



# Information Structure (IS) and The LFG Framework

## LFG18, University of Vienna, Austria

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### Background/Introduction

It is observed that previous analyses of information structure within the i-structure in LFG is underspecified in capturing subtypes of discourse notions more especially in languages that use overt morphological particles in modeling these notions. Focus subtypes: selective focus, contrastive focus, corrective focus as opposed to new information/information focus are underspecified in the i-structure. Same is observed for subtypes of topic constructions: familiarity topic, contrastive topic etc.

### Objectives

- Give account of IS in Kusaal.
- Model the observation in the i-structure in LFG by proposing additional attributes therein.

### Questions

- What is the resulting effect of resourcing the c-structure for subtypes of discourse function when same is not mapped on to the i-structure?
- How complete is the i-structure when subtypes of discourse notions are only visible in the c-structure?

### Methods

- IS in Kusaal: Focus constructions in Kusaal  
Topic constructions in Kusaal
- Previous analyses of IS in LFG and lapses observed
- Proposal to mitigate observed lapses

### Focus-Background in Kusaal

- Focus evokes a contrasting proposition or set of propositions (Rooth 1996). The other constituent parts of the sentence are then referred to as the background (Krifka 2007).
- The evocation of alternative is restricted to a particular type of focus constructions. (Halliday 1967; Chafe 1976; Szabolcsi 1981; Rochemont 1986; É. Kiss 1998).
- Information focus
- Contrastive focus

(2) a. Q: Àdúku b̄w̄ ànó'óné?  
Aduku beat who  
'Who did Aduku beat?'  
b. Ans: Àdúku b̄w̄ bígí lá.  
Aduku beat child DEF.  
'Aduku beat the child. (information focus)'

(3) a. Q: Àdúku b̄w̄ né ànó'óné?  
Aduku beat FOC who  
'Who (specifically) did Aduku beat?'  
b. Ans: Àdúku b̄w̄ né bígí lá.  
Aduku beat FOC child DEF.  
'It is the child that Aduku beat.' (contrastive focus)'

- Information focus is morphologically null in Kusaal
- Contrastive focus is marked using the particles: *kà*, *ń* and *né*

### Topic –Comment Constructions in Kusaal

Topic, most commonly, expresses some element of 'aboutness' (Reinhart 1981; Strawson 1964; Kuno 1972; and Dik 1978) thus it answers the question 'what is the sentence about?' whilst comment refers to the rest of the sentence.

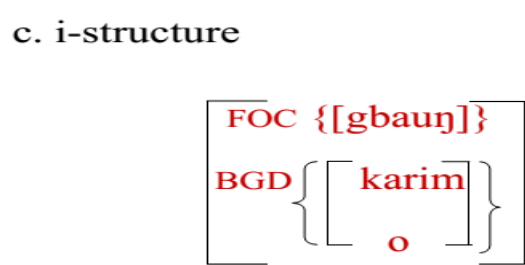
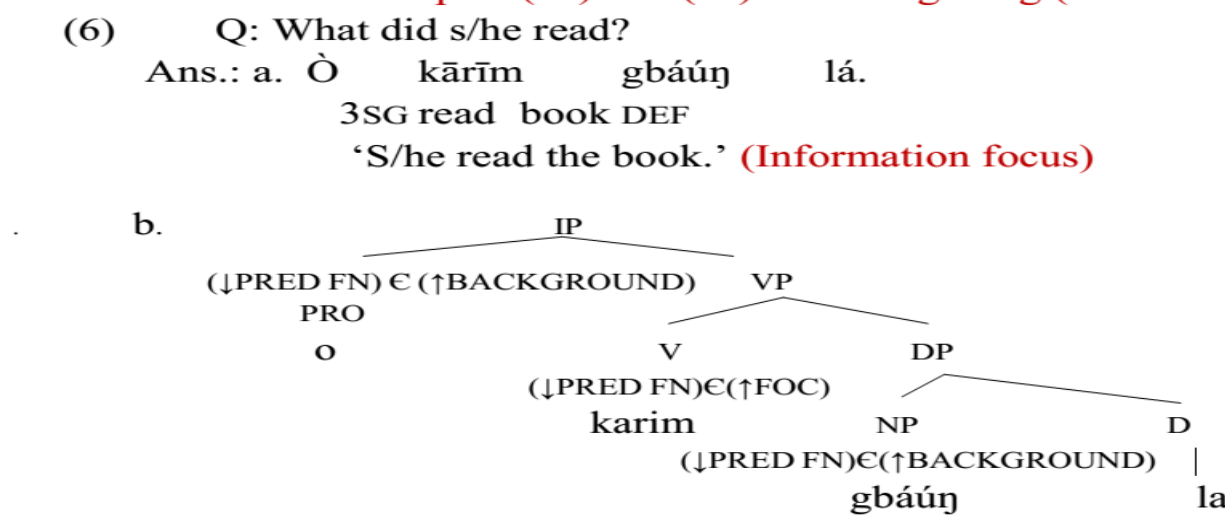
(4) *Yá'á àn bíís lá* (TOP), *bà dī dííb lá* (COMMENT).  
if COP.be children DEF 3PL eat food DEF  
'As for the children, they have eaten the food.'

