Islands and resumption in Asante Twi

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1. Introduction

Since Ross (1967), it has been known that there is a relation between resumption and islands. For example, the adjunct island violation in (1a) is improved for many speakers if the dependency terminates in a resumptive pronoun (1b) (Ross 1967:433).

(1)   a.   *King Kong is a movie which$_1$ you'll laugh yourself sick [$_{CP}$ if you see ___$_1$]
       b.   King Kong is a movie which$_1$ you'll laugh yourself sick [$_{CP}$ if you see *it*$_1$]

The classical view is that there are essentially two ways to derive an $\overline{\text{A}}$-dependency: (i) by movement leaving a gap (2a), (ii) by base-generation of an operator binding a pronoun (2b).

(2)   a.   [$_{CP}$ DP$_1$ [$_{TP}$ ... [... ___$_1$]]]   *(Movement)*

       b.   [$_{CP}$ DP$_1$ [$_{TP}$ ... [... pro$_1$]]]   *(Base generation and binding)*

These two options show distinct properties in many languages. For example, Irish is a language in which gaps alternate with resumptives, however only gaps are island-insensitive (McCloskey 1979, 2002) (also see Hebrew; Borer 1984 and Tuki; Biloa 2013 for similar data):

(3)   *Gaps are island-sensitive in Irish* (McCloskey 1979:32):
       *Bean$_1$ nachN   bhfuil fhios agam [$_{CP}$ an   bpósfadh   duine   ar bith ___$_1$]
       woman NEG.COMP I know   INT.PRT would marry person any
       'a woman who I don't know if anyone would marry'

(4)   *Resumptives are not island-sensitive in Irish* (McCloskey 1979:33):
       Sin bean$_1$ nachN   bhfuil fhios agam [$_{CP}$ an   bpósfadh   duine   ar bith í$_1$]
       that woman NEG.COMP I know   INT.PRT would marry person any   her
       'That's a woman who I don't know if anyone would marry her'

Furthermore, gaps show weak crossover effects (5a), whereas resumptives do not (5b).

(5)   *No WCO with resumptives in Irish* (McCloskey 2011:110):
       a.   *[$_{DP}$ fear$_i$ [$_{CP}$ a   d'fhág [a$_i$ bhean] ___$_i$]]
            man   *a*^{L} left   his wife
            'the man$_i$ who his$_i$ wife left *e*$_i$'
       b.   [$_{DP}$ fear$_i$ [$_{CP}$ a   d'fhág [a$_i$ bhean] é$_i$]]
            man   *a*^{N} left   his wife   him
            'the man$_i$ who his$_i$ wife left him$_i$'

This suggests that, in Irish, gaps result from a movement derivation (2a), whereas resumptives are the result of base-generation and binding (2b). However, there are also languages in which resumptive pronouns have the same properties as gaps in Irish, and therefore involve a movement derivation (6).

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(6) [$_{CP}$ DP$_1$ [$_{TP}$ ... [... RP$_1$]]]   *(Movement)*

One such language is Vata, as described by Koopman & Sportiche (1982, 1986). In Vata, resumptives show gap-like behavior, i.e. island-sensitivity (7) and WCO effects (8).

(7) *Resumptives are island-sensitive in Vata* (Koopman & Sportiche 1986:370):
    *Álɔ́$_1$ ǹ   nylà nyni [$_{CP}$ nā   ɔ̀$_1$ dì mɛ́] là?
    who you wonder   COMP 3SG cut it WH
    'Who do you wonder whether he cut it?'

(8) *WCO with resumptives in Vata* (Koopman & Sportiche 1982:143):
    *Àlɔ́$_i$ [ɔ̀$_i$ nɔ́]   gùgù nā ɔ́$_i$ mlì là?
    who his mother think that 3SG left WH
    'Who$_i$ did his$_i$ mother think left?'

This presents us with a rather neat picture: island-insensitivity and lack of WCO/reconstruction together diagnose base-generation, whereas island-sensitivity coupled with WCO/reconstruction effects support a movement-based derivation of resumption (see section 4 for a more refined picture). What is then unexpected on this view is a language with island-insensitive resumption, in spite of otherwise robust evidence for movement. In this paper, we show that Asante Twi presents precisely such a language with mixed properties. We will argue that this enriches the typology of $\overline{\text{A}}$-resumptive dependencies by showing that it is possible to have a movement derivation such as (6) without concomitant island-effects.

