Information-structural constraints on linearization in the DP

Johannes Mursell¹ & Anke Himmelreich² https://mabia-vp.com

¹j.mursell@lingua.uni-frankfurt.de

²himmelreich@lingua.uni-frankfurt.de

DGfS 2024, Bochum, 2024-02-29

Introduction •000

 $DP \neq CP$: Morphological focus marking

Introduction

- Encoding of information-structural (IS) categories on a sentential level has received considerable attention in the last years.
- Different IS-categories (Topic, Focus and their sub-types) can be marked by different marking strategies across and within languages.
- ► Languages tend to select one of the following strategies as the main strategy for focus marking (cf. Büring 2009):
 - phonological marking
 - word order changes
 - morphological marking
 - (no marking at all)

Introduction

Introduction

- ► IS encoding on the DP-level as well as its relation to sentential focus marking has been discussed much less frequently.
- ► For some languages, there seems to be a correspondence between IS marking strategies on the sentential and the DP level (cf. Samek-Lodovici 2010 for Italian)
- ► In this talk we will extend this discussion to the Mabia languages spoken in northern Ghana and surrounding areas.
- These languages
 - mark focus morphologically with particles;
 - do not allow any type of DP-internal focus marking.

Introduction

 $DP \neq CP$: Morphological focus marking

Claims

— Claim

Information-structural marking in the DP does not always correspond to the marking on a sentential level.

- There is no evidence for a designated focus projection inside of DPs in Mabia languages
- The lack of a focus projection in the DP affects the linearization of the focus marker.

тос

- 1 Introduction
- 2 DP = CP: Non-morphological focus marking Romance Germanic
- ③ DP ≠ CP: Morphological focus marking Gbe Mabia
- 4 Conclusion

тос

1 Introduction

2 DP = CP: Non-morphological focus marking Romance Germanic

③ DP ≠ CP: Morphological focus marking Gbe Mabia

4 Conclusion

Romance – Spanish

- ► For both Spanish and Italian, focus marking in the DP works in parallel to focus marking in the CP.
- ► In Spanish, new information focus must be realized in sentence final position, achieved by moving non-focal constituents to non-canonical positions (Zubizarreta 1998).
- (1) Q: Who gave you the bottle of wine?
 - A: Me regaló la botella de vino **Maria**. me gave the bottle of wine Maria 'Maria gave me the bottle of wine.'
 - A': #Maria me regaló la botella de vino.

(Zubizarreta 1998: 126)

Introduction

DP = CP: Non-morphological focus marking

DP ≠ CP: Morphological focus marking

Conclusion

Romance – Spanish

- While the picture might be more complex on the phrasal level (del Mar Vanrell and Fernández-Soriano 2018), something similar can be observed inside the DP.
- Bernstein (2001) argues that elements in DP-final position receive a focal interpretation.
- (2) a. el libro interesante **este**, no aquel the book interesting this not that 'this interesting book, not that (one)'
 - b. *el libro interesante este, no aburrido the book interesting this not boring int.: 'this interesting book, not the boring (one)'
- (3) ??un estudiante rubio cualquiera, no moreno a student blond any not brunette 'any blond student, not brunette'

(both from Bernstein 2001: 2)

Romance – Italian

- Something very similar has been discussed for Italian adjectival orderings (Samek-Lodovici 2010).
- ► Focus on the lower adjective as in (4-A) requires it to remain in right-peripheral position of the DP, blocking the otherwise possible raising of [noun+lower adjective] across the higher adjective (4-A').
- (4) Q: Where is this splendid car from?
 - A: È una splendida macchina **francese**. is a splendid car French 'It is a splendid FRENCH car.'
 - A': *È una macchina **francese** splendida.

Introduction

Conclusion

Romance – movement to a low FocP

- ► Focus marking in the DP seems to parallel focus marking in the clause in some Romance languages.
- ► While this is often attributed to the prosodic account of Zubizarreta (1998), it is also compatible with a syntactic account.
- Both constructions might involve movement into a dedicated low focus positions, similar to what was proposed in Belletti (2004) for the clause.
- ► Potential evidence comes from the pattern in (5) from Hoot (2012: 302) (with considerable speaker variation) or other data discussed in Villalba and Bartra-Kaufmann (2010).
- (5) Q: How many police officers arrested the suspect?
 - A: Arrestaron al sospechoso **cuatro** poliCÍAS. arrested the suspect four police.officers 'Four police officers arrested the suspect.'

