

# Chapter 6

## Subject encoding in Limbum

Johannes Hein


University of Potsdam

This paper presents novel data from the understudied Grassfields Bantu language Limbum (Cameroon) showing three interrelated asymmetries within the realm of subject marking. The first is a dependency of overt subject marking on number and category of the subject. The second concerns the apparent absence of subject resumption for third person plural while it is obligatory in all other cases. The third asymmetry is found with focus-marked subjects where subject marking is dependent on the type of focus-marking. It will be argued that the first asymmetry can be understood in terms of differential subject marking, while the second one is due to a weak/strong distinction in pronouns. The last asymmetry is derived from the first in interaction with a structural ambiguity in subject focus constructions.

### 1 Introduction

It is well known that syntactic operations and processes do not necessarily have to be applicable to all kinds of arguments, nor does one and the same syntactic operation/process have to have the same effect on different kinds of arguments. In fact, examples of asymmetric behaviour of distinct kinds of arguments are abundant. There are subject/object asymmetries with regard to inter alia *that*-trace effects (Perlmutter 1971), sub-extraction (Huang 1982), resumption (Koopman 1983; McCloskey 1990), and many more. Direct and indirect objects behave differently with respect to scope and binding (Barss & Lasnik 1986; Larson 1990), resumption (Stewart 2001), and extraction (Bresnan & Moshi 1990; Holmberg et al. 2019). There are also asymmetries between arguments and non-arguments for island sensitivity and weak islands (Huang 1982; Engdahl 1986) and reconstruction (Freidin 1986; Lebeaux 1988).



Johannes Hein. 2021. Subject encoding in Limbum. In Akinbiyi Akinlabi, Lee Bickmore, Michael Cahill, Michael Diercks, Laura J. Downing, James Essegbey, Katie Franich, Laura McPherson & Sharon Rose (eds.), *Celebrating 50 years of ACAL: Selected papers from the 50th Annual Conference on African Linguistics*, 121–145. Berlin: Language Science Press. DOI: 10.5281/zenodo.5578828 

Less well known is the fact that there can be asymmetric behaviour within one kind of argument. Thus, with focus marking, matrix subjects show one kind of encoding while embedded subjects employ a different focus marking strategy in Dagbani (Issah & Smith 2018) and in Igbo (Amaechi & Georgi 2019). The most well known case of such internal asymmetry is possibly differential object marking, where objects show a different morphological encoding depending on some inherent (and sometimes also external) properties. In the realm of subjects, the most prominent asymmetry is probably the so-called antiagreement effect (Ouhalla 1993; 2005, see also Baier 2018 for a recent overview and discussion) which distinguishes subjects that have undergone extraction from in situ subjects by a loss of agreement on the verb (antiagreement) or a different morphological encoding on the verb (alternative agreement).

In this paper, I will present and discuss three subject-internal asymmetries in Limbum, a Grassfields Bantu language spoken in North Western Cameroon, that are, to some degree, interdependent. First, Limbum shows an asymmetry in the presence of a subject marker. While this marker is obligatory for full NP and plural pronominal subjects, it has to be absent when the subject is a singular pronoun. Coupled with the fact that Limbum requires a resumptive pronoun to occur in the base position of a subject A'–dependency, this leads to an apparent anti-agreement effect (cf. Ouhalla 1993; Baier 2018). Second, there is an asymmetry of third person plural subjects vs. all other person-number combinations with regard to resumption. While, generally, subject extraction leaves a resumptive pronoun that is identical in form to the regular personal pronoun, extraction of third person plural subjects leaves a gap. However, this gap is only apparent, because, as I argue, the third person plural is the only one that has a weak pronoun variant which is null. A third asymmetry concerns the interaction of the particle *cí*, which occurs in focus constructions, and the choice of subject marker. It is shown that when *cí* is overt, there has to be a resumptive pronoun *í*, while there is optionality between the resumptive and the subject marker *à* when *cí* is absent. This optionality is analysed as stemming from a structural ambiguity between a movement and a non-movement configuration.

The data in this paper stem from a number of elicitation sessions with one native speaker from Nkambe, Cameroon, over a period of several months between August 2018 and May 2019. The sessions took place in Leipzig.

## 2 Subject agreement

Limbum, a Grassfields Bantu language (Niger-Congo) is spoken by about 73 000–90 000 (Fransen 1995: 21) to 130 000 speakers (according to a 2005 census, Eberhard et al. 2019) in the Northwest Region of Cameroon. Its basic word order is

SVO with tense-aspect markers appearing between the subject and the verb. Adverbs always take the clause-final position (1).

- (1) Njínwè fǒ à mū yē bō fǒ nìṅkòr.  
 woman DET SM PST2 see children DET yesterday  
 ‘The woman saw the children yesterday.’

## 2.1 The data

In some tenses and aspects (all three past tenses and, optionally, in the progressive aspect), a subject marker *à* obligatorily occurs with the subject (2).

- (2) a. Nfòr à mū zhé bzhí.  
 Nfor SM PST2 eat food  
 ‘Nfor ate food.’  
 b. Nfòr à cí zhé bzhí.  
 Nfor SM PROG eat food  
 ‘Nfor is eating food.’

In other tenses and aspects, like the future (3a) or the habitual (3b), no such subject marker occurs. In fact, the presence of a subject marker renders the sentence ungrammatical.

- (3) a. Nfòr (\*à) bí zhé bzhí.  
 Nfor SM FUT1 eat food  
 ‘Nfor will eat food.’  
 b. Nfòr (\*à) kí zhé bzhí.  
 Nfor SM HAB eat food  
 ‘Nfor regularly eats food.’

In this paper, I will focus on the tenses and aspects in which the subject marker is found. Interestingly, the subject marker only occurs with full NP subjects (2) and plural pronouns (4).

- (4) a. Wèr \*(à) mū fà?  
 1PL.EXC SM PST2 work  
 ‘We(excl) worked.’  
 b. Sì \*(à) mū fà?  
 1PL.INC SM PST2 work  
 ‘We(incl) worked.’

- c. Yì \*(à) mū fàʔ.  
 2PL SM PST2 work  
 ‘You(pl) worked.’

For third person plural subjects, both pronouns and full NPs, the subject marker appears in an exclusively plural form *ó* (5).

- (5) a. Wōyè \*(ó) mū fàʔ.  
 3PL 3PL.SM PST2 work  
 ‘They worked.’  
 b. Bō fō \*(ó) mū zhé bzhí.  
 children DET 3PL.SM PST2 eat food  
 ‘The children ate food.’

However, when the subject is a 1st, 2nd, or 3rd person singular pronoun, the subject marker *à* is ungrammatical (6). Thus, singular pronouns and *à* never cooccur in a clause.

- (6) a. Mè (\*à) mū fàʔ.  
 1SG SM PST2 work  
 ‘I worked.’  
 b. Wè (\*à) mū fàʔ.  
 2SG SM PST2 work  
 ‘You(sg) worked.’  
 c. Í (\*à) mū fàʔ.  
 3SG SM PST2 work  
 ‘(S)he worked.’