(5) a. *Bííg nwa, ò sààm sà nyē ò.*  
child DEM 3SG.POSS father PAST see.PERF 3SG.ACC  
'This child, his father saw him yesterday.' (Familiarity topic)

b. *Yá'á àn bííg nwa, ò sààm sà nyē ò.*  
if COP child this.3SG.POSS father PAST see.PERF 3SG.POSS  
'This child, his father saw him yesterday / As for this child his father saw him yesterday.' (Contrastive topic)

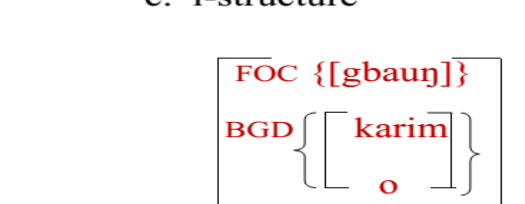
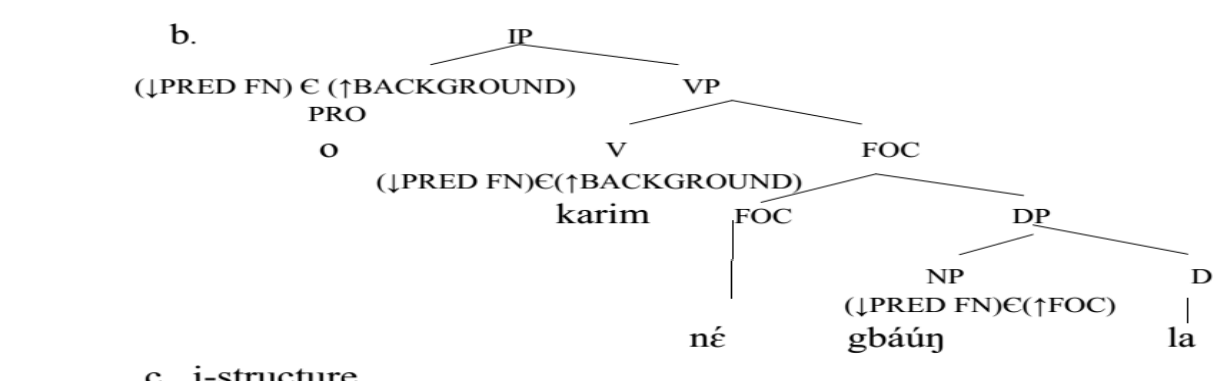
### Some Previous analyses of IS in LFG

Ambiguity resulting from the under-specification of focus subtypes in the i-structures in examples (6c) and (7c) following King (1995/1997).



(7) Q: Ò kārīm né b̄s?  
3SG read FOC what  
'What (specifically) did s/he read?'

Ans.: a. Ò kārīm né gbáúŋ lá.  
3SG read FOC book DEF  
'It is the book that s/he read (not the newspaper for instance).'  
(Contrastive focus)



(8) Choi (1996)'s four way distinction of information structure.

