



# Asymmetries in Asante Twi Ā-movement On the role of noun type in resumption

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### Syntax Semantics Lab, University of Delaware December 3rd, 2020

Funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) – project number 317633480 – SFB 1287, Project C05 (Georgi)

# Introduction

### Goals

- asymmetry in Asante Twi (Kwa, Ghana) focus fronting: leaves a gap or a resumptive pronoun (RP) in its base position
- previous literature: The choice between gap/RP is determined by the [±N] status of the extractee: nominals leave an RP, non-nominals a gap

### We argue for the following:

- The crucial factor is not the [±N]-status; it rather seems to be a semantic/pragmatic one, reminiscent of referentiality: only "referential" extractees leave an RP.
- We model this apparent semantic effect on resumption as a structural difference: the presence/absence of a D-shell in the extractee.
- Coupled with the partial deletion account of RPs under the copy theory of movement, this derives the distribution of gaps/RPs.
- AT exhibits a preference of an RP over a gap when possible a pattern that is in conflict with economy constraints such as Avoid Pronoun.

### Overview

- 1. Introduction
- 2. Previous work
- 3. New observation
- 4. Analysis
- 5. Consequences and further issues
- 6. Extension: Subject extraction
- 7. Conclusion

# Previous work

#### Previous work

# Saah (1994), Korsah (2017), Korsah and Murphy (2020)

- Focus fronting of nominal XPs always leaves an RP in syntax though the RP remains unpronounced with inanimate antecedents.
- Animate elements leave an overt RP (1).
- (1) Overt RP with animate extractee Hwáń<sub>1</sub>/Kofi<sub>1</sub> na Yaw pé {\*\_\_\_\_1 / no<sub>1</sub>}? who/Kofi Foc Yaw like 3sg.o
  'Who does Yaw like? / It's Kofi who Yaw likes.'
  - Inanimate elements leave a surface gap (3).
- (2) Apparent gap with inanimate extractee Déén<sub>1</sub>/[kŕataá nó]<sub>1</sub> na Yaw pé { \_\_\_\_1 / \*no<sub>1</sub>}? what/book DEF FOC Yaw like 3sG.O 'What does Yaw like? / It's the book that Yaw likes.' (KM 2020)

# Saah (1994), Korsah (2017), Korsah and Murphy (2020)

- The 'gap' with inanimates is in fact an unpronounced RP (either a null RP, Saah 1994; or a PF-deleted RP, Korsah 2017, KM 2020).
- Evidence: The RP is forced to be overt
  - ▶ when followed by a clause-final adverb (3) (Saah 1994),
  - with change-of-state verbs (4) (Osam 1996),
  - and with secondary predicates (Korsah 2017).
- (3) Overt inanimate RP with clause-final adverb

  [Aduane nó]<sub>1</sub> na Kofí pé {\* 1 / nó<sub>1</sub>} anɔpá.
  food the Foc Kofi like 3sG.o morning
  'It's the food that Kofi likes in the morning.'
  (KM 2020)

  (4) Overt inanimate RP with change-of-state verb

  [Akonwa nó]<sub>1</sub> na Kofi bú-u {\* 1 / no<sub>1</sub>}.
  chair the Foc Kofi break-PST 3sG.o
  'It's the chair that Kofi broke.'

#### Previous work

# Saah (1994), Korsah (2017), Korsah and Murphy (2020)

- Focus fronting of non-nominal XPs (VPs, PPs) leaves true gaps (even when followed by a clause-final adverb).
- (5) True gap with PP-focus

[PP Akonwá nó mú] na Kofí dá { \_\_\_PP / \*h>} anopá. chair the in FOC Kofi lie there morning 'Kofi is lying IN THE CHAIR in the morning.' (KM 2020)

(6) True gap with VP-focus

[vp Dán sí]-é na Ámá káa sé Kofi á-yó { <u>vp</u> / \*nó} house build-nmlz foc Ama say.pst that Kofi pFv-do 3sg.o anɔpá.

morning

'Ama said that Kofi BUILT A HOUSE in the morning (not bought a car).'