Concerning the tenses that do not show the subject marker for full NPs, these also lack it if the subject is a pronoun (singular or plural). Some examples in the future tense are given in (7).

- (7) a. Wèr (\*à) bí fàʔ.  
 1PL.EXC SM FUT1 work  
 ‘We(excl) will work.’  
 b. Mè (\*à) bí fàʔ.  
 1SG SM FUT1 work  
 ‘I will work.’

Contrary to what is reported in Fransen (1995)<sup>1</sup>, who restricts *à* and *ó* to subjects of class 1 and 2 respectively, the subject markers for the speaker consulted here are invariant with regard to the noun class of the subject. That is, both *à* and *ó* occur across different noun classes (8). The tense restrictions are the same as discussed above.

- (8) a. Rtāā f̃ 5.cap DET SM PST2 fall  
à mū gwê.  
‘The cap fell.’
- b. Mtāā f̃ 6.cap DET 3PL.SM PST2 fall  
ó mū gwê.  
‘The caps fell.’
- c. Nà f̃ 10.cow DET SM PST2 sleep  
à mū būmī.  
‘The cow slept.’
- d. Mnà f̃ 10.pl.cow DET 3PL.SM PST2 sleep  
ó mū būmī.  
‘The cows slept.’

Concerning the restriction of *à* to past tenses, this is already noted in Fransen (1995: §10.2) albeit as restricted to class 1/1a subjects. As of now, I unfortunately have no explanation for this constraint.

In summary, the distribution of subject markers is quite asymmetric in Limbum. First, they only occur in a selection of tenses and aspects. Second, singular NPs and local person plural pronouns pattern together in requiring the presence of the *à* marker while singular pronominal subjects demand its absence. Third person plural subjects obligatorily appear with the exclusive *ó* marker. The overall pattern is given in Table 6.1.

## 2.2 Why is agreement absent for singular pronouns?

There are some possibilities for why agreement is impossible with singular pronouns. First, for Celtic languages, it has been argued that what looks like an agreement marker is really a pronominal argument cliticized onto the verb. Thus, in Breton, full DP subjects never trigger agreement (9a), but pronominal subjects are obligatorily dropped with “agreement” showing up on the verb (9b).

<sup>1</sup>The speaker gave the comment that Fransen’s data sound archaic to him but admitted that she might also be describing a different dialect of Limbum. Generally, his data diverge from the data presented by Fransen (1995) for several phenomena, including relativization and focus.

Table 6.1: Distribution of subject markers in Limbum past tenses and progressive aspect

Subjects		Sg		Pl	
		Pronoun	Marker	Pronoun	Marker
Pronominal	1.excl	mè	∅	wèr	à
	1.incl			sì	à
	2	wè	∅	yì	à
	3	í	∅	wōyè	ó
Nominal			à		ó

- (9) Breton (Jouitteau & Rezac 2006: 1916)
- a. Gant o mamm e karf-ent/\*karf-e *pro* bezañ.  
with their mother R would.love-3PL/\*would.love-3SG 3PL be.INF  
'They would like to be with their mother.'
- b. Gant o mamm e karf-e/\*karf-ent Azenor ha  
with their mother R would.love-3SG/\*would.love-3PL Azenor and  
Iona bezañ.  
Iona be.INF  
'Azenor and Iona would like to be with their mother.'

This complementarity effect has been taken as evidence that, in fact, there is no  $\phi$ -agreement between subject and verb. If the subject is a pronoun, which is weak enough to cliticize onto the verb, it only appears as though the verb inflects (see Anderson 1982; see also Stump 1984 who rejects this analysis in favour of an agreement analysis). The facts are almost identical and have received an identical analysis in Irish (Pranka 1983; Doron 1988; Ackema & Neeleman 2003) and Scottish Gaelic (Adger 2000). Under such an approach, the Limbum subject markers, would be weak pronouns cliticizing to the verb. Their absence with pronominal subjects is then due to the fact that these subjects must be strong pronouns that cannot cliticize onto the verb. In contrast to the Celtic languages mentioned above, however, Limbum allows the subject marker to cooccur with a full NP subject. If the subject marker is indeed a pronoun, one could argue that it is the actual subject, taking the subject's argument position and theta role, similar to what has been argued to be the case for polysynthetic non-configurational languages (see Jelinek 1984; Baker 1996). What appears to be the full NP subject,

then is actually just an adjoined phrase that is somehow linked to the respective pronominal argument.

However, this analysis would leave unexplained the occurrence of the subject marker with plural pronominal subjects. In this part of the paradigm, Limbum behaves more like Welsh, where a (postverbal) pronominal subject agrees with the verb (10) while a (postverbal) full DP subject does not (11).

(10) Welsh (Borsley 2009: 227)

- a. Gwelodd e/hi ddraig.  
see.PST.3SG he/she dragon  
'He saw a dragon.'
- b. Gwelon nhw ddraig.  
see.PST.3PL they dragon  
'They saw a dragon.'

(11) Welsh (Borsley 2009: 227)

- a. Gwelodd y bachgen/bechgyn ddraig.  
see.PST.3SG the boy/boys dragon  
'The boy/boys saw a dragon.'
- b. \*Gwelon y bechgyn ddraig.  
see.PST.3PL the boys dragon

Thus, an account of the absence of the subject marker with singular pronominal subjects that derives it as a type of complementarity effect, as found in many Celtic languages, is not feasible.

A second possible explanation is that the subject agreement paradigm simply contains three markers  $\acute{a}$ ,  $\acute{o}$ , and  $\emptyset$  which are specified such that the zero marker realizes 1st, 2nd, and 3rd person singular. However, in this scenario, the zero marker would have to explicitly make reference to the (categorical) status of the subject as a pronoun (12).

(12) Vocabulary entries for agreement markers

- a. / $\acute{o}$ /  $\leftrightarrow$  [ $-1, -2, -sg$ ]
- b. / $\emptyset$ /  $\leftrightarrow$  [ $pron, +sg$ ]
- c. / $\acute{a}$ /  $\leftrightarrow$  [ ]

Now, this requires that subject-verb agreement not only leads to  $\phi$ -features being present on the verb/T, but also the categorial feature of the subject. Agreement for category, however, is a very uncommon feature in natural languages (cf. Weisser 2019).

A third option is that the subject marker is not an agreement marker but a specific past tense marker that displays subject-sensitive allomorphy. As allomorphy rules are generally able to refer to the category of an allomorphy-trigger, the fact that pronouns in the singular require the zero allomorph is easily captured (13).