	+Prom	-Prom
-New	Topic	Tail
+New	Contrastive Focus	Completive Focus

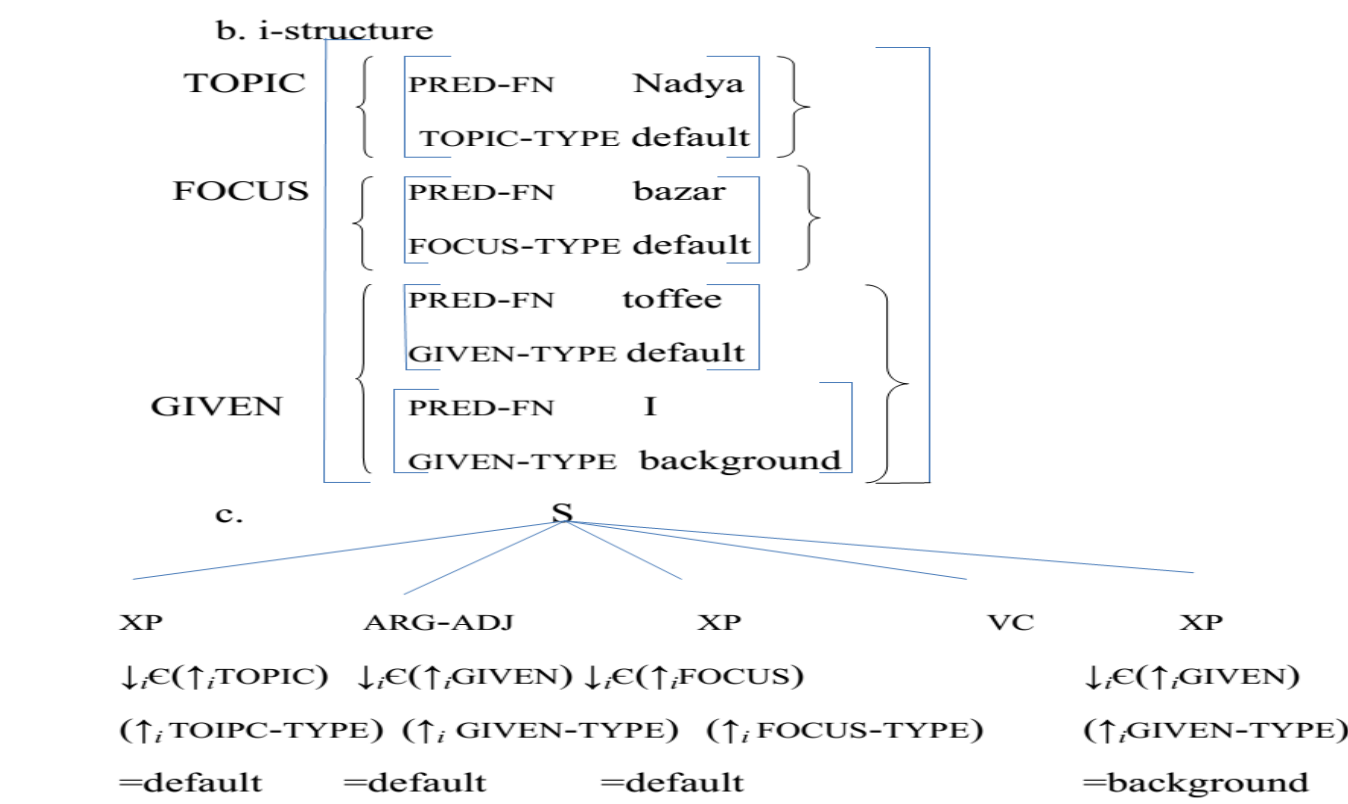
Prominence not a universal distinguishing feature in discourse notions:

(9) Who beat the child?  
B: [Àdúku.ú]<sub>N+P</sub> b̄w̄ bííg lá.  
Aduk.Emph. beat child DEF  
'Aduku beat the child.'

d. C. Àyéí, [dáu lá]<sub>N+P</sub> ń b̄w̄ bííg lá.  
no man DEF FOC beat.perf. child DEF  
'No, it is the man who beat the child (not the woman, not Aduku)'

