# The absence of islands in Akan: The role of resumption

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**Abstract**

The precise nature of Ā-dependencies that terminate in a pronoun has been a long-standing subject of cross-linguistic research. Traditionally, it has been assumed that there are two derivational strategies to form resumptive Ā-dependencies: movement and base generation. Island configurations have played a crucial role in determining which derivational strategy is employed in a given language, as islands effects are expected to arise from dependencies created by movement but not by base generation. The body of cross-linguistic research on resumption has shown that the situation is more complicated once other diagnostics are taken into account, as languages can have mixed resumption profiles. In this paper, we discuss resumption in Ā-dependencies in Akan, a Kwa language spoken in Ghana, and illustrate that, despite their general insensitivity to islands, resumptive dependencies also show many classic hallmarks of movement. We situate these findings in the broader context of a general understanding of resumption cross-linguistically and discuss how the conflicting diagnostics might be reconciled with a movement-based analysis.

## 1 Introduction

Since their discovery by Ross (1967), syntactic islands have played a central role in research on long-distance dependencies in natural language. Whether or not an island boundary may intervene between the head and tail of a dependency is arguably the main diagnostic used to argue that a particular dependency involves movement. While this is most often applied to filler-gap dependencies, as research on long-distance dependencies has taken data from a wider range of languages into account, it became clear that many languages have productive strategies for forming long-distance dependencies that terminate in a pronoun rather than a gap (e.g. McCloskey 1979; Borer 1984; Koopman & Sportiche 1986). For this reason, diagnostics such as island-sensitivity are crucial in determining the nature of a resumptive dependencies, as it is not *a priori* clear whether they involve movement or base generation. While it initially appeared that there may be a neat dichotomy between resumptive dependencies created by movement and those created by base generation and binding, subsequent research has shown that the cross-linguistic picture is, in fact, far more complicated and that the presence or absence of island effects with resumption does not always neatly align with other diagnostics for movement (see e.g. Salzmann 2017*b* and Hewett 2023). Reconciling these conflicting diagnostics is the current major challenge facing analyses of resumptive Ā-dependencies.

In this paper, we will discuss how Akan, a Kwa language spoken in Ghana, fits into the empirical landscape of resumption. Building on previous work (Korsah & Murphy 2020), we argue that Akan has a rather unique profile among languages employing a resumptive strategy to form Ā-dependencies. Despite the general absence of island effects with resumption in Akan,

we will show that there are several other diagnostics that have been traditionally assumed to point to a movement derivation of resumption, such as crossover effects, cyclicity effects, reconstruction effects, in addition to some language-specific arguments. In what follows, we aim to provide a detailed picture of the empirical situation in Akan and discuss its broader theoretical consequences for the theory of resumption and island-sensitivity. While several of the discussed diagnostics can also be accommodated under a non-movement analysis, we will show that alternative approaches such as base generation or mixed chains ultimately struggle to capture the full range of data, cyclicity effects in particular. We ultimately conclude that a movement-based derivation still offers the most promising solution to the puzzling resumption profile of Akan, however the exact way in which resumption obviates island effects in the language is still an unresolved issue. We will discuss two potential explanations for this involving island repair by resumption (Korsah & Murphy 2020) and category-sensitive island-sensitivity (Hein & Georgi 2021) and the outstanding challenges facing each approach.

## 2 Islands and resumption in A-bar dependencies

Much of the early generative work on syntactic displacement focused on the properties of filler-gap dependencies and the restrictions imposed on them (e.g. Ross 1967). However, the idea that a long-distance dependency could also terminate in a pronoun was discussed in Ross' seminal work. While gapped dependencies are subject to the island constraints identified by Ross, such as the adjunct island in (1a), Ross (1967: 433) observed that a resumptive pronoun at the tail of the dependency appears to avoid an island violation (1b).

(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*$_1$ ]

A tempting conclusion to draw from (1) would be that island violations diagnose a movement derivation in the syntax. This would imply that the gapped dependency in (1a) involves movement, while the resumptive dependency in (1b) does not. Consequently, there would therefore be two different grammatical strategies available for forming an Ā-dependency such as the one found in relative clauses: genuine syntactic movement versus base generation and binding of a pronoun, as schematized in (2).

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

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

Subsequent work on the kind of resumption that Ross identified for English has concluded that resumption in English does not represent a genuine grammatical option in the language, but instead is a case of 'intrusive resumption', e.g. an extra-grammatical repair strategy used to facilitate processing (Sells 1984; Shlonsky 1992; Beltrama & Xiang 2016; however see Kroch 1981; Ackerman et al. 2018). Cross-linguistic research, however, has uncovered that many languages do indeed have genuine grammatical strategies for forming resumptive dependencies. In fact, this option sometimes co-exists alongside the more familiar gap-formation strategy.

One such language is Irish. McCloskey (1979; 2002) shows that Ā-constructions in Irish, such as those found in relative clauses, may terminate either in a gap (3) or a resumptive (4). Importantly, only gaps are island-sensitive, therefore conforming to the aforementioned hypothesis that gapped dependencies involve movement, while resumptive dependencies involve base generation (also see Borer 1984 on Hebrew).

(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)
bean$_1$ nachN bhfuil fhios agam [$_{CP}$ an bpósfadh duine ar bith **í**$_1$ ]
woman NEG.COMP I know INT.PRT would marry person any her
'a woman who I don't know if anyone would marry her'

This dichotomy is further supported by the observation that other diagnostics for movement show the same distinction. So-called 'weak crossover' (WCO) effects, in which a pronoun bound by the moved phrase is 'crossed' by a dependency (i.e. is not c-commanded by the tail of the dependency), are often taken to be a hallmark of (Ā-)movement (see section 3.4 for further discussion). In Irish, only gapped Ā-constructions show WCO effects (5).

(5) *No WCO with resumptives in Irish* (McCloskey 2011: 110)
a. *[$_{DP}$ fear$_1$ [$_{CP}$ a d'fhág [a$_1$ bhean] ⸺$_1$ ]]
man *a*$^{L}$ left his wife
'the man who his wife left'
b. [$_{DP}$ fear$_1$ [$_{CP}$ a d'fhág [a$_1$ bhean] **é**$_1$ ]]
man *a*$^{N}$ left his wife him
'the man who his wife left him'

The consistent patterning together of (in)sensitivity to islands and other movement diagnostics has been observed in other languages, too. In Vata, a Kru language spoken in Côte d'Ivoire, Koopman & Sportiche (1982; 1986) illustrate that resumptive dependencies show both sensitivity to islands (6) and weak crossover effects (7).

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

(7) *WCO with resumptives in Vata* (Koopman & Sportiche 1982: 143)
*Àlɔ́$_1$ [ɔ̀$_1$ nɔ́] gùgù [$_{CP}$ nā ɔ̀$_1$ mlì ] lá?
who his mother think COMP 3SG left WH
'Who did his mother think left?'

Given this state of affairs, one might also expect to find other putative movement diagnostics patterning together with island sensitivity. Various kinds of reconstruction effects may be taken as evidence for a movement derivation since, taken at face value, a movement-generated resumptive implies that the resumed phrase is in some sense syntactically represented at the tail of the dependency, while a simple base generation and binding strategy may not.[1]

With this in mind, we find some supporting evidence of this correlation from *deto*-relative clauses in Bulgarian. As Krapova (2010) shows, movement gaps are not possible inside Complex NP islands, while overt resumptive pronouns are (8).

[1]However, we will see that in practice this is not necessarily the case, see sections 3.3, 4.1.

(8) *Resumptives are not island-sensitive in Bulgarian* deto*-relatives* (Krapova 2010: 1250)
Tova e [$_{DP}$ edin film$_1$ [$_{CP}$ deto [$_{DP}$ vsicki [$_{CP}$ koito sa **go**$_1$ / *__$_1$ gledali ]]
this is a film that all who.3PL are it.CL.ACC seen
mnogo go xaresvat ]]
a.lot it.CL.ACC like.3PL
'This is a film that all those who have seen it like it a lot.'

In addition to not exhibiting WCO effects (Krapova 2010: 1250, fn.16), resumptive dependences in Bulgarian *deto*-relatives fail to exhibit another apparent effect of movement, namely allowing for reconstruction to the position of the resumptive. Since the head of the relative clause contains a pronoun bound by a quantifier inside the relative clause, it would have to reconstruct to its base position for purposes of interpretation. As (9) shows, this is possible with a gap, but not with a resumptive pronoun.