(13) Allomorphs of the subject marker

- a.  $\acute{o}$  / [3pl]\_\_
- b.  $\emptyset$  / [pron, sg]\_\_
- c.  $\acute{a}$

Allomorphy is usually triggered under linear adjacency. Thus, when material linearly intervenes between the subject and the subject marker, we would expect that the default allomorph  $\acute{a}$  appears. Unfortunately, adverbs in Limbum always occur clause-finally making them unusable for testing this prediction. However, we can employ coordinations where each conjunct requires a different allomorph. What we find is that the subject marker apparently references the whole conjunction. Thus, in (14a), the conjunction of a full NP  $\eta w\acute{e} rl\acute{o} f\acute{o}$  ‘the reverend’ and the pronoun  $w\acute{e}$  ‘you (sg.)’, which together resolves into a 2nd person plural subject, triggers the subject marker  $\acute{a}$  despite the singular pronoun  $w\acute{e}$  being linearly adjacent. Example (14b) shows the coordination of two different pronominal subjects  $w\acute{e}$  ‘you (sg.)’ and  $m\acute{e}$  ‘I’ each independently requiring the zero form of the subject marker. However, again  $\acute{a}$  appears, as the whole coordination is a first person plural pronominal subject. Lastly, (14c) gives the coordination of two singular NPs each requiring the subject marker  $\acute{a}$  in isolation. Instead, the plural marker  $\acute{o}$  occurs.

- (14) a. [ $\eta w\acute{e}$   $rl\acute{o}$   $f\acute{o}$   $b\acute{a}$   $w\acute{e}$ ]<sub>2pl</sub>  $\acute{a}$   $m\acute{u}$   $zh\acute{e}$   $b\acute{a}$ .  
           person prayer the and you.sg SM PST2 eat fufu  
           ‘The reverend and you ate fufu.’
- b. [ $w\acute{e}$   $b\acute{a}$   $m\acute{e}$ ]<sub>1pl</sub>  $\acute{a}$   $m\acute{u}$   $zh\acute{e}$   $b\acute{a}$ .  
           2sg and 1sg SM PST2 eat fufu  
           ‘You(sg) and I ate fufu.’
- c. [ $\eta w\acute{e}$   $rl\acute{o}$   $b\acute{a}$   $y\acute{a}$   $b\acute{a}\acute{a}$ ]<sub>3pl</sub>  $\acute{o}$   $m\acute{u}$   $zh\acute{e}$   $b\acute{a}$ .  
           person prayer and my father 3PL.SM PST2 eat fufu  
           ‘The reverend and my father ate fufu.’

In sum, the examples in (14) behave as if agreement takes place with the whole coordination rather than with one of its conjuncts. Allomorphy alone can therefore not account for the pattern of subject marking. In addition, the allomorphy



rule would have to make reference to the feature [pron]. While it is possible for allomorphy to refer to category features, the general perspective on pronouns since Postal (1969) and Abney (1987) is that they are elements of category D, i.e. that there is no dedicated category Pron comprising pronominal elements.

It is thus unclear how to formally analyze the Limbum subject agreement pattern. From a functional perspective, it looks like an instance of complex differential subject marking (DSM, de Hoop & Malchukov 2008). In analogy to differential object marking (DOM), DSM occurs when the morphological encoding of subjects varies depending on some properties of the subject with less likely subjects (according to some hierarchy such as referentiality, definiteness, or person, Hale 1972; Silverstein 1976) being more marked than more likely subjects. In the Limbum case, the relevant property is a combination of definiteness and number. The definiteness and number scales are given in (15) and (16).

(15) Definiteness scale

Pro(noun) > Name (PN) > Def(inite) > Indefinite Specific (Spec) >  
NonSpecific (NSpec)

(16) Number scale

Plural > Singular

In effect, when considering these scales for subjects, a pronominal element turns out to be a more likely/expected subject than a proper name. The latter, in turn, is a more likely subject than a definite element, and so on. Now, Limbum draws the line between Pro and PN on the scale, separating pronouns from all other types of subjects. Combining the definiteness with the number scale, Limbum further distinguishes between singular pronominal subjects and plural pronominal subjects with the former being the most likely/expected subjects. As such, these do not have to be marked overtly (by an overt subject marker). In contrast, any subject deviating from the expectation (i.e. singular pronoun) has to receive a specific encoding in the form of an overt subject marker. The fact that the Limbum subject marker is absent with singular pronominal subjects only thus results from functional considerations where expectations as to what constitutes a prototypical/likely subject play a role for the morphological encoding. This, of course, leaves open the question of why the subject marker only occurs in a handful of tenses/aspect.

### 2.3 An apparent anti-agreement effect

The different behaviour of singular NPs and singular pronouns with regard to subject agreement gives rise to an interesting effect when the subject has under-

gone some form of displacement. When the subject is questioned (17a), focussed<sup>2</sup> (17b), or relativized (17c), the *à* marker that usually appears with full NP subjects disappears. Instead, there is a different marker *í* occurring in the clause.<sup>3</sup>

- (17) a. *Á ndá<sub>1</sub> cí í<sub>1</sub> Ø mū zhé bzhí (à)?*  
           FOC who COMP 3SG.RP SM PST2 eat food Q  
           ‘Who<sub>F</sub> ate food?’  
       b. *Á Nfor<sub>1</sub> cí í<sub>1</sub> Ø mū zhé bzhí.*  
           FOC Nfor COMP 3SG.RP SM PST2 eat food  
           ‘Nfor<sub>F</sub> ate food.’ (new information focus)  
       c. *Mè rìŋ njíŋwē<sub>1</sub> [ zhì í<sub>1</sub> Ø cí yē ŋgwē fō ].*  
           1SG know woman REL 3SG.RP SM PROG see dog DET  
           ‘I know the woman who is seeing the dog.’

This marker *í* is in fact the regular third person singular pronoun as in (18).

- (18) *Í Ø cí fà? mí ŋkà?.*  
       S/He SM PROG work in garden  
       ‘S/He is working in the garden.’

In light of (18), it is plausible to treat the occurring *í*-marker in (17) as a resumptive pronoun taking the place of the displaced subject. Now at first glance, it appears as though the *à* marker has gone missing in (17) as a consequence of full NP subject displacement. This is reminiscent of the so-called anti-agreement effect (Ouhalla 1993; Baier 2018), where subject agreement is suppressed when the subject undergoes displacement. In Limbum, however, the pronoun independently cannot cooccur with the subject marker *à*, which therefore is absent from the sentence.

That one is not dealing with an anti-agreement effect can immediately be shown by comparing extraction of singular NP subjects with extraction of (local) plural pronominal subjects. Both kinds of subjects obligatorily require the subject marker *à* when in situ (19).

<sup>2</sup>The focus marked by the particle *á* here is new information focus. There is at least one other focus marking strategy with a particle *bá* which encodes contrastive/exhaustive focus (Becker et al. 2019; Driemel & Nformi 2018). As the latter does not involve displacement to the left periphery, it is of no interest here.

<sup>3</sup>See Becker et al. (2019) for arguments that the *á* construction is not a biclausal cleft but rather involves a monoclausal movement structure.