- Both the gap and the (overt/null) RP cases involve movement.
- Evidence (KM 2020): reconstruction effects, tonal reflex of movement

### Previous work: summary

### (7) Interaction of category $[\pm N]$ and gap/RP-choice:

extractee:	N[+N]	$[-N]_{(VP/PP)}$
(c)overt RP	yes	no

# New observation

### Data source

- elicitation sessions with 5 native speakers
- elicitation items present context supposed to facilitate/force a desired reading of a nominal (partly modelled on contexts in the semantic literature on AT nominal interpretation; see Arkoh 2011; Arkoh and Matthewson 2013; Bombi 2018; Bombi et al. 2019)
- context followed by utterance of person A which included a nominal object/subject
- utterance A is then corrected by person B (to license *na*-focus)
- two versions of B's correction were given, one with an RP and another with a gap; participants were asked which version they prefer (multiple choice allowed)

### Observation

- \* Extraction of some [+N]-elements, even animates, results in a true gap  $\Rightarrow$  [±N]-status of the extractee is not a sufficient predictor of gap/RP.
- previous literature: examples with [+N]-extractees (that leave RPs) are proper names, definite nouns (with an overt D), (wh)-pronouns.
- [+N]-elements that leave a gap are parts of idioms, predicative nouns, and non-specific indefinite nouns.
- It seems to be a semantic property ("referentiality") of the nominal that determines whether it leaves a gap or an RP upon extraction.

### **Observation:** Parts of idioms

- This example already appears in KM (2020) but they do not discuss the absence of an RP.
- (8) Neutral declarative baseline
  p-gya-a ne-nán [PP wo dán nó mú ].
  3sG.s-leave-PST 3sG.POSS-leg LOC room DEF inside
  Id.: 'He defecated in the room.'
  Lit.: 'He left his leg in the room.'

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(KM 2020)
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- (9) Ex-situ focus of inanimate idiomatic object
  - a. Ne-nán<sub>1</sub> na p-gyác \_\_\_\_\_1 [PP WD dán nó mú ]. his-leg FOC 3SG.S-leave.PST 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.' (KM 2020)
  - b. Ne-nán<sub>1</sub> na p-gyác nó<sub>1</sub> [PP wo dán nó mú]. his-leg FOC 3sG.S-leave.PST 3SG.O LOC room the inside #ld.: 'It's defecating that he did in the room.'
    Lit.: 'It's his leg that he left in the room.'

### **Observation: Parts of idioms**

- We could confirm this observation in our own data, see (10).
- (10) <u>Context</u>: Ama is visiting her friend Abena. Abena's husband Kofi is mentally unstable at the moment and tends to loose his temper especially when he's home from work for lunch. Suddenly, Abena's dog walks past. It looks like it's been beaten up: It has lots of scratches and is noticably limping. Ama, knowing about Kofi's anger issues, says:
  - a. Me-n-tumi nnye nni sɛ Kofi bɔ-ɔ kraman no ɛnora. 1sG-NEG-can believe that Kofi hit-PST dog DEF yesterday 'I can't believe that Kofi punched the dog yesterday'

Abena knows this can't be true as Kofi ate lunch during his break yesterday. She says:

b. Daabi. [N'-ano twedee]<sub>1</sub> na Kofi bɔ-ɔ { \_\_\_\_ / \*no<sub>1</sub> } enora.
no 3sg.poss-mouth Foc Kofi hit-pst 3sg.o yesterday
ld.: 'No. Kofi ATE yesterday (during his lunchbreak).'
#Lit.: 'No. Kofi punched his own mouth yesterday.'

### **Observation: Predicative nouns**

- Predicative nouns like *tikyani* 'teacher' leave a gap, despite their animacy and the clause-final adverb (11).
- (11) <u>Context</u>: Kofi is about to graduate this year. Kwame claims:
  - a. Kofi bɛ-yɛ dokota afe yí.
    Kofi FUT-be doctor year this
    'Kofi will become a doctor this year.'
  - But Ama knows that this is not correct and says:
  - b. Tíkyani<sub>1</sub> na Kofi bé-yé { \_\_\_\_1 / \*nó<sub>1</sub>} afe yí. teacher FOC Kofi FUT-be 3sG.O year this 'It is a teacher that Kofi will become this year.'

### **Observation: Non-specific indefinites**

- Bare nouns that are interpreted as non-specific indefinites like okyerekyereni 'teacher' leave a gap, despite the clause-final adverb (12).
- (12) <u>Context</u>: You're a new student at a school and tell a classmate that you're planning to rent a school uniform instead of buying one. However, you don't know if that's possible. Your classmate asks:
  - a. Wo-be-bisa headmaster no?
    2sg-fut-ask headmaster DEF
    'Will you ask the headmaster?'