(9) *No reconstruction to position of resumptive* (Krapova 2010: 1247–1248)
[$_{DP}$ [snimkata na deteto si$_1$]$_2$ [$_{CP}$ deto vsjaka majka$_1$ __$_2$ / ***ja**$_2$
picture.the of child.the her.REFL that every mother her.CL.ACC
nosi v portmoneto si ]]
carry.3SG in purse.the her.REFL
'the picture of her$_1$ child that every mother$_1$ carries (it) in her purse'

Given that reconstruction is often taken to be a defining property of movement dependencies, we would expect to find reconstruction effects with island-sensitive resumption. There are actually surprisingly few clear-cut cases of this, however. Perhaps the only potential example we are aware of comes from Welsh where both resumptive and gapped dependencies into relative clauses are ungrammatical, indicating some sensitivity to strong islands:[2]

(10) *Resumption in Welsh is island-sensitive* (Borsley et al. 2007: 148)
*Dyma 'r ffenest$_1$ darais i [$_{DP}$ 'r bachgen [$_{CP}$ dorrodd hi$_1$ ddoe ]]
that.is the window hit.PST.1SG I the boy break.PST.3SG it yesterday
'That's the window that I hit the boy who broke (it) yesterday.'

According to Rouveret (2008), Welsh allows for reconstruction for variable binding to the position of the resumptive, as in (11). Taken at face value, this would seem to imply that a different kind of derivation is involved than with resumption in Bulgarian *deto*-relatives, for example.[3]

(11) *Reconstruction to position of resumptive in Welsh* (Rouveret 2008: 182)
Mae gan Siôn [farn ar ei$_1$ lyfr]$_2$ y mae pob awdur$_1$ yn ei$_2$ pharchu
is with Siôn opinion about his book C is each author PROG it respect
'Siôn has an opinion about his book that each author respects.'

So far, a reasonably neat picture emerges. On the one hand, we have languages that have what we might call a 'Type I' resumption profile, where island-insensitivity correlates with a

[2]The situation surrounding islands in Welsh is complicated, to say the least. To varying degrees, both movement and gaps seem to be possible inside wh-islands and complement clauses to nouns (Tallerman 1983; Borsley et al. 2007; Borsley 2013), while neither is possible in relative clauses. Why exactly only relative clauses should count as Complex NP islands is unclear (though perhaps operator movement plays a role here).

[3]Given the dichotomy we are considering at the moment, this would imply movement. However, this is actually not what Rouveret (2008) propose for Welsh. Instead, he favours an Agree-based approach similar to what Adger & Ramchand (2005) suggest for Scottish Gaelic, discussed in detail below. How exactly an Agree-based account derives the class of constructions that constitute islands has, to the best of our knowledge, still not been worked out.

lack of other positive diagnostics for movement such as crossover effects or reconstruction (e.g. Irish and Bulgarian). In addition to these, we have a 'Type II' profile, where island sensitivity aligns with other potential movement diagnostics. Vata, and perhaps Welsh, are examples of this kind of language. Both of these can be seen in the table below.

(12) *Types of resumption profiles (preliminary)*

| | *Is resumption island-sensitive?* | *Does resumption have properties of movement?* |
|---|---|---|
| Type I (e.g. Irish, Bulgarian) | ✗ | ✗ |
| Type II (e.g. Vata, Welsh?) | ✓ | ✓ |
| Type III? | ✓ | ✗ |
| Type IV? | ✗ | ✓ |

At this point, one might wonder if there are languages with 'mismatched' resumption profiles, e.g. a 'Type III' language in which we find island-sensitivity but otherwise a lack of evidence for movement. Or perhaps the reverse case in which there is evidence for movement in spite of a lack of island effects with resumption. Determining whether such profiles truly exist is a difficult and involved matter. For one thing, we will see that languages can show conflicting results for the various diagnostics for movement (potentially casting some doubt on their validity as such). Nevertheless, a detailed comparison of the varying properties of resumptive dependencies does reveal some interesting mixed cases (also see Schurr et al. 2024 on conflicting evidence from islands and other movement diagnostics for non-resumptive Ā-dependencies in Shupamem).

A potential Type III language could be Scottish Gaelic. Following the description in Adger & Ramchand (2005), Ā-dependencies in the language are island-sensitive:

(13) *Ā-dependencies in Scottish Gaelic are island-sensitive* (Adger & Ramchand 2005: 178)
*am fear$_1$ a phòg mi [$_{DP}$ a'bhean [$_{CP}$ a phòs *pro*$_1$ ]]
the man C.REL kissed I the.woman C.REL married
'the man who I kissed the woman who married'

The tail of the dependency in (13) is not occupied by an overt resumptive pronoun, from which one might want to conclude that there is movement rather than resumption here. However, Adger & Ramchand (2005: 167–171) provide a number of empirical challenges for a trace-based account, e.g. from non-identity effects, where the gap position fails to exhibit the kind of connectivity effects we would expect from movement. Examples of this include selectional mismatches between the 'extractee' and its base position, the lack of definiteness agreement on adpositions adjacent to Ā-gaps and the absence of case connectivity effects with participles. In addition to this, Adger & Ramchand (2005) point out that we find a lack of reconstruction effects, for example for Principle C. The example in (14) is grammatical, which would not be expected if there was reconstruction of the wh-phrase.

(14) *No reconstruction for Principle C in Scottish Gaelic* (Adger & Ramchand 2005: 171)
[Dè an dealbh de dh'Iain$_1$]$_2$ a cheannaich e$_1$ *pro*$_2$ an de
what the picture of Iain C.REL bought he yesterday
'Which picture of Iain did he buy yesterday?'

While Adger & Ramchand (2005) reject a movement-based account in favour of Agree, it still shows some of the hallmarks of a Type III profile. Ultimately, though, this is perhaps not the clearest example of a potential Type III resumption profile, as it still requires the assumption of

a null resumptive pronoun, which can, in practice, be difficult to distinguish from a genuine gap.[4]. Furthermore, Adger & Ramchand (2005) report that we find the kind of morphological cyclicity effects that are normally assumed to be typical of movement. We return to this issue in section 4.

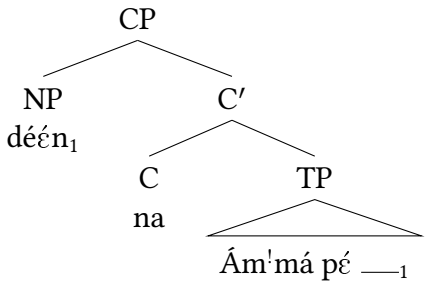
Finally, we may ask whether there is a different kind of mismatched profile, i.e. a Type IV language. This would be a language with island-insensitive resumption that nevertheless shows evidence of movement. As we will see, despite the fact that the empirical picture is generally somewhat murky and incomplete, we believe that the resumption profile of Akan currently makes the strongest case for a Type IV profile. While resumption with nominal extractees is typically impervious to islands in Akan, it nevertheless shows other effects of what are typically considered to be hallmarks of movement. This breaks the neat dichotomy that was originally hinted at by languages such as Irish and Vata.

In the remainder of this paper, we will lay out the empirical landscape of resumption in Akan and, building on Korsah & Murphy (2020), attempt to establish the full resumption profile of Akan. We will argue that Ā-dependencies in Akan are island-insensitive and yet still derived by movement. In rejecting alternative approaches involving base generation and mixed chains, we will discuss two potential ways in which one can reconcile a movement derivation with island-insensitivity.

## 3 Resumption and Ā-dependencies in Akan

Akan has two main kinds of Ā-constructions that will be relevant for the following discussion. The first is the so-called *na*-focus construction which is used for *ex situ* wh-questions, such as (15), in addition to focalization of some argument or adjunct in a declarative clause.[5] The structure we assume for the *na*-focus construction is given below.

(15) *The* na*-focus construction in Akan*
Déɛ́n$_1$ na Ámˈmá pɛ́ ⸺$_1$ ?
what FOC Ama like
'What does Ama like?'




The second major construction of interest to us is the relative clause. As can be seen in (16), relative clauses in Akan contain the invariant relative marker *áa* and also contain the so-called 'clausal determiner' (CD) *nó*, which has the same form as regular determiners (on clausal determiners, see Korsah 2017 and Kandybowicz & Torrence 2019). As the structure below illustrates, we assume that the CD is adjoined to the relative CP which is in turn extraposed

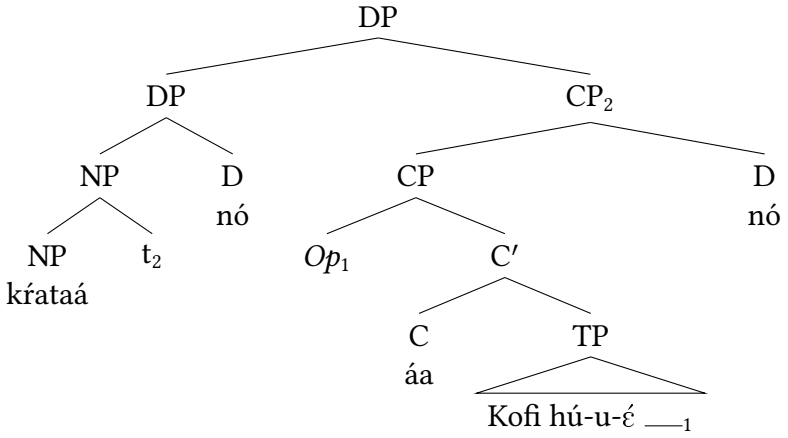
[4]Schurr et al. (2024) provide a novel diagnostic for distinguishing gaps from null resumptives based on association with epithets in Shupamem.