2. Islands and resumption in Asante Twi

On the surface, Asante Twi seems to show a distinction between gaps and resumptives. Extraction of an animate DP triggers obligatory resumption in its base position (9b), whereas extraction of an inanimate DP leaves a gap (9c).[1]

(9) a. Yaw ma-a   Saka siká.
         Yaw give-PST Saka money
         'Yaw gave Saka money.'
    b. Hwáń$_1$ na Yaw má-a   {*___$_1$ / no$_1$ } sika?
        Who   FOC Yaw give-PST   3SG money
        'Who did Yaw give money to?'
    c. Déɛ́n$_1$ na Yaw má-a   Saka { ___$_1$ / *no$_1$ }?
        what FOC Yaw give-PST Saka   3SG
        'What did Yaw give to Saka?'

If these two options correspond to distinct derivations, i.e. movement vs. base-generation, we would expect the same difference in island-sensitivity that has been reported for languages like Irish. However, both $\overline{\text{A}}$-dependencies with both resumptives (10) and gaps (11) are robustly island-insensitive.

(10) *Island insensitivity with resumptives* (Saah 1994:172; Korsah 2017:117):
    a. Hwáń$_1$ na wo-hú-u   [$_{DP}$ onípá ko [$_{CP}$ áa ɔ-bɔ́-ɔ   **no$_1$** no]] ?
        who FOC 2SG-see-PST   person DEF   REL 3SG-hit-PST 3SG CD
        'Who did you see the person who hit him?'   *(CNP island)*
    b. Ám'má$_1$ na Kofí bísá-a [$_{CP}$ sɛ́ hwán na ɛ-dɔ́   **nó$_1$** nó]
        Amma FOC Kofi ask-PST   that who FOC 3SG-love 3SG CD
        'It is Ama who Kofi asked who loves her.'   *(wh-island)*
    c. Ám'má$_1$ na Yaw ré-sú   [$_{CP}$ ésánesɛ́ Kofi dɔ́ **nó$_1$** nó]
        Ama   FOC Yaw PROG-cry   because Kofi love 3SG CD
        'It is Ama that Yaw is crying because Kofi loves her.'   *(adjunct island)*

[1] Asante Twi is a dialect of Akan, spoken in Ghana. Abbreviations: CD - clausal determiner, DEF - definite determiner, FOC - focus, NEG - negation NMLZ - nominalizer PERF - perfective, POSS - possessive PST - past, PROG - progressive, REFL - reflexive REL - relativizer, WH - question particle YE - aspectual particle

d. Hwáń₁ na [$_{CP}$ sɛ́ Kofi dɔ́ **nó₁** nó] á-ma   abusuá mmienú nó á-bóḿ.
   Who FOC that K love 3SG CD PERF-give family two DEF PERF-reconcile
   'Who is [that Kofi loves her] has made the two families reconcile.'

(sentential subject)

(11) *Island insensitivity with gaps* (Saah 1994:172,197):

a. Déɛ́n na wo-níḿ [$_{DP}$ onipa ko [$_{CP}$ áa ɔ-tɔ́-ɔ-ɛ́   ___₁ nó]] ?
   who FOC 2SG-know   person DEF   REL 3SG-buy-PST-YE   CD
   'What do you know the person that bought?'   *(CNP island)*

b. Deɛn₁ na Mary bisa-a [$_{CP}$ sɛ́ hwán na ɔ-yɛ-e   ___₁ nó] ?
   what FOC Mary ask-PST   that who FOC 3SG-make-PST   CD
   'What did Mary ask who made?'   *(wh-island)*

c. Siká₁ na Yaw ré-sú   [$_{CP}$ ésánesɛ́ Kofi dɔ́ ___₁ nó]
   Ama FOC Yaw PROG-cry   because Kofi love   CD
   'It is money that Yaw is crying because Kofi loves.'   *(adjunct island)*

d. Déɛ́n₁ na [$_{CP}$ sɛ́ Kofi dɔ́ ___₁ nó] á-ma   abusuá mmienú nó á-bóḿ
   Ama FOC that K love   CD PERF-give family two DEF PERF-reconcile
   'What does [that Kofi loves] has made the two families reconcile.'