But you didn't want to bother the headmaster with this so you say:

b. Daabi. okyerekyereni<sub>1</sub> na me-be-bisa { \_\_\_\_1 / ??no<sub>1</sub> } kane.
no teacher foc 1sg-fut-ask 3sg.o first
'No. I will ask A (RANDOM) TEACHER first.' (i.e. one of the many teachers around)

### **Observation: Kinds**

- On the other hand, we can add nouns interpreted as kinds, like asebo 'tigers' in (13), to the list of nominals that leave an RP under extraction
- (13) <u>Context</u>: The government is about to pass a new law to protect certain animals. Ama and Kofi discuss which animals are protected by this law. Ama says:
  - a. Me dwene sɛ mmra foforɔ no bɛ-bɔ mpan ho ban. 1sG think c law new DEF FUT-hit bat.PL self wall 'I think that the new law will protect bats.'

But Kofi disagrees:

b. Daabi. Asebo<sub>1</sub> na mmra foforo no bɛ-bo {\*\_1 / won<sub>1</sub> } no tiger.PL FOC law new DEF FUT-hit 3PL.ANIM.O ho ban. self wall

'No. The new law will protect TIGERS.'

▶ It is not true that focus-fronted [+N]-constituents consistently leave an (overt or covert) RP as opposed to [-N]-constituents, which leave a true gap.

► Rather, the interpretation/referentiality of the nominal seems to play a role.

(14) Updated table:

extractee:	$[+N]_{[+ref]}$	$[+N]_{[-ref]}$	$[-N]_{(VP/PP)}$
(c)overt RP	yes	no	no

### RPs and interpretation

► The influence of noun type on resumption is not surprising – various pronominal elements that double (A/A'-moved) nominals have been reported to be sensitive to the specificity/referentiality of their antecedent:

- pronominal clitics often trigger a specific interpretation of their associate and can only double referential expressions (Suñer 1988; Anagnostopoulou 2017; Baker and Kramer 2018)
- same effect in languages in which gaps and RPs can alternate in A'-dependencies (Doron 1982; Sharvit 1999; Bianchi 2004; Sichel 2014) – there is no free gap/RP alternation in AT, however
  - (15) Dani yimca et ha-iša [še hu mexapes \_\_\_ / ota] Dani find.FUT ACC the-woman C he seeks her
    "Dani will find the woman he is looking for." (Hebrew, Doron 1982) with RP: √ de re, \*de dicto with gap: √ de re, √ de dicto

### Source of the split between Ns

- What's the difference between XPs that require an RP under extraction and those that don't?
- Proposal: we can derive this from two indep.ly motivated assumptions
  - 1. structural difference between the noun types: DPs vs. NPs
  - 2. RPs are the spell-out of the D-head of a DP-copy whose NP-supart has been deleted (see Postal 1969; Elbourne 2001)

*background*: cross-linguistically, RPs are taken from the personal pronoun paradigm (Asudeh 2011, 2012; McCloskey 2017); pronouns are of category D (Postal 1969; Abney 1987); also holds for AT (Korsah 2017: 106)

hypothesis for AT: extractees that leave an RP have a D-layer (DPs), those that leave a gap lack a D-layer (NPs)

### RP-leaving XPs: D-shell present

Background:

- underlying type of Ns in AT = <e,t> (Malte Zimmermann, p.c.)
- \* Ns with other types are type-shifted (cf. Chierchia 1998)
- assumption: semantic complexity implies structural complexity

**RP-leaving XPs:** 

- definite Ns with an overt D: obviously have a D-shell
- proper names/kinds: are of type e, viz., derived; proper names are of category D (Longobardi 1994)
- specific indefinite Ns (bare nouns in AT): analyzed as containing a variable over choice functions (Reinhart 1997; Winter 1997; Kratzer 1998; Matthewson 1999) commonly assumed to be hosted in a D-head

### Gap-leaving XPs: no D-shell present

- \* VP, PP: no nominal layers in their extended projection
- ♦ predicate N: basic type  $\langle e,t \rangle$ , underived
- non-specific indefinites (bare nouns in AT): NPs rather than DPs (a.o. Higginbotham 1987); prominent in the literature on differential argument marking and on (pseudo) noun incorporation (see among others Massam 2001; Danon 2006; López 2012; Arkadiev and Testelets 2019)
- idiomatic N: potential problem possibly solution: the internal structure of idiomatic objects is opaque for the (post)syntax while the structure of the whole V+DP expression is transparent; partial deletion of the NP-subpart of the object is thus blocked, full deletion of the whole DP-object is possible

## Supporting evidence

Elements without a D-layer can also not be taken up by a discourse anaphoric pronoun.

