Island constraints are category-sensitive: The case of Asante Twi and Limbum^{*}

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1 Introduction

- Ever since Ross's (1967) discovery of islands they have puzzled linguists and still continue to puzzle us.
- It remains a matter of debate whether they are proper syntactic constraints (as was assumed when they were discovered), representational constraints at the PF-level of grammar (e.g. Merchant, 2001; Lasnik, 2001; Hornstein et al., 2007; Boeckx, 2012; Griffiths and Lipták, 2014) or simply limitations on processing capacity (e.g. Kluender, 1991, 1998; Kluender and Kutas, 1993; Hofmeister et al., 2013; Kluender and Gieselman, 2013).
- What is reasonably well-known is that they come in two flavours: Strong (or absolute) islands and weak (or selective) islands (see Szabolcsi and Lohndal, 2017 for a recent overview) and that at least in some languages resumptive pronouns may alleviate island violations (Kroch, 1981; Chomsky, 1986; Shlonsky, 1992; McDaniel and Cowart, 1999; Ackerman et al., 2018).
- Today, I will have nothing to say about all those issues. What I want to argue instead is that there are languages, of which Asante Twi and Limbum are examples, in which islands are selectively active for VP- and PP-extraction, while they are inactive for nominals (i.e. objects here) and that this inactivity is not due to these nominals leaving a (silent) resumptive pronoun.

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2 Islands in Asante Twi focus construction

2.1 The focus construction in Twi

- Asante Twi is a Kwa language (Niger-Congo) spoken by about 9 million people mainly in Ghana.
- Base order is SVO.
- Adverbs always appear clause-finally
- (1) Asante Twi neutral declarative clause Kofí á-si dán εnora.
 Kofi PRF-build house yesterday 'Kofi has built a house yesterday.'
- There is a focus construction (encoding contrastive focus) in which a focussed constituent (including *wh*-elements) appears in the left periphery of the clause followed by the focus marker *na* (2).
- (2) Asante Twi object focus
 Dán₁ na Kofi á-sí ____1 εnora.
 house FOC Kofi PRF-build yesterday
 'It's a house that Kofi has built yesterday. (as opposed to e.g. a boat).'
- Generally, focus of an animate object requires the presence of a resumptive pronoun *no* in the base position (3-a). However, inanimate objects leave a gap when focussed (3-b) (Saah, 1994; Saah and Goodluck, 1995).
- (3) Animate vs. inanimate object focus
 - a. Hwáń₁ na Yaw pέ *(no₁)? who FOC Yaw like 3SG.OBJ 'Who does Yaw like?'
 - b. Déέn₁ na Yaw pέ (*no₁)?
 what FOC Yaw like 3SG.OBJ
 'What does Yaw like?' (Korsah and Murphy, 2020: 845)
- As both animate and inanimate object focus is insensitive to islands, Saah (1994) proposes that they involve base generation of the focussed constituent which binds a (overt or covert) resumptive.

- (4) *Island insensitivity with resumptives and gaps* (Saah, 1994: 172)
 - a. Hwáń₁ na wo-hú-u [_{DP} onipa ko [_{CP} áa ɔ-bɔ́-ɔ nó₁ who FOC 2SG-see-PST person DEF REL 3SG.SBJ-hit-PST 3SG nó]] ?
 CD
 'Who did you see the person who hit?'
 - b. Déén na wo-ním [_{DP} onipa ko [_{CP} áa ɔ-tɔ́-ɔ-é ____1 nó what FOC 2SG-know person DEF REL 3SG-buy-PST-YE CD]]?

'What do you know the person that bought?'

- However, Korsah and Murphy (2020) show that the construction exhibits properties of \overline{A} -movement.
- First, there is reconstruction for binding, as shown by the grammaticality of (5).
- (5) Reconstruction for variable binding $[_{DP} Ne_i$ -máńfóś yíe-yś hó $]_1$ na Kofí ním $[_{CP} s\varepsilon$ abán bíárá_i POSS-people well-be self FOC Kofi know that government every dwéné no₁ dáá]. think 3SG.OBJ every.day 'It's the well-being of its_i people that Kofi knows that every_i government thinks about every day.' (Korsah and Murphy, 2020: 850)
- Second, there are weak crossover effects (6).
- (6) Weak Crossover in Twi
 ??Hwáń_i na né_i-núá tán nó_i (nó) ?
 who FOC POSS.3SG-brother hate 3SG.OBJ CD
 'Who_i does his_i brother hate?' (Korsah and Murphy, 2020: 851)
- Third, there is reconstruction for scope (7).
- (7) *Reconstruction for scope in Twi* (Korsah and Murphy, 2020: 852)
 - a. Obi ka-a [_{CP} sé abofrá bíárá do Kofí].
 someone say-PST that child every love Kofi
 'Someone said that every child loves Kofi.' (*∀ > ∃, ∃ > ∀)
 - b. Hwáń₁ na Kofí ká-a [_{CP} sế abofrá bíárá do no₁]? who foc Kofi say-PST that child every love 3SG.OBJ 'Who did Kofi say that every child loves?' $(\forall > wh, wh > \forall)$