(sentential subject)

From this, we could simply conclude, as others have (e.g. Saah 1994; Saah & Goodluck 1995), that both types of Ā-dependency involve base-generation and binding of a (possibly null) pronoun. In what follows, however, we will show that this view is problematic in light of other evidence that resumption has properties of genuine Ā-movement. We argue that the lack of island-sensitivity in Asante Twi does therefore not necessarily diagnose a lack of movement. Instead, we argue that island-insensitive Ā-dependencies involve a movement derivation in syntax. The lack of island-insensitivity is the result of a PF process that turns the lowest movement copy into an 'intrusive' pronoun, which ameliorates island violations. The following section provides evidence in support of this view.

3. Resumptives are derived by movement

3.1. Nominal gaps are not gaps

The first argument is that the surface distinction between gaps and pronouns in (9) is actually spurious. Instead, we argue that both extraction of animate and inanimates results in resumption, however there is an independent process of pro-drop affecting inanimate pronouns in general (see Korsah 2017). Ordinarily, anaphoric pronouns (including resumptives) are obligatorily dropped in object position, however there are at least three contexts in which this does not apply: (i) clause-final adverbs, (ii) change-of-state verbs, (iii) secondary predicates. We see the same effect with resumptive pronouns. In each of these three contexts, while inanimate resumptives are normally dropped, they become obligatory in each of the contexts in (11):

(12) *Inanimate resumption with clause final adverb*:

a. Aduane nó₁ na Kofí pɛ́ (***no₁**)
   food   DEF FOC Kofi like 3SG
   'It's the food that Kofi likes.'

b. Aduane nó₁ na Kofí pɛ́ *(**no₁**) anɔpá
   food   DEF FOC Kofi like   3SG morning
   'It's the food that Kofi likes in the morning.'

(13) *Inanimate resumption with change-of-state verbs*:

a. Akonwa nó₁ na Kofi kŕá-a   (***no₁**).
   chair DEF FOC Kofi import-PST   3SG
   'It's the chair that Kofi imported.'

b. Akonwa nó₁ na Kofi bú-u   *(**no₁**).
   chair DEF FOC Kofi break-PST   3SG
   'It's the chair that Kofi broke.'

(14) *Inanimate resumption with secondary predication*:

    a.   Aduane nó₁ na   Kofí pɛ́ [$_{SC}$ *(**no₁**) hyehyééhyé]
           food   DEF FOC Kofi like   3SG very.hot
           'It's the food that Kofi likes very hot.'

    b.   [$_{DP}$ Aduane nó₁ [$_{CP}$ áa   Kofí pɛ́ *(**no₁**) hyehyééhyé nó]] nie
              food   DEF   REL Kofi like 3SG very.hot   CD   this
   'This is the food that Kofi likes very hot.'

This suggests that there is actually no deep distinction between nominal resumptives and gaps in the language. A̅-movement of nominals always results in syntactic resumption in the base position, however the phonological realization of this resumptive is sensitive to other factors. Since nominal extraction always results in resumption, this is what we assume is ultimately responsible for its island-insensitivity.

3.2. Islands reappear with true gaps

This conclusion predicts that the availability of a resumptive should correlate with sensitivity to islands. Indeed, this is what we seem to find with extraction of non-nominal categories. For example, extraction of a PP does not trigger resumption (15b) (even when obligatory *pro*-drop contexts are controlled for).

(15) *Extracted PPs lack resumptives*:

    a.   Kofí da [$_{PP}$ akonwá nó mú]
           Kofi lie   chair   DEF in
           'Kofi is lying in the chair.'

    b.   [$_{PP}$ Akonwá nó mú] na   Kofí dá { ___$_{PP}$ / *hɔ   }
             chair   DEF in FOC Kofi lie   there
           'Kofi is lying IN THE CHAIR.'

Furthermore, PPs can also undergo long-distance A̅-movement across a finite clause boundary (16).
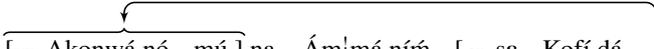
(16)   [$_{VP}$ Akonwá nó mú] na   Ám˩má nı́ḿ [$_{CP}$ sɛ   Kofí dá ___$_{PP}$]]
           chair   DEF in FOC Ama know   that Kofi lie
          'Ama knows that Kofi lies IN THE CHAIR.'

