

## Asymmetries in Asante Twi $\bar{A}$ -movement: on the role of noun type in resumption

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**Claim:** Based on a questionnaire study on Asante Twi (AT) ex-situ focus/questions, we argue that the choice between a gap vs. a resumptive pronoun (RP) at the bottom of an  $\bar{A}$ -movement-dependency is not due to the category (nominal vs. non-nominal) of the extracted XP, as suggested in the recent literature (Korsah & Murphy 2019, henceforth KM 2019). Rather, it is determined by the noun type of the extractee, which is related to referentiality: referential XPs leave a RP, while less/non-referential ones leave a gap. Moreover, we found that the same factor governs the choice between two RPs for 3sg animate subjects. We derive this effect from two independently motivated assumptions: (a) a structural difference between ref./non-ref. nouns (DPs vs. NPs), and (b) the idea that RPs are the spell-out of the D-head of a DP-copy whose NP-subpart has been deleted (partial copy deletion), cf. Postal (1969), Elbourne (2001). (b) is obligatory in AT: we find a preference for RPs over gaps whenever the former are an option; this provides evidence against a universal economy constraint that privileges gaps over RPs (i.e. Avoid Pronoun, Chomsky 198).

**Background:** KM (2019) provide a detailed study of focus/wh-ex-situ in AT. In this construction, the focused XP occurs in the clause-initial position and is followed by the focus marker *na*. KM (2019) argue that these dependencies involve movement. Crucially, there is an asymmetry in the choice of gap vs. RP at the bottom of these dependencies: As for objects, KM (2019) claim that the choice is determined by the category, viz., the  $[\pm N]$ ominal status of the extractee:  $[+N]$  arguments leave behind an RP in syntax, while  $[-N]$  extractees (VPs, PPs) leaves behind gaps, as illustrated in (1a-c) (examples based on those in KM 2019). Note that examples in which an inanimate  $[+N]$  object is extracted contain a clause-final adverb; this adverb blocks a general PF rule that deletes inanimate object pronouns in clause-final position in AT (Saah 1988, 1994, Korsah 2017).  $[-N]$ -gaps are true gaps: they remain even in the presence of such adverbs.

- (1) a. Hwáń<sub>1</sub> na Yaw pé { \*—<sub>1</sub> / no<sub>1</sub> }?    b. Déén<sub>1</sub> na Yaw pé { \*—<sub>1</sub> / no<sub>1</sub> }    anɔ́pá?  
    who    FOC Yaw like                      3SG.O    what    FOC Yaw like                      3SG.O  
    ‘Who does Yaw like?’  $[+N, anim.]$                       ‘What does Yaw like?’  $[+N, inanim.]$   
    c. [PP Akonwá nó mú ] na Kofí dá { —<sub>PP</sub> / \*hɔ } anɔ́pá    d. Kofí na ɔ́/ɛ-pé    sika  
        chair    the in    FOC Kofi lie                      there morning    Kofi FOC 3SG.S-like money  
    ‘Kofi is lying IN THE CHAIR in the morning.’  $[-N]$                       ‘It’s Kofi who likes money.’

There is another asymmetry in resumption in AT that arises under subject  $\bar{A}$ -extraction: Unlike objects,  $\bar{A}$ -moved subjects always leave an RP. Crucially, when a 3sg animate subject is  $\bar{A}$ -moved, there is a choice between two RPs:  $\text{ɔ}$  (3sg animate pronoun) and  $\text{ɛ}$  (3sg inanimate pronoun), see Korsah (2017) and (1d). What governs the choice between the two RPs is unclear so far.

**Observation/study:** An initial check with two native speakers revealed that the  $[\pm N]$ -status alone is not a sufficient predictor of RPs/gaps in AT since even  $[+N]$ -XPs have to leave gaps in certain contexts. For  $[+N]$ -extractees *noun type* seems to play a crucial role. To verify this, we conducted a questionnaire study (provided online via SoSci-survey). Informants were asked to choose between two versions of a sentence with (a) a gap or an RP (for objects) or (b) with the  $\text{ɔ}$  or  $\text{ɛ}$  RP (for subjects) that they found more natural in a given context (multiple choice possible). The test sentences contained the ex-situ focus construction and were varied according to the factors NOUN TYPE (different kinds of (in)definite Ns, possessed N, proper names, pronouns, generics, kinds, strong/weak Qs, (non-)D-linked wh-NPs, idioms, predicate Ns), GF (subject, object) and ANIMACY ((in)animate); we left out inanimate subjects since no RP-alternation arises there. The context was used to license the use of the particular noun type, based on insights from the previous literature on definiteness marking in AT (Arkoh 2011, Arkoh & Matthewson 2013, Bombi 2018, Bombi et al. 2019). The context was followed by a statement by a person A, containing the noun type/animacy/GF combination under investigation. A’s statement was then corrected by a person B. Person B’s correction statement was the test scenario (two versions, among which the participants had to choose). We created this set up because ex-situ focus is used to express contrast in AT. Filler sentences were included, too. So far 5 native speakers completed the questionnaire.