- Fourth, there is a tonal reflex associated with A-movement in which lexical low tones on all verbs crossed by the dependency are overwritten with high tones (8).
- (8) *Tonal overwriting in focus construction* (Korsah and Murphy, 2020: 834)
 - a. Kofí kaé sε Ám¹má kita bayéré.
 Kofi remember that Ama hold yam
 'Kofi remembers that Ama is holding a yam.'
 - b. Déén₁ na Kofí káé se Ám[!]má kítá ____?
 what FOC Kofi remember that Ama hold
 'What does Kofi remember that Ama is holding?'
- Importantly, these movement indicators can also be observed with focalization from inside an island (9).
- yíe-yó hó]₁ na m-á-té $[_{DP} atés \acute{e} \acute{m}]$ (9) $[_{DP} Ne_i$ -máńfóź a. 3SG.POSS-people well-be self FOC 1SG-PERF-hear rumour abán *bíárá*_{*i*} dwéné no₁ dáá bí CP SE]]. that governmen every think 3SG.OBJ every.day INDEF 'It's the well-being of its_i people that I have heard a rumour that every_i government thinks about every day.
 - b. Hwáń_i na wo-á-té $[_{DP}$ atésém bí $[_{CP}$ sɛ who FOC 2SG-PERF-hear rumour INDEF that né_i-núá tán nó_i nó]]? 3SG.POSS-sibling hate 3SG.OBJ CD 'Who have you heard the rumour that his/her sibling hates (him/her)?'
 - c. (i) [_{CP} Sé Kofí do Ám¹má] ye asem pá. that Kofi love Ama be matter good 'That Kofi loves Ama is good news.'
 - (ii) Hwáń₁ na [_{CP} sế Kofí dố nó₁ nó] ε -y ε as ε m pá? who FOC that Kofi love 3SG.OBJ CD 3SG-be matter good 'Who is that Kofi loves her good news?' (Korsah and Murphy, 2020: 859)
- This suggests that the focus construction in Twi involves proper \overline{A} -movement. An account in terms of base-generation (Saah, 1994) therefore seems unfit.
- As resumptives may occur in the root of a focus dependency, it also indicates that they are one possible outcome of movement (Zaenen et al., 1981; Engdahl, 1985; Pesetsky, 1998; Boeckx, 2003; Sichel, 2014; Klein, 2017), e.g. as the spellout of a lower copy in a movement chain (see e.g. Kandybowicz, 2008; van Urk, 2018).

2.2 Islands are not absent from Twi

- These data do not mean that islands constraints are inactive in the entirety of the language.
- As Korsah and Murphy (2020) point out, focus of VPs (10-a) and PPs (11-a) from a non-island context is grammatical. However, focalization of the same VP or PP from inside an island renders the sentence ungrammatical (10-b) and (11-b).
- (10) a. [VP Dán sí]-é na Ámá káa sé Kofí á-y5 {__VP / house build-NMLZ FOC Ama say.PST that Kofi PFV-do
 *nó} anopá.
 3SG.0 morning
 'Ama said that Kofi BUILT A HOUSE in the morning (not bought a car).'
 b. *[VP Dán sí]-é na mé-n-tée [DP atétésém bíárá
 - house build-NMLZ FOC ISG-NEG-hear.PST rumour.PL any [_{CP} sє́ Kofí á-yɔ́ ____VP]]. that Kofi PFV-do 'I didn't hear any rumours that Kofi has BUILT A HOUSE.'

(Hein, 2017: 38)

- (11) a. [PP Akonwá nó mú] na Kofí dá {__PP / *hɔ} anɔpá. chair the in FOC Kofi lie there morning 'Kofi is lying IN THE CHAIR in the morning.'
 - b. *[PP Akonwá nó mú] na Ama nímí [DP neá ntí [CP áa chair the in FOC Ama know thing because.of REL Kofi dá __PP]].
 Kofi lie

'Ama knows the reason why Kofi lies IN THE CHAIR.'

(Korsah and Murphy, 2020: 847f.)

2.3 Repair by resumption

- The immediate question then is: What is special about nominal constituents that allows them to apparently violate island constraints even in the presence of a gap, as with inanimate objects?
- There is a general process of deletion of inanimate object pronouns (12) (Riis, 1854; Christaller, 1875/1964; Osam, 1996).
- (12) a. Kofi bɛ-tən [dua no]_i.b. Kofi bɛ-tən (*no_i).Kofi FUT-sell tree DEF
'Kofi will sell the tree.'Kofi FUT-sell 3SG.OBJ
'Kofi will sell it (the tree).'

- Following Korsah (2017), Korsah and Murphy (2020) argue that inanimate objects do in fact leave a resumptive pronoun and that this resumptive pronoun is subject to the same obligatory deletion rule at PF (i.e. pro-drop).
- The effect that resumptives circumvent island constraints is then analyzed as a result of the latter being PF-constraints (cf. Merchant, 2001; Lasnik, 2001; Hornstein et al., 2007; Boeckx, 2012; Griffiths and Lipták, 2014) that militate against representations with a gap in the base position. If there is a resumptive, the constraint is satisfied.
- The island-obviating effect of the pseudo-gaps with inanimate objects is accounted for by PF-ordering: the island constraints are checked before the PFdeletion rule applies to the resumptive pronoun of a moved inanimate object, therefore, no island violation is incurred.
- This approach is corroborated by the fact that in the contexts where regular inanimate pronouns are exempt from deletion, i.e. with clause-final adverbs (13-a), secondary predicates (13-b), and change-of-state verbs (13-c), the resumptive is also exempt and therefore surfaces overtly (13-d-f).
- In these contexts, Korsah (2017); Korsah and Murphy (2020) suggest that the PF-rule is suspended.
- (13) *Contexts for inanimate pronoun realization* (Korsah and Murphy, 2020: 845-847)
 - a. Kofi bɛ-tən *(no_i) əkyena. Kofi FUT-sell 3SG.OBJ tomorrow 'Kofi will sell it (e.g. the tree) tomorrow.'
 - b. Kuukua té [_{SC} *(no_i) mónó].
 Kuukua pluck 3sG.OBJ fresh
 'Kuukua plucks it (e.g. the flower) fresh.'
 - c. Kofi bu-u *(no_i).
 Kofi break-PST 3SG.OBJ
 'Kofi broke it (e.g. the chair).'
 - d. [Aduane nó]₁ na Kofí pé $*(no_1)$ anopá. food DEF FOC Kofi like 3SG.OBJ morning 'It's the food that Kofi likes in the morning.'
 - e. [Akonwa nó]₁ na Kofi bú-u *(no₁). chair DEF FOC Kofi break-PST 3SG.OBJ 'It's the chair that Kofi broke.'
 - f. [$_{DP}$ Aduane nó₁ [$_{CP}$ áa Kofí pé *(no₁) hyehyééhyé nó]] nie food DEF REL Kofi like 3SG.OBJ very.hot CD this 'This is the food that Kofi likes very hot.'