[5]Note that Akan is optionally wh-in-situ. The focus particle *na* does not surface in the *in situ* variant of (15). Since these constructions will be uninformative for present purposes, we will only discuss *ex situ* wh-questions and focus movement constructions.

within the DP.[6]

[6]It is important to note that the CD is also possible, albeit optionally, in the *na*-focus construction. Here, the attachment height of the CD is less clear. It is possible that it attaches lower here. Previous literature has claimed that the CD is used to mark an event as familiar (e.g. Boadi 1974), but Bombi et al. (2019) show that this is not the case for the CD in a *na*-focus construction (what they call 'cleft-*nó*'). For relative clauses, they assume a different structure to the one in (16) where the CD is, in fact, the determiner modifying the head noun, but it is unclear to us how one can accommodate the additional determiner on this analysis.

(16) *Relative clauses in Akan*
[$_{DP}$ Kŕataá nó$_1$ [$_{CP}$ áa Kofi hú-u-ɛ́ ___$_1$ nó ]] da [$_{PP}$ pónó nó só ]
paper DEF REL K. see-PST-YE CD lie table the on
'The paper that Kofi saw is on the table.'




Going back to the earliest work on wh-movement and focus in Akan (e.g. Schachter 1973; Boadi 1974; Saah 1988, 1994), it was noticed that Ā-dependencies must terminate in a resumptive pronoun if the displaced phrase is animate. Taking the ditransitive sentence in (17a) as our baseline, we observe that wh-movement of the animate indirect object leads to an obligatory resumptive pronoun *nó* in the base position (17b).[7] If we instead move the inanimate direct object, then no pronoun may appear in this position (17c).

(17) 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. Dɛ́ɛ́n$_1$ na Yaw má-a Saka { ___$_1$ / *no$_1$ }?
what FOC Yaw give-PST Saka 3SG
'What did Yaw give to Saka?'

At first glance, this may suggest that Akan has two distinct ways of forming Ā-dependencies, a gap strategy and resumptive strategy. This initial impression is misleading, however. As shown in Korsah (2017), the gaps we find with extraction of inanimates are best viewed as the result of a more general rule of 'pro drop' that typically blocks the overt realization of inanimate object pronouns (both anaphoric and resumptive). The reason for thinking comes from three contexts in which inanimate pronouns are obligatorily pronounced. These are (i) preceding clause-final adverbs (Saah 1994), (ii) the object of change-of-state verbs (Boadi 1971; Osam 1996), and (iii) the subject of secondary predicates (Korsah 2017). As each of the examples in (18) through (20) show, gaps and resumptives alternate even in positions associated with an inanimate extractee.

(18) *Inanimate resumption with clause final adverb*
a. Aduane nó$_1$ na Kofí pɛ́ (*__no__$_1$)
food DEF FOC Kofi like 3SG
'It's the food that Kofi likes.'

[7]Note that the resumptive pronoun has the same form as anaphoric pronouns (following *McCloskey's Generalization*; McCloskey 1990). Furthermore, inanimate anaphoric pronouns (like inanimate resumptive pronouns) must be dropped outside of the environments in (18) through (20) (see Korsah 2017: §2 for further discussion).

b. Aduane nó$_1$ na Kofí pɛ́ *(**no**$_1$) anɔpá
food DEF FOC Kofi like 3SG morning
'It's the food that Kofi likes in the morning.'

(19) *Inanimate resumption with change-of-state verbs*

a. Akonwa nó$_1$ na Kofi kŕá-a (*__no__$_1$).
chair DEF FOC Kofi import-PST 3SG
'It's the chair that Kofi imported.'

b. Akonwa nó$_1$ na Kofi bú-u *(__no__$_1$).
chair DEF FOC Kofi break-PST 3SG
'It's the chair that Kofi broke.'

(20) *Inanimate resumption with secondary predication*

a. Aduane nó$_1$ na Kofí pɛ́ [$_{SC}$ *(__no__$_1$) hyehyééhyé ]
food DEF FOC Kofi like 3SG very.hot
'It's the food that Kofi likes very hot.'

b. [$_{DP}$ Aduane nó$_1$ [$_{CP}$ áa Kofí pɛ́ *(__no__$_1$) hyehyééhyé nó ]] nie
food DEF REL Kofi like 3SG very.hot CD this
'This is the food that Kofi likes very hot.'

Given these observations, Korsah (2017) and Korsah & Murphy (2020) conclude that both *na*-focus constructions and relative clauses always trigger a resumptive pronoun, which subsequently undergoes pro drop if the extractee is inanimate. The three contexts above are exceptions to the inanimate pro drop rule. What exactly singles out these contexts as exempt from the pro drop rule is an interesting question that need not immediately concern us here (see Korsah 2017 for a possible analysis involving object shift).

The final thing to mention about resumption in Akan pertains to the nature of subject vs. object resumption. As we have seen above, object extraction leads to a resumptive pronoun *nó* in the base position of the object. Subject pronouns, both resumptive and anaphoric, appear as a bound morpheme on the verb. This is shown in (21) for both anaphoric pronouns (21a) and resumptive pronouns (21b).

(21) a. Ɔ$_1$-dɔ Saka
3SG.SBJ-love Saka
'He loves Saka.'

b. Hwáń$_1$ na ɔ$_1$-dɔ́ Saka?
who FOC 3SG.SBJ-love Saka
'Who loves Saka?'

Syntactically, we assume that Ā-dependencies with subjects involve a null resumptive in subject position. We treat the overt morpheme on the verb as an agreement marker cross-referencing the features of the null resumptive pronoun (22).

(22) Hwáń$_1$ na *pro*$_1$ ɔ-dɔ́ Saka?
who FOC 3SG.SBJ-love Saka
'Who loves Saka?'

Some supporting evidence for this comes the observation in Korsah (2017) that subject resumptives, unlike object resumptives, undergo an optional alternation with the inanimate pronoun ɛ-. This can be understood in terms of (optional) anti-agreement, which is already a well-known reflex of subject extraction (see e.g. Ouhalla 1993; Schneider-Zioga 2007; Henderson 2013; Baier 2018).

(23) *Anti-agreement with local subject extraction* (Korsah 2017: 118,121)

a. Kofi$_1$ na **ɛ/ɔ**$_1$-káń-n kŕataá nó
Kofi FOC 3-/3SG.SBJ-read-PST book DEF
'It is Kofi who read the book.'
b. [$_{DP}$ Abɔfrá nó$_1$ [$_{CP}$ aá **ɛ/ɔ**$_1$-káń-n kŕataá nó ]] nie
child DEF REL 3-/3SG.SBJ-read-PST book DEF this
'This is the child who read the book.'

The idea that this is anti-agreement is supported by the fact that the unagreeing ɛ- marker is not possible under long-distance extraction (Korsah 2017: 120). This is entirely parallel to what we find with anti-agreement in Berber, for example (Ouhalla 1993).

### 3.1 Island effects

With these preliminary observations about Ā-constructions and resumptive pronouns in place, we can now turn to island effects in Akan. As has been established in much previous literature, island effects are absent with extraction of both animate and inanimate noun phrases (Saah 1994; Saah & Goodluck 1995; Goodluck et al. 1995). This is irrespective of whether the dependency terminates in a resumptive or a gap. This is illustrated below for four kinds of syntactic islands, namely Complex NP islands, wh-islands, adjunct islands and sentential subject islands, for both resumptive dependencies (24) and gapped dependencies (25), respectively.

(24) *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*)
d. Hwáń$_1$ na [$_{CP}$ sɛ́ Kofi dɔ́ **nó**$_1$ nó ] á-ma abusuá mmienú nó
Who FOC that K love 3SG CD PERF-give family two DEF
á-bóḿ.
PERF-reconcile
'Who is such that [that Kofi loves her] has made the two families reconcile.'
(*sentential subject*)

(25) *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. Deɛn$_1$ 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. Siká$_1$ na Yaw ré-sú [$_{CP}$ ésánesɛ́ Kofi dɔ́ ___$_1$ nó ]
money FOC Yaw PROG-cry because Kofi love CD
'It is money that Yaw is crying because Kofi loves.' (*adjunct island*)
d. Déɛ́n$_1$ na [$_{CP}$ sɛ́ Kofi dɔ́ ___$_1$ nó ] á-ma abusuá mmienú nó
what FOC that K love CD PERF-give family two DEF
á-bóḿ
PERF-reconcile

'What is such that [that Kofi loves (it)] has made the two families reconcile.'
(*sentential subject*)

Given the fact that there appears to be no obvious difference in acceptability between displacement associated with a gap or a resumptive with regard to islands, Saah (1994) proposed that both grammatical strategies are instances of base generation, with binding of a null *pro* in the case of a gap (cf. the Scottish Gaelic example in (13)).

