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# Additive focus in Sylheti: Description and analysis in a Lexical-Functional Grammar framework

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#### **Abstract**

This paper offers a description of the additive focus marker in Sylheti and proposes an analysis within the Lexical-Functional Grammar (LFG) framework. It first examines the literature around focus particles, before providing a descriptive account of the Sylheti particle =2, which marks additive focus. Finally, a theoretical account of the particle is proposed within the LFG framework.

#### 1. Introduction

The Sylheti language is spoken in Bangladesh, Assam, India, and in diaspora communities, including London. It has a particle =2, which marks additive focus. In this paper we describe the syntax and functions of this marker, and propose a theoretical account within the syntactic framework of Lexical-Functional Grammar (LFG). Data for the analysis comes from Farhana Ferdous, a speaker of Sylheti residing in London, and collected as part of a Field Methods course at SOAS, University of London, supplemented by further data from the same consultant. The analysed data comes from a combination of narratives, structured elicitation tasks, and translations, with most weight placed on the first two as sources of evidence.

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The Sylheti additive focus marker  $= \mathfrak{d}$  is a clitic which marks the elements within its scope as the focus of the utterance, and adds them to a set previously established in the discourse. Consider the following examples: <sup>1</sup>

# (1) Context: Sara bought three bananas

tora berr=> km-tf-tl-a

few berry=AD.FOC buy-PST-PFV-3.FML

'(She) also bought [some berries]<sub>F</sub>'

# (2) Context: Nadia ate the cake

 $pl\varepsilon it=0$   $dsi-l\varepsilon-s-sin$ 

plate=AD.FOC wash-PFV-PST-3.FML

'(She) also [washed the plate]<sub>F</sub>'

As demonstrated in the above examples, the additive focus marker may mark either an argument (as in (1)) or a predicate (as in (2)) as being in focus. Example (2) also demonstrates a key restriction on the placement of the focus marker: that it may not appear utterance-finally. These characteristics will be taken up further in the analysis that follows.

# 2. Focus and focus particles

We define focus as the new relation expressed by a proposition which involves the selection of one from a set of alternatives. This combines the insights of Lambrecht (1994: 209) who defined focus as 'the element of information whereby the presupposition and the assertion differ from each other', and Rooth (1992), whose Alternative Semantics model suggests that the focus of an utterance is the element that generates a set of alternatives. This is in line with the approach taken by researchers working within LFG where focus and other information-structural notions are defined with regard to the features [New] and [Prominent]. We follow the extension by Butt &

INST – instrumental, LOC – locative, M – masculine, NFT – non-finite, NOM – nominative, PFV – perfective, PRG – progressive, PST – past, PRS – present, STAT – stative.

<sup>&</sup>lt;sup>1</sup> Parentheses indicate elements omitted in Sylheti but necessary for translation, generally comprising omitted copulas and pro-dropped elements. Square brackets and subscript 'F' indicate focused elements. Abbreviations are: 1 – first person, 3 – third person, ACC – accusative, AD.FOC – additive focus, CL – classifier, EX.FOC – exclusive focus, F – feminine, FML – formal, GEN – genitive, INFML – informal, INST, instrumental LOC.

King (1996) of the approach of Choi (1999) to defining discourse functions, which posits a four-way distinction using these features. 'New' refers to the relation expressed by a proposition, rather than the newness of a referent (cf. Mycock, 2013), which accords with Lambrecht's (1994: 209) observation that information is 'conveyed only by establishing RELATIONS between denotata and propositions'. 'Prominent', in Choi's (1999) proposal, refers to an element selected from a set of alternatives, in line with Rooth's (1992) definition. These features lead to the following four-way division of discourse functions:

Focus: [+New, +Prom]
Topic: [-New, +Prom]
Completive: [+New, -Prom]
Background: [-New, -Prom]

Of these, we will be principally concerned with Focus, being [+New], the new relation expressed by a proposition, and [+Prom], the selection of one from a set of alternatives.

Focus can be subdivided according to its domain, i.e. how much of a sentence is in focus. Lambrecht (1994) distinguishes argument, predicate and sentence focus. Sentence focus refers to 'all-new' or 'thetic' sentences which do not have an obvious previously-mentioned topic; Lambrecht describes them as 'event-reporting'. Predicate focus refers to utterances with the VP in focus, while argument focus means that one of the arguments is in focus:

(3) a) Who did you see yesterday?

I saw [David]<sub>F</sub> Argument focus

b) What did you do yesterday?

I [saw David]<sub>F</sub> Predicate focus

c) What happened yesterday?

[I saw David]<sub>F</sub> Sentence focus

We will see that the Sylheti additive particle can be used with argument or predicate focus.