2.4 Summary Asante Twi

- Focus fronting involves A-movement.
- Nominal arguments may be focussed from inside an island leaving a resumptive (animates) or a surface gap (inanimates).
- Focus fronting of VPs and PPs, though perfectly focussable from non-islands, incurs island violations.
- Analysis by Korsah and Murphy (2020): All nominal arguments leave RPs which may circumvent PF-island constraints. The RPs for inanimates are subject to a general PF-deletion rule for inanimate pronouns that applies after the islands have been checked.

3 Islands in Limbum focus construction

3.1 The focus construction in Limbum

- Limbum is a Grassfields Bantu language spoken by 70 000-120 000 speakers in Cameroon.
- Base order is SVO.
- Adverbs including negation always appear clause-finally.
- (14) Njíŋwè fɔ̄ à mū yē bō fɔ̄ nìŋkòr.
 woman DET SM PST2 see children DET yesterday
 'The woman saw the children yesterday.'
- There is a focus construction (new information focus, Becker et al., 2019) in which a focussed constituent (including *wh*-elements) appears in the left periphery of the clause preceded by a particle *á* and followed by another particle *cí*.
- (15) Á Ngàlá (cí) mè bí kōnī.
 FOC Ngala COMP I FUT1 meet
 'I will meet NGALA.' (Driemel and Nformi, 2018: 18)
- Despite the appearance, there are arguments that (15) does not have a biclausal cleft structure (I follow arguments presented in Becker et al., 2019).
- First, *á*-focus is compatible with non-exhaustive contexts. This is evidenced by the fact that it may contain an inherently non-exhaustive universal quantifier as part of the focussed constituent (16). Clefts, however, are typically found with an exhaustive meaning component (Horn, 1981; Percus, 1997).

- (16) Á ŋwè nsìp (cí) mè bí kōnī.
 FOC person every COMP I FUT1 meet
 'I will meet EVERBODY.' (Becker et al., 2019: 225)
- Second, Fransen (1995) analyses the *á* marker in (17) as a copula, concluding that it also acts as a copula in the *á*-focus construction which must therefore be a cleft.
- (17) á rtēē COP palm.tree 'It is a palm tree.'

(Fransen, 1995: 301)

• Becker et al. (2019) suggest that \dot{a} in (17) is in fact a focus particle (as it is (16)) while the copula is silent. This correctly predicts that TAM-markers or negation are incompatible with \dot{a} (18-a). If a TAM-marker is required in the focus part, the only way to express it is to add an overt copula $b\bar{a}$ and an expletive \dot{a} resulting in a proper biclausal structure (18-b).

(18)	a.	(*mū) á (*mū) bāā (cí) Nfor à bā zhē.	
		PST2 FOC PST2 fufu COMP Nfor SM PST1 eat	
		'Nfor ate FUFU.'	
	b.	À mū bā bāā Nforà mū zhē.	
		EXPL PST2 COP fufu Nfor SM PST2 eat	
	'It was fufu that Nfor ate.' (Beck		r et al., 2019: 227)

- Third, clefts are typically analysed as containing a relative clause (Akmajian, 1970; Gundel, 1977; Percus, 1997; Svenonius, 1998; Hedberg, 2000; Reeve, 2011). As Fransen (1995) and Mpoche (1993) show, a relative clause may optionally be followed by the demonstrative marker *nà* (19-a). This marker is ungrammatical in an *á*-focus construction (19-b).
- (19) a. mū zhť í mū zhéć mŋòmbé (nà) child REL 3SG PST2 eat plantains DEM 'the child who ate plantains'
 - b. Á ŋkfúú (cí) mè bí kōnī (*nà).
 FOC chief COMP 1SG FUT1 meet DEM 'I will meet the CHIEF.' (Becker et al., 2019: 228)
- In addition, *cí* [tʃi] is distinct from the relative pronoun *zhǐ* [ʒi]. As shown in (20) and pointed out in Becker et al. (2019: 227), *cí* cannot act as a relative pronoun whereas *zhǐ* can.

- (20) Ŋwè fō rɨŋ njíŋwè fō zhɨ/*cí Nfor à mū yē nìŋkòr. man DET know woman DET REL/COMP Nfor SM PST2 see yesterday 'The man knows the woman whom Nfor saw yesterday.'
- This is corroborated by data showing that the relative pronoun covaries with the head noun (at least) in number taking the form $v\check{t}$ in the plural (21-a) whereas the complementizer $c\acute{t}$ is invariant in a focus construction (21-b).
- (21) a. Ŋwè fɔ̄ rɨŋ bōmbáŋrò fɔ̄ vɨ/*cí njíŋwè fɔ̄ à mū man det know boys det rel.pl/comp woman det sm pst2 yē nìŋkòr. see yesterday
 'The man knows the boys whom the woman saw yesterday.'
 - b. Á bōmbáŋrò fā cí/*vǐ njíŋwÈ fā à mū y $\bar{\epsilon}$ nìŋkòr. FOC boys DET COMP/REL.PL woman DET SM PST2 see yesterday 'The woman saw THE BOYS yesterday.'
- Thus, despite its appearance, the *á*-focus construction does not show typical properties of a cleft. Rather, it seems to involve a monoclausal structure in which the focussed constituent is placed in the left periphery instead of its base position.