The situation regarding island effects is more complicated, however. Korsah & Murphy (2020) point out that extraction of certain kinds of categories does appear to show island sensitivity. First, consider the fact that PPs can undergo long extraction out of an embedded CP:

(26) *Long-distance PP extraction is possible*
[$_{PP}$ Akonwá nó mú ] na Ama níḿ [$_{CP}$ sɛ Kofí dá ___$_{PP}$ ]
chair DEF in FOC Ama know that Kofi lie
'Ama knows that Kofi lies IN THE CHAIR.'

When this CP forms part of an island, e.g. a Complex NP island (27b) or a wh-island (27d), then extraction is impossible:

(27) *PP extraction is island-sensitive*
a. Amma nim [$_{DP}$ neá ńtí [$_{CP}$ áa Kofi dá [$_{PP}$ akonwá nó mú ] ]]
Ama know thing because REL Kofi lie chair DEF in
'Ama knows the reason why Kofi lies in the chair.'
b. *[$_{PP}$ Akonwá nó mú ] na Ama níḿ [$_{DP}$ 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.' (*Complex NP island*)
c. Amma bisá-a [$_{CP}$ sé bré bɛ́n na Kofi dá [$_{PP}$ akonwá nó mú ]]
Ama ask-PST that time Q FOC Kofi lie chair DEF in
'Ama asked when Kofi lies in the chair.'
d. *[$_{PP}$ Akonwá nó mú] na A!ma bísá-a [$_{CP}$ sɛ́ bré bɛ́n na Kofi dá ___$_{PP}$ ]
chair DEF in FOC Ama ask-PST that time Q FOC Kofi lie
'Ama asked when Kofi lies IN THE CHAIR.' (*wh-island*)

The same pattern is also found for VP movement, as Hein (2017) has shown. Hein points out that VP extraction may proceed long distance:

(28) *Long-distance VP extraction is possible* (Hein 2017: 9)
[$_{VP}$ dán sí-é ] na Ám!má ká-a [$_{CP}$ sɛ́ 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)'

Nevertheless, it shows sensitivity to the same kinds of islands as PP movement does (29).

(29) *VP fronting is island-sensitive* (Hein 2017: 10)
a.?*[$_{VP}$ dán sí-é ] na mé-ń-té-e [$_{DP}$ atétɛ́sɛ́m bíárá [$_{CP}$ sɛ́ Kofí
house build-NMLZ FOC 1SG-NEG-hear-PST rumour.PL any that Kofi
á-yɔ́ ___$_{VP}$ ]]
PRF-do
'I didn't hear any rumours that Kofi has BUILT A HOUSE.' (*Complex NP island*)
b.?*[$_{VP}$ dán sí-é ] na Ám!má bísá-a [$_{CP}$ sɛ dabɛ́n na Kofí yɔ́-ɔ-é
house build-NMLZ FOC Ama ask-PST that when FOC Kofi do-PST-YE

—VP ]

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

The conclusion that Korsah & Murphy (2020) draw from this is that sensitivity to islands is linked to the possibility of (covert) resumption. Neither PPs nor VPs allow for resumptive pronouns.[8] This can be seen for PP extraction in (30b). Even though the tail of the Ā-dependency is in a context that should block pro drop (a clause-final adverb), no resumptive is possible here. The impossibility of a resumptive (even one that has undergone pro drop) is directly linked to the re-emergence of island effects according to Korsah & Murphy (2020).

(30) *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 } anɔpá.
chair DEF in FOC Kofi lie there morning
'Kofi lies IN THE CHAIR in the morning.'

An important complication to this otherwise straightforward picture was raised by Hein & Georgi (2021). They note that non-referential NPs of various kinds do not allow for overt resumptives, similar to PPs and VPs. They provide data showing that idiom chunks, predicate nominals and non-specific indefinites do not leave resumptives when extracted, even in those contexts where pro drop is otherwise blocked.

The example that Hein & Georgi (2021) provide for a predicate nominal is given in (31). Despite the presence of a clause-final adverb in B's answer, no overt resumptive is possible.

(31) Context: Kofi is about to graduate this year. Kwame claims:

A: Kofi bɛ-yɛ dɔkota afe yi
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 na Kofi bɛ-yɛ {—$_1$ / *no$_1$ } afe yi
teacher FOC Kofi FUT-be 3SG.OBJ year this
'It's a teacher that Kofi will become this year.' (Hein & Georgi 2021)

The example in (32) shows the same effect for extraction of a non-specific indefinite.

[8] Kandybowicz (2015) describes the aspectual particle *-yɛ* as a verbal resumptive, though the actual analysis involves insertion of a form to avoid a prosodically vacuous AsP domain (rather than genuine realization of a movement trace). The insertion of *-yɔ* does not avoid island violations (see Hein 2017).

(32) Context: 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?'

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

B: Daabi, ɔkyerɛkyerɛni$_1$ na me-be-bisa {__$_1$ / ??no$_1$ } kane
no, teacher FOC 1SG-FUT-ask 3SG.OBJ first
'No, I will ask a (RANDOM) TEACHER first.' (one of many teachers around)
(Hein & Georgi 2021)

Due to the impossibility of an overt resumptive here, one would expect displacement of these nominals to show sensitivity to islands like PP or VP extraction does. As Hein & Georgi (2021) show, however, these extractions are insensitive to islands (33). Only a gap in the extracted position is licit, any kind of resumptive is still impossible.

(33) a. Tíkya$_1$ na m-á-té [$_{DP}$ atésɛ́m nó [$_{CP}$ sɛ́ Kofi bɛ́-yɛ́ {__$_1$ / *nó$_1$ }
teacher FOC 1SG-PERF-hear rumour DEF that Kofi FUT-be 3SG.OBJ
afe yí ]]
year this
'It is a teacher that I heard the rumour that Kofi will become this year.'

b. Npípa na wo-té-e [$_{DP}$ atésɛ́m nó [$_{CP}$ sɛ́ Kofi súró {__$_1$ / *nó$_1$ /
person FOC 2SG.SBJ-hear-PST rumour DEF that Kofi fear 3SG.OBJ
*wón$_1$ } páa ]]
3SG.PL really
'It's people that I've heard the rumour that Kofi really fears.'
(Hein & Georgi 2021)

This seems to go against the empirical generalization in Korsah & Murphy (2020) that whether a particular resumptive dependency is insensitive to islands in Akan correlates directly with possibility of having overt resumptive pronoun in that dependency. We address this issue in some detail in section 4.2.2.

With the discussion of island-sensitivity in Akan in place, we now turn to other potential diagnostics for movement. In the following sections, we will discuss three in particular: cyclicity effects (§3.2), reconstruction effects (§3.3) and crossover effects (§3.4). In addition, section 3.5 will present a language-internal argument against treating all kinds of Ā-movement in Akan as base generation.

### 3.2 Cyclicity effects

The first diagnostic test to discuss comes from so-called 'cyclicity effects'. As we will show, Akan shows a robust cyclicity effect of tonal overwriting that also persists into islands. This will leads to two possible conclusions: (i) tonal overwriting does not diagnose movement, (ii) movement out of islands is possible. Ultimately, we will argue in favour of the latter conclusion in section 4.2.1, given the difficulties associated with maintaining a base generation analysis.

Since Chomsky (1973), it has been assumed that movement-based Ā-dependencies are subject to locality constraints. This means that long-distance dependencies must be broken up into a series of smaller movement chains. In their most recent instantiation, these locality constraints take the form of phases. If we follow Chomsky (2000, 2001), both $v$P and CP constitute phases and therefore require a long-distance dependency to make an intermediate

'stop-over' at each of these projections, as in (34).

(34) [$_{CP}$ Who do you [$_{vP}$ ___ think [$_{CP}$ ___ that everyone [$_{vP}$ ___ [$_{VP}$ likes ___ ]]]]] ?