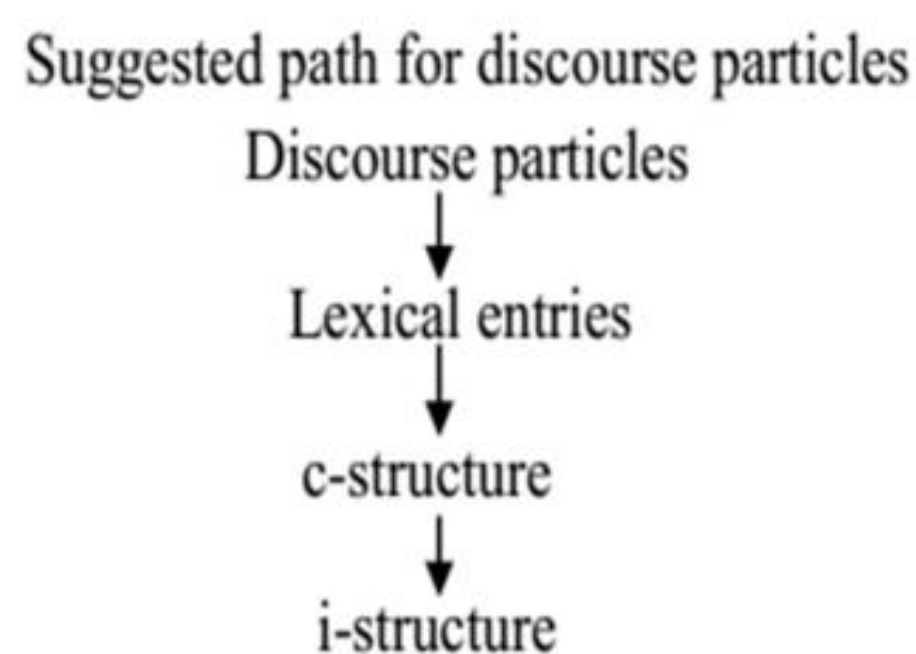
Butt (2014) includes finer grained details of discourse notions in i-structure and c-structure.

(10) a. [nadya]<sub>T</sub> (to) [ab'í] [t̄]<sub>C</sub> [bazar=se]<sub>F</sub>  
Nadya.F.Nom indeed just now toffee.F.Nom market.M=from  
xarid rah-i t̄-I [mere=liye]<sub>g</sub>  
buy stay-Perf.F.Sg be.Past-F.Sg I.Gen.Obj=for  
'Nadya was just buying toffee at the market for me.'



### Proposed Suggestions

- The suggested intervention builds on the combined approaches of King (1997); Choi (1999); Mycock (2006); Butt (2014).
- Discourse particles should be added to the i-structure.



### Additional Attributes in i-structure and Sample Analyses

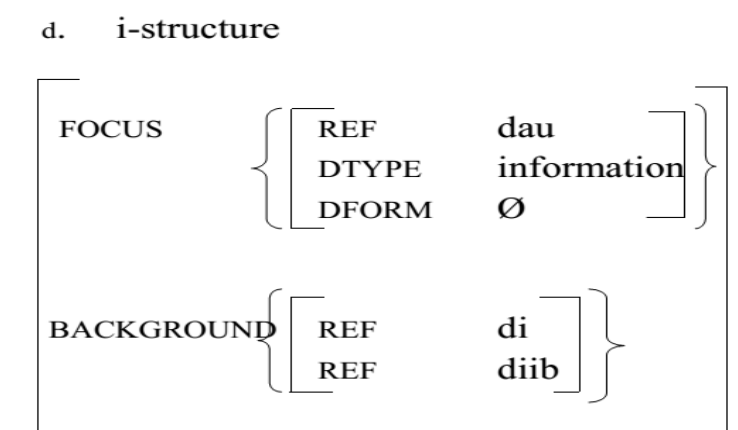
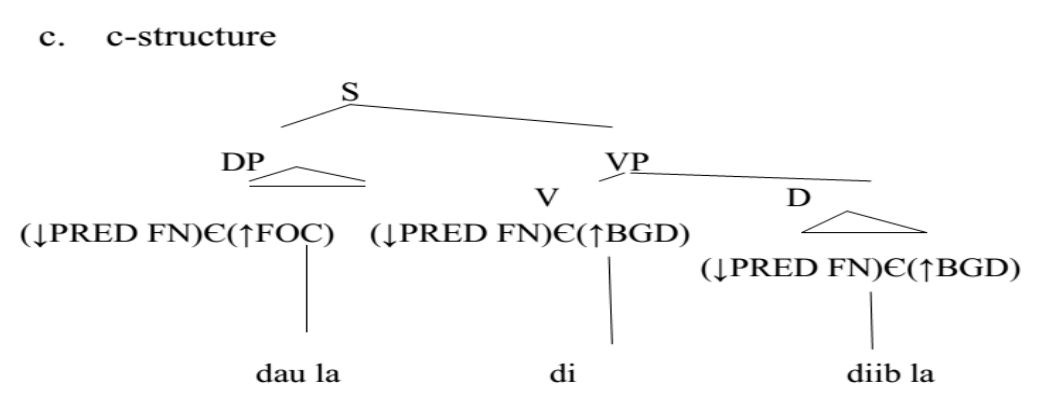
- Discourse Type (DTYPE): contrastive focus, information focus and topic.
- DFORM: discourse particle if any or the feature specification of the said discourse status determined by the language in question.
- For instance a DTYPE can have the value {contrastive focus} and a DFORM VALUE {né} for Kusaal and {contrastive focus} and {+NEW +PROM} for German.