(16) Idiomatic extractee

- a. ɔ-gya-a ne-nán wɔ dán nó mú. 3sg.s-leave-pst 3sg.poss-leg loc room def inside 'He defecated (lit.: left his leg) in the room.'
- b. \*Na ε-a-bu. pst 3.inan.s-pfv-break 'It was broken.'

(17) Non-specific indefinite extractee

a. Kofi kan kŕataá. Kofi read paper 'Kofi reads (a) newspaper.'
b. ?ε-yε aniká. 3.INAN.s-be interesting 'It is interesting.' (18) Predicative noun extractee

- a. Kofí yɛ tíkya.Kofi be teacher'Kofi is a teacher.'
- b. ?ε-yε adwúmá pa. 3.INAN.s-be work good It is a good job.

## Partial copy deletion

- pronouns spell-out D-heads whose NP-complement has been deleted (Postal 1969; Elbourne 2001; Jenks and Bi 2019)
- applied to RPs in A'-chains: a DP copy undergoes partial deletion (Pesetsky 1998; Landau 2006; van Urk 2018): only the NP-subpart is deleted, the remaining D-head is realized as a pronoun, see (19)
- gaps in A'-chains: application of full copy deletion (entire copy is deleted), see (20)

(19) partial copy deletion:  $\langle [_{DP} D NP ] \rangle \rightarrow \dots \langle [_{DP} \boxed{D} NP ] \rangle$   $\downarrow$  RP(20) full copy deletion:  $\langle [_{DP} D NP ] \rangle \rightarrow \dots \langle [_{DP} \overrightarrow{D} NP ] \rangle$   $\downarrow$   $\downarrow$  gap

## Application of copy deletion in AT

- full copy deletion applies to intermediate copies in a chain
- partial copy deletion applies to the lowest copy in chain
- (21) Partial deletion deletes the maximal projection of the lexical core of an XP (where lexical categories are N, V, P, A).

Result of partial copy deletion:

(22) DP-extractee:(24) VP-extractee: $[_{DP} D NP ] \rightarrow [_{DP} D NP ]$ RP $[_{VP} V XP ] \rightarrow [_{VP} V XP ]$ gap(23) NP-extractee:(25) PP-extractee: $[_{NP} N XP ] \rightarrow \dots [_{NP} N XP ]$ gap $[_{PP} P NP ] \rightarrow [_{PP} P NP ]$ gap

# An alternative: referentiality in syntax

- \* Alternative: referential Ns leave an RP, non-referential ones leave a gap
- problems:
  - incompatible with the T/Y-model (a semantic/pragmatic property influences PF), unless referentiality is encoded in the syntax (as a feature)
  - The RP/gap split does not perfectly track referentiality: no effect of D-linking (26-a, b) or quantifiers (every) (26-c)
    - (26) a. Hwáń<sub>1</sub> na Ámá hú-u {\*\_\_\_1 / nó<sub>1</sub>} nnera? who FOC Ama see-PST 3SG.O yesterday 'Who did Ama see yesterday?'
      - b. [Papa bɛn]<sub>1</sub> na Ámá hú-u {\*\_\_\_1 / nó<sub>1</sub>} nnera? man which FOC Ama see-PST 3sG.O yesterday 'Which man did Ama see yesterday?'
      - c. [ɔbáá bíárá]<sub>1</sub> na Kofí hú-u {\*\_\_\_1 / nó<sub>1</sub>} nnera.
         woman every FOC Kofi see-PST 3sG.O yesterday
         'It is every woman that Kofi saw yesterday.'
- no problem for the struct. account: The XPs in (26) have a D-shell.
  - wh-pronoun; which: usually identified as a D-element in the syntactic literature; semantics: argued to contain a (silent) D-layer in Rullmann and Beck (1998)
  - ▶ Qs are NP-external elements, often located in D (Abney 1987)