Introduction

Conclusion

German – IS on the clausal level

- In German, new-information focus is expressed via prosody, sometimes in combination with syntactic reordering.
- ► (6-a) has the focus on the IO with unmarked word order, whereas in (6-b), the IO in focus also surfaces in the rightmost position of the VP (ignoring the participle) (Büring 2009: (42)).
- (6) a. Er hat **dem PiLOten** die Passagiere gezeigt. he has the.DAT pilot the.ACC passengers shown 'He showed the passengers to the pilot.'
 - b. Er hat die Passagiere **dem PiLOten** gezeigt. he has the.ACC passengers the.DAT pilot shown 'He showed the passengers to the pilot.'
 - Note that (6-b) is usually not analysed as the focus moving into a dedicated position but the other element(s) moving to higher positions.

German – IS on the DP level

- ► In the DP in German, similar to many other languages, the rather fixed adjective ordering can be changed when a lower adjective is focused (7).
- ► This has been taken as evidence for a high syntactic focus position (Scott 2002; Svenonius 2008; and many others), but see Cinque (2010) for discussion.
- (7) a. der große rote Ballon the big red balloon
 - b. der **ROTE** große Ballon the red big balloon 'the big red balloon'

(Roehrs 2020b: (21))

Intro	odu	cti	on
000	00		

 $DP \neq CP$: Morphological focus marking

Conclusion

German

- Other clear cases of focus effects on the DP syntax in German are difficult to find.
- Roehrs (2020a) proposes a generalized left-peripheral position in the German DP (following Giusti and Iovino 2016 for Latin) which can host topical as well as focused elements.
- (8) a. von der Stadt die Zerstörung of the city the destruction 'the destruction of the city'
 - b. aus **Italien** der Wein from Italy the wine 'the wine from Italy'

(Roehrs 2020a: (40))

► Note the parallel here to the left-peripheral position in the German clause (*Vorfeld*).

Conclusion

тос

1 Introduction

- DP = CP: Non-morphological focus marking Romance Germanic
- 3 DP ≠ CP: Morphological focus marking Gbe Mabia
- 4 Conclusion

 $DP \neq CP$: Morphological focus marking

Conclusion

Focus projections in the DP?

- Many West African languages mark information-structure morphologically by the use of designated topic and focus particles.
- ► Aboh (2004) presents an idea of topic and focus projections in the DP, mirroring the structure of clauses.
- ► In Gungbe, there are different articles following the noun:

$$Top^{0} = \begin{cases} \mathbf{b} : \mathbf{b} : [+specific, +definite] \\ \mathbf{b} : \mathbf{d} : [+specific, -definite] \\ \mathbf{b} : \mathbf{d} : [partitive] \end{cases}$$

► Further, there is a question marker:

$$Foc^0 = \mathbf{b} \mathbf{t} \mathbf{t}$$
 ('which')

Introduction

DP = CP: Non-morphological focus marking

 $DP \neq CP$: Morphological focus marking

Conclusion

Focus projections in the DP?

- (9) a. *[Távò xɔíxɔílɔ́/dé tɛ́] wɛ̀ Kòfí xɔ?
 table old DEF.SPEC/INDEF.SPEC Q FOC Kofi buy
 'Which old aforementioned table did Kofi buy?'
 (Aboh 2004: 8)
 - b. [Távò xɔ́xɔ́ dě tế lấ] wề Kòfí xɔ́?
 table old ракт q NUMB FOC Kofi buy
 'Which one of the old tables did Kofi buy?'

```
(Aboh 2004: 8)
```

No focus in the DP

Below, we challenge Aboh's claim that focus is part of the DP evidenced by data from Mabia languages.

Conclusion

Focus marking in Mabia languages

- ► In Mabia (formerly Gur) languages, ex-situ, as well as in-situ focus is marked morphologically by independent particles.
- ▶ Dependent on the language, the in-situ particle can either
 - ▶ be in a fixed post-verbal / sentence-final position (e.g. Dagbani, Dagaare, Gurene, Buli, Kusaal / Sisaali)
 - immediately follow the focused element (e.g. Likpakpaanl, Kasem)
- (11) Q: Who did Konja beg a book from?
 - A: Konja mee Sam le ki-gban.
 Konja beg Sam Foc Nc-book today
 'Konja begged a book from SAM.'
- (12) Q: What did Konja beg from Sam?
 - A: Konja mee Sam ki-gban la.
 Konja beg Sam Nc-book Foc
 'Konja begged a BOOK from Sam.'