Strikingly, however, PP extraction differs from DP extraction in that it is sensitive to islands:

(17) *PP extraction from Complex NP island*:

    a.   Ám˩má nim [$_{DP}$ neá ńtí   [$_{CP}$ áa Kofi dá [$_{PP}$ akonwá nó mú]]]
           Ama know   thing because.of REL Kofi lie   chair   DEF in
           'Ama knows the reason why Kofi lies in the chair.'

    b.   *[$_{PP}$ Akonwá nó mú] na Ám˩má nı́ḿ [$_{DP}$ neá ńtí   [$_{CP}$ áa   Kofi dá ___$_{PP}$]]
             chair   DEF in FOC Ama know   thing because   REL Kofi lie
          'Ama knows the reason why Kofi lies IN THE CHAIR.'

(18) *PP extraction from adjunct island*:

    a.   Amma ání á-gye   [$_{CP}$ ɛsánsɛ́ Kofí da [$_{PP}$ akonwá nó mú]]
           Ama eye PERF-collect   because Kofi lie   chair   DEF in
           'Ama is happy because Kofi is lying in the chair.'

    b.   *[$_{PP}$ Akonwá nó mú] na Ám˩má ání á-gye   [$_{CP}$ ɛsánsɛ́ Kofí dá ___$_{PP}$]
             chair   DEF in FOC Ama eye PERF-get   because Kofi lie
          'Ama is happy because Kofi is lying IN THE CHAIR.'

The same argument can be made from VP fronting. In Asante Twi, VPs can be long A̅-moved (19).

(19) [_{VP} dán sí]-έ   na Ám[!]má ká-a   [_{CP} sέ Kofí á-yɔ́   ____{VP}]

       house build-NMLZ FOC Ama   say-PST   that Kofi PERF-do

       'Ama said that Kofi BUILT A HOUSE (not bought a car)'   (Hein 2017:9)

There are no obvious pro-forms for VPs.[2] As expected, movement of VPs is then also island-sensitive:

(20) *Island sensitivity of VP movement* (Hein 2017:10):

    a. ?*[_{VP} dán sí]-έ   na mé-ń-té-e   [_{DP} atétésέm bíárá [_{CP} sέ Kofí á-yɔ́

        house build-NMLZ FOC 1SG-NEG-hear-PST   rumour.PL any   that Kofi PERF-do

        ____{VP}]]

        'I didn't hear any rumours that Kofi has BUILT A HOUSE.'   (*Complex NP island*)

    b. ?*[_{VP} dán sí]-έ   na Á[!]má bísá-a [_{CP} sέ dabέn na Kofí yɔ́-ɔ-έ   ____{VP}]

        house build-NMLZ FOC Ama ask-PST   that when FOC Kofi do-PST-YE

        'Ama asked when Kofi BUILT A HOUSE.'   (*wh-island*)

These data show that there is a link between the availability of resumption and island-sensitivity. If resumption is obligatory (as with nominals), then island effects are obviated, whereas extraction of categories lacking resumptives is still constrained by islands.

3.3. Evidence for successive-cyclicity in Asante Twi

As pointed out by Salzmann (2017:192ff.), cyclicity effects can provide a potentially important argument for a movement derivation of resumption. One of the strongest pieces of evidence for successive-cyclic movement involves morphological reflexes of movement (see e.g. Georgi 2017). The most well-known case is Irish, where complementizers are argued to have different forms (*go* vs. a^L) depending on whether or not movement takes place in that clause (McCloskey 2002). As can be seen in (5), resumptive dependencies differ from gap dependencies in having yet another complementizer a^N, further suggesting that they involve different derivations. On the other hand, some languages such as Welsh (Rouveret 2008) and Scottish Gaelic (Adger & Ramchand 2005) have been claimed to show movement-like reflexes with resumptive Ā-dependencies, however, this is not too surprising since they are island-sensitive in the languages in question. What would be most interesting would be to find movement reflexes with island-insensitive resumptive dependencies.