3.2 Evidence for movement

- Several movement diagnostics indicate that the focussed constituent originates inside the clause in its respective canonical position.
- First, there is binding reconstruction for Condition C (22).
- (22) *Reconstruction for Condition C*
 - a. $\hat{I}_{*i/j}$ rin $i-n\overline{\epsilon}$ à ci ró Nfòr_i. 3SG know 3SG-C 2SG PROG search Nfor 'He knows that you are searching for Nfor.'
 - b. Á Nfòr_i cí $i_{*i/j}$ rìŋ $i-n\overline{\epsilon}$ wè cí ró $__i$. FOC Nfor COMP 3SG know 3SG-C 2SG PROG search $_$ 'He knows that you are searching for NFOR.'
- Second, there is reconstruction for variable binding (23).
- (23) a. $[Nw \ge ns \ge p]_x$ bí kānī táā $zh \ge_{x/y}$ ngwá. man every FUT1 meet father 3SG.POSS wife 'Every man will meet the father of his wife.'

- b. Á [táā ŋgwá zhł_{x/y}]1 cí mè kwà?shí mè-nē [ŋwè nsłp]x
 FOC father wife 3SG.POSS COMP 1SG think 1SG-C man every
 bí konī _1.
 FUT1 meet _____
 'I think that every man will meet THE FATHER OF HIS WIFE.'
- Third, there is reconstruction for relative quantifier scope (25). Example (24) shows that quantifier raising is clause-bound (May, 1985; Larson and May, 1990).
- (24) NwÈ-ryĒ?nì à mū la í-nĒ mū nsìp à mū cí bumi. MAN-teach SM PST2 say 3SG-C child every SM PST2 PROG sleep 'A/Some teacher said that every child was sleeping.' $(\exists > \forall, *\forall > \exists)$
- (25) Á mbàŋrù₁ cí Shey à mū lā í-n $\bar{\epsilon}$ njíŋwè nsìp à mū bzú FOC male COMP Shey SM PST2 say 3SG-C woman every SM PST2 birth -1.

'Shey said that every woman gave birth to A son.' $(\forall > \exists, *\exists > \forall)$

- Finally, we find reconstruction into intermediate position, i.e. reconstruction conflicts (26) (cf. Rouveret, 2008; Guilliot and Malkawi, 2009; Moulton, 2013; Panitz, 2018) along the lines of the English example in (27).
- Á nkār [bō njínwè nsip₁ kwà?shī [_{CP} t'_2 (26)a. $bvi_1]_2$ cí FOC friend children 3SG.POSS COMP woman every think mū cèb t_2]. $i-n\overline{\epsilon}$ $\dot{0}_2$ 3SG-C 3PL.SM PST2 insult '(It's) a friend of [her₁ children]₂ (that) every woman₁ thinks that they₂ insulted. b. *Á nkār [bō $bvi_1]_2$ cí $\mathbf{0}_2$ kwà?shī [_{CP} t₂' ó-n $\bar{\epsilon}$ FOC friend children 3SG.POSS COMP 3PL.SM think 3SG-C njíŋwè nsip₁ à mū cèb t_2]. woman every sм psт2 insult '(It's) a friend of [her₁ children]₂ (that) they₂ think that every woman₁ insulted?
- (27) a. [Which paper that he_1 gave to $Bresnan_2$]_{*i*} did every student₁ think [t'_i that she₂ would like t_i]?
 - b. *[Which paper that he₁ gave to Bresnan₂]_{*i*} did she₂ think [t'_i that every student₁ would like t_i]? (Lebeaux, 1991)
- I take this to show that ex-situ focus in Limbum involves \overline{A} -movement.

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3.3 Island-insensitivity of nominal focus

• Curiously, extraction of nominal objects is island-insensitive just like in Asante Twi, with the difference that there are no resumptive pronouns.¹

(28) Nominal object extraction from island

- mè mū yō? $[_{DP}$ nsūŋ njinw ε_1 cí Nfor A $\int_{CP} zhi - n\bar{\varepsilon}$ a. FOC woman COMP I PST2 hear rumour 3SG.INAN-C N. kənī ___1]]. bí FUT1 meet ____ 'I heard the rumour that Nfor will meet A WOMAN.' mè mū yō? [$_{DP}$ nsūŋ Á rkar₁ cí $\int_{CP} zhi n\bar{\varepsilon}$ Nfor b. FOC car COMP I PST2 hear rumour 3SG.INAN-C N. bí yū __1]]. FUT1 buy ____ 'I heard the rumour that Nfor will buy A CAR.'
- Nonetheless, just as in Twi, we find that the same movement diagnostics as for non-island focus, i.e. binding reconstruction for Condition C and variables, scope reconstruction, and reconstruction conflicts, appear in focalizations from inside an island (29).
- (29) Á Nfor_i cí $i_{*i/j}$ mū yō? [_{DP} nsūŋ [_{CP} zhť-nĒ à cí FOC Nfor COMP 3SG PST2 hear rumour 3.INAN-C 2SG PROG ró __i]]. search 'He has heard a rumour that you are searching for NFOR.'
- (30) Á [táā ŋgwá zhł_{y/x}]1 cí mè mū yō? [_{DP} nsūŋ [_{CP} FOC father wife 3SG.POSS COMP 1SG PST2 hear rumour zhǐ-nē [ŋwè nsłp]x bí kōnī __1]].
 3SG.INAN-C man every FUT1 meet _____
 'I heard a rumour that every man will meet THE FATHER OF HIS WIFE.'
- (31) Á $[mbanru]_1 ci$ mè mū yō? $[_{DP} nsūn [_{CP} zhi-nĒ njínwe FOC male COMP 1SG PST2 hear rumour 3SG.INAN-C woman nsip à mū bzú __1]].$ $every SM PST2 birth __$ $'I heard a rumour that every woman gave birth to A son.' (*<math>\exists > \forall, \forall > \exists$)