König (1991: 33) claims that focus particles quantify over an alternative set of elements, which may be included or excluded as possible alternatives; hence they can be divided into additive particles, which include some alternatives, and restrictive, which imply that none of the alternatives satisfy the proposition (König 1991). The Sylheti particle =3 is argued to be an example of the former. In English, additive particles include also and even, while restrictive particles include only. The use of these exemplifies the behaviour of focus particles:

- (4) a) Only [John]<sub>F</sub> invited Bill
  - b) John only invited [Bill]<sub>F</sub>
  - c) [John]<sub>F</sub> also invited Bill
  - d) John also invited [Bill]<sub>F</sub>

The contribution of a focus particle to the meaning of a sentence depends on the focus of the sentence, and the scope of the particle, which may coincide but do not have to (König 1991). Thus, (4c, d) above, for example, are identical apart from the placement of focus, but have different meanings: in (4c), when the focus is *John*, there is a presupposition that someone else invited Bill; whereas in (4d), when the focus is *Bill*, it is presupposed that John invited someone else besides Bill. Similarly, in (4a), no-one else invited Bill, whereas in (4b), John invited no-one else.

Krifka (1999:111) notes that additive particles 'express that the predication holds for at least one alternative of the expression in focus', and that this is presupposed. Hence, there must be one or more presupposed alternatives, and the additive focus particle indicates that the proposition is true for at least one of them. Beaver & Clark (2008) observe that the presupposition must relate to specific, relevant alternatives: it is not just an existential presupposition. They exemplify this with the sentence (Beaver & Clark 2008: 72):

(5) Tonight [Sam]<sub>F</sub> is having dinner in New York, too.

If we allowed the presupposition to be an existential, i.e. that there is someone besides Sam having dinner in New York, then we would expect this sentence to be felicitous out of the blue, since it is uncontroversial given our knowledge of the real world. As it is infelicitous without context, Beaver & Clark (2008: 73) conclude that there must be 'a specific, salient instance' of an alternative. In terms of the alternative set that focus induces, we can say that additive focus relies on there being a previously established, non-empty set in the common ground, and an utterance involving additive focus asserts that the focus is also a member of this set. This accords with Krifka (2007) who observes that additive focus can be used in a restricted range of communicative settings owing to its requirement that the alternative set has already been established. An additive particle, then, contributes this meaning to the focus within its scope.

Note that the expression of exclusive focus in Sylheti involves the independent word *xali*, as in the following:

(6) tai xali  $for-s-\varepsilon$  she.INFML EX.FOC read-PST-3.INFML 'Only [she]<sub>F</sub> read (the book)'

# 3. Descriptive analysis

This section gives a descriptive account of the additive focus particle =3, covering its syntactic status and functions.

#### 3.1. Clitic status

In terms of its morphosyntactic status, the additive focus particle is best analysed as a clitic. Dixon & Aikhenvald (2003) define a clitic as an element which appears to be a word based on its grammatical behaviour, but an affix according to its phonological behaviour. This section examines the word-like and affix-like properties of the additive marker, demonstrating that it can best be classified as a clitic.

Consider the following example of =  $\sigma$  attached to a pronoun:

(7) tai  $for-s-\varepsilon$ ,  $h\varepsilon=o$   $for-s-\varepsilon$  she.INFML read-PST-3.INFML he=AD.FOC read-PST-3.INFML 'She read (the book), [he]<sub>F</sub> also read (the book).'

One word-like property of the additive marker is that it can take scope over a phrase or conjoined nominal, a typical clitic property according to Spencer & Luís (2012):

(8) Context: Faruk has three books

tar  $\varepsilon x = ta$  xata ar  $\varepsilon x = ta$  xɔlɔm=ɔ as- $\varepsilon$  he.GEN one=CL notebook and one=CL pen=AD.FOC have-3.INFML 'He also has [a notebook and a pen]<sub>F</sub>'

Additionally, it can appear attached to items of almost all word classes. Flexibility in its host word is a common property of clitics but not affixes (Zwicky & Pullum 1983). Example (9) shows its placement with finite and non-finite verbs, postpositions and quantifiers; it also appears with nouns (as in example (8)) and pronouns (as in example (7)); although it does not seem to be able to appear on numerals or adjectives.