It has been shown that there are various different kinds of evidence supporting this derivation (see e.g. Georgi 2014, van Urk 2020), with perhaps the most compelling evidence coming from languages which show dedicated morphological reflexes of movement taking place within that clause (see e.g. Chung 1982; Schneider-Zioga 1995; Lahne 2008; Georgi 2014, 2017). These reflexes can be on C (see e.g. McCloskey 2002; Georgi 2017) or they can be on the verb, i.e. in $v$ (e.g. van Urk & Richards 2015). Presumably, while movement dependencies are forced to comprise a series of smaller connected steps, morphological cyclicity effects could be taken to diagnose movement over resumption, since variable binding is typically not subject to locality constraints.[9]

A potentially revealing example of a morphological cyclicity effect comes from Defaka. As Bennett et al. (2012) argue, the suffix *-ke* in Defaka surfaces on verbs in clauses in which there has been overt Ā-movement (35b). Importantly, when something is extracted from an embedded clause, as in (35c), the *-ke* morpheme is found on both the embedded and the matrix verb. It therefore seems to mark the path of movement, assuming that movement applies cyclically with an intermediate stopover in the embedded clause.

(35) *Morphological reflex of movement in Defaka* (Bennett et al. 2012: 296–297)

a. Amanya ómgbinya sóno á ama-ma kíꜜá ꜜté ?
Amaya shirt buy her give-NFUT market at
'Amaya bought a shirt for her at the market.'

b. Tári$_1$ ndo Amanya ómgbinya sóno ___$_1$ ama-**ke** kíꜜá ꜜté ?
who FOC Amaya shirt buy give-KE market at
'Who did Amaya buy a shirt for at the market?'

c. Ándu$_1$ ndo Bomá faa-**ke** [$_{CP}$ iní ___$_1$ été-**ke** ]
canoe FOC Boma say-KE they have-KE
'It's a canoe that Boma said they have.'

Korsah & Murphy (2020) argue that the Asante Twi dialect of Akan shows a similar cyclicity effect in the realm of tone. Asante Twi has a process of high-tone overwriting on verbs in certain Ā-constructions. This process was originally noticed by Schachter & Fromkin (1968) and has subsequently been corroborated in further literature (e.g. Marfo 2005; Fiedler & Schwarz 2005; Genzel 2013). As the following example shows, the underlyingly low verb *wɔ* ('be') in (36a) receives a high tone in the corresponding focus construction in (36b).

(36) a. Kofí **wɔ** Ényirési
Kofi be England
'Kofi is in England.'

b. Kofí$_1$ na ɔ$_1$-**wɔ́** Ényirési
Kofi FOC 3SG.SBJ-be England
'It is Kofi who is in England.' (Schachter & Fromkin 1968: 209)

Korsah & Murphy (2020) point out that tonal overwriting has the signature of a reflex of successive-cyclicity. In particular, it applies to all verbs that are along the path of movement.

[9]This assumption is far from trivial, however. Several authors have argued that, if implemented by Agree, base-generated resumption involving binding may also be subject to locality constraints (e.g. Adger & Ramchand 2005; Rouveret 2008; Pan 2016) and therefore potentially also successive-cyclic.

Importantly, this effect is also found with an overt resumptive pronoun. This is the case for both focus constructions (37) and relative clauses (38).

(37) *Overwriting affects all verbs in a long-distance dependency* (Korsah & Murphy 2020)

a. [$_{CP}$ Kwame **nim** [$_{CP}$ sɛ́ Ámꜜmá **hu**-u Efua ]]]
Kwame knows that Ama see-PST Efua
'Kwame knows that Ama saw Efua.'

b. [$_{CP}$ Hwáń$_1$ na Kwame **nímˊ** [$_{CP}$ sɛ Ámꜜmá **hú**-u no$_1$ ]]]
who FOC Kwame knows that Ama see-PST 3SG
'Who does Kwame know that Ama saw?'

(38) *Long distance relativization shows movement reflex*

a. Me-nim [$_{CP}$ sɛ́ óbíárá á-**te** [$_{CP}$ sɛ́ Kofi á-**ka** [$_{CP}$ sɛ́
1sg-know that everybody PERF-hear that Kofi PERF-say that
ɔ-**dɔ** ɔbáá nó ]]]
3SG.SBJ-love woman DEF.
'I know that everybody has heard that Kofi has said that he loves the woman.'

b. Me-hu-u [$_{DP}$ ɔbáá nó [$_{CP}$ *Op*$_1$ áa óbíárá á-**té** [$_{CP}$ sɛ Kofi
1SG-see-PST woman DEF REL everybody hear-PST that Kofi
á-**ká** [$_{CP}$ sɛ ɔ-**dɔ́** nó$_1$ nó ]]]]
PERF-say that 3SG.SBJ-FUT-love 3SG.OBJ CD
'I saw the woman whom everybody has heard that Kofi has said that he loves her.'

While the unbounded nature of the process may seem to provide a convincing argument for movement, it is important to establish that movement reflexes are also found inside islands. This is because it is possible that there could be a movement dependency up to the edge of the island boundary with a non-movement dependency reaching into the island itself (see section 4.2.1). We still find movement reflexes inside islands, as shown in (39).

(39) *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. Hwáń$_1$ na wo-**hú**-u [$_{DP}$ onípá ko [$_{CP}$ áa ɔ-**bɔ́**-ɔ nó$_1$ 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** [$_{CP}$ ésánesɛ́ Kofi **dɔ** Ámꜜmá ]
Yaw PROG-cry because Kofi love 3SG
'Yaw is crying because Kofi loves Ama.'

d. Ámꜜmá$_1$ 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*)

This supports the idea that whatever the source of this cyclicity effect is, it does not distinguish between dependencies into islands and non-islands. If it is the result of successive-cyclic movement via $v$P, as Korsah & Murphy (2020) argue, then we must conclude that such movement is possible out of an island (see section 4.2.2 for further discussion). The other possible alternative, which we will ultimately dismiss, is that tonal overwriting does not diagnose movement after all. We will argue that there are several difficulties associated with maintaining this assumption,

however (see section 4.2.1).

### 3.3 Reconstruction effects

Now, let us turn to reconstruction effects. Reconstruction effects have traditionally been assumed to imply movement, as a representation of the moved item is assumed to be present at the tail of a movement dependency (especially given the Copy Theory of Movement; Chomsky 1995), while this is not necessarily the case under base generation. As we will see in section 4, however, whether reconstruction effects are themselves indicative of movement is still controversial and should therefore be treated with caution.

Recall from the examples discussed in section 2 that there are languages with island-insensitive resumption like Bulgarian which allow the c-command requirement for variable binding to be satisfied by a moved element containing a bound variable only if the dependency terminates in a gap rather than a pronoun, as in (40).

(40) *No reconstruction to position of resumptive* (Krapova 2010: 1247–1248)
[$_{DP}$ [snimkata na deteto si$_2$]$_1$ [$_{CP}$ deto vsjaka majka$_2$ —$_1$ / *__ja__$_1$
picture.the of child.the her.REFL that every mother her.CL.ACC
nosi v portmoneto si ]]
carry.3SG in purse.the her.REFL
'the picture of her$_1$ child that every mother$_1$ carries (it) in her purse'

On the other hand, there are languages such as Lebanese Arabic, as discussed by Aoun & Benmamoun (1998), which allow reconstruction for variable binding at the position of an overt resumptive pronoun (also see Cinque 1977 for evidence for reconstruction in French left dislocation structures). In (41a), the extracted phrase containing a bound pronoun may be interpreted by reconstructing it to its base position, i.e. interpreting the extracted phrase as if it occupied that position. As (41b) indicates, the surface position of the resumptive pronoun must be c-commanded by the binder in order for the sentence to be grammatical, further supporting the idea that there is indeed reconstruction to this position.

(41) *Reconstruction to resumptive in Lebanese Arabic* (Aoun & Benmamoun 1998: 581)
a. [Mʕalləmt-o$_1$]$_2$ fakkarto ʔənno kəll walad$_1$ ʕaṭee -__ha__$_2$ hdiyye
teacher.F-his thought.2SG that every boy gave.3s -her gift
b. *[Mʕalləmt-o$_1$]$_2$ fakkarto ʔənno ʕaṭee -__ha__$_2$ kəll walad$_1$ hdiyye
teacher.F-his thought.2SG that gave.3s -her every boy gift
'His teacher, you thought that every boy gave her a gift.'

In Akan, we see a similar effect. A moved phrase containing a bound variable reconstructs to the position of the pronoun in order to license variable binding, as can be seen in (42b).

(42) *Reconstruction for variable binding in Akan*
a. Abán bíárá$_1$ dwéne [$_{DP}$ ne$_1$-máńfóɔ́ yíe-yɔ́ hó ] dáá
government every think POSS-people well-be self every day
'Every$_1$ government thinks about the well-being of its$_1$ people every day.'
b. [$_{DP}$ ne$_1$-máńfóɔ́ yíe-yɔ́ hó ]$_2$ na abán bíárá$_1$ dwéné __no__$_2$ dáá
POSS-people well-be self FOC government every think 3SG.OBJ every day
'It's the well-being of its$_1$ people that every$_1$ government thinks about every day.'