- (19) a. Nfòr *\*(à)* mū zhé bzhí.  
           Nfor SM PST2 eat food  
           ‘Nfor ate food.’  
       b. Wèr/sì/yì *\*(à)* mū fà?  
           1PL.E/1PL.I/2PL SM PST2 work  
           ‘We(exc)/we(inc)/you(pl) worked.’

Now, when the singular subject of (19a) is extracted, it leaves a singular resumptive pronoun *í* which independently disallows *à*. Consequently, *à* is absent (20).

- (20) Á Nfòr<sub>1</sub> cí í<sub>1</sub> Ø mū zhé bzhí.  
       FOC Nfor COMP 3SG.RP SM PST2 eat food  
       ‘Nfor<sub>F</sub> ate food.’

On the other hand, extraction of the subject in (19b) should leave a plural resumptive pronoun, which requires the presence of *à*. We would thus expect that no “antiagreement” effect will be observed. As (21) confirms, this is indeed the case.

- (21) Á wèr/sì/yì cí wèr/sì/yì *\*(à)* mū fà?  
       FOC 1PL.EXC/1PL.INC/2PL COMP 1PL.EXC/1PL.INC/2PL SM PST2 work  
       ‘We(exc)/we(inc)/you(pl)<sub>F</sub> worked.’

With extraction of singular pronominal subjects, we would expect a resumptive pronoun to occur but the marker *à* to be absent as these pronouns never cooccur with *à* (6). This expectation is also fulfilled (22).

- (22) Á mè/wè/í cí mè/wè/í *\*(à)* mū fà?  
       FOC 1SG/2SG/3SG COMP 1SG/2SG/3SG SM PST2 work  
       ‘I/you(sg)/(s)he<sub>F</sub> worked.’

Third person plural subjects, in contrast, behave in a surprising way giving rise to yet another asymmetry between different kinds of subjects. Under the approach sketched so far, we would expect them to pattern with local person plural subjects, i.e. leaving a resumptive pronoun plus subject marker, with the difference that this subject marker is *ó*, not *à*. This is, because like the latter, a pronominal third plural subject requires the presence of a subject marker when in situ (5a). However, this is not what we find. When a third person plural subject is extracted it obligatorily leaves a gap with the presence of the subject marker being unaffected by extraction (23).

- (23) a. *Á bō f̃ cí (\*wōyè) ó mū zhé bzhí.*  
 FOC children DET COMP 3PL.RP 3PL.SM PST2 eat food  
 ‘The children<sub>F</sub> ate food.’
- b. *Á wōyè cí (\*wōyè) ó mū zhé bzhí.*  
 FOC 3PL COMP 3PL.RP SM PST2 eat food  
 ‘They<sub>F</sub> ate food.’

The pattern of resumption and subject marking under extraction is given in Table 6.2. As can be seen, to the exception of third person plural, it reflects the pattern of pronominal in situ subjects and subject markers in Table 6.3.

Table 6.2: Resumptive pronouns (RP) and SM

subject	RP	SM
singular	✓	—
1st & 2nd plural	✓	✓
3rd plural	—	✓

Table 6.3: Regular pronouns (Pron) and SM

subject	Pron	SM
singular	✓	—
1st & 2nd plural	✓	✓
3rd plural	✓	✓

With the exception of third person plural, it is thus the interaction between the pattern of agreement on one side and the requirement of subject displacements to have a resumptive pronoun in their base position on the other side that gives the impression of an anti-agreement effect for singular NP subjects.

### 3 The third person plural

Turning back to third person plural subjects, recall that they behave like local person plural pronominal subjects in that they obligatorily require a cooccurring subject marker when in situ as in (5), repeated below as (24), but differ from these in that they leave a gap rather than a resumptive pronoun when they are extracted (23).

- (24) a. *Wōyè \*(ó) mū fàʔ.*  
 3PL 3PL.SM PST2 work  
 ‘They worked.’
- b. *Bō f̃ \*(ó) mū zhé bzhí.*  
 children DET 3PL.SM PST2 eat food  
 ‘The children ate food.’

Given that examples like the ones in (23) parallel examples of extraction of other pronominal subjects like in (21) and (22), this suggests that the resumptive pronoun counterpart to the third person plural pronoun is simply null. The resumptive versions of all other pronouns, in contrast, are form-identical to the ones used in non-resumptive contexts as shown in Table 6.4.

Table 6.4: Regular and resumptive pronouns

	Regular		Resumptive	
	Sg	Pl	Sg	Pl
1.exc	mè	wèr	mè	wèr
1.inc	–	sì	–	sì
2	wè	yì	wè	yì
3.anim	í	wōyè	í	∅
3.inan	í	bvī	í	bvī

Support for this line of analysis comes from subject extraction out of islands. The island-obviating effect of resumptive pronouns is well-known by now (McCloskey 1979; Borer 1984). As subject extraction of non-third person plural subject leaves an overt resumptive pronoun, islands should not have any degrading effect. Indeed, this is what we find. Examples of subject extraction from a complex NP island are given in (25a) for a second person plural subject and (25b) for a third person singular subject.<sup>4</sup>

- (25) a. Á yì cí mè ∅ mū yō? nsūŋ zhǐ-nē yì à mū  
 FOC 2PL COMP I SM PST2 hear rumour 3SG.INAN-COMP 2PL SM PST2  
 fà?  
 work  
 ‘I have heard the rumour that you(pl)<sub>F</sub> have worked.’

<sup>4</sup>Note that the complementizer *nē* in (25) and (26) shows agreement (in the form of a prefix) with the embedding noun *nsūŋ* ‘rumour’. This fits the general pattern of complementizer agreement in the language where the complementizer agrees with the matrix subject for person, number, and animacy in case there is no intervener (i.e. a direct object). An exploration of this phenomenon and the interesting intervention effects that are observed with it is beyond the scope of this article. I refer the interested reader to Nformi (2018), who documents the pattern in some detail.

- b. Á Nfòr cí mè Ø mū yō? nsūŋ zhǐ-nē í mū  
 FOC Nfor COMP I SM PST2 hear rumour 3SG.INAN-COMP 3SG PST2  
 fà?  
 work  
 ‘I have heard the rumour that Nfor<sub>F</sub> has worked.’

Importantly, the island-obviating effect is also found with extraction of a third person plural subject despite the lack of an overt resumptive pronoun (26).

- (26) Á wōyè cí mè Ø mū yō? nsūŋ zhǐ-nē (\*wōyè) ó  
 FOC 3PL COMP I SM PST2 hear rumour 3SG.INAN-COMP 3PL 3PL.SM  
 mū fà?  
 PST2 work  
 ‘I have heard the rumour that they<sub>F</sub> have worked.’

This parallel behaviour with regard to island-sensitivity suggests that there is a silent resumptive pronoun present in (26).<sup>5</sup> If this line of reasoning is correct, Limbum goes against the cross-linguistically largely valid generalization that the forms of resumptive pronouns are generally drawn from the set of regular (personal) pronouns (Asudeh 2011; 2012; Salzmann 2017; McCloskey 2017, though see Adger 2011 for counter-examples).