**Results:** Indeed, noun type was found to be decisive for the RP/gap choice with [+N]-extractees: less/non-referential Ns (e.g. non-specific indefinites, generics, predicate Ns, idiom parts) leave gaps (see (2)), while fully referential ones (e.g. names, pronouns, definite/specific indefinite Ns) leave RPs. Moreover, the same factor determines the choice between  $\circ/\varepsilon$  with  $\bar{A}$ -moved 3sg animate subjects: the optionality breaks down with those less/non-referential XPs that require gaps for [+N]-objects: they are only compatible with  $\varepsilon$  (resulting in an animacy mismatch on the RP).

- (2) a. Ne-nán<sub>1</sub> na  $\circ$ -gyáε {—<sub>1</sub> / \*nó<sub>1</sub>} [<sub>PP</sub> wɔ 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.’  
 b. Nípa<sub>1</sub> na Kofi súró {—<sub>1</sub> / \*nó<sub>1</sub>} páa. c. Tíkyani na Kofi bé-yé {—<sub>1</sub> / \*nó<sub>1</sub>} afe yí.  
 person FOC Kofi fear 3SG.O really teacher FOC Kofi FUT-be /3SG.O year this  
 ‘It’s people that Kofi really fears.’ ‘It is a teacher that Kofi will become this year.’

**Analysis:** The split between RP-leaving Ns and gap-leaving ones corresponds to an independent structural difference: the former have all been argued to be bigger than bare NPs (DPs, Stowell 1991): for example, proper names contain a D-layer (Longobardi 1994) as do definite Ns; specific indefinites contain a variable over choice functions hosted above NP (i.e. on D or in SpecD, Reinhart 1997, Winter 1997). The latter, like non-specific indefinites, predicative Ns and kinds, lack a D-layer (are NPs; cf. a.o. Higginbotham 1987, Rullmann & Beck 1998, Chierchia 1998, Lopez 2012). Coupled with the proposal that pronouns spell out a D-head with a silent complement (Postal 1969, Elbourne 2001) the pattern falls out naturally if deletion of movement copies affects the NP-part only (partial copy deletion, Landau 2006, van Urk 2018). When partial deletion applies to a copy of a referential XP [<sub>DP</sub> D NP], the remaining D-head is realized as an RP, *nó* for objects and  $\circ$  for subjects. When it applies to less/non-referential XPs [<sub>NP</sub> ...], nothing remains and a gap results in object position. As the subject position cannot contain a gap (due to EPP) an expletive  $\varepsilon$  (homophonous to the 3sg inanimate RP) is inserted. This is corroborated by the fact, that  $\varepsilon$  serves as an expletive in the respective contexts (Korsah 2016). The observed dependence of RP/gap on noun type thus provides indirect support for RPs as D-heads with silent NP.

**Consequences/discussion:** (i) That specificity plays a role for (optional) resumption has been observed previously in the literature for Hebrew and Italian (Bianchi 2004, Sichel 2014, Doron 1982, Sharvit 1999), where the presence/absence of an RP coincides with a specific/non-specific interpretation of an indefinite antecedent. However, these works exclusively looked at RPs in relative clauses (RCs). AT presents a first case for specificity effects with obligatory RPs in focus-/wh-dependencies in addition to RCs. Further, the effect in RCs was just noted for (in)definite nouns. No further tests investigating the behaviour of other noun types (names, pronouns, idiom parts, etc.) was done so far to verify the specificity effect attributed to RPs. (ii) Note also that partial NP-deletion must be the default/only option of copy deletion as evidenced by the ungrammaticality of gaps (= fully deleted copies) with full DP extractions. Given this, RPs appear as soon as there is a D-layer – a pattern that is in conflict with economy constraints such as AVOID PRONOUN (Chomsky 1981, 1982, Montalbetti 1984). (iii) It has been claimed that the insensitivity of argument extraction to island constraints in AT is due to it leaving a (silent) RP (Saah 1994, KM 2019). This entails that a noun type that is not able to leave a RP should also not be able to be extracted from an island. This expectation is not met (3).

- (3) Tíkyā<sub>1</sub> na m-á-té [<sub>DP</sub> atésém nó [<sub>CP</sub> sé Kofi bé-yé {—<sub>1</sub> / \*nó} afe yí ]].  
 teacher FOC 1SG-PERF-hear rumour the that Kofi FUT-be 3SG.O year this  
 ‘It is a teacher that I have heard the rumour that Kofi will become this year.’

The island-insensitivity of (3) cannot be attributed to an underlying RP that is deleted at PF because PF-deletion is suspended with clause-final adverbs. In the absence of a theory of islands that could independently explain the sensitivity we are forced to postulate at least two distinct types of  $\bar{A}$ -movement, one which respects island constraints and another one which does not.