Morphological focus marking not allowed in DPs

- Both in Likpakpaanl and Kasem, the focus marker is not allowed to immediately follow a focused element inside a DP.
- Instead, the focus marker must be right-adjacent to the highest DP layer.¹

¹All data were elicited with the DFG-funded project "The VP-periphery in Mabia languages (https://mabia-vp.com/). We thank our associate researcher **Samuel O. Acheampong** for the Likpakpaanl data.

Focused possessors

$(13) \ {\rm one} \ {\rm level} \ {\rm of} \ {\rm embedding}$

- Q: Whose fowl did Mary slaughter?
- A: Mary kor [DP Peter (*le) aa-kola] *(la). Mary kill Peter FOC Poss-fowl FOC 'Mary killed PETER'S fowl.'
- (14) two levels of embedding
 - Q: Whose sister's fowl did Mary slaughter?
 - A: Mari nan kor [DP [DP Peter (*le) aa-ninkpan]
 Mary PST slaughter Peter FOC POSS-sister
 aa-kola]*(la).
 POSS-fowl FOC
 'Mary slaughtered PETER'S sister's fowl.'

In-situ focus inside a relative clause

(15) one level of embedding

- Q: Did you see the man who slaughtered the cow?
- A: Aayi, n nan kan [DP u-ja [Rel u nan kor u-kola (*le)]
 No I PST see NC-man REL PST slaughter NC-fowl FOC
 na]] *(la).
 REL.DEF FOC
 'No, I saw the man who slaughtered a FOWL.'

(16) two levels of embedding

- Q: Do you know the woman who saw the man who slaughtered a cow?
- A: Aayi, n nyi $\begin{bmatrix} DP & U-pii \end{bmatrix} \begin{bmatrix} Rel & U & Nan & Ran & Nan &$

In-situ focus inside a finite clause inside a relative clause

- ► The only exception to this rule is that if a DP embeds a finite clause, the focus marker can occur inside this DP.
- (17) Q: Did you see the man that said that Peter slaughtered a fowl?
 - A: Aayi, n kan [DP u-ja [Rel u len [CP ke John *(le) no I see NC-man REL say COMP John FOC kor u-kola na]]] (*la).
 slaughter NC-fowl REL.DEF FOC 'No, I saw the man that said that JOHN slaughtered a fowl.'

No extraction out of DPs

- ► Ex-situ focus is formed by moving the focused constituent to the left periphery of the clause followed by the ex-situ focus particle (18).
- ► Fronting is impossible if the focused constituent is inside the DP (19).
- (18) Q: What did Konja beg from Sam?
 - A: Ki-gban_i le Konja mee Sam t_i.
 NC-book FOC Konja beg Sam
 'Konja begged a BOOK from Sam.'
- (19) Q: Whose fowl did Mary slaughter?
 - A: **Peter**_i le Mary kor **[**_{DP} u_i / *t_i aa-kola **]**. Peter FOC Mary slaughter 3SG POSS-fowl Literally: 'It is PETER that Mary slaughtered his fowl.'

 $DP \neq CP$: Morphological focus marking

Conclusion

No ex-situ focus inside DPs

- ► Embedded finite clauses provide an ex-situ focus position (20).
- ▶ DPs do not have such a position (21).
- (20) Peter len [CP ke u-kɔla; le John kɔr t;]. Peter said сомр мс-fowl Foc John slaughter.PFV 'Peter said that John slaughtered a FOWL.'

(21) Q: John's brother slaughtered a fowl.

 A: *Aayi, [_{DP} aa-ninkpan_i le John t_i] kor u-kola.
 no Poss-sister Foc John slaughter Nc-fowl Intended: 'No, John's SISTER slaughtered a fowl.'

Introduction 0000

Conclusion

No focus dependency across a DP

- ► The data suggest that the in-situ focus marker *le* must be licensed by an element inside a finite clause.
- Assuming that this is a focus head, the licensing dependency (agreement or movement) may not cross a DP boundary (22).
- ► If the DP contains a full finite clause, the focus head in this clause can license a focus marker (23).