When testing for reconstruction, it is important to control for various other factors. For example, Schneider-Zioga (2009) notes that reconstruction for variable binding in Kinande is possible for local extraction, but not for long-distance extraction. This leads her to propose that long-

distance extraction in Kinande is in fact not formed by movement (see section 4.2.1). In Akan, however, we also find reconstruction effects with long-distance movement (43), meaning that we do not have to be concerned about this potential complication.

(43) *Reconstruction across clause boundary*
[$_{DP}$ Ne$_1$-máńfóɔ́ yíe-yɔ́ hó ]$_2$ na Kofí níḿ [$_{CP}$ sɛ abán bíárá$_1$ dwéné
POSS-people well-be self FOC Kofi know that government every think
**no**$_2$ dáá ]
3SG.OBJ every day
'It's the well-being of its$_1$ people that Kofi knows that every$_1$ government thinks about every day.'

There is yet another potential confounding factor, however. Aoun et al. (2001) demonstrate that, in Lebanese Arabic, there are actually two available strategies for resumption: base generation and movement (or 'true' vs. 'apparent' resumption in their words). They argue that reconstruction effects are only found with resumptives generated by a movement derivation. This option is blocked, however, when the resumptive is located inside a strong island. In this context, the base generation strategy must instead be used, leading to the lack of reconstruction into islands. Akan, however, does not share this property. As (44) illustrates, reconstruction for variable binding persist into islands.

(44) *Reconstruction for variable binding into an island*
[$_{DP}$ Ne$_1$-máńfóɔ́ yíe-yɔ́ hó ]$_2$ na m-á-té [$_{DP}$ atéśéḿ bí [$_{CP}$ sɛ
3SG.POSS-people well-be self FOC 1SG-PERF-hear rumour INDEF that
abán bíárá$_1$ dwéné **no**$_2$ dáá ]]
government every think 3SG.OBJ every day
'It's the well-being of its people that I have heard a rumour that every government thinks about everyday.'

The preceding examples also show reconstruction to the position of a resumptive pronoun for the purposes of variable binding. We also find reconstruction effects for other kinds of binding. For example, the anaphor *hó* is subject to Principle A (Saah 1989). As (45a) shows, it must be bound by the closest c-commanding antecedent within its local clause. Under long-distance movement, the anaphor may only refer to the embedded antecedent, thereby indicating reconstruction (45b).[10]

(45) *Reconstruction for Principle A with resumption*
a. Kofí$_1$ dwene [$_{CP}$ sɛ́ Ámˈmá$_j$ bɛ-pírá [$_{DP}$ ne hó$_{j/*i}$ ]]
Kofi think that Ama FUT-hurt 3SG.OBJ REFL
'Kofi$_i$ think that Ama$_j$ will hurt herself$_{j/*i}$'
b. [$_{DP}$ Ne hó$_{j/*i}$ ]$_1$ na Kofí$_i$ dwéné [$_{CP}$ sɛ Ámˈmá$_j$ bɛ-pírá **no**$_1$ ɔkyena ]
POSS REFL FOC Kofi think that Ama FUT-hurt 3SG.OBJ tomorrow
'It is herself$_j$ that Kofi thinks that Ama$_j$ will hurt tomorrow.'

Similarly, Akan shows Principle C effects in non-movement constructions, as (46a) shows. When a phrase containing an R-expression is extracted, we still find observe a Principle C effect with respect to the position of the resumptive pronoun (46b).

[10]It is also worth highlighting that the matrix subject does not appear to be a possible binder for the moved anaphor, indicating that reconstruction to an intermediate landing site is not possible (Barss 1986).

(46) *Reconstruction for Principle C with resumption*

a. *$\text{Ɔ}_1$-pɛ [$_{DP}$ Kofí$_1$ ḿfónírí yí]
3SG-like Kofi picture this
'He$_1$ likes the picture of Kofi$_1$'

b. *[$_{DP}$ Kofí$_1$ ḿfónírí yí ]$_2$ na Ámˈmá níḿ [$_{CP}$ sɛ $\text{ɔ}_1$-pé **no**$_2$ paa ]
Kofi picture this FOC Ama think that 3SG-like 3SG really
'It's this picture of Kofi$_1$ that Ama thinks he$_1$ really likes'

As the two examples in (47) illustrate, reconstruction for Principle C is also found with resumption into islands.[11]

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

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

In addition to this, we find evidence for reconstruction with idiom chunks, too. Akan has a class of idiomatic VP constructions that are known as *inherent complement verbs* (ICVs) in the literature (Essegbey 1999; Korsah 2016). For example, the VP *to ndwom* ('throw song') has the non-compositional interpretation 'to sing' (48a) (Kandybowicz 2015: 266). This meaning is preserved when the complement of the ICV is focused and a resumptive pronoun fills the object position (48b).

(48) *Reconstruction for idiomatic interpretation*

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.OBJ yesterday
'It was SINGING that Kofi did yesterday.'

Taken together then, it is clear that Akan shows a range of evidence of reconstruction in resumptive dependencies. As mentioned in the introduction, reconstruction effects have traditionally been taken as evidence for a movement derivation. In our contemporary understanding of resumption, however, this conclusion is arguably less straightforward, as we will discuss further in section 4. As with other diagnostics, the presence of reconstruction alone is not a conclusive argument for movement. It must be considered alongside other potential diagnostics, too.

[11] A reviewer points out that this shows not only that reconstruction for Principle C is possible, but that it is obligatory. As far as we can tell, reconstruction is always obligatory with Ā-movement in Akan. While it has been argued that reconstruction for Principle C can be avoided with Late Merge (e.g. Lebeaux 1988, 1991), this does not seem to be an option in Akan.

### 3.4 Crossover effects

The final potential diagnostic for movement we will discuss is crossover effects. Crossover effects involve a configuration in which a displaced element is also co-indexed with a bound variable pronoun. A distinction is typically made between two types of crossover situations: Strong Crossover (SCO) (49) and Weak Crossover (WCO) (50).

(49) *Strong Crossover*

a. *Who$_1$ does he$_1$ love $\_\_{}_1$ ?
b. Who$_1$ $\_\_{}_1$ loves him*(self)$_1$?

(50) *Weak Crossover*

a.?*Who$_1$ does [his$_1$ mother] love $\_\_{}_1$ ?
b. Who$_1$ $\_\_{}_1$ loves [his$_1$ mother] ?

In each of the ungrammatical cases, (49a) and (50a), the movement gap does not c-command the bound pronoun. The main difference is that in WCO configurations like (50a), the pronoun does not c-command the movement gap, unlike in SCO configurations (49a). This is relevant because it is possible that SCO effects could be subsumed under reconstruction for Principle C (see e.g. Chomsky 1981). As we saw in the previous section, Akan exhibits reconstruction effects with resumption, so SCO would potentially not tell us anything new.

For this reason, we will focus on WCO effects. What exactly WCO effects show is still a matter of some contention. Traditionally, WCO has been used to motivate the idea that the tail of a movement dependency, whether realized as a pronoun or a gap, has a special status as a 'syntactic variable' (Chomsky 1981; Reinhart 1983; Safir 1984; also see Koopman & Sportiche 1982). These variables are then subject to additional constraints, including Weak Crossover. Importantly, this differs from simple bound pronouns without movement, which do not count as syntactic variables. As the following grammatical example shows, a similar binding configuration to WCO does not lead to degradation when movement is not plausibly involved:

(51) Every boy$_1$ told [his$_1$ mother] that the teacher praised him$_1$

As we have seen, this is relevant in the context of resumptive Ā-dependencies. Recall that Irish, a language with island-insensitive resumption, does not exhibit WCO effects in the relevant cases (52a), whereas island-sensitive resumption in Vata does (52b).

(52) a. [$_{DP}$ fear [$_{CP}$ *Op*$_1$ a d'fhág [a$_1$ bhean] é$_1$ ]]
man *a*$^{N}$ left his wife him
'the man who his wife left him' (*Irish*)

b. *Àlɔ́$_1$ [ɔ̀$_1$ nɔ́] gùgù [$_{CP}$ nā ɔ̀$_1$ mlì ] là?
who his mother think COMP 3SG left WH
'Who did his mother think left?' (*Vata*)

If the resumptive pronoun in (52a) is the result of base generation and binding, similar to (51), while the resumptive in (52b) counts as a syntactic variable, then the presence/absence of WCO effects in each case is predicted.

Let us now turn to Akan. Since nominal resumption in Akan is insensitive to islands, like in Irish, we would expect not to find WCO effects, all else being equal. Korsah & Murphy (2020) provided the following examples that they claim illustrate a WCO effect in Akan. They claimed that (53a) is grammatical, while (53b) is ungrammatical (at least for some speakers).