This is what we find in Asante Twi. Korsah & Murphy (2016, 2017) argue that there is a tonal alternation in Asante Twi that tracks successive-cyclic movement, where low tones on the verb become high when crossed by an Ā-dependency (21). Korsah & Murphy (2016, 2017) analyze this as a reflex of successive-cyclic movement through vP.

(21) *Overwriting affects all verbs in a long-distance dependency* (Korsah & Murphy 2017):

    a. [_{CP} Kofí **kaé**   [_{CP} sɛ Ám[!]má **kita** bayéré]]

        Kofi remember   that Ama   hold yam

        'Kofi remembers that Ama is holding a yam.'

    b. [_{CP} Déέn₁ na Kofí **káé**   [_{CP} sɛ Ám[!]má **kítá** ___₁]] ?

        what FOC Kofi remember   that Ama   hold

        'What does Kofi remember that Ama is holding?'

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[2] Note that verb doubling is reported by Hein (2017) to be island-sensitive (i) (despite being unbounded). This suggests that one cannot conceive of verb doubling as actual resumption.

(i) *Verb doubling is not possible inside islands* (Hein 2017:10):

    *Sí-(é)   na mé-ń-té-e   [_{DP} atétésέm bíárá [_{CP} sέ Kofí á-**si**   dán]]

    build-NMLZ FOC 1SG-NEG-hear-PST   rumour.PL any   COMP Kofi PERF-build house

    'I didn't hear any rumours that Kofi has BUILT a house.'

Importantly, we also find this effect with extraction terminating in a resumptive pronoun (22).[3]

(22) *Resumption triggers tonal reflex* (Korsah & Murphy 2017):
 a. [CP Kwame **nim** [CP sέ Ám˩má **hu**-u Efua]]]
  Kwame knows that Ama see-PST Efua
  'Kwame knows that Ama saw Efua.'

 b. [CP Hwáń₁ na Kwame **ním

** [CP sε Ám˩má **hú**-u no₁]]]
  who FOC Kwame knows that Ama see-PST 3SG
  'Who does Kwame know that Ama saw?'

Thus, despite the general island-insensitivity of Asante Twi nominal extraction, we still find what seems to be evidence of successive-cyclic movement.[4] Descriptively, this presents us with apparently conflicting evidence for movement (island-sensitivity vs. movement reflexes). There is still the possibility that resumptive dependencies employ genuine $\overline{\text{A}}$-movement, whereas those reaching into an island employ base-generation (Aoun et al. 2001). We would then expect to find tonal overwriting in non-island contexts. As (23) shows, this cyclicity effect is still found with resumptive dependencies into an island.

(23) *Reflex of succesive-cyclicity with extraction from island*:
 a. Me-hu-u [DP onipa ko [CP áa ɔ-**bɔ**-ɔ Kofí nó]]
  1SG-see-PST person DEF REL 3SG-hit-PST 3SG CD
  'I saw the person who hit Kofi'

 b. Hwáń₁ na wo-**hú**-u [DP onípá ko [CP áa ɔ-**bɔ́**-ɔ nó₁ nó]] ?
  who FOC 2SG-see-PST person DEF REL 3SG-hit-PST 3SG CD
  'Who did you see the person who hit?' (*CNP island*)

 c. Yaw **re-su** [CP ésánesέ Kofi **dɔ** Ám˩má nó]
  Yaw PROG-cry because Kofi love 3SG CD
  'It is Ama that Yaw is crying because Kofi loves her.'

 d. Ám˩má₁ na Yaw **ré-sú** [CP ésánesέ Kofi **dɔ́** nó₁ nó]
  Ama FOC Yaw PROG-cry because Kofi love 3SG CD
  'It is Ama that Yaw is crying because Kofi loves her.' (*adjunct island*)

3.4. Reconstruction effects with resumption

Another argument for a movement derivation of resumptives comes from reconstruction effects at the position of the resumptive. Such effects have been reported for languages with island-sensitive resumption (but cf. Adger & Ramchand 2005). However, island-insensitive resumption in Asante Twi also shows a whole host of reconstruction effects.

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[3] In light of what was shown in section 3.1, this is perhaps not all too surprising if there is no real distinction between gaps and resumptives with nominal extraction.

