Focus size in morphologically focus-marking languages

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Issues In this paper we propose a mechanism to link known generalizations about focus projections with the formal calculation of focus alternatives in morphological focus-marking languages. Our analysis is based on cross-linguistic data that illustrate the difference between languages like Hausa (Chadic), in which the subject can be part of a focus when it is unmarked, but only narrow focus when it is marked, and languages like Buli (Mabia/Gur), in which focus marking on the subject is ambiguous between narrow subject focus and sentence focus. Despite excellent work on the details of the focus marking systems in languages like Buli (Fiedler et al. 2010, Schwarz 2016 etc.) and Hausa (Hartmann and Zimmermann 2007, among others), there is virtually no work connecting this up to formal focus semantics. We argue that this can be modeled using the UNALTERNATIVE SEMANTICS framework (Büring 2015), which advances a relational, rather than a privative, theory of focus.

Data In Hausa, if the subject is focus marked, it can only be narrowly focused, as in (1-a), where the focus is marked by the relative form of the verb ta- $k\dot{e}e$ and an optional focus particle $nee/cee.^1$ Any other focus than narrow subject does not have to be marked, as in (1-b). A sentence with SVO order and absolutive form of the verb is ambiguous between sentence, V, VP and object focus (examples bellow from Hartmann and Zimmermann 2007).

(1)	a.	Kandè (cee)	ta- kèe	dafà	kiifii.	b.	Kandè	taa	dafà	kiifii.
		Kandè FOC	3SG-REL.IPFV	cook	fish		Κ	3SG.F.PFV	cook	fish
		'KANDE is co				'Kande is cooking fish'				

While (1-a) is rather straightforwardly modelled by assuming that a subject marked as focus sits in a focus position, it is not clear how (1-b) would be modeled using F-markers. How can we exclude the subject from being F-marked in (1-b) when it is part of a larger focus? An F-marking on the subject would directly result in narrow subject focus, which cannot occur with absolutive form of the verb. Furthermore, it wouldn't do to assume that subjects in sentences without any focus marking are generally marked as G(iven), since such sentences can be interpreted as all-new.

Interestingly, there are also languages which show a near-opposite focus projection pattern from the one in Hausa. Buli, for example, uses the same focus marking for narrow subject focus and for all new sentences (where the subject is not the focus itself, but is *part of* a focus). Examples are given in (2-a), an answer to 'Who ate the beans?' (Fiedler et al. 2010), and (2-b), a beginning of a narrative (Schwarz 2011), in both of which the focus marker $(a)l\bar{e}$ follows the subject (which we gloss as FOC here).

(2)	a.	Mary àlē ŋòbī.	b.	Nípōk àlē tòm wà=bi-kpāgī		
		Mary FOC eat= 3 SG		woman.1 FOC send $1=$ child-head.5		
		'MARY ate them'.		'A woman sent her first child'		

Fiedler et al. (2010) observed that subject and sentence focus are marked in the same way in multiple African languages. In European languages, however, it is highly unusual for subject and sentence focus to be marked the same way, as sentence focus is usually homophonous with

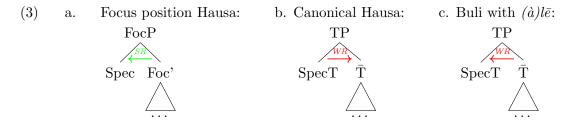
 $^{^{1}}$ We are aware of a single example in which a subject focus marking is used in Hausa in a broad focus context (answer to 'What happened?', in Hausar Baka 4.03:5). However, our consultants did not produce this pattern, and when confronted with it, rejected it.

object focus in these languages. Schwarz (2016) analyzes $(\dot{a})l\bar{e}$ as a connector encoding theticity. In our paper, however, we follow Fiedler et al. (2010) in treating it as encoding both sentence and subject focus and we simply assume that different sizes of focus are realized by the same marking, $(\dot{a})l\bar{e}$.

Generalizations <u>Hausa</u>: i) When the subject is marked for focus, it can only itself be the focus, and ii) when the subject is not marked for focus, it can be part of a bigger focus, such as sentence focus. <u>Buli</u>: $\hat{a}l\bar{e}$ indicates that the subject can be itself the narrow focus or part of a broader sentence focus.

Proposal Büring (2015) proposes to replace F-marking by a duo of relational restrictions to govern the generation of focus alternatives. While used for English there, the system is well-suited for cases like these. First, rather than tying the generation of focus alternatives to the *presence* of a specific structural property such as stress, it sees it as the default: absent any restrictions, all, any, or none of the nodes in a given structure may be interpreted as 'focal' (i.e. have non-trivial alternatives).

Secondly, restrictions on focus alternatives, where present, are *relational*, and, in particular, may be *conditional*. The WEAK RESTRICTION (WR) only lets the sister at the tail of the arrow introduce alternatives if the sister at the tip of the arrow does. Note that this does not force anything to be focal. Such a WR turns out to be an exact match for the canonical subject position in Hausa: It may be focal, but only if its sister is, too. This is modeled in in (3-b). In Buli, we see the exact mirror image: When the subject is marked for focus, the rest of the sentence can be focal, but only if the subject is. This is modeled in (3-c). (3-a) models the case of Hausa with focus marking on the subject by using the STRONG RESTRICTION (SR) which demands that the sister at the tip is focal and the sister at the tail is not.



The WR in (3-b) ensures that the subject can only introduce alternatives if the rest of the sentence does, and in (3-c), where the arrow is reversed, that the rest of the sentence can only introduce alternatives if the subject does.

Summing up, our paper presents a fully compositional semantics, which makes crucial use of relational constraints, rather than privative F-marking, to generate focus alternative sets. This is illustrated for two languages, Hausa and Buli, which display a near-opposite pattern in focus projection from the subject. The focus marking patterns in Hausa and Buli pose a significant problem for analyses using traditional F-marking. Our paper thus shows that the study of focusing in non-European languages can directly inform the development of semantic theories of focus.

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