.
- Fiedler, I., Hartmann, K., Reineke, B., Schwarz, A., and Zimmermann, M. (2010). Subject focus in West African languages. In Zimmermann, M. and Féry, C., editors, Information Structure. Theoretical, Typological, and Experimental Perspectives, pages 234–257. Oxford University Press, Oxford.
- Frey, W. (2010). A-Movement and conventional implicatures: About the grammatical encoding of emphasis in German. Lingua, 120:1416–1435.
- Geurts, B. and van der Sandt, R. (2004). Interpreting focus. *Theoretical Linguistics*, 30:1–44.

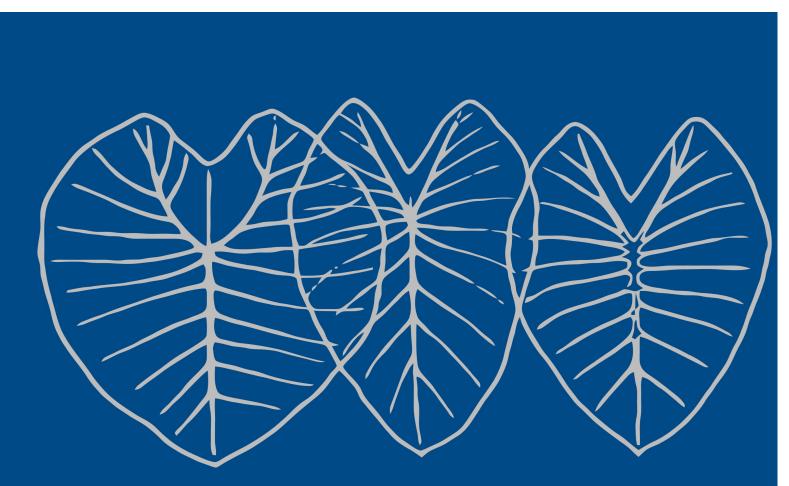
- Haida, A. (2007). *The Indefiniteness and Focusing of Wh-Words*. PhD thesis, Humboldt University Berlin.
- Hartmann, K. (2008). Focus and Emphasis in Tone and Intonational Languages. In Steube, A., editor, *The Discourse-Potential of Underspecified Structures*, pages 389–411. de Gruyter, Berlin/New York.
- Hartmann, K. and Zimmermann, M. (2014). In place out of place? focus in hausa. In Schwabe, K. and Winkler, S., editors, On Information Structure, Meaning and Form: Generalizing Across Languages, pages 365–403. Benjamins, Amsterdam.
- Heim, I. (1991). Artikel und definitheit. In von Stechow, A. and Wunderlich, D., editors, Semantik: Ein internationales Handbuch der zeitgenössischen Forschung, pages 487–535. de Gruyter, Berlin.
- Horvath, J. (2010). 'Discourse-Features', Syntactic Displacement and the Status of Contrast. *Lingua*, 120:1346–1369.
- Horvath, J. (2013). On focus, exhaustivity and wh-interrogatives: The case of hungarian. In Brandtler, J., Molnar, V., and Platzak, C., editors, *Approaches to Hungarian*, pages 97–132. John Benjamins, Amsterdam.
- Katz, J. and Selkirk, E. (2009). Contrastive focus vs. discourse-new: Evidence from prosodic prominence in english. MIT/Umass,Amherst.
- Kiss, K. É. (1998). Identification focus versus information focus. Language, 74(2):245–273.
- Krifka, M. (2008). Basic Notions of Information Structure. *Acta Linguistica Hungarica*, 55(3-4):243–276.
- Orenstein, D. and Greenberg, Y. (2013). A flexible exclusive operator: The case of the hebrew *be-sax ha-kol* (≈ *all in all*). In Chemla, E., Homer, V., and Winterstein, G., editors, *Proceedings of Sinn und Bedeutung 17*, pages 381–397, Paris.
- Percus, O. (1997). Prying open the cleft. In Kusumoto, K., editor, *Proceedings of NELS 27*, pages 337–351. McGill University.
- Percus, O. (2006). Antipresuppositions. In Ueyama, A., editor, *Theoretical and Empirical Studies* of Reference and Anaphora: toward the Establishment of Generative Grammar as an Empirical Science, page 5273.
- Rooth, M. (1985). Association with Focus. PhD thesis, University of Massachussetts.
- Rooth, M. (1992). A Theory of Focus Interpretation. Natural Language Semantics, 1:75–116.
- Rooth, M. (1999). Association with focus or association with presupposition? In Bosch, P. and van der Sandt, R., editors, *Focus*, Studies in Natural Language Processing, pages 232–244. Cambridge University Press, Cambridge.
- Sauerland, U. (2008). Implicated presuppositions. In Steube, A., editor, *The discourse potential of underspecified structures*, pages 581–600. de Gruyter, Berlin.
- Skopeteas, S. and Fanselow, G. (2009). Focus types and argument asymmetries: a cross-linguistic study in language production. In Breul, C. and Göbbel, E., editors, *Contrastive Information Structure*, pages 169–198. Benjamins, Amsterdam/Philadelphia.
- Skopeteas, S. and Fanselow, G. (2011). Focus and the exclusion of alternatives: On the interaction of syntactic structure with pragmatic inference. *Lingua*, 121:1693–1706.

- Szabolcsi, A. (1981). Compositionality in focus. Folia Linguistica Societatis Linguisticae Europaeae, 15:141–162.
- Vallduví, E. and Vilkuna, M. (1998). On Rheme and Kontrast. In Culicover, P. and McNally, L., editors, *The Limits of Syntax*, pages 79–106. Academic Press, New York.
- van der Wal, J. (2011). Focus excluding alternatives: Conjoint/disjoint marking in Makhuwa. *Lingua*, 121:1734–1750.
- van der Wal, J. (2014). Subordinate clauses and exclusive focus in Makhuwa. In *Information Structure and Reference Tracking in Complex Sentences*, Typological Studies in Language 105, pages 45–70. John Benjamins, Amsterdam.
- Velleman, D., Beaver, D., Destruel, E., Bumford, D., Onea, E., and Coppock, L. (2012). It-clefts are IT (Inquiry Terminating) constructions. In Chereches, A., editor, *Proceedings of SALT 22*, pages 441–460. University of Chicago.
- Zimmermann, M. (2008). Contrastive focus and emphasis. *Acta Linguistica Hungarica*, 55:347–360.
- Zimmermann, M. (2011). The grammatical expression of focus in West Chadic: Variation and uniformity in and across languages. *Linguistics*, 49:1163–1213.
- Zimmermann, M. and Onea, E. (2011). Focus marking and focus interpretation. *Lingua*, 121:1651–1670.

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