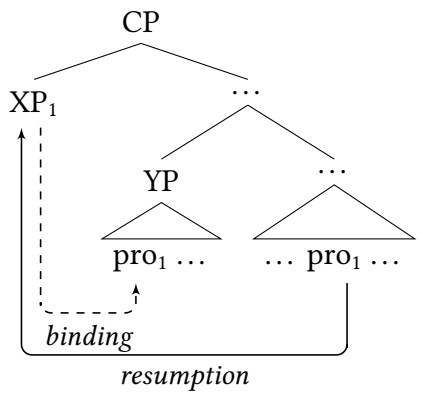
(53) a. Hwáń$_1$ na ɔ$_1$-tán né$_1$-núá (nó) ?
who FOC 3SG.SBJ-hate POSS.3SG-brother CD
'Who$_1$ hates his$_1$ brother?'

b. Hwáń$_1$ na né$_1$-núá tán no$_1$ (nó) ?
who FOC POSS.3SG-brother hate 3SG.OBJ CD
'Who$_1$ does his$_1$ brother hate?'

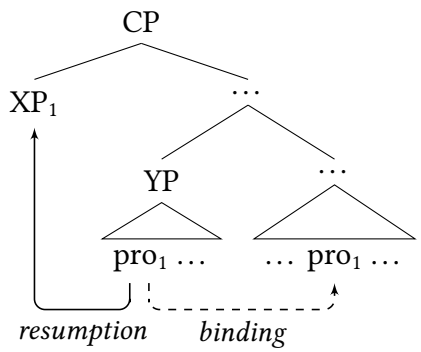
The presence of a WCO effect in (53b) was disputed by Titov (2019) and, indeed, it seems that this conclusion was too hasty. At present, we are no longer confident in our previous claim that (53b) reliably exhibits a WCO effect. The conclusion at this point would seem to be quite straightforward then – Akan lacks WCO effects and therefore resumption in Akan fails this potential diagnostic for movement, patterning with base-generated resumption languages like Irish.

There is a general complication with using WCO effects to test whether resumption is movement-derived, however. An example such as (53b) is structurally ambiguous in that it is not immediately clear which of the two pronouns is the resumptive pronoun (see Hewett 2023: 332–334 for discussion). In principle, a WCO configuration with a resumptive pronoun can be viewed as a true crossover configuration in which the lower pronoun is the resumptive of XP, while the possessor in YP is a variable bound by XP (54). Alternatively, the possessor position could instead be analyzed as the resumptive pronoun (55), assuming that the lower pronoun can be bound from (within) a c-commanding A-position (Reinhart 1983; Büring 2005).[12] In this case, there is no crossover configuration to begin with.

(54)




(55)




This means that the absence of WCO effects could simply be due to the fact that there is an alternative derivation which avoids the crossover configuration entirely, providing an alternative way of satisfying the binding requirements of the non-resumptive pronoun. On this view, the absence of WCO effects would not necessarily provide an argument in favour of base generation over movement.

Indeed, we suspect that this is the situation in Akan. Previous discussions of WCO in Akan have failed to take into account the fact that Akan allows extraction from the possessor position of a noun phrase (56), in violation of the *Left-Branch Condition* (Ross 1967).

(56) Hwáń$_1$ na [*pro*$_1$ né-núá] tán Kofi (nó) ?
who FOC POSS.3SG-brother hate Kofi CD
'Who$_1$ does his$_1$ brother hate Kofi?'

[12] In this sense, an XP generated in an operator position, e.g. in Irish, would have to count as occupying an A-position for the purposes of binding. One way of characterizing this could be to say that all base-generated positions count as A-positions for the purposes of variable binding.

This then opens up the derivation possibility in (55) for apparent WCO configurations such as (53b). These can instead be analyzed as involving resumption in the possessor position, which we treat analogous to subject resumption as involving null resumptive triggering agreement (57). This corresponds to the analysis in (55) in which there is no crossover at all.

(57) Hwáń$_1$ na [*pro*$_1$ né-núá] tán no$_1$ (nó) ?
who FOC POSS.3SG-brother hate 3SG.OBJ CD
'Who$_1$ does his$_1$ brother hate?'

For this reason, Hewett (2023) argues this kind of primary crossover configuration is inconclusive for determining whether movement or base generation is involved.

In response to this, different options for ruling out the derivational possibility in (55) have been explored. One option, for example, would be to replace the higher pronoun with an element that can function as a bound variable, but not as a resumptive element. This is the strategy employed by McCloskey (1990/2011) in testing for SCO in Irish. The problem here is that, although epithets are not possible resumptives in Akan, they also may not function as bound variables either, as the ungrammaticality of (58) under a bound interpretation indicates.

(58) *[ ɔdaduani biara ]$_1$ bɔ mpae sɛ dabidabi aban bɛ-hu [ gyimifoɔ no ]$_1$
prisoner every pray prayer COMP someday government FUT-see fool DEF
mɔbɔ.
mercy
'Every prisoner$_1$ prays that the government will have mercy on the fool$_1$ someday.'

For this reason, the fact that the example in (59) is ungrammatical is still relatively uninformative about whether there are WCO effects in Akan, as the epithet can function neither as a resumptive element nor a bound variable.

(59) *Hwáń$_1$ na [$_{DP}$ gyimífóɔ nó$_1$ ɛ́-maamé ] hú-u no$_1$ (nó) ?
who FOC fool DEF 3SG.POSS-mother see-PST 3SG.OBJ CD
'Who$_1$ did the fool's$_1$ mother see?'

There is, however, an alternative strategy we can use to try to test for WCO in Akan which equally rules out the possibility that the resumptive pronoun is in the possessor position. This comes from what Postal (1993) called 'secondary crossover effects', originally discussed by Higginbotham (1980) (also see Safir 1984). The examples in (60) exhibit the secondary WCO paradigm.

(60) *Secondary Weak Crossover*
a. [Whose$_1$ mother]$_2$ ___$_2$ hates him$_1$ ?
b. *[Whose$_1$ mother]$_2$ does [his$_1$ sister] hate ___$_2$ ?

What distinguishes secondary WCO from the regular WCO configuration is that the quantifier that binds the pronoun is contained inside the moving phrase rather than being the moved phrase itself (compare: **Who$_1$ does his$_1$ sister hate?*). Nevertheless, we find unacceptability just in case the bound pronoun is 'crossed' by movement (60b), i.e. if the pronoun is not c-commanded by the base-position of the moved phrase containing the binder.

The analytical challenge posed by such data is that appealing to binding of the pronoun by a trace in a c-commanding A-position is not straightforwardly possible as the trace now bears the 'wrong' index, i.e. 2. Nevertheless, (60a) is acceptable. What we can assume is at play

here is that a pronoun may be bound 'indirectly' from the possessor position of a phrase in an argument position (see Büring 2004 for an explicit proposal for how this could work). If we assume that movement reconstructs, then possessor binding from an argument position will be possible in (60a), but not in (60b) where the base position is lower than the phrase containing the bound pronoun.

If we recreate the secondary WCO paradigm in Akan, we find the same pattern as we do for English. We have an apparent secondary WCO effect in (61b) where the resumptive pronoun is an object, while binding from the possessor is possible if the position of the subject resumptive pronoun c-commands the bound pronoun (61a).

(61) *Secondary WCO in Akan*

a. Me-bisá-a sɛ́ [ hwan$_1$ ba ]$_2$ na ɔ$_2$-hú-u no$_1$
1SG-ask-PST COMP who child FOC 3SG.SBJ-see-PST 3SG.OBJ
'I asked whose$_1$ child saw him$_1$.'

b. *Me-bisá-a sɛ́ [ hwán$_1$ ba ]$_2$ na n$_1$-adanfo sómá-a no$_2$
1SG-ask-PST COMP who child FOC POSS-friend send-PST 3SG.OBJ
'I asked whose$_1$ child his$_1$ friend sent.'

This example also allows us to avoid the confounding possibility of extraction from the possessor, but in a slightly different way. We can rule out the possibility of the possessor position in (61b) being the resumptive, as it bears a different index to the moved phrase. For this reason, we can be certain that we have a crossover configuration in (61b) and that the reason for the ungrammaticality must be that there is no c-commanding argument position from which possessor binding can take place. Given these findings, it seems that one might be able to uphold the claim that Akan exhibits sensitivity to WCO after all.