(9a) Non-finite verb:

ami	tora	baţ	randa-m	
I	little	rice	cook.nft-1	
sa-r-ai	m	ar	xaɪta-m=ɔ	sa-r-am
like-PF	RS.PRG-1	and	eat.NFT-1=AD.FOC	like-PRS.PROG-1
'I wou	ld like to o	ook some	rice and like to [eat] <sub>F</sub> (it)'	

#### (9b) Finite verb:

Context: Nadia ate the cake quickly

plett dɔi-le-s-əm=ə təpati plate wash-PFV-PST-3.FML=AD.FOC quickly

'(She) also [washed the plate]<sub>F</sub> quickly'

# (9c) Postposition:

Context: She bought vegetables from the shop

market taki=ə kın-tʃ-il-a

market from=AD.FOC buy-PST-PFV-3.FML

'(She) also bought (vegetables) [from the market]<sub>F</sub>'

# (9d) Quantifier:

Context: Sara bought three bananas

tora=ə beri kın-tʃ-il-a

few=AD.FOC berry buy-PST-PFV-3.FML

'(She) also bought [some berries]<sub>F</sub>'

Weaker evidence comes from the consultant's intuition that =3 is a separate word, although this could be influenced by its translation into English being a free word. Perhaps relatedly, the consultant occasionally produced =3 as a separate word in slow repetition (which Sharma (2003) gives as evidence that the Hindi/Urdu discourse markers are clitics). While neither of these observations are conclusive in themselves, they provide useful supplementary evidence.

The marker = 2 also shows affix-like properties. It cannot be elicited in isolation as a translation for 'also'. It also shows some phonological integration with the preceding word: it is not realised following a word that already ends in /3, as shown by the difference between the synonyms for 'meat' in the following examples:

# (10) Context: She bought vegetables from the shop

mangsə kin-ts-əin dukan taki meat buy-PST-3.FML shop from

'... (she also) bought [meat]<sub>F</sub> from the shop'

gost=ə kın-tʃ-əın dukan taki meat=AD.FOC buy-PST-3.FML shop from

<sup>&#</sup>x27;...(she) also bought [meat]<sub>F</sub> from the shop'

It seems to be realised as a glide following a word ending in a vowel:

# (11) Context: Nadia is eating cake

$sara=\varepsilon=\mathfrak{I}$	keik	xa-r-a
[name]=NOM=AD.FOC	cake	eat-PRS.PRG-3.FML
'[Sara] <sub>F</sub> is also eating cake'		

A full phonological analysis of Sylheti is unavailable, but it seems as though this realisation does not occur across word boundaries, only within words.

The additive marker is always the final morpheme of a word, and appears after case endings and classifiers, as seen in example (11) above. The case endings and classifiers can themselves be shown to be clitics as they have many of the properties described here, providing further evidence for considering the additive marker to be a clitic: Zwicky & Pullum (1983) note that clitics can follow other clitics, but affixes cannot follow clitics.

Syntactically, then, the focus particle behaves like a word, however, it also shows affix-like properties, most of which are phonological. It is therefore appropriate to consider it a clitic.

# 3.2 Scope and meaning

Based on the contexts in which it appears, the Sylheti clitic = $\mathfrak{I}$  fits the definition of an 'additive'/'inclusive' focus marker: it indicates inclusion of at least one (presupposed) alternative. This is demonstrated by its use in answer to yes/no questions along with  $\mathfrak{I}$  'yes', demonstrating that the suggestion in the question is correct (that is, it is a viable alternative):

lerra e a

# (12) Context question: Is Nadia buying carrots?

madra

JE	паата	gazər	$\kappa m$ - $i$ - $\alpha$ ,
yes	[name]	carrot	buy-PRS.PRG-3.FML,
apɛl=ɔ		kın-r-a	
apple=A	D.FOC	buy-PRS.PR	G-3.FML
'Yes, N	adia is buyin	g carrots, (sh	ne) is also buying [apples] <sub>F</sub>

Furthermore, its behaviour accords with Krifka's (2007) proposal that the alternative set must have previously been established: it cannot be established in the first conjunct of a coordinated noun phrase, as we will see below. Evidence from its occurrence in narrative also demonstrates the need for a previously established alternative set: whenever it is used the alternative set is explicitly established in the preceding discourse. Consider, for example, the following utterance from a narration of the *Pear Film* (Chafe 1980):

(13) Context: The boy falls off his bicycle and drops the pears he was carrying. Some children approach.

tara	ага	Э	foa=rε	tʊl-tʃ-ε
they	come.NFT	dem	boy=ACC	pick.up-PST-3.FML
•				
ar	fear=ɔ	tola-t/	<del>-</del> E	dι-s-ε
and	pear=AD.FOC	pick.u	p-PST-3.FML	give-PST-3.FML
'Comir	ng, they picked up	this boy and	l also picked up	[the pears] <sub>F</sub> and gave
(them	to the boy)'			