(22)
$$\begin{bmatrix} CP & \dots & FOC_{[UFOC]} & \dots & \begin{bmatrix} DP & \dots & XP & le_{[iFOC]} & \dots & \end{bmatrix} & \dots \end{bmatrix}$$

$$(23) \quad \begin{bmatrix} CP & \dots & \begin{bmatrix} CP & POC_{[UFOC]} & \dots & XP & le_{[iFOC]} & \dots & \end{bmatrix} & \dots \end{bmatrix} \dots \end{bmatrix}$$

 $DP \neq CP$: Morphological focus marking

Conclusion

No focus projection in the DP

Two arguments:

- ► Ex-situ focus within the DP seems impossible in Likpakpaanl.
- Once we assume a focus projection in the DP, the impossibility of *le* within DPs becomes a mystery.

No focus in the DP

The Mabia data cannot corroborate Aboh's claim that the DP contains a elaborate structure similar to clauses.



Linearization as a repair?

► Linearizing the normally right-adjacent in-situ focus marker to the right of the highest DP-layer leads to ambiguity: Either the highest DP is in focus or any subconstituent inside of it can be focused. (The context disambiguates the structure.)

The dependency between the in-situ focus marker *le* and the focused constituent cannot be based on Agree as this would cross the DP barrier, which we previously argued to be impossible.

Linearization as a repair?

- One way to solve this would be to use linearization as a repair. We speculate that:
 - ▶ *le* is first right-adjacent to the focused XP inside the DP.
 - ▶ In order to get licensed, *le* readjoins to the outermost DP barrier.

Introduction 0000

 $DP \neq CP$: Morphological focus marking



Conclusions

- ► We discussed parallels between focus marking on the clausal and the DP-level, respectively.
- ► For Spanish and Italian, and maybe to a lesser extent German, focus marking in the two domains is similar.
- ► Note that in these languages, the main marking strategy is **prosodic**.
- ► In the Mabia languages focus marking on the clausal level is **morphological** and impossible in the DP.
- This suggests some fundamental differences between the marking strategies and casts doubt on universal IS-projections inside the DP.

References I

- Aboh, E. O. (2004). Topic and focus within d. *Linguistics in the Netherlands 21*(1), 1–12.
- Belletti, A. (2004). Aspects of the low IP area. In L. Rizzi (Ed.), *The Structure of CP and IP*, pp. 16–51. Oxford: Oxford University Press.
- Bernstein, J. B. (2001). Focusing the "right" way in Romance determiner phrases. *Probus 13*, 1–29.
- Büring, D. (2009). Towards a typology of focus realization. In M. Zimmermann and C. Féry (Eds.), *Information structure: Theoretical, typological, and experimental perspectives*, pp. 177–205. Oxford: Oxford University Press.
- Cinque, G. (2010). *The syntax of adjectives: A comparative study.* Cambridge, MA: MIT Press.
- del Mar Vanrell, M. and O. Fernández-Soriano (2018). Language variation at the prosody-syntax interface: Focus in European Spanish. In M. G. García and M. Uth (Eds.), *Focus Realization in Romance and Beyond*, pp. 33–70. Amsterdam: John Benjamins.

References II

- Giusti, G. and R. Iovino (2016). Latin as a split-DP language. *Studia Linguistica* 70(3), 221–249.
- Hoot, B. (2012). Narrow focus on pre-nominal modifiers in Spanish: An optimality-theoretic analysis. In K. Geeslin and M. Díaz-Campos (Eds.), Selected Proceedings of the 14th Hispanic Linguistics Symposium, Somerville, MA, pp. 293–307. Cascadilla Proceedings Project.
- Roehrs, D. (2020a). The left periphery of the German noun phrase. *Studia Linguistica* 74(1), 98–138.
- Roehrs, D. (2020b). Structure of noun (np) and determiner phrases (dp). In *The Cambridge Handbook of Germanic Linguistics*, pp. 537–564. Cambridge University Press.
- Samek-Lodovici, V. (2010). Final and non-final focus in Italian DPs. *Lingua 120*(4), 802–818.

References III

- Scott, G.-J. (2002). Stacked adjectival modification and the structure of nominal phrases. In G. Cinque (Ed.), *Functional Structure in DP and IP: The Cartography of Syntactic Structures, Vol. I.*, pp. 91–120. Oxford: Oxford University Press.
- Svenonius, P. (2008). Adjective position in the decomposition of DP. In *Adjectives and Adverbs. Syntax, Semantics, and Discourse*, pp. 16–42. Oxford: Oxford University Press.
- Villalba, X. and A. Bartra-Kaufmann (2010). Predicate focus fronting in the Spanish determiner phrase. *Lingua 120*(4), 819–849.
- Zubizarreta, M. L. (1998). *Prosody, Focus, and Word Order*. Cambridge, MA: MIT Press.