However, there is a further qualification to be made. As Salzmann (2017: 187) points out, “[r]esumptives are usually drawn from the unmarked series of the personal pronoun paradigm, thus usually the weak/clitic forms”. Now, there is no distinction between strong and weak pronouns in non-third person contexts. First, in the various examples throughout this paper the focussed pronoun, which is arguably strong, has the same form as the arguably weak resumptive. Second, in a weak pronominal context, such as discourse anaphora (27), the anaphoric pronoun is not different from either the supposedly strong pronoun in focus contexts or the resumptive pronoun as in (21).

- (27) a. Mē bá yà bàá à níŋī. \*(Wèr) à bā kōnī Nfòr à ŋgàbtfə?  
 I and my father SM arrive 1PL.EXC SM PST1 meet Nfor in morning  
 ‘Me and my father have arrived. We met Nfor in the morning.’

<sup>5</sup>It should be mentioned that this argument loses some of its strength as islands in Limbum seem to be quite liberal in general (see appendix in section 5 for data). For objects, extraction is possible from regular embedded clauses as well as from inside an island, leaving a gap in both cases. On the other hand, extraction of either the verb or the verb phrase out of an island is impossible despite this being grammatical from a simple embedded clause (for details, see Hein 2020). This indicates that islands still exist in the language and that the insensitivity of objects towards them might have a different source.

- b. Wè bá yà bàá à níŋĩ. \*(Yí) à bā kōnī Nfòr à ngàbtfəʔ.  
 you and my father SM arrive 2PL SM PST1 meet Nfor in morning  
 ‘You and my father have arrived. You met Nfor in the morning.’

However, the situation is different with third person subjects. For third person plural, both in resumption (28a) and in discourse anaphoric use (28b) (i.e. in contexts where the pronoun is expected to take the weak form) the form of the pronoun is null contrasting with the form *wōyè* that appears in focus positions (i.e. a context for a strong form). The only element that appears before the TAM-marker is the subject marker *ó* in both cases.

- (28) a. Á bō cí (\*wōyè) ó mū zhé bzhí.  
 FOC children COMP 3PL 3PL.SM PST3 eat food  
 ‘The children<sub>F</sub> ate food.’  
 b. Bfər ó níŋĩ. (\*Wōyè) Ó kē? ā mūʔshī mŋkòb.  
 relatives 3PL.SM arrive 3PL 3PL.SM start to open suitcases  
 ‘The relatives have arrived. (They) have already started unpacking their suitcases.’

This suggests that there is a strong/weak distinction for third person plural pronouns and that the weak version has a null realization. In that case, Limbum complies with the abovementioned cross-linguistic generalization.<sup>6</sup>

Interestingly, a third person singular pronominal subject also shows distinct forms for strong and weak contexts. While it occurs as *í* in discourse anaphoric use (29a) and resumption (29b) it takes the form *yé* in focus position (29b).

- (29) a. Nfòr à níŋĩ. \*(Í) Ø bā kōnī wèr à ngàbtfəʔ.  
 Nfor SM arrive he SM PST1 meet 1PL in morning  
 ‘Nfor has arrived. He met us in the morning.’  
 b. Á yé cí í Ø mū fàʔ.  
 FOC 3SG COMP 3SG SM PST2 work  
 ‘S/he<sub>F</sub> worked.’

<sup>6</sup>There is, of course, a very obvious functional explanation for the fact that it is just the third person plural which shows a null pronoun. In contrast to all other person-number combinations, it has a unique subject marker *ó*, which is able to unambiguously identify the subject as a third person plural in the absence of an overt realization of the subject. The other subject markers *Ø* and *à* are ambiguous between 1st, 2nd, and 3rd person singular and 1st, 2nd person plural as well as 3rd singular NP, respectively.

In contrast to the third person plural, however, the weak form for the third person singular is not null. In addition, for third person singular the strong form is syncretic with the one found in object position (30a) while there is only a partial identity between the strong subject form *wōyè* and the object form *wō* for third person plural pronouns (30b).

- (30) a. *Nfòr à níjī. Mè Ø bā yē \*(yē) à ɲgàɓtfəʔ.*  
 Nfor SM arrive I SM PST1 see 3SG.OBJ in morning  
 ‘Nfor has arrived. I saw him in the morning.’  
 b. *Bfər ó níjī. Mè Ø bā yē \*(wō) à ɲgàɓtfəʔ.*  
 relatives 3PL.SM arrive I SM PST1 see 3PL.OBJ in morning  
 ‘The relatives have arrived. I met them in the morning.’

For local person pronouns, both singular and plural, the forms for subjects and objects are always entirely syncretic. The forms for subject and object pronouns are given in Table 6.5.

Table 6.5: Subject and object pronouns

	Subject		Object	
	Sg	Pl	Sg	Pl
1.exc	mè	wèr	mè	wèr
1.inc	–	sì	–	sì
2	wè	yì	wè	yì
3.anim	í	wōyè	yé	wō
3.inan	í	bvī	zhī	bvī

Note that pro-drop is not an option in Limbum neither in subject position (29a) nor in object position (30). The only case in which it looks like the pronoun has been dropped is when it is a third person plural subject (28b). Pro-drop is usually not confined exclusively to one specific person-number combination. Rather, in specific environments all pronominal elements, independent of their person-number specifications, are dropped. Thus, I argue that what is special about the third person is that it is the only person-number combination in Limbum for which there are distinct strong and weak pronouns. In particular, the weak form for the third person plural is null, which gives rise to the apparent surface asymmetry regarding resumption. Additionally, it is also the only person-number combination which exhibits a difference in form for subject and object pronouns.



## 4 Focus marking

Let me turn to a third asymmetry: focus marking. So far, in examples with a focussed constituent marked by *á*, this constituent has consistently been followed by an overt element *cí*, preliminarily glossed as COMP.<sup>7</sup> This element, however, is in fact optional and may be left out without a difference in meaning. Interestingly, it interacts with the subject marker *à* and the resumptive pronouns *í* in the following way. In a regular declarative focus-less sentence, only *à* is possible and *cí* has to be absent (31a). In a sentence where a focussed subject is followed by *cí*, only *í* is licit, while the presence of *à* renders the sentence ungrammatical (31c). However, if the focussed subject is not followed by *cí*, both *í* or *à* may occur without any difference in interpretation (31b) (for the interpretation of focus in Limbum also see Driemel & Nformi 2018; Becker et al. 2019).

- (31) a. Nfòr *\*í/à*            mū fà?  
           Nfor \*3SG.RP/SM PST2 work  
           ‘Nfor worked.’
- b. Á Nfòr *cí*    *í/\*à*            mū fà?  
           FOC Nfor COMP 3SG.RP/\*SM PST2 work  
           ‘Nfor<sub>F</sub> worked.’
- c. Á Nfòr *í/à*            mū fà?  
           FOC Nfor 3SG.RP/SM PST2 work  
           ‘Nfor<sub>F</sub> worked.’