¹Resumption may optionally occur when a bare noun indefinite is focussed. In this case, the focussed constituent obligatorily receives a specific interpretation.

- (32) a. Á [ŋkār [bō bvi₁]₂]₃ cí njiŋwè nsip₁ à mū yō? [_{DP} FOC friend children 3SG.POSS COMP woman every SM PST2 hear nsūŋ [_{CP} zhɨ-nē ó₂ mū cèb ____3]].
 rumour 3.INAN-C 3PL PST2 insult 'It is a friend of [her₁ children]₂ that every woman₁ heard a rumour that they₂ insulted.'
 - b. *Á [ŋkār [bō bvi₁]₂]₃ cí ó₂ mū yō? [_{DP} nsūŋ [_{CP} FOC friend children 3SG.POSS COMP 3PL PST2 hear rumour zhǐ-nē njiŋwè nsip₁ à mū cèb ___3]].
 3.INAN-C woman every SM PST2 insult 'It is a friend of [her₁ children]₂ that they₂ heard a rumour that every woman₁ insulted.'
- Thus, it seems that nominal focus from islands involves A-movement just like nominal focus from non-islands does, too.
- In contrast to Asante Twi, however, we do not observe the presence of a resumptive pronoun (with at least one type of nominal, e.g. animates).

3.4 Island-sensitivity of non-nominal focus

- Parallel to the Asante Twi case, this does not entail that island constraints are inactive in Limbum entirely.
- Note that focus fronting of VPs (33) and PPs (34) is grammatical in Limbum leaving a gap.
- (33) Á r-[yū msāŋ] cí njíŋwè fɔ̄ bí gī __.
 FOC NMLZ-buy rice COMP woman DET FUT1 do
 'It is buying rice that the woman will do.' (Becker and Nformi, 2016: 75)
- (34) Á [ní pkūh] cí Nfòr nòŋ ___.
 FOC in bed сомр N. sleep ____.
 'It is in the bed that Kofi is lying.'
- However, when focussed from inside an island, VPs and PPs incur an island violation (35) and (36).
- (35) *Á r-[yū msāŋ] cí mè mū yō? [_{DP} nsūŋ [_{CP} FOC NMLZ-buy rice COMP 1SG PST2 hear rumour zhɨ-nē Nfòr bí gī __]].
 3SG.INAN-COMP Nfor FUT1 do 'I heard a rumour that Nfor will BUY RICE.'

(36) *Á [ní pkūh] cí mè mū yō? [DP nsūŋ [CP zhǐ-nē Nfòr nòŋ FOC in bed COMP 1SG PST2 hear rumour 3SG-COMP Nfor sleep __]].

'It is in the bed that I heard a rumour that Nfor is lying.'

• Summarizing briefly, the pattern in Limbum is parallel to the one in Asante Twi. Nominal arguments may extract freely from islands while VPs and PPs incur violations in these contexts despite being focus-frontable in non-island environments.

3.5 Repair by resumption?

- Recall that the exemption of nominals from island constraints in Asante Twi was suggested to be due to them leaving a resumptive pronoun that circumvents a violation of a representational PF-island constraint before it is deleted (for inanimate pronouns).
- This proposal gains some support in Twi from the fact that the resumptive pronoun appears overtly with animate objects.
- Can this analysis be transferred to the Limbum data?
- Overt resumption can indeed be found in Limbum ex-situ object focus. However, it is restricted to specific indefinites (37). And even with those it is only one additional option besides a gap.
- (37) *Object focus with resumptive pronoun*
 - a. Á njiŋw ε_1 cí Nfor bí konī __1/yē₁. FOC woman COMP Nfor FUT1 meet /her 'Nfor will meet A SPECIFIC WOMAN.'
 - b. Á $rkar_1 ci$ Nfor bí $y\bar{u} __1/zh\bar{i}_1$. FOC car COMP Nfor FUT1 buy /it 'Nfor will buy a specific car.'
- Resumption for other noun types results in ungrammaticality, as shown for a proper name in (38-a), a pronoun in (38-b), and a definite expression in (38-c).
- (38) a. Á Tanko₁ cí Nfòr à mũ y $\bar{\epsilon}$ *y $\bar{e}_1/__1$ nìŋkòr. FOC Tanko COMP N. SM PST2 see 3SG/___ yesterday 'Nfor saw Tanko yesterday.'
 - b. Á $y\bar{e}_1$ cí Nfor à mū $y\bar{e} *y\bar{e}_1/__1$ nìŋkòr. FOC 3SG COMP Nfor SM PST2 see 3SG/___ yesterday 'Nfor saw HIM/HER yesterday.'