(11) Ànó'ón dī dííb lá?  
who eat food DEF  
'Who ate the food?'

a. Dáu lá dī dííb lá.  
man DEF eat food DEF  
'The MAN ate the food.'

b. Lexical entries: Dáu lá dī dííb lá.

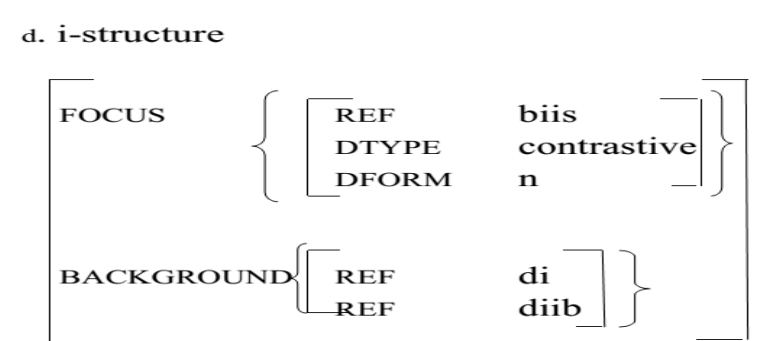
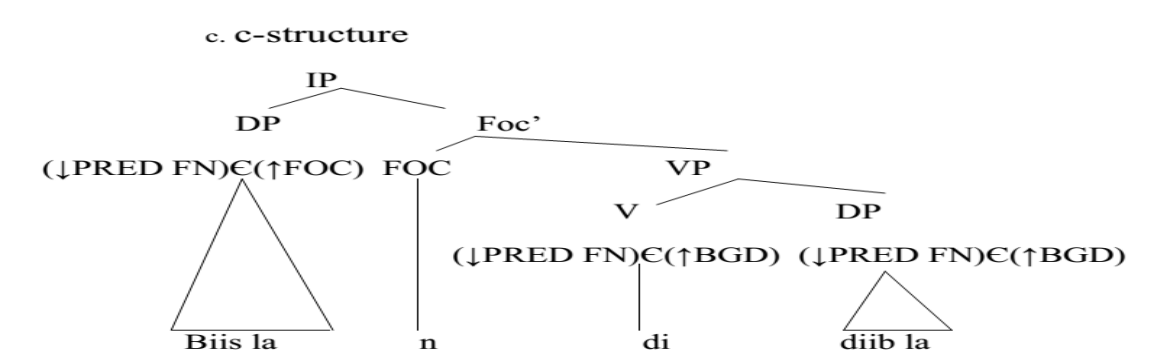
Dau N(↑PRED) = 'dau'  
(↑NUM) = SG  
(↑DEF) = +  
Di V(↑PRED) = 'di<(↑SUBJ) (↑OBJ)>'  
(↑TENSE) = PERFECTIVE  
Diib N(↑PRED) = 'diib'  
(↑DEF) = +



(12) a. Àyéí, bíís lá ń dí dííb lá.  
no children DEF FOC eat food DEF  
'It is the children that ate the food.'

b. Lexical entries

Biis N(↑PRED) = 'biis'  
(↑NUM) = PL  
(↑DEF) = +  
n P'(↑DFORM) = 'n'  
(↑DTYPE) = CONTRASTIVE FOCUS  
(↑TENSE) = PERFECTIVE  
Diib N(↑PRED) = 'diib'  
(↑NUMBER) = UNCOUNTABLE  
NOUN  
(↑DEF) = +



### Conclusion

- This discussion has looked at information structure: focus constructions and topic constructions in Kusaal.
- It is observed that previous analyses of IS in the i-structure is underspecified for subtypes of discourse notions: contrastive focus, new information, contrastive topic and familiarity topic.
- The under-specification of subtypes of focus and topic in the i-structure results in ambiguity and mismatches between the information in the c-structure and the i-structure.
- The attributes DTYPE and DFORM are proposed for the i-structure to resolve the observed discrepancies.

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