The pattern is summarized in Table 6.6.

We have already seen that, as a resumptive pronoun, *í* only occurs when the subject has been displaced. In contrast, *à* is only licit when the subject adjacent to it is not a singular pronoun. If we now assume that *cí* is the optional overt realization of the head to whose specifier the focussed subject is displaced, the pattern in Table 6.6 falls out straightforwardly.

<sup>7</sup>This element is very similar to the relative marker *zhì* used to introduce relative clauses such as (i).

- (i) Mè rìŋ    nǵíŋwè [ zhì   *í*   Ø   *cí*   yē   ŋgwē fō   ].  
       1SG know woman    REL.P 3SG SM PROG see dog    DET  
       ‘I know the woman who is seeing the dog.’

However, they are not identical. The relative marker’s consonant is pronounced [ʒ] while *cí* is pronounced with a [tʃ]. Also, the former is low toned while the latter bears a high tone. It should thus be clear that focus constructions do not involve a relative clause.

Table 6.6: Pattern of cooccurrence of Focus, *cí*, and the subject marker/resumptive

FOCUS	<i>cí</i>	SM/RP
—	—	à
✓	—	à, í
✓	✓	í

In (31a), the subject is not focussed and not displaced. As it is a third person singular NP, it triggers the presence of the subject marker *à*. The structure of (31a) is sketched in (32).

(32) [<sub>CP</sub> [<sub>TP</sub> Nfòr *à* mū [<sub>VP</sub> fà? ]]]

In (31b), in contrast, the subject is focussed, as indicated by it being preceded by the focus particle *á*. Additionally, the concomitant displacement is indicated by overt material intervening between the subject and its base position, namely *cí*. As the subject is unambiguously displaced, the only material that can appear directly preceding the tense marker *mū* is the resumptive pronoun *í*. The element *cí* could either be a realization of the C head, under the assumption that focus displacement targets SpecCP. It could also be regarded as a realization of the Focus head, as argued by Becker et al. (2019), with the focus particle *á* heading its own FP projection (see also Horvath 2007; 2010; 2013; Cable 2010). These structures of (31b) are sketched in (33).<sup>8</sup>

(33) a. [<sub>CP</sub> *á* Nfòr *cí* [<sub>TP</sub> *í* ∅ mū [<sub>VP</sub> fà? ]]]  
 b. [<sub>CP</sub> [<sub>FocP</sub> [<sub>FP</sub> *á* Nfòr ] *cí* [<sub>TP</sub> *í* ∅ mū [<sub>VP</sub> fà? ]]]]

<sup>8</sup> An anonymous reviewer suggests that *cí* might also indicate an underlying biclausal cleft structure. In this structure, *á* would serve as a copula and *cí* as a relative marker. The difference between (31b) and (31c) would then be one between a cleft and a regular fronting/in-situ focus structure. However, as pointed out above, there is no difference in meaning between a structure with *cí* and one without it. In addition, Becker et al. (2019: §3.1) present three arguments against a cleft structure. (i) A focus sentence (with and without *cí*) is compatible with non-exhaustive contexts while clefts typically have an exhaustive meaning component. (ii) The purported copula *á* is not modifiable with tense/aspect markers. Instead, overt tense marking forces the presence of an additional copular element *bā* giving rise to a true cleft sentence. (iii) Clefts contain a relative clause. However, *cí* cannot serve as a relative pronoun. Also, the clause-final demonstrative *nà* that optionally occurs with relative clauses cannot occur with focus sentences. It thus seems very unlikely that focus sentence with *cí* constitute clefts.

Turning to the case of optionality, I argue that this is structurally ambiguous between an in-situ (32) and a displacement structure (33). In one case, the subject is focus marked by the particle *á* but stays in situ in SpecTP (34). Here, it is not possible for *cí* to occur in between the subject and the subject marker simply because the head which it realizes precedes the subject. The subject marker *á* occurs as the subject is not displaced.

(34) [CP [TP *á* Nfòr *à* mū [VP fà? ]]]

In the other case, the subject is focus marked by *á* and displaced to SpecCP or SpecFocP just as in (33). However, the C or Foc head is not overtly realized. Therefore, there is no overt (configurational) indication of displacement (35). The resumptive pronoun *í* occurs because the subject is not in its base position.

(35) a. [CP *á* Nfòr C<sub>∅</sub> [TP *í* *∅* mū [VP fà? ]]]  
 b. [CP [FocP [FP *á* Nfòr ] Foc<sub>∅</sub> [TP *í* *∅* mū [VP fà? ]]]]

Both structures (34) and (35) result in the same surface string with the only difference being that (34) features the subject marker *á* and (35) contains the resumptive pronoun *í* instead.

An indication that the absence of *cí* is not equivalent to the absence of displacement or the absence of the head that hosts *cí* comes from object focus. When an object undergoes focus fronting, *cí* is equally optional as with subject focussing (36).

(36) *Á Ngàlá (cí) mē bí kōnī.*  
 FOC Ngala COMP I FUT1 meet  
 ‘I will meet Ngala<sub>F</sub>.’ (Becker & Nformi 2016: 60)

The object in (36) clearly appears outside of its base position. Therefore, there must be a head that provides a specifier to host it whether *cí* is overt or not. Thus, displacement in (35) is a valid possibility despite the lack of *cí*.

## 5 Conclusion

In this paper, I showcased three subject-internal asymmetries in Limbum. The first asymmetry is between singular pronominal subjects and singular full NP/plural pronominal subjects. Its interaction with subject resumption gives rise to what looks like an antiagreement effect on the surface. As this effect is a direct

result of the interaction, this might lend some support to approaches to antiagreement effects that attribute it to language-specific properties (Fominyam & Georgi 2019; van Alem 2019) rather than some cross-linguistic general antiagreement rule/mechanism/operation (e.g. antilocality or A'–triggered impoverishment).

The second asymmetry obtains between third person plural vs. everything else with regard to resumption. Again, the asymmetry is only apparent as the gap left by third person plural subject extraction is not a true gap. Only the third person shows a weak vs. strong distinction in pronouns as evidenced by discourse anaphoricity. The weak version of the third person plural pronoun used in resumption contexts simply happens to be null and therefore gives the impression of a gap.

The last asymmetry concerns the cooccurrence of focus marking and the subject marker/resumptive pronoun. It was shown that the absence of focus marking is paired with the subject marker, while the presence of full focus marking with *á* and *cí* requires the resumptive pronoun. Focus marking with only *á* allows for subject marker or resumptive pronoun to be present. This optionality can be derived from an underlying structural ambiguity between ex-situ and in-situ focus marking in interaction with the optionality of overt *cí*.