The additive focus particle in Sylheti occurs with a wide variety of word classes and can be used for both argument and predicate focus. To focus a core argument (subject or object), a non-core (oblique) argument, or an adjunct, the additive focus marker is usually added to the final word of the relevant constituent without affecting word order:

(14) Context: The bride's mother came to the wedding

xəina=r	$baf= \mathfrak{I}$	ai-s-əin
bride=GEN	father=AD.FOC	come-PST-3.FML
'The bride's father also	came'	

(15) Context: She bought vegetables from the shop

market	taki	kın-tſ-il-a
market	from=AD.FOC	buy-PST-PFV-3.FML
(She) also bou	oht (vegetables) [from th	e marketl <sub>e</sub> '

'(She) also bought (vegetables) [from the market] $_{\rm F}$ 

However there is a degree of flexibility in its placement: in the sequence quantifier+noun, =3 can appear on either element, giving the whole phrase focus status:

# (16) Context: Sara bought three bananas

	tora	$b\varepsilon r_1=\mathfrak{I}$	kın-tʃ-ıl-a
	few	berry=AD.FOC	buy-PST-PFV-3.FML
or			
	tora=o	beri	kın-tʃ-ıl-a
	few=AD.FOC	berry	buy-PST-PFV-3.FML
	'(She) also boug	tht [some berries] <sub>F</sub> '	

Possessed noun phrases may appear with the additive focus marker on the noun, even when, semantically speaking, the possessor is in focus (the noun itself having already been introduced):

(17) Context: The bride's parents attended the wedding

namand = 2r ma-baf = 2 as-l-a a

'The [groom's]<sub>F</sub> parents also came'

However, adjectives and classified numerals cannot appear with =0, and when such uses were suggested they elicited negative grammaticality judgements (although =0 can appear following a classified noun as in example (8) above). For example, attempts to cliticize the additive focus marker to the classified numeral in (18) to create (19) were rejected by the consultant.

(19) \*ami  $\varepsilon x = ta$  biskot sai ar  $\varepsilon x = ta = 0$  keik I one=CL biscuit want.1 and one=CL=AD.FOC cake

*sai* want.1

Intended: 'I want a biscuit and I also want a cake'

While the Sylheti marker usually appears once per clause, in some instances it is used twice. In one instance, this appears with asyndetic coordination, that is, coordination without a coordinator (cf. Haspelmath 2004):

#### (20) Context: Faruk has three books

```
tar \varepsilon x = ta xata = 2 xolom = 2 as - \varepsilon
he.GEN one=CL notebook=AD.FOC pen=AD.FOC have-3.INFML
'He also has [a notebook]<sub>F</sub> and [also a pen]<sub>F</sub>'
```

Here, both conjuncts are added to a set established in the previous utterance. It appears that each conjunct is, separately, added to the set; crucially, they are added to the same set. It is not possible for two instances of the particle to refer to two different sets.

The additive focus marker also appears within co-compounds, also called 'dvandva compounds'. Wälchli (2005: 1) describes such compounds as being formed of two or more parts which express 'semantically closely associated concepts' and have a more general meaning than the meaning of their parts. In Sylheti, they are formed by the juxtaposition of two related words, without any linking morpheme, for example *ma-baf* 'parents' (literally 'motherfather'). The preferred placement for the additive clitic in co-compounds is at the end, although double-marking is possible, as in:

This is unexpected since compounds are thought to be stored as single words in the lexicon, so we would not expect the clitic to intervene. However, this possibility may imply that such forms are productive in Sylheti and not stored in the lexicon. This is supported by the possibility of asyndetic coordination, exemplified above, in contrast to Masica's (1991) claim that coordination in Indo-Aryan languages requires a conjunction. The form *mabaf*, therefore, could be a co-compound with the more general meaning 'parents', or could be asyndetic coordination, with the less general meaning 'mother and father'.

Additionally, there is interaction between = 0 and ar 'and'. It is generally impossible for them to co-occur at the level of the noun phrase: the second element of a coordinated noun phrase cannot be marked with = 0 and added to the set established in the first noun phrase (unlike in English where examples such as 'I ate bread and also butter' are perfectly acceptable). This is, however, acceptable where the coordination involves a verb, as in (23).

(23) saul amra deg-a de-1, ar fani=a de-1 rice we pan-LOC add-1, and water=AD.FOC add-1 'We put rice in a pan, and also put water in a pan'

Part or all of a noun or postpositional phrase may therefore be semantically focused through the use of the marker =0 on the final word, even if the final word is not, semantically speaking, part of the focus. This appears to be the preferred structure for marking additive argument focus, although the clitic may sometimes be added to a non-final word in the phrase, and be used multiple times if multiple elements are being added to the same set.