### Further predictions of the structural account

- other DPs should leave an RP under extraction, too
- $\clubsuit$  Korsah and Murphy (2019) argue that all CPs in AT have a D-shell  $\rightarrow$  focus fronting of CPs should result in an RP
- (27) Kofi nim [<sub>CP</sub> sε Ama kita bayerε].
   Kofi know сомр Ama hold yam
   'Kofi knows that Ama is holding a yam.'
- (28) [<sub>CP</sub> Sε Ama kita bayerε] na Kofi ním { \_\_\_\_CP / no<sub>CP</sub> }. COMP Ama hold yam FOC Kofi know 3sG.O 'That Ama is holding a yam, Kofi knows.'
  - ♦ Judgements: 2 gap, 1 RP, 6 ungrammatical with either option

## Further predictions of the structural account

- Unique definites, like 'the Pope', 'the president of Ghana', etc. may appear with an optionally overt determiner *no* in AT (see Bombi 2018).
- As bare nouns, they may lack a D-layer ightarrow should leave a gap
- However, these nouns (with or without D) obligatorily leave an RP:
- (29) <u>Context</u>: Yesterday was the Ghanaian national day and there were a lot of celebrations in Accra, which were visited by many famous people. Kofi and Ama were in Accra for the celebrations. When they go back to their village, they talk to their friend about how beautiful the celebration was (but they don't talk about who was there). The friend asks them whether they saw anyone famous. Kofi says:
  - a. Me-hu-u omanpanin (no). 1sg-see-pst president DEF

'I saw the president (of Ghana).'

But Ama corrects him:

b. Daabi. [Popu (no)]<sub>1</sub> na wo-hu-u { \_\_\_\_1 / no<sub>1</sub> }.
no pope def foc 2sg-see-pst 3sg.o
'No. You saw the Pope.'

## Further predictions of the structural account

Explanation:

- These nouns function as proper names when used in their bare form (Arkoh and Matthewson 2013; Bombi 2018; Bombi et al. 2019); proper names in AT cannot combine with an overt D
  - (30) a. Bombi et al. (2019: 187):

"It has to be noted that the examples appear to have lexical restrictions: they always involve nouns referring to human entities that potentially can be addressed with a title, e.g. president, teacher, pastor."

- b. Bombi (2018: 157):
  - "[...] the definite bare noun involves a covert type shift [...]"
- They should thus have the structure of proper names, viz., be DPs (with a silent D).

# Consequences and further issues

## Consequence: Avoid Gap

- our account: partial deletion applies obligatorily to the lowest copy
- usually: full deletion = default, partial deletion as a repair (a position needs to be pronouned); reasons:
  - special (non-structural) case (Pesetsky 1998)
  - particular phonological requirement (Landau 2006)
  - EPP (van Urk 2018)
  - $\Rightarrow$  Avoid Pronoun (Chomsky 1981, 1982; Montalbetti 1984)

Asante Twi:

- Partial deletion is the default:
- preference for RPs over gaps whenever the former are an option. Note: Gaps are allowed in this position.

 $\Rightarrow$  Avoid Pronoun cannot hold universally.

 $\$  Why should this be the case?  $\rightarrow$  cross-linguistic variation

## Resumption and islandhood (Korsah and Murphy 2020)

- ♦ recall KM's (2020) system:  $[\pm N]$  determines the gap/RP-choice
- Movement of nominal XPs (overt or null RP): is not island-sensitive
- (31) Animate object extraction from island leaving overt RP Hwáń<sub>1</sub> na wo-ním [<sub>DP</sub> onipa ko [<sub>CP</sub> áa ɔ-bóɔ nó<sub>1</sub> nó ]]? who Foc 2sg-know person the REL 3sg.s-hit.pst 3sg.o cD 'Who do you know the person who hit (him)?' (KM 2020)
- (32) Inanimate object extraction from island leaving surface gap
   Déén<sub>1</sub> na wo-ním [<sub>DP</sub> onipa ko [<sub>CP</sub> áa ɔ-tɔ́ɔé \_\_\_\_\_1 nó ]]?
   what Foc 2sG-know person the REL 3sG.s-buy.PST CD
   'What do you know the person who bought (it)?'
   (KM 2020)

# Resumption and islandhood (Korsah and Murphy 2020)

- Movement of non-nominal XPs (true gap): is island-sensitive
- (33) PP-extraction from island results in ungrammaticality
  - \*[PP Akonwá nó mú] na Ama ním [DP neá ntí [CP áa Kofi chair the in FOC Ama know thing because.of REL Kofi dá \_\_\_\_PP ]].