- c. Á $[ŋwe-rye?nif_{\overline{2}}]_1$ cí í bí $k\overline{2}n\overline{1} * y\overline{e}_1/__1$ ntómbzu. FOC man-teach DEF COMP Nfor FUT1 meet 3SG.O first 'He will meet THE TEACHER first.'
- One could, of course, assume that the lack of resumptives with the latter nominals is due to a deletion rule akin to the one in Asante Twi. However, there are some considerations that this is not the case.
- First, gaps in Twi nominal extraction occur in a natural class of contexts, namely with inanimate objects. The contexts for gaps in Limbum do not form a natural class. Rather, the opposite is true. If we were to treat resumption in Limbum on a par with resumption in Asante Twi, that is as the default output of extraction from object position, we would have to restrict the domain of application of a purported PF-deletion rule to all nominals except specific indefinites.
- In addition, such a rule would have to be optionally applicable to specific indefinites (and only for them) since a gap is compatible with both a specific and non-specific indefinite.
- Second, unlike in Twi, there is no evidence that an alleged underlying resumptive pronoun appears overtly in any other contexts except specific indefinites. In particular, clause-final adverbs do not force an overt resumptive instead of a gap (38-c).
- What is more, there seems to exist a deletion rule in Limbum that is almost identical to the one proposed for Asante Twi. It applies to regular object pronouns in discourse-anaphoric use and optionally deletes them (39) (cf. object (pro-)drop).
- (39)Yaa à mū y $\bar{\epsilon}$ rkār zhií kòn. Ndū zhì bí a. yū Yaa SM PST2 see car REL.SG 3SG like husband 3SG.POSS FUT1 buy (zhi) àvànsè. 3SG.INAN.O tomorrow 'Yaa saw a car that she likes. Her husband will buy it tomorrow.' Yaa à mū yē mŋkòb bvì í kòŋ. Ndū zhì bí b. yū Yaa SM PST2 see suitcases REL 3SG like husband 3SG.POSS FUT1 buy (**bvi**) àyàŋsè. 3PL.INAN.O tomorrow 'Yaa saw suitcases (that she likes). Her husband will buy them tomor-
- However, it is restricted to inanimates. Deletion of animate object pronouns leads to ungrammaticality (40).

row.'

(40)Yaa à mū y $\bar{\epsilon}$ Shey. Ndū zhì bífu kənī *(yē) a. Yaa SM PST2 see Shey husband 3SG.POSS FUT3 meet 3SG.O àyàŋsè. tomorrow 'Yaa saw Shey. Her husband will met him tomorrow.' Yaa à mū y $\bar{\epsilon}$ Shey ba Ngala. Ndū b. zhì bífu kənī Yaa SM PST2 see Shey and Ngala husband 3SG.POSS FUT3 meet *(wō) àyàŋsè.

3PL.O tomorrow

'Yaa saw Shey and Ngala. Her husband will meet them tomorrow.'

- If, as in Twi, this rule were responsible for the deletion of resumptive pronouns and the occurrence of pseudo-gaps, it should spare animate resumptives. Under the assumption that every nominal extraction first left a resumptive pronoun to later be deleted at PF, we would therefore expect that pseudo-gaps were restricted to inanimate objects, contrary to fact.
- In light of these observations, it seems to be the case that island constraints must be regarded as selectively inactive for nominal (argument) focalization. If one can focus a nominal object via movement from inside an island and leave a true gap (as opposed to a silent resumptive pronoun) the island simply cannot hold.

4 Special noun-types in Asante Twi

- In fact, novel data from Asante Twi indicate that the PF-deletion analysis suggested by Korsah and Murphy (2020) cannot be the whole story in Twi either.
- Recall that all nominals in Twi are claimed to leave a resumptive when extracted, which is deleted at PF for inanimates, but only after the PF-island constraints have been checked. This was corroborated by data showing that in some contexts (e.g. clause-final adverbs) the deletion is suspended.
- Georgi and Hein (2020) observe that there are some special noun types, including predicate nouns, kind/generic expressions, and parts of idioms, whose extraction always results in a gap even if they are animate (in which case the deletion rule should be inapplicable) or inanimate appearing in the deletionsuspending contexts (41).
- (41) Some noun types leave true gaps in Asante Twi (Georgi and Hein, 2020)
 - a. Tíkyani₁ na Kofi b \acute{e} -y \acute{e} { $__1$ / *n \acute{o}_1 } afe yí. teacher FOC Kofi FUT-be 3SG.O year this 'It is a teacher that Kofi will become this year.'

- b. Nípa₁ na Kofi súró $\{__1 / *no_1\}$ páa. person FOC Kofi fear 3SG.O really 'It's people that Kofi really fears.'
- c. Ne-nán₁ na $\mathfrak{2}$ -gyá \mathfrak{E} {_1 / *nó₁} [PP w $\mathfrak{2}$ dán nó mú]. his-leg FOC 3SG.S-leave.PST 3SG.O LOC room the inside Id.: 'It's defecating that he did in the room.' Lit.: 'It's his leg that he left in the room.'
- They thus do not seem to involve an underlying resumptive pronoun. Nonetheless, like the gaps that occur in Limbum focalizations, those gaps do not incur an island violation (42).
- (42) *True gaps appear in islands in Asante Twi* (Georgi and Hein, 2020)
 - a. Ne-nán₁ na m-á-té $[_{DP} atésém bi [_{CP} sé]_{OP} -gyáe$ his-leg FOC 1SG.S-PFV-hear that 3SG.S-leave.PST rumour a $\{__1 / *no_1\}$ wo dán nó mú]]. 3SG.O LOC room the inside Id.: 'It's defecating that I have heard a rumour that he did in the room.' b. Tíkya₁ na m-á-té $\int_{DP} atésém$ nó $\int_{CP} sé$ Kofi bé-yé teacher FOC 1SG-PERF-hear rumour the that Kofi FUT-be $\{__1 / *nó\}$ afe yí]]. 3SG.O year this 'It is a teacher that I have heard the rumour that Kofi will become this vear.
 - c. Nípa₁ na wo-té-e [_{DP} atésém nó [_{CP} sé Kofi súró {_1 / person FOC 2sG.s-hear-PST rumour the that Kofi fear *nó₁} páa]].
 3SG.0 really 'It's people that I have heard the rumour that Kofi really fears.' (not animals)
- This indicates that the presence of a resumptive pronoun that undergoes deletion at PF is not the sole property of Twi that renders argument focalization insensitive to islands (as suggested by Korsah and Murphy, 2020). Rather, like in Limbum, island constraints seem to be inactive in the extraction of (some types of) nominal arguments.