[4] Of course, one could still argue that this reflex is the result of successive binding dependencies where the reflex tracks external merge of an operator, as McCloskey (2002) argued for Irish. One reason to reject this view is that we may expect to find 'mixed chains' of the kind in (ia) (McCloskey 2002:190). Here, it is possible to have the reflex in the top clause only and not in intermediate positions (ib). No such constructions are possible in Asante Twi.

(i) a. [DP fir [CP **ar** shíl Aturnae an Stáit [CP **go** rabh *siad* díleas do'n Rí]]]
   men *a*[N] thought Attorney the State *go* were they loyal to.the king
   'men that the Attorney General thought they were loyal to the king'

 b. [DP … [CP *pro*ᵢ [C′ *a*[N] [TP … [CP *go* [TP … RPᵢ …]]]]]]

3.4.1. Reconstruction for binding

The first set of reconstruction effects pertains to binding phenomena. As in English, the reflexive *ne hó* is subject to Condition A and requires a local c-commanding antecedent (24a). When this phrase is $\overline{\text{A}}$-moved leaving a resumptive behind, co-reference with the embedded subject is still possible (24b).

(24)   *Reconstruction for Condition A*:

    a. Kofí$_i$ pɛ   [$_{CP}$ sɛ́ Ám$^!$má$_j$ pírá [$_{DP}$ ne hó$_{j/*i}$]]
        Kofi wants   that Ama hurt   3SG REFL
        'Kofi$_i$ wants Ama$_j$ to hurt (her)self$_{j/*i}$'

    b. [$_{DP}$ Ne hó$_{j/*i}$]$_1$ na Kofí$_i$ pɛ́   [$_{CP}$ sɛ Ám$^!$má$_j$ pírá **no**$_1$ seesíá]
           3SG REFL FOC Kofi wants   that Ama   hurt 3SG now
        'It is (her)self$_i$ that Kofi wants Ama$_i$ to hurt now.'

Condition C also holds, meaning that a pronoun cannot c-command a co-referent R-expression (25a). Furthermore, even if the DP is moved (again leaving a resumptive), the Condition C effect pertains (25b), suggesting that there is reconstruction to the position occupied by the resumptive.

(25)   *Reconstruction for Condition C*:

    a. *Ɔ$_i$-pɛ   [$_{DP}$ Kofí$_i$ ḿfónírí yí]
        3SG-like   Kofi picture this
        'He likes the picture of Kofi'

    b. *[$_{DP}$ Kofí$_i$ ḿfónírí yí] na Ám$^!$má níḿ [$_{CP}$ sɛ ɔ$_i$-pɛ́   **no**$_1$ paa]
           Kofi picture this FOC Ama think   that 3SG-like 3SG really
        'It's this picture of Kofi that Ama thinks he really likes'

Finally, a bound variable must be c-commanded by an operator, such as a quantifier (26a). Even if the phrase containing the variable is moved, the bound reading is still possible (26b).

(26)   *Reconstruction for variable binding*:

    a. *Abán*   *bíárá$_i$* dwéne [$_{DP}$ *ne$_i$*-máńfó-ɔ́   yíe-yɔ́ hó] dáá
        government every think   POSS-people-PL well-be self every day
        'Every$_i$ government thinks about the well-being of its$_i$ people every day.'

    b. [$_{DP}$ *ne$_i$*-máńfó-ɔ́   yíe-yɔ́ hó]$_1$ na *abán*   *bíárá$_i$* dwéné **no**$_1$ dáá
           POSS-people-PL well-be self FOC government every think 3SG every day
        'It's the well-being of its$_i$ people that every$_i$ government thinks about every day.'

Again, this indicates reconstruction of the moved phrase to the position of the resumptive (also see Aoun & Benmamoun 1998:581 for similar data).

3.4.2. Weak Crossover

We also find WCO effects in Asante Twi relative to the position of the resumptive (27b).

(27)   a. Hwáń$_i$ na ɔ$_i$-tán   né$_i$-núá   (nó) ?
        who   FOC 3SG-hate POSS.3SG-brother CD
        'Who hates his brother?'

    b. ??Hwáń$_i$ na né$_i$-núá   tán **nó**$_i$ (nó) ?
        who   FOC POSS.3SG-brother hate 3SG CD
        'Who$_i$ does his$_i$ brother hate?'