### lie

'Ama knows the reason why Kofi lies IN THE CHAIR.' (KM 2020)

- (34) VP-extraction from island results in ungrammaticality
  - \*[<sub>VP</sub> Dán sí]-é na mé-n-tée [<sub>DP</sub> atétésέm bíárá [<sub>CP</sub> house build-NMLZ FOC 1SG-NEG-hear.PST rumour.PL any
  - sέ Kofí á-yɔ́ \_\_\_\_vp ]].

that Kofi pFv-do

'I didn't hear any rumours that Kofi has вильт A HOUSE.' (Hein 2017)

### Resumption and islandhood

- \* KM (2020): island facts directly linked to resumption asymmetry
- RPs alleviate island violations in at least some languages (see e.g. McCloskey 1979 on Irish; Borer 1984 on Hebrew).
- $\, \diamond \,$  nominals always leave an RP  $\, \rightarrow \,$  no island violation
- $\diamondsuit$  non-nominals always leave a gap  $\rightarrow$  island violation
- implementation:
  - islands are PF-constraints (Merchant 2001, Boeckx 2012) that are satisfied as long as there is an RP in the root of the dependency
  - apparent gap with inanimates: PF-ordering where island-constraints are checked before deletion of inanimate RPs
- Expectation: noun types that do not leave RPs upon extraction (NPs) should respect island constraints

## Resumption and islandhood

Interestingly, even these types of nominals leave true gaps (like VPs, PPs), the dependencies are **not** island-sensitive (unlike VPs, PPs)!

- (35) a. Ne-nán<sub>1</sub> na m-á-té  $[_{DP}$  atésém bí  $[_{CP}$  sé ɔ-gyáe his-leg FOC 1SG.S-PFV-hear rumour a that 3SG.S-leave.PST  $\{\__1 / *no_1\}$  wɔ 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. Tíkya<sub>1</sub> na m-á-té [<sub>DP</sub> atésém nó [<sub>CP</sub> 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 year.'

c. Nnípa<sub>1</sub> na wo-té-e [<sub>DP</sub> atésém nó [<sub>CP</sub> sé Kofi súró {\_\_\_1 / person FOC 2sG.S-hear-PST rumour the that Kofi fear \*nó<sub>1</sub> / \*won<sub>1</sub> } páa ]].
 3SG.O 3PL.O really

'It's people that I have heard the rumour that Kofi really fears.'

# Resumption and Islandhood

Distribution of gup	s unu Ki s		
summary:	[+N] <sub>KM</sub>	$[+N]_{novel}$	VP/PP
(c)overt RP	yes	no	no
island-sensitive	no	no	yes

#### (36) Distribution of gaps and RPs

- KM's (2020) explanation of island-repair by resumption cannot account for the whole pattern.
- If it is not the dichotomy between gap and RP, what then causes island-sensitivity?
- \* So far, it seems as if the category of the lexical head of the (extended) projection ( $[\pm N]$ ) of the extractee matters (XPs with nominal core are not island-sensitive, those with a non-nominal core are) why should that be the case? We leave this to future research.

# Extension: Subject extraction

- Extracted nominal subjects are generally doubled by an RP (o-/o- for animates; e-/e- for inanimates).
  - (37) a. Kofí<sub>1</sub> na ɔ<sub>1</sub>-pé sika. Kofi ғос 3sg.s-like money 'lt's Kofi who likes money.'
    - b. Hwáń<sub>1</sub> na o<sub>1</sub>-hú-u obáá nó?
      who FOC 3sG.s-see-PST woman DEF
      'Who saw the woman?'
    - c. [əbáá nó]<sub>1</sub> na ə<sub>1</sub>-fá-a fie nó akyí. woman DEF FOC 3SG.S-pass-PST house DEF behind 'It's the woman who passed behind the house.'
  - (38) a. [εboɔ nó]<sub>1</sub> na ε<sub>1</sub>-bɔ́-ɔ mɛ́. stone DEF FOC 3.INAN.s-hit-PST 1SG.O 'The stone hit me.'
    - b.  $D\acute{e}\acute{n}_1$  na  $\epsilon_1$ -dá pónó nó só? what FOC 3.INAN.s-lie table DEF on 'What lies on the table?'