5 Conclusion

- Both Asante Twi and Limbum exhibit a pattern of focus/wh-movement in which nominal arguments may extract freely from inside islands while VP- and PP-movement incurs a violation of the island constraint.
- While this could (partly) be explained as a case of repair by resumption and PF-deletion of the resumptive in Asante Twi, no such explnation presents itself for the Limbum data.
- In fact, additional data from Asante Twi evade the repair by resumption analysis, too.
- I take this to mean that island constraints, at least in some languages, are sensitive to the category of the extracting element.

References

- Ackerman, Lauren, Michael Frazier, and Masaya Yoshida. 2018. Resumptive pronouns can ameliorate illicit island extractions. *Linguistic Inquiry* 49 (4): 847– 859.
- Akmajian, Adrian. 1970. On deriving cleft sentences from pseudo-cleft sentences. *Linguistic Inquiry* 1: 149–168.
- Becker, Laura, and Jude Nformi. 2016. Focus and verb doubling in Limbum. In *Replicative Processes in Grammar*, eds. Katja Barnickel, Matías Guzmán Naranjo, Johannes Hein, Sampson Korsah, Andrew Murphy, Ludger Paschen, Zorica Puškar, and Joanna Zaleska. Vol. 93 of *Linguistische Arbeits Berichte* (*LAB*), 57–84. Leipzig: Universiät Leipzig.
- Becker, Laura, Imke Driemel, and Jude Nformi. 2019. Focus in Limbum. In *African linguistics across the disciplines: Selected papers from the 48th Annual Conference on African Linguistics*, eds. Samson Lotven, Silvina Bongiovanni, Phillip Weirich, Robert Botne, and Samuel Gyasi Obeng. Vol. 5 of *Contemporary African Linguistics*, 219–237. Berlin: Language Science Press.
- Boeckx, Cedric. 2003. *Islands and chains: Resumption as stranding*. Amsterdam: John Benjamins.
- Boeckx, Cedric. 2012. *Syntactic islands*. Cambridge: Cambridge University Press. Chomsky, Noam. 1986. *Barriers*. Cambridge, MA: MIT Press.
- Christaller, Johann G. 1875/1964. A grammar of the Asante and Fante language called tshi [chee, twi]. New Jersey: Gregg Press.
- Driemel, Imke, and Jude Nformi. 2018. Focus strategies in Limbum. In Proceedings of TripleA 4: Fieldwork perspectives on the semantics of african, asian and

austronesian languages, eds. Elizabeth Bogal-Allbritten and Elizabeth Coppock, 17–30. Tübingen: Universitätsbibliothek Tübingen.

- Engdahl, Elisabet. 1985. Parasitic gaps, resumptive pronouns and subject extractions. *Linguistics* 23 (1): 3–44.
- Fransen, Margo. 1995. A grammar of Limbum: A grassfields bantu language. PhD diss, Vrije Universitet Amsterdam, Amsterdam, The Netherlands.
- Georgi, Doreen, and Johannes Hein. 2020. (A)Symmetries in Asante Twi object extractions. talk given at Linguistics in Göttingen 3, February.
- Griffiths, James, and Aniko Lipták. 2014. Contrast and island sensitivity. *Syntax* 17 (3): 189–234.
- Guilliot, Nicolas, and Nouman Malkawi. 2009. When movement fails to reconstruct. In *Merging features: Computation, interpretation and acquisition*, eds. José M. Brucart, Anna Gavarró, and Jaume Solà, 159–174. Oxford: Oxford University Press.
- Gundel, Jeanette. 1977. Where do cleft sentences come from? *Language* 53: 543–559.

Hedberg, Nancy. 2000. The referential status of clefts. Language 76: 891-920.

- Hein, Johannes. 2017. Doubling and *do*-support in verbal fronting: Towards a typology of repair operations. *Glossa* 2 (1): 67–136. doi:http://doi.org/10.5334/gjgl.161.
- Hofmeister, P., L. S. Casasanto, and I. A. Sag. 2013. Islands in the grammar? Standards of evidence. In *Syntax and island effects*, eds. J. Sprouse and N. Hornstein, 42–63. Cambridge: Cambridge University Press.
- Horn, Larry. 1981. Exhaustiveness and the semantics of clefts. In *Proceedings of NELS 11*, eds. Virginia Burke and James Pustejovsky, 124–142. Amherst, MA: GLSA.
- Hornstein, Norbert, Howard Lasnik, and Juan Uriagereka. 2007. The dynamics of islands: Speculations on the locality of movement. *Linguistic Analysis* 33 (1–2): 149–175.
- Kandybowicz, Jason. 2008. *The Grammar of Repetition. Nupe grammar at the syntax-phonology interface*. Vol. 136 of *Linguistik Aktuell Linguistics Today*. Amsterdam/Philadelphia: John Benjamins.
- Klein, Timo. 2017. Patterns of resumption: Towards a derivational account. PhD diss, Universität Leipzig, Leipzig.
- Kluender, R. 1991. Cognitive constraints on variables in syntax. PhD diss, University of California San Diego, San Diego, CA.
- Kluender, R. 1998. On the distinction between strong and weak islands: a processing perspective. In *The limits of syntax*, eds. P. Culicover and L. McNally, 241–279. Leiden: Brill.