Turning to predicate focus, we most commonly see examples like the following, where the additive focus marker does not appear at the right hand edge of the focused element:

### (24) Context: Nadia ate the cake

plett=0 dot-le-s-oin
plate=AD.FOC wash-PFV-PST-3.FML

'(She) also [washed the plate]<sub>F</sub>'

It seems that what determines this pattern is an additional constraint that the clitic cannot appear utterance-finally, since it appears on the final word of the focused element if this does not coincide with the end of the utterance:

# (25) Context: Nadia ate the cake quickly

plett doi-le-s-oin=0 topati
plate wash-PFV-PST-3.FML=AD.FOC quickly
(She) also [washed the plate]<sub>F</sub> quickly'

It is not clear whether this constraint also applies to argument focus, since it is unusual for a nominal or postpositional phrase to be post-verbal. The verb, though, is normally the final element in the utterance. When the predicate consists of noun + finite verb, this leads to the potential for ambiguity in focus scope, which would normally be resolved by context, as in:

(26) 
$$pleit=3$$
  $d3i-le-s-3in$   
 $plate=AD.FOC$  wash-PFV-PST-3.FML  
'(She) also washed [the plate]<sub>F</sub>' / '(She) also [washed the plate]<sub>F</sub>'

We see a similar pattern when a non-finite verb alone is in focus, with the additive clitic appearing on the non-finite verb and a finite verb utterance-finally:

In sum, the additive clitic is placed, preferentially, at the right edge of the focused element. However, the clitic cannot appear utterance-finally, and so occurs on the second-to-last word in the focus if it would otherwise be the final element of an utterance. There is some flexibility in the placement of the clitic in cases of argument focus: it does not need to attach to the final element of the argument in focus, although it usually does; the constraints on this have not been determined.

# 4. An LFG analysis

Lexical-Functional Grammar is a non-transformational, constraint-based theory (Bresnan 2001; Dalrymple et al. 2019). It posits distinct kinds of representation for different types of linguistic information. Syntactic information is represented as c(onstituent)-structure and f(unctional)-structure: c-structure represents linear order and hierarchical relationships of constituents (in the form of annotated trees), while f-structure represents grammatical functions (in the form of attribute-value matricies). In addition, parallel representations for other types of information have been suggested. Of particular relevance here is a separate i-structure representation that has been proposed for discourse functions (cf. King 1997; Dalrymple & Nikolaeva 2011), and a semantic representation called s-structure. This paper will assume the following mapping functions between these parallel representations, as proposed by Dalrymple & Nikolaeva (2011):

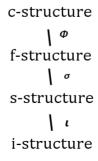


Figure 1: LFG mapping (Dalrymple & Nikolaeva, 2011: 90)

An LFG analysis of Sylheti, then, needs to take into account the linear order of words and how they are arranged into constituents, their grammatical functions, how they combine to create semantic meaning, and their information-structure roles. This paper will concentrate on the f-structure, s-structure and i-structure representations, where the key features of the focus particles are captured. The analysis will be exemplified with the following:

(28) Argument focus – Context: Nadia is eating cake

 $sara=\varepsilon=\mathfrak{I}$   $k\varepsilon ik$  xa-r-a

[name]=NOM=AD.FOC cake eat-PRS.PRG-3.FML

'[Sara]<sub>F</sub> is also eating cake'

(29) Predicate focus – Context: Nadia ate the cake

 $nadia = \varepsilon$   $pl\varepsilon it = \sigma$   $d\sigma i - l\varepsilon - s - \sigma in$ 

Nadia=NOM plate=AD.FOC wash-PFV-PST-3.FML

'Nadia also [washed the plate]<sub>F</sub>'

# 4.1 A brief c-structure analysis

Within LFG, each terminal node of the c-structure tree dominates exactly one grammatical word (Bresnan 2001); since clitics are grammatical words, the additive focus marker will have its own terminal node at c-structure. Sharma (2003:73) treats the Hindi/Urdu discourse markers as non-projecting categories; that is, they adjoin as sister and daughter to their host, as in:

(30)



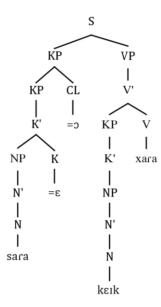
Support for this analysis comes from the fact that clitics can attach to any part of the phrase and to a wide variety of word classes (Sharma 2003). These properties also apply to the =2 particle, so the non-projecting analysis will also be used for Sylheti. For argument focus, this leads to the c-structure representation in:

(31) Context: Nadia is eating cake<sup>2</sup>

 $sara=\varepsilon=\mathfrak{I}$   $k\varepsilon ik$  xa-r-a

[name]=NOM=AD.FOC cake eat-PRS.PRG-3.FML

'[Sara]<sub>F</sub> is also eating cake'