This is particularly revealing, since WCO effects are typically found for languages with island-sensitive resumption, such as Vata (8), and absent with base-generation, as in Irish (5).

3.4.3. Scope reconstruction

Another diagnostic involves reconstruction of the wh-phrase to a position below a universal quantifier to derive wide scope (e.g. Agüero-Bautista 2001; Panitz 2014).

(28) *Scope reconstruction to resumptive in Spanish* (Agüero-Bautista 2001:172):
A quién$_1$ dijo cada testigo [$_{CP}$ que María **le**$_1$ quería pegar] ?
A whom said each witness that Maria him wanted hit.INF
'Who did each witness say that Maria wanted to hit? ($\forall \succ wh, wh \succ \forall$)

In Asante Twi, we also find that a resumptive dependency still permits wide-scope of the universal quantifier, i.e. a pair-list reaing (29).

(29) Hwáń$_1$ na Kofí ká-a [$_{CP}$ sɛ́ abɔfrá bíárá dɔ́ **no**$_1$] ?
who FOC Kofi say-PST that child every love 3SG
'Who did Kofi say that every child loves?' ($\forall \succ wh, wh \succ \forall$)

3.4.4. Idiom reconstruction

Idiomatic interpretation is often assumed to require adjacency at LF (e.g. Chomsky 1993:38f.). This means that extracted idiom chunks must reconstruct in order to maintain a non-literal interpretation (30).

(30) a. [$_{DP}$ the headway$_1$ [$_{CP}$ that we made ___$_1$]] was satisfactory (Schachter 1973:31)
b. Those strings$_1$, he wouldn't pull ___$_1$ for you (Gazdar et al. 1985:238)

We find evidence of idiom reconstruction at the resumption site in Asante Twi. For example, the expression *to ndwóm* ('throw song') has a non-compositional reading 'to sing' (31a). If part of this idiom chunk is extracted leaving a resumptive behind, the idiomatic meaning is still maintained (31b).

(31) *Extracted idiom chunks reconstruct*:
a. Kofí to-o ndwóm ɛ́nóra
Kofi throw-PST song yesterday
'Kofi sang yesterday'
b. Ndwóm$_1$ na Kofí tó-o **no**$_1$ ɛ́nóra
song FOC Kofi throw-PST 3SG yesterday
'It was SINGING that Kofi did yesterday.'

Assuming that reconstruction is a necessary condition for the idiomatic reading, there must again be reconstruction to the position of the resumptive pronoun.

3.4.5. Reconstruction into islands

Aoun et al. (2001) argue that, in Lebanese Arabic, a base-generation derivation of resumption is employed only when movement is not possible (i.e. out of islands) and this goes hand-in-hand with the lack of reconstruction. We can rule out such a possibility for Asante Twi since we still find reconstruction effects with resumptives inside islands. This is shown for Condition C reconstruction in (32) and (33).

(32) *Condition C reconstruction into Complex NP island*:
[$_{DP}$ Ám$^!$má$_i$ adúané nó]$_1$ na m-á-té [$_{DP}$ atetésɛ́m bí [$_{CP}$ sɛ́ ɔ́$_{*i/j}$-dí **no**$_1$
Amma food DEF FOC 1SG-PERF-hear rumour INDEF that 3SG.NOM-eat 3SG
dáá]]
every day
'It's Ama's$_i$ food that I have heard a rumour that s/he$_{*i/j}$ eats every day.

(33) *Condition C reconstruction into adjunct island*:
[$_{DP}$ Ám$^!$má$_i$ adúané nó]$_1$ na Yaw ré-sú [$_{CP}$ ésánesɛ́ ɔ́$_{*i/j}$-dí **no**$_1$ dáá]
Amma food DEF FOC Yaw PROG-eat because 3SG.NOM-eat 3SG every day
'It's Ama's$_i$ food that Yaw is crying because s/he$_{*i/j}$ eats every day.'