- Kluender, R., and S. Gieselman. 2013. What's negative about negative islands? a re-evaluation of extraction from weak island contexts. In *Experimental syntax and island effects*, eds. J. Sprouse and N. Hornstein, 186–207. Cambridge: Cambridge University Press.
- Kluender, R., and M. Kutas. 1993. Bridging the gap: Evidence from ERPs on the processing of unbound dependencies. *Journal of Cognitive Neuroscience* 5: 196–214.
- Korsah, Sampson. 2017. Issues in Kwa syntax: Pronouns and clausal determiners. PhD diss, Universität Leipzig, Leipzig.
- Korsah, Sampson, and Andrew Murphy. 2020. Tonal reflexes of movement in Asante Twi. *Natural Language and Linguistic Theory* 38: 827–885. doi:https://doi.org/10.1007/s11049-019-09456-9.
- Kroch, Anthony S. 1981. On the role of resumptive pronouns in amnestying island constraint violations. In *Proceedings of the 17th annual meeting of the chicago linguistic society*, 125–135. Chicago, IL: The University of Chicago.
- Larson, Richard K., and Robert May. 1990. Antecedent containment or vacuous movement: Reply to Baltin. *Linguistic Inquiry* 21 (1): 103–122.
- Lasnik, Howard. 2001. When can you save a structure by destroying it? In *Proceedings of the 31st Annual Meeting of the North East Linguistic Society (NELS 31)*, eds. M. Kim and U. Strauss, 301–320. Amherst, MA: GLSA.
- Lebeaux, David. 1991. Relative clauses, licensing and the nature of the derivation. In *Syntax and semantics 25: Perspectives on phrase structure*, ed. Susan Rothstein, 209–239. New York: Academic Press.
- May, Robert C. 1985. *Logical form: Its structure and derivation*. Cambridge, MA: MIT Press.
- McDaniel, Dana, and Wayne Cowart. 1999. Experimental evidence for a Minimalist account of English resumptive pronouns. *Cognition* 70: 15–24.
- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis.* Oxford: Oxford University Press.
- Moulton, Keir. 2013. Not moving clauses: Connectivity in clausal arguments. *Syntax* 16 (3): 250–291.
- Mpoche, Kizitus. 1993. The Limbum Noun Phrase (a Generative Approach). Master's thesis, Université de Yaoundé, Yaoundé, Cameroon.
- Osam, Emmanuel Kweku. 1996. Animacy distinctions in Akan grammar. *Studies in the Linguistic Sciences* 23 (2): 153–164.
- Panitz, Ezekiel J. 2018. Argument ellipsis and strong islands. PhD diss, University College London, London.
- Percus, Orin. 1997. Prying open the cleft. In *Proceedings of NELS 27*, ed. Kiyomi Kusumoto, 337–351. Montreal: McGill University.

- Pesetsky, David. 1998. Some optimality principles of sentence pronunciation. In *Is the best good enough?*, eds. P. Barbosa, D. Fox, P. Hagstrom, M. McGinnis, and D. Pesetsky, 337–383. Cambridge, Mass.: MIT Press.
- Reeve, Matthew. 2011. The syntactic structure of English clefts. *Lingua* 121: 142–171.
- Riis, Hans N. 1854. *Grammatical outline and vocabulary of the Oji-language with especial reference to the Akuapim-dialect*. Basel: G. Detloff.
- Ross, Jon Robert. 1967. Constraints on variables in syntax. PhD diss, MIT, Cambridge, MA.
- Rouveret, Alain. 2008. Phasal agreement and reconstruction. In *Foundational issues in linguistic theory*, eds. R. Freidin, C. P. Otero, and M. L. Zubizarreta, 167–195. Cambridge: Cambridge University Press.
- Saah, Kofi, and Helen Goodluck. 1995. Island effects in parsing and grammar: Evidence from Akan. *The Linguistic Review* 12: 381–409.
- Saah, Kofi K. 1994. Studies in Akan syntax, acquistion and sentence processing. PhD diss, University of Ottawa, Ottawa.
- Shlonsky, Ur. 1992. Resumptive pronouns as last resort. *Linguistic Inquiry* 23 (3): 443–468.
- Sichel, Ivy. 2014. Resumptive pronouns and ceompetition. *Linguistic Inquiry* 45: 655–693.
- Svenonius, Peter. 1998. Clefts in Scandinavian. an investigation. ZAS Papers in *Linguistics* 10: 163–190.
- Szabolcsi, Anna, and Terje Lohndal. 2017. Strong vs. weak islands. In *The Wiley Blackwell Companion to Syntax II*, eds. Martin Everaert and Henk van Riemsdijk, 1–51. Oxford: John Wiley and Sons.
- van Urk, Coppe. 2018. Pronoun copying in Dinka Bor and the copy theory of movement. *Natural Language and Linguistic Theory* 36 (3): 393–990.
- Zaenen, Annie, Elisabet Engdahl, and Joan M. Maling. 1981. Resumptive pronouns can be syntactically bound. *Linguistic Inquiry* 12 (4): 679–682.