With predicate focus, the marker is placed at the end of the focused element unless this is also the end of the utterance, in which case it attaches to the second-to-last word. Lowe (2016) proposes that clitics may appear in unexpected positions within syntactic units when there are prosodic restrictions on their position, which is best accounted for by separating the sstring, the string of syntactic words, from the c-structure. He argues that clitics may be reordered with respect to other elements in the mapping from s-string to c-structure, as in:

<sup>2</sup> A full c-structure analysis of Sylheti phrases is not developed here and the analysis given is not claimed to be definitive. For these c-structures, KP (case phrase) is used because semantic information appears to be contributed by the case clitics (cf. analyses of comparable clitics in Hindi/Urdu by Butt & King (1999) and Sharma (2003)); VP is

of comparable clitics in Hindi/Urdu by Butt & King (1999) and Sharma (2003)); VP is used based on the observation that obliques and some adjuncts appear to be able to appear anywhere within the VP.

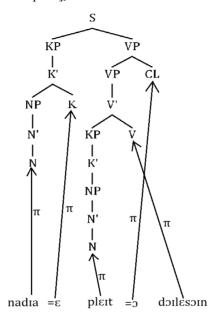
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(32) Context: Nadia ate the cake

 $nadia=\varepsilon$   $pl\varepsilon it=0$   $doi-l\varepsilon-s-oin$ 

Nadia=NOM plate=AD.FOC wash-PFV-PST-3.FML

'Nadia also [washed the plate]<sub>F</sub>'

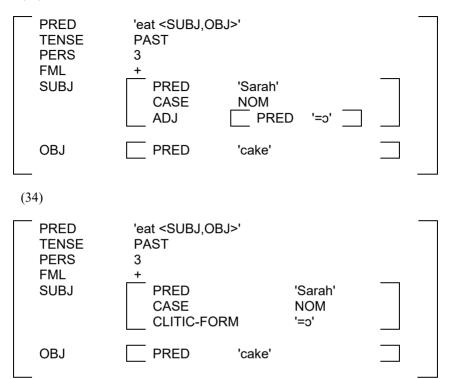


This accounts for the position of the Sylheti additive focus marker by suggesting that the constraint which prevents it from being utterance-final does not affect the c-structure, only the s-string. This also allows for a uniform c-structure treatment of instances where an adverb or other element appears following the verb, and where it does not, and for a uniform treatment of predicate and argument focus.

# 4.2 An f-structure analysis

In f-structure, additive clitics show properties associated with adjuncts: they are optional, not an argument of anything, and appear in various positions. An adjunct analysis would accord with König's (1991) claim that focus particles cross-linguistically often show properties associated with adverbs. However, Butt & King (1998) do not consider the Bengali additive focus clitic to contribute an ADJ(unct) attribute, but instead [CLITIC-FORM =o]. These proposals lead to two possible f-structures for the argument focus example in (28) above.

(33)



If  $= \mathfrak{I}$  is considered to have an ADJ function, it must be located in an inner f-structure within the element it modifies, and must contribute a PRED value, whereas the use of the CLITIC-FORM attribute just tells us that the clitic is present. Since  $= \mathfrak{I}$  can be analysed as contributing information about the relations holding between referents, rather than contributing a 'real-world' meaning itself, it does not seem to contribute a PRED. Furthermore, the CLITIC-FORM analysis maintains parallelism between the additive focus marker and the case clitics, in that both are at the same level as the modified element at f-structure. This accords with Sharma's (2003) observations that case and discourse clitics in Hindi/Urdu both perform clause-level functions, determining the grammatical or discourse function of the element to which they attach. Hence the CLITIC-FORM analysis in (32) will be adopted here.

In the case of predicate focus, [CLITIC-FORM =5] will be introduced in the outermost f-structure, at the same level as the verbal predicate:

(35)

PRED	'eat <su< th=""><th>BJ,OBJ&gt;'</th><th></th><th></th></su<>	BJ,OBJ>'		
CLITIC-FORM	l '=ɔ'			
TENSE	PAST			
PERS	3			
FML	+			
SUBJ	PRED		'Sarah'	
	CASE		NOM	
OBJ	PRED	'cake'		

In the s-structure representation the clitic will take scope over the verb, possibly in combination with an argument.

# 4.3 An s-structure and i-structure analysis

For the representation of s-structure and i-structure, LFG proposals diverge. This section will look at how the model of Dalrymple & Nikolaeva (2011) can be used to analyse the Sylheti additive focus marker.