Overall, the three subject asymmetries have been argued to be the result of language-specific peculiarities (i.e. absence of subject marker with singular pronouns, weak-strong distinction for third person pronouns only, optional overt-ness of *cí*) and their interaction with other properties of the language (e.g. obligatory subject resumption, focus movement).

## Appendix

Nominal object extraction for focus leaves a gap rather than a resumptive pronoun, whether it takes place out of a regular embedded clause (37), or from a complex NP (38) or an adjunct clause (39).

- (37) *Á wō(yè)/mè/yì cí Nfòr à mū lib \*wō/\*ó/\*mè/\*yì/\_\_\_.*  
 FOC 3PL/1SG/2PL COMP Nfor SM PST2 beat 3PL.RP/3PL.SM/1SG/2PL/\_\_\_  
 'Them/me/you(pl.)<sub>F</sub>, Nfor has hit.'

- (38) a. *Á ndāp cí mè ∅ mū yō? nsūŋ zhǐ-nē Nfòr à*  
 FOC house COMP I SM PST2 hear rumour 3SG.INAN-COMP Nfor SM  
*mū bō \*zhǐ/\_\_\_.*  
 PST2 build 3SG.INAN.OBJ/\_\_\_  
 'I have heard a rumour that a house<sub>F</sub> Nfor has built.'

- b. ? Á wō(yè) cí mè Ø mū yō? nsūŋ zhǐ-nē Nfòr à  
 FOC 3PL COMP I SM PST2 hear rumour 3SG.INAN-COMP Nfor SM  
 mū kōnī \*ó/\*wō/\_\_\_\_.  
 PST2 meet 3PL.SM/3PL/\_\_\_\_  
 ‘I have heard a rumour that them<sub>F</sub> Nfor has met.’
- (39) Á wō(yè)/mè/yì (cí) Nfòr à mū būmī ká? ànjó? í Ø mū  
 FOC 3PL/1SG/2PL COMP Nfor SM PST2 sleep NEG because 3SG SM PST2  
 lib \*ó/\*wō/\*mè/\*yì/\_\_\_\_  
 beat 3PL.SM/3PL/1SG/2PL/\_\_\_\_  
 ‘Nfor didn’t sleep because them/me/you(pl.)<sub>F</sub> he hit.’

Extraction for focus of a verbal constituent is generally possible (40a).

- (40) a. Á r-bò cí Nfòr bí bō ndāp.  
 FOC 5-build COMP Nfor FUT1 build house  
 ‘Nfor will build<sub>F</sub> a house.’
- b. Á r-[bò ndāp] cí Nfòr bí gī.  
 FOC 5-build house COMP Nfor FUT1 do  
 ‘Nfor will [build a house]<sub>F</sub>.’

Extraction for focus of either the verb or the verb phrase out of an island, here a complex NP, is impossible, even though arguably, the verb copy in (41a) and the dummy verb in (41b) could be regarded as resumptive elements.

- (41) a. \* Á r-bò cí mè Ø mū yō? [nsūŋ zhǐ-nē Nfòr  
 FOC 5-build COMP 1SG SM PST2 hear news 3SG.INAN-COMP Nfor  
 bí bō ndāp].  
 FUT1 build house  
 ‘I heard a rumour that Nfor will build<sub>F</sub> a house.’
- b. \* Á r-[bò ndāp] cí mè Ø mū yō? [nsūŋ zhǐ-nē  
 FOC 5-build house COMP 1SG SM PST2 hear news 3SG.INAN-COMP  
 Nfòr bí gī].  
 Nfor FUT1 do  
 ‘I heard a rumour that Nfor will [build a house]<sub>F</sub>.’

## Acknowledgments

I would like to thank Doreen Georgi, Imke Driemel, Martin Salzmann, and Philipp Weisser for discussion of various parts of this paper. I am very grateful to

Jude Nformi for providing examples and judgements. All errors are my own. This research was funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – Project number 317633480 – SFB 1287, Project C05.

## Abbreviations

Below are listed only those abbreviations that do not adhere to or are beyond the scope of the Leipzig Glossing Rules.

5, 6, 10	Noun classes	Pro(n)	Pronoun
DOM	Differential object marking	PST1	Near past tense
DSM	Differential subject marking	PST2	Distant past tense
FUT1	Near future tense	SM	Subject marker
HAB	Habitual	R	Breton rannig
INAN	Inanimate	RP	Resumptive pronoun
PN	Proper name		

## References

- Abney, Steven Paul. 1987. *The English noun phrase in its sentential aspect*. Cambridge, MA: MIT. (Doctoral dissertation).
- Ackema, Peter & Ad Neeleman. 2003. Context-sensitive spell-out. *Natural Language and Linguistic Theory* 21. 681–735.
- Adger, David. 2000. Feature checking under adjacency and VSO clause structure. In Robert D. Borsley & Jaklin Kornfilt (eds.), *The nature and function of syntactic categories*, 79–100. San Diego, CA: Academic Press.
- Adger, David. 2011. Bare resumptives. In Alain Rouveret (ed.), *Resumptive pronouns at the interfaces*, 343–365. Amsterdam: John Benjamins.
- Amaechi, Mary & Doreen Georgi. 2019. Quirks of subject (non-)extraction in Igbo. *Glossa* 4(1). 69–136.
- Anderson, Stephen R. 1982. Where's morphology? *Linguistic Inquiry* 13. 571–612.
- Asudeh, Ash. 2011. Towards a unified theory of resumption. In Alain Rouveret (ed.), *Resumptive pronouns at the interfaces*, 121–187. Amsterdam: John Benjamins.
- Asudeh, Ash. 2012. *The logic of pronominal resumption*. Oxford: Oxford University Press.