- \* The noun-types identified above (idiom parts, non-specific indefinites) are doubled by the inanimate marker  $e-/\epsilon$  even when they are animate (and we thus expect o-/2-).
- (39) a. Ne-hό<sub>1</sub> na ε<sub>1</sub>-dáné-eε.
  3sg.poss-self FOC EXPL-turn-PST
  Id.: 'It's her who became pregnant.' / Lit.: 'It's her self that turned.'
  b. Ne-hό<sub>1</sub> na ρ<sub>1</sub>-dáné-eε.
  - b. Ne-ho<sub>1</sub> na o<sub>1</sub>-dane-eε.
    3sg.poss-self FOC 3sg.s-turn-PST
    #ld.: 'lt's her who became pregnant.' / Lit.: 'lt's her self that turned.'
- (40) Q: Did your mother tell you that it's healthy to eat a lot of fruit?
  - a. Daabi. Doketá<sub>1</sub> na  $\varepsilon_1$ -ká kyéré- $\varepsilon$  mé s $\varepsilon$   $\varepsilon$ -y $\varepsilon$ . no doctor foc expl-say say-pst 1sg.0 comp 3.inan.s-be 'No. Some doctor told me that it is.'
  - b. Daabi. Doketá<sub>1</sub> na o<sub>1</sub>-ká kyéré-ε mé sε ε-yε.
     no doctor foc 3sg.s-say say-pst 1sg.o comp 3.inan.s-be
     'No. The/My doctor told me that it is.'

- Subjects show a similar split as objects
- Difference:
   objects: RP vs. gap alternation;
   subjects: RP vs. {e/ε} alternation
- Idea (in analogy to object extraction): these noun-types leave a gap which triggers insertion of an expletive.
- reason for expletive: phonological EPP? (position needs to be pronounced; cf. Landau 2006; van Urk 2018)
- ♦ Extracted VP-subjects also trigger presence of *e*-/ε-:
  - (41) [VP Dán sí]<sub>1</sub>-é na Kofi nim s $\epsilon \epsilon_1/^* \mathfrak{d}_1$ -y $\epsilon$  den. house build-NMLZ FOC Kofi know COMP EXPL/3SG.s-be difficult 'It is building a house that Kofi knows is difficult.'

- Some support for this comes from the fact that *e*-/ε- is the element used in expletive contexts.
- (42) a. ε-yε mé sε Kofí a-waré. EXPL-do/be 1sg.0 COMP Kofi PFV-marry 'It appears that Kofi is married.'
  - b. ε-n-yε m-máá nó na e-hú-u m-marimá nó. EXPL-NEG-do/be PL-woman DEF FOC EXPL-see-PST PL-man DEF 'It was no woman who saw the men.'
  - c. ε-wo sé obiáá túmí kyéré n-ádweén.
    EXPL-be COMP everyone can show 3sg.Poss-mind
    'It ought to be the case that everbody is able to express their opinion.' (Korsah 2016: 113)

# Optionality under local subject extraction

- Usually: e-/ɛ- for inanimate subjects, non-nominal subjects (e-/ɛ- = default); o-/ɔ- for animate Ns
- Optionality for animate N-subjects in local extraction
  - (43) Kofí na ο/ε-káń-n kŕataá nó.
     Kofi FOC 3sG.S/EXPL-read-PST book DEF 'It is Kofi who read the book.'
- No optionality in long-distance extraction
  - (44) Kofí na wo-nim sε ɔ/\*ε-káń-n kŕataá nó.
     Kofi FOC 2sG.s-know COMP 3sG.s/EXPL-read-PST book DEF 'It is Kofi who you know read the book.'
- unclear why the less specific/default element can be used for animate N-antecedents only under local subject extraction

# Conclusion

## Conclusions

(45) Distribution of gaps and RPs					
	summary:	[+N] <sub><i>KM</i></sub>	$[+N]_{novel}$	VP/PP	
	(c)overt RP	yes	no	no	
	island-sensitive	no	no	yes	

- Ā-extraction of nominal elements may result in either a gap or a pronoun, both are island-insensitive, *pace* claims in the literature
- The choice is dependent on the structural properties of the extracted nominal (DP vs. NP)
- A partial deletion account where RPs realize D-heads whose NP-complement has been deleted captures this split straightforwardly
- Consequence: There seems to be a preference for RPs over gaps when possible – conflict with economy principles like Avoid Pronoun.
- ► study of resumption: check more noun types!

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