Dalrymple & Nikolaeva (2011) propose that topic markers contribute the feature-value pair [DF TOPIC] to s-structure, that is, they contribute the TOPIC discourse function to the element(s) within their scope. In the simplest case, this means that the following equation is part of the lexical entry for a topic marker (Dalrymple & Nikolaeva (2011: 98):

(36) 
$$(\uparrow_{\sigma} DF) = TOPIC$$

Similarly, I suggest that the additive focus marker indicates that the element to which it attaches is a FOCUS in i-structure by introducing [DF FOCUS] to s-structure, through the equation:

(37) 
$$(\uparrow_{\sigma} DF) = FOCUS$$

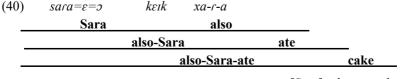
The additive marker may only attach to elements which are compatible with a FOCUS interpretation, e.g., if it is attached to a topical element, this would result in a clash in s-structure, since two different values would be contributed to the same DF attribute.

In i-structure, this means that any element associated with the additive clitic will be marked for inclusion in the FOCUS set, leading to the following i-structures for predicate and argument focus:

```
(38)
                        [FOCUS {[washed - plate]} TOPIC {[Nadia]}]
nadia=\varepsilon
                       pl&it=2
                                                   dəi-le-s-əin
Nadia=NOM
                       plate=AD.FOC
                                                   wash-PFV-PST-3.FML
'Nadia also [washed the plate]<sub>F</sub>'
(39)
                          [FOCUS \{ [Sara] \} TOPIC \{ [eat - cake] \} ]
                                     keik
saca=\varepsilon=2
                                                 xa-r-a
[name]=NOM=AD.FOC
                                     cake
                                                 eat-PRS PRG-3 FML
'[Sara]<sub>E</sub> is also eating cake'
```

However, the additive marker does not just pick out an element as focus, but it also contributes the meaning of addition. As Krifka (2007) notes, focus particles can contribute to semantic content (Krifka's 'common ground'). In the case of additive focus, as discussed in Section 2, this involves the requirement of a relevant alternative set already in the discourse. Therefore, we would expect the additive marker to contribute its additive meaning to s-structure. However, i-structure is the representation where utterances in a discourse can be related to one another (Butt & King 1997), so we expect it to have an effect in i-structure as well.

The interpretation of the focus clitic depends on its scope, which is determined by its placement in c-structure and analysis in f-structure. Utterances with =0 are felicitous in the appropriate contexts, as in examples (28) and (29) above, but not felicitous without such context, since there is not an appropriate presupposition. This indicates that the meaning contributed by the focus particle is at least partially semantic, as it impacts the truth conditions of the utterance. I suggest that the LFG analysis of quantifier scope (and scope ambiguity) may be adapted to account for the semantic interpretation of the additive focus clitic. In the case of argument focus, the f-structure elements making up the argument must combine with the focus clitic, before combining with the rest of the utterance. For example (stated informally):



If the verb and object are both in the scope of the additive marker, these must combine with each other before combining with the focus marker:

 wash	plate		
wash-	plate	also	
;	also-wash-plate		Nadia

Nadia also [washed the plate]<sub>F</sub>

These analyses are simplified; nonetheless, they demonstrate how the meaning of addition can be incorporated in s-structure, accounting for the contribution of the additive marker semantically.

However, by incorporating the additive meaning in s-structure but not in i-structure, this approach treats types of focus as a purely semantic rather than pragmatic phenomenon. Some researchers (e.g., Dik 1997) might suggest that the different types of meaning that can be contributed by focus, whether marked or not, should be incorporated into the model. Information about different types of focus could be incorporated into the i-structure, as proposed by Butt (2014), who includes the attribute FOCUS-TYPE within i-structure. She does not go into detail about its possible values, but mentions that they are determined by morphology, prosody, or lexical items, including focus particles, or else are assigned as 'default'. We could propose, then, that the Sylheti additive marker contributes [FOCUS-TYPE additive] to i-structure, meaning that its lexical entry would contain the following equation:

# (42) $(\uparrow_i \text{ FOCUS-TYPE}) = \text{additive}$

The contrast between utterances with and without the additive clitic is then shown in the i-structure representations:

I suggest that the FOCUS-TYPE attribute is included in i-structure, as well as incorporating the meaning of addition in the semantic representation. This has the advantage of responding to Dik's (1997) proposal that there are a

variety of pragmatic uses of focus available cross-linguistically, and Lambrecht's (1994) observation that there is no clear division between semantic and pragmatic meaning, since the clitic contributes to both.