- Baier, Nico. 2018. *Anti-agreement*. Berkeley, CA: University of California at Berkeley. (Doctoral dissertation).
- Baker, Mark C. 1996. *The polysynthesis parameter*. New York: Oxford University Press.
- Barss, Andrew & Howard Lasnik. 1986. A note on anaphora and double objects. *Linguistic Inquiry* 17(2). 347–354.
- Becker, Laura, Imke Driemel & Jude Nformi. 2019. Focus in Limbum. In Samson Lotven, Silvina Bongiovanni, Phillip Weirich, Robert Botne & Samuel Gyasi Obeng (eds.), *African linguistics across the disciplines: Selected papers from the 48th Annual Conference on African Linguistics*, vol. 5 (Contemporary African Linguistics), 219–237. Berlin: Language Science Press.
- Becker, Laura & Jude Nformi. 2016. Focus and verb doubling in Limbum. In Katja Barnickel, Matías Guzmán Naranjo, Johannes Hein, Sampson Korsah, Andrew Murphy, Ludger Paschen, Zorica Puškar & Joanna Zaleska (eds.), *Replicative Processes in Grammar*, vol. 93 (Linguistische Arbeitsberichte (LAB)), 57–84. Leipzig: Universität Leipzig.
- Borer, Hagit. 1984. Restrictive relatives in Modern Hebrew. *Natural Language and Linguistic Theory* 2. 219–260.
- Borsley, Robert D. 2009. On the superficiality of welsh agreement. *Natural Language and Linguistic Theory* 27. 225–265. DOI: 10.1007/s11049-009-9067-3.
- Bresnan, Joan & Lioba Moshi. 1990. Object asymmetries in comparative Bantu syntax. *Linguistic Inquiry* 21(2). 147–185.
- Cable, Seth. 2010. *The grammar of Q. Q-Particles, Wh-movement, and pied-piping*. Oxford: Oxford University Press.
- de Hoop, Helen & Andrej Malchukov. 2008. Case-marking strategies. *Linguistic Inquiry* 39(4). 565–587.
- Doron, Edit. 1988. On the complementarity of subject-verb agreement. In M. Barlow & C. A. Ferguson (eds.), *Agreement in natural language: Approaches, tendencies and description*, 201–218. Stanford, CA: CSLI.
- Driemel, Imke & Jude Nformi. 2018. Focus strategies in Limbum. In Elizabeth Bogal-Allbritten & Elizabeth Coppock (eds.), *Proceedings of TripleA 4: Fieldwork perspectives on the semantics of African, Asian and Austronesian languages*, 17–30. Tübingen: Universitätsbibliothek Tübingen.
- Eberhard, David M., Gary F. Simmons & Charles D. Fennig (eds.). 2019. *Ethnologue: Languages of the World*. 22nd edn. Dallas, TX: SIL International.
- Engdahl, Elisabet. 1986. *Constituent questions*. Dordrecht: Reidel.
- Fominyam, Henry & Doreen Georgi. 2019. *On the nature of subject marking in Awing*. Talk given at ACAL 50, Vancouver.

- Fransen, Margo A. E. 1995. *A grammar of Limbum: A Grassfields Bantu language*. Amsterdam, The Netherlands: Vrije Universiteit Amsterdam. (Doctoral dissertation).
- Freidin, Robert. 1986. Fundamental issues in the theory of binding. In Barbara Lust (ed.), *Studies in the acquisition of anaphora*, 151–188. Dordrecht: Reidel.
- Hale, Ken. 1972. A new perspective on American Indian linguistics. In A. Ortiz (ed.), *New perspectives on the pueblos*, 87–103. Albuquerque: University of New Mexico Press.
- Hein, Johannes. 2020. *Verb doubling and dummy verb: Gap avoidance strategies in verbal fronting* (Linguistische Arbeiten 574). Berlin/Boston: De Gruyter.
- Holmberg, Anders, Michelle Sheehan & Jenneke van der Wal. 2019. Movement from the double object construction is not fully symmetrical. *Linguistic Inquiry* 50(4). 677–722.
- Horvath, Julia. 2007. Separating “focus movement” from focus. In Simin Karimi, Vida Samiian & Wendy K. Wilkins (eds.), *Phrasal and clausal architecture: Syntactic derivation and interpretation. In honor of Joseph E. Emonds*, 108–145. Amsterdam: John Benjamins.
- Horvath, Julia. 2010. “Discourse-features”, syntactic displacement and the status of contrast. *Lingua* 120. 1346–1369.
- Horvath, Julia. 2013. On focus, exhaustivity and Wh-interrogatives: The case of Hungarian. In Johan Brandtler, Valéria Molnár & Christer Platzack (eds.), *Approaches to Hungarian: Papers from the 2011 Lund conference*, vol. 1, 97–132. Amsterdam: John Benjamins.
- Huang, C. T. James. 1982. Move WH in a language without Wh-movement. *The Linguistic Review* 1(4). 369–416.
- Issah, Samuel & Peter W. Smith. 2018. *Subject and non-subject ex-situ focus in Dagbani*. Ms., Goethe-Universität Frankfurt.
- Jelinek, Eloise. 1984. Empty categories, case, and configurationality. *Natural Language and Linguistic Theory* 2. 39–76.
- Jouitteau, Mélanie & Milan Rezac. 2006. Deriving the Complementarity Effect: Relativized minimality in Breton agreement. *Lingua* 116. 1915–1945.
- Koopman, Hilda. 1983. Control from COMP and comparative syntax. *The Linguistic Review* 2(4). 365–391.
- Larson, Richard. 1990. Extraction and multiple selection in PP. *The Linguistic Review* 7(2). 169–182.
- Lebeaux, David. 1988. *Language acquisition and the form of the grammar*. Amherst, MA: University of Massachusetts. (Doctoral dissertation).
- McCloskey, James. 1979. *Transformational syntax and model theoretic semantics: A case study in Modern Irish*. Dordrecht: Riedel.



- McCloskey, James. 1990. Resumptive pronouns, a'-binding and levels of representation. In Randall Hendrick (ed.), *The syntax and semantics of the Modern Celtic languages*, 199–248. New York: Academic Press.
- McCloskey, James. 2017. Resumption. In Martin Everaert & Henk van Riemsdijk (eds.), *The Wiley Blackwell Companion to Syntax, Second Edition*, 1–30. Oxford: Wiley-Blackwell.
- Nformi, Jude. 2018. Complementizer agreement and intervention effects. Ms., Universität Leipzig.
- Ouhalla, Jamal. 1993. Subject-extraction, negation and the antiagreement effect. *Natural Language and Linguistic Theory* 11. 477–518.
- Ouhalla, Jamal. 2005. Agreement features, agreement, and anti-agreement. *Natural Language and Linguistic Theory* 23. 655–686.
- Perlmutter, David M. 1971. *Deep and surface structure constraints in syntax*. New York: Holt, Rinehart & Winston.
- Postal, Paul. 1969. On So-called “pronouns” in English. In David A. Reibel & Sanford A. Schane (eds.), *Modern studies in English: Readings in transformational grammar*, 201–224. Englewood Cliffs, NJ: Prentice-Hall.
- Pranka, Paula. 1983. *Syntax and word formation*. Cambridge, MA: MIT. (Doctoral dissertation).
- Salzmann, Martin. 2017. *Reconstruction and resumption in indirect a'-dependencies. On the syntax of prolepsis and relativization in (Swiss) German and beyond* (Studies in Generative Grammar 117). Berlin/Boston: de Gruyter.
- Silverstein, Michael. 1976. Hierarchy of features and ergativity. In R. Dixon (ed.), *Grammatical categories in Australian languages*, 112–171. Canberra: Australian Institute of Aboriginal Studies.
- Stewart, Osamuyimen Thompson. 2001. *The serial verb construction parameter*. New York: Garland.
- Stump, Gregory T. 1984. Agreement vs. Incorporation in Breton. *Natural Language and Linguistic Theory* 2. 289–426.
- van Alem, Astrid. 2019. *Anti-agreement on complementizers in non-standard varieties of West-Germanic*. Talk given at the SynSem Colloquium, University of Potsdam.
- Weisser, Philipp. 2019. Telling allomorphy from agreement. *Glossa* 4(1). 86. DOI: 10.5334/gjgl.803.