4. Consequences for the theory of resumption

We have seen that resumptive $\bar{\text{A}}$-dependencies in Asante Twi have a surprising profile. On the one hand, they are robustly island-insensitive, whereas on the other, they show hallmarks of movement such as cyclicity effects, weak crossover and a whole host of reconstruction effects. These two diagnostics seem to conflict: on the one hand, island-insensitivity suggests a lack of movement, whereas the other strongly point towards a movement derivation. This suggests that the simple picture presented by languages such as Irish and Vata, where island-sensitivity is a reliable diagnostic for movement or base-generation is actually more complicated. This has already been noted for resumption in languages such as Scottish Gaelic (Adger & Ramchand 2005), Welsh (Rouveret 2008) and Mandarin Chinese (Pan 2016), which is sensitive to (strong) islands, but nevertheless does not show typical properties of $\bar{\text{A}}$-movement such as cyclicity or reconstruction effects. As (34) shows, this type of language, which we call Type III, involves a mismatch between island-sensitivity and other potential diagnostics for movement. Asante Twi presents a mismatch in the other direction. While (nominal) resumption is island-insensitive, it shows seemingly unequivocal evidence for $\bar{\text{A}}$-movement.[5] This finding therefore enriches the typology of resumptive $\bar{\text{A}}$-dependencies in (34) to include yet another case where island-sensitivity mismatches with other diagnostics for movement, albeit with the mismatch going in the opposite direction.

(34)

	Island-sensitive?	*Evidence for $\bar{\text{A}}$-movement?*	
Type I	✗	✗	(e.g. Irish)
Type II	✓	✓	(e.g. Vata)
Type III	✓	✗	(e.g. Scottish Gaelic, Welsh)
Type IV	✗	✓	(e.g. Asante Twi)

What this tells us is that the simple picture presented by languages such as Irish and Vata, where island-sensitivity straightforwardly diagnoses either movement or base-generation, cannot be taken for granted. The reality is in fact often more complicated. For Type III languages, it has been proposed that sensitivity to islands, in the absence of other evidence for movement, can be attributed to something independent of movement (i.e. locality constraints imposed on Agree). For Asante Twi, we can take a similar approach. In the face of independent converging evidence for movement, the island-insensitivity of resumptive dependencies must result from something other than the lack of $\bar{\text{A}}$-movement. Concretely, we propose that it is resumption that is directly responsible for island-insensitivity. A compelling argument for this was shown in section 3.2, where island restrictions reappear when the extracted category independently lacks a resumptive. We therefore suggest that Asante Twi has a movement derivation of resumption in the syntax, however the lowest copy of a moved item is converted into a pronoun at PF by a process of *Pronoun Conversion* (35) (analogous to *Trace Conversion* at LF; cf. Fox 1999).

(35) *Pronoun Conversion*:
$[_{CP}$ DP$_1$ $[_{TP}$ ... $[$ ... $\langle$DP$\rangle_1$ $]]] \Rightarrow [_{CP}$ DP$_1$ $[_{TP}$ ... $[$ ... pro$_1$ $]]]$

We argue that this process has the effect of 'intrusive' or 'facilitating' resumptives (cf. Sells 1984; Erteschik-Shir 1992), which can obviate island effects. Since there is a movement derivation in the syntax and a full DP copy in the base-position at LF, we straightforwardly account for both cyclicity and reconstruction effects. One may wonder why this is not also the case for Type II languages such as Vata with island-sensitivity and positive movement diagnostics. One way of accounting for this is the timing of PF operations: In Asante Twi, Pronoun Conversion would apply prior to the evaluation of islands at PF, thereby bleeding island-induced ungrammaticality (much in the same way as ellipsis; cf. Merchant 2001). If PC took place after island violations were checked, then resumption would be island-sensitive, since PC would apply too late. In sum, while the status of intrusive resumption has proven somewhat controversial for English (e.g. Heestand et al. 2011; Beltrama & Xiang 2016), a deep connection between resumption and island-obviation seems to be empirically well-motivated for Asante Twi.

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[5] It is important to mention that Guilliot & Malkawi (2006) reported a similar mismatch for Jordanian Arabic, where reconstruction effects into islands were found with otherwise island-insensitive resumption. This led them to propose an account where two full copies are base-generated with deletion under identity in the lower one. Korsah & Murphy (2017) argue against this analysis for Asante Twi, based on an independently-motivated haplology diagnostic.

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