The additive focus marker thus specifies that the i-structure FOCUS set must have [FOCUS-TYPE additive]. Furthermore, we have seen that there may be two instances of the additive focus marker within an utterance, but only if they are adding members to the same alternative set. As such, we could distinguish the set to which marked elements are being added by specifying the identity of the additive set, e.g., representing it as [FOCUS-TYPE additive $_n$ ]. This would be accompanied by a constraint to the effect that there can only be one value for n within an utterance. Then, the marker may only be used multiple times if the elements it attaches to are being added to the same set, otherwise there would create a clash:

#### (45) Context: Faruk has three books

```
tar ex=ta xata=0 xolom=0 as-e he.GEN one=CL notebook=AD.FOC pen=AD.FOC have-3.INFML 'He also has a notebook and also a pen'
```

```
 \left[ FOCUS \left\{ [PRED - FN \ notebook \ FOCUS - TYPE \ additive1 \ ] \left[ PRED - FN \ pen \quad FOCUS - TYPE \ additive1 \ ] \right\} \right] 
 TOPIC \qquad \left\{ [PRED - FN \ he - has \ TOPIC - TYPE \ default \ ] \right\}
```

By modelling the context of (45), we can further show the link between the set made available by the first utterance and the elements added in the second:

This shows that the set of 'things Faruk has' established in the first (thetic) utterance is, in the second utterance, selected as the alternative set and has two elements added to it through use of the additive clitic.

I propose the following lexical entry for =*\sigma*:

(47) = 
$$\mathfrak{I}$$
 CL<sub>disc</sub> ( $\uparrow$ CLITIC-FORM) = '= $\mathfrak{I}$ '
( $\uparrow_{\sigma}$  DF) = FOCUS
( $\uparrow_{\sigma}$  FOCUS-TYPE) = additive,

The first line indicates that its word class is 'discourse clitic' (CL<sub>disc</sub>), following Sharma (2003), and that it contributes [CLITIC-FORM '=o'] to f-structure. The second line indicates that it contributes [DF FOCUS] to s-structure, and as we have seen this will result in it being a member of the FOCUS set in i-structure. The third line contributes [FOCUS-TYPE additive] to the i-structure. This extends the proposal put forward by Dalrymple & Nikolaeva (2011) and accounts for the various meanings, both semantic and pragmatic, that can be contributed by focus.

The function of the additive clitic in discourse regulation can therefore be accounted for through i-structure, while its truth-conditional effects relate to s-structure. Its positioning is modelled through constraints on the relationship between the c-structure and the s-string as well as phrase structure rules determining the word classes with which it can appear.

#### 5. Conclusion

This paper has examined the additive focus marker = 3 in Sylheti, offering a description of the particle's distribution and an initial analysis within the LFG framework.

The Sylheti additive focus marker is a clitic. Its positioning was modelled through constraints applying to the mapping between the s-string and the c-structure, following the proposal put forth by Lowe (2016), which accounts for the unexpected positioning of the clitic in some instances of predicate focus.

This investigation is also a preliminary attempt to analyse focus particles within the model of LFG proposed by Dalrymple & Nikolaeva (2011). Earlier LFG proposals (Otoguro 2003; Sharma 2003) analysed discourse functions as contributing attributes to f-structure representations. However, using istructure to represent discourse functions and s-structure for semantic relations has a number of advantages. Using s-structure allows more detailed representation of semantic information. Focus scope may be something other than a c-structure or f-structure constituent (cf. King 1997), e.g., if only the verb is included in focus. The proposal here allows information from different sources to be involved in the determination of focus scope, avoiding the mismatches seen when f-structure is used for discourse functions: the scope of =2 is determined partly by its c-structure position, which feeds into its fstructure analysis, but may also be influenced by information from the linguistic and pragmatic context, which Dalrymple & Nikolaeva (2011) allow to intervene in the mapping between f-structure and s-structure. Scope may also be determined by prosody, which has not been investigated here but could be incorporated in p-structure (Dalrymple & Mycock 2011) if found to be relevant. A model which separates different kinds of structure, then, is able to account for more of the observed properties than if the analysis were restricted to one level.

This proposal also separates the semantic effects of the marker from its pragmatic effects, by incorporating some of the ideas from Butt (2014) into the model of LFG adopted here. If we take s-structure to be meaning without context, and allow utterances to relate to the previous discourse in i-structure (as in Butt & King 1997), then the clitic has a particular meaning in s-structure which restricts the discourse it can appear in, but is also evaluated in i-structure with regard to the availability of an appropriate alternative set. This is modelled here through the use of an index on the additive value within i-structure.

This paper has therefore proposed a first description of Sylheti additive focus and shown some ways in which the LFG framework can be adapted to account for this type of focus particle.

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