With that said, there is an alternative view that would say that secondary crossover effects are not reliable diagnostics for movement either. Hewett (2023) has recently demonstrated that secondary crossover is found with island-internal resumption and can be derived under base generation given the theory of binding developed in Büring (2004). The crucial assumption of this theory that Hewett (2023) highlights is that the operator responsible for indirect binding out of an XP ($\Sigma$) is excluded from Ā-positions (Hewett 2023: 399). This means that there is no way to bind a resumptive from inside of a base-generated or a moved XP in an Ā-position, thereby giving rise to secondary crossover effects in non-movement derivations. On this view, secondary crossover effects do not diagnose movement, as they are also expected to arise in a base-generated Ā-dependency in which there is no intervening A-position from which binding could take place. Primary crossover effects are also analytically ambiguous given the aforementioned complication regarding identifying which pronoun is the resumptive one. This places increased importance on the particular analysis of crossover effects that one adopts, as Hewett's argument against secondary crossover as a movement diagnostic very much rests on Büring's (2004) theory of crossover. Alternative analyses may not necessarily have the property of deriving secondary crossover with base-generation 'for free', in which case this diagnostic may not necessarily be inconclusive after all.[13]

### 3.5 Evidence for base-generated Ā-constructions in Akan

In addition to the arguments we have seen above, which may be interpreted as supporting the claim that resumptive dependencies in Akan involve movement, there are also language-internal reasons to doubt that base generation is involved in all Ā-constructions. The reason for this is that there is evidence that Akan does in principle have a strategy for forming resumptive

[13]That said, crossover effects have been argued to exist with island-insensitive resumption, as Hewett shows, which makes this more than just a theory-internal issue.

Ā-dependencies with base generation and these dependencies crucially lack the kind of cyclicity effects that we have identified previously. This divergence therefore provides an argument against treating all Ā-dependencies as involving base generation.

The first relevant construction is the *déé*-construction. Korsah & Murphy (2020) note that, in contrast to the *na*-focus construction and relativization, the *déé*-construction does not show any reflexes of movement – neither tonal overwriting nor anti-agreement. This difference can be seen in (62).

(62) *No tonal overwriting or anti-agreement in the* déɛ́*-construction*

a. Kofi$_1$ na **ɛ/ɔ$_1$-káń**-n kŕataá nó
Kofi FOC 3-/3SG.SBJ-read-PST book DEF
'It is Kofi who read the book.'

b. Kofi$_1$ déɛ́, ***ɛ/ɔ$_1$-kan**-n kŕataá nó
Kofi TOP *3-/3SG.SBJ-read-PST book DEF
'As for Kofi, he read the book.'

The conclusion that Korsah & Murphy (2020) draw is that the pivot of the *déé*-construction is base-generated, whereas the *na*-focus construction involves movement. If this is the case, then we have good reason to believe that Akan does in fact have an independent base generation strategy for Ā-dependencies that has a distinct empirical footprint to the other Ā-constructions we have discussed (i.e. *na*-focus constructions and relativization). Importantly, however, neither type of construction shows sensitivity to islands with nominal extraction.

Further evidence for base generation comes from the construction in (63b) (also discussed in Korsah & Murphy 2020). A possible interpretation of (63b) is that it involves raising of the embedded subject to the matrix clause with concomitant subject resumption.

(63) a. Kofí nim [$_{CP}$ sɛ Ámˈmá **pɛ** Yaw ]
Kofi know that Ama love Yaw
'Kofi knows that Ama loves Yaw.'

b. Kofí nim Ámˈmá$_1$ [$_{CP}$ sɛ ɔ$_1$-**pɛ** Yaw ]
Kofi know Ama that 3SG.SBJ-love Yaw
'Kofi knows Ama to be someone who loves Yaw.'

Two things are unexpected about (63b) if movement is at play, however. We do not find tonal overwriting on the embedded verb *pɛ* and the unagreeing subject pronoun *ɛ*- is not possible, as (64) shows.

(64) Kofí nim Ámˈmá$_1$ [$_{CP}$ sɛ {ɔ$_1$-/*ɛ$_1$-}pɛ Yaw ]
Kofi know Ama that {3SG.SBJ-/*3-}love Yaw
'Kofi knows of Ama that she loves Yaw.'

Since both of tonal overwriting and anti-agreement can be taken to be diagnostics of movement, Korsah & Murphy (2020) propose that this construction involves a kind of prolepsis, i.e. base generation and binding (Salzmann 2017*a*), rather than movement. This is further supported by the fact that this construction shows idiosyncratic predicate restrictions. While it is possible with 'know', it does not work with 'think' and 'say' (65b). This lexical restriction makes sense if the higher object is actually an object of the higher verb, but remains rather puzzling if movement were involved (note that all of these are bridge verbs).

(65) a. *Kofi dwene Ámˈmá$_1$ [$_{CP}$ sɛ ɔ$_1$-pɛ Yaw ]
Kofi think Ama that 3SG.SBJ-like Yaw
*Int:* 'Kofi thinks of Ama that she loves Yaw.'
b. *Kofi ka-a Ámˈmá$_1$ [$_{CP}$ sɛ ɔ$_1$-pɛ Yaw ]
Kofi say-PST Ama that 3SG.SBJ-like Yaw
*Int:* 'Kofi said of Ama that she loves Yaw.'

What both of these constructions show is that Akan does in fact have a strategy for forming Ā-dependencies using base generation and binding. Importantly, however, the canonical properties of Ā-constructions we have identified elsewhere are absent in these constructions. This provides an argument against treating *na*-focus constructions and relativization as involving base generation, as one would then have to find an alternative explanation for their divergent behaviour with regard to tonal overwriting and anti-agreement, that does not rely on movement (see section 4.2.1 for further discussion).

## 4 Discussion

### 4.1 The resumption profile of Akan

As we have seen, the picture that emerges from a close look at resumption in Akan is a mixed one. While nominal resumption does not show sensitivity to islands, it does show a number of other effects which one might want to classify as evidence for movement, e.g. cyclicity effects, reconstruction effects, and crossover effects. As we will discuss in this section, conflicting diagnostics of movement within resumptive languages is not unusual, but we believe Akan stands out in that it seems to pass almost every putative movement diagnostic except sensitivity to islands.

How does this fit into the cross-linguistic landscape of resumption? Some of the data discussed in section 2 and that have been mentioned in the course of the preceding discussion are summarized in the table in (66), which we have organized according to the four different types of resumption profile we outlined at the outset (however, see Salzmann 2017*b* and Hewett 2023 for more comprehensive overviews).

(66) *Some resumption profiles cross-linguistically*[14]

| | *Island-sensitive?* | *Evidence for Ā-movement?* | | |
|---|---|---|---|---|
| | | *Crossover effects* | *Cyclicity effects* | *Reconstruction effects* |
| Type Ia (Irish) | ✗ | ✗ | (✗) | — |
| Type Ib (Bulgarian) | ✗ | ✗ | — | ✗ |
| Type IIa (Vata) | ✓ | ✓ | — | — |
| Type IIb (Welsh) | (✓) | — | ✓ | ✓ |
| Type III (Scottish Gaelic?) | ✓ | — | ✓ | ✗ |
| Type IVa (Akan) | ✗ | (✓) | ✓ | ✓ |
| Type IVb (Jordanian Arabic) | ✗ | — | — | ✓ |
| Type IVc (Swedish) | ✗ | % | — | (✓) |
| Type IVd (Hebrew) | ✗ | (✓) | — | (✓) |

[14]Some clarifications are in order about this table. The brackets indicate that the status of this diagnostic is

As (66) makes clear, alongside what we have called Type I and II languages, in which island-sensitivity mostly patterns together with other movement diagnostics, there are some mixed profiles. As discussed in section 2, it is unclear whether there is even a true Type III language, i.e. a language with island-sensitive resumption that fails other diagnostics for movement. Scottish Gaelic, as analyzed by Adger & Ramchand (2005), is perhaps the best candidate for such a language, but the evidence for resumption is somewhat more indirect as the resumptives in question are more often than not null in their crucial examples. While Scottish Gaelic lacks reconstruction effects, it does show cyclicity effects on complementizers similar to what is found in Irish, giving rise to a mixed profile.

Aside from Akan, there are a few other languages that come into question for a Type IV profile, however, i.e. a language without island effects but that shows a range evidence of movement. These are listed in (66). As mentioned above, Jordanian Arabic has been argued to show reconstruction effects in the absence of islands (Guilliot & Malkawi 2011), but other diagnostics remain unclear. Another language with a potential Type IV profile could be Swedish. However, the situation surrounding resumption is complicated. While it has been claimed that resumptives show both WCO amnesty (Engdahl 1985: 9) and reconstruction for Principle A to the site of a resumptive pronoun (Zaenen et al. 1981), Asudeh (2012) presents several important qualifications about these data that may serve to weaken the case. Crossover is subject to speaker variation and the purported example of reconstruction by Zaenen et al. (1981) is subject to a serious confound, as the resumptive involved is arguably not a genuine resumptive (see Asudeh 2012: 35–36). Finally, as noted by a reviewer, Hebrew could also be argued to have a Type IV profile. However, as with the other potential Type IV cases we mentioned, there are numerous complications here, too. Even though Hebrew resumption is generally agreed to be island-sensitive (Borer 1984), it has been argued that we find WCO effects in restrictive relative clauses (e.g. Demirdache 1991; Shlonsky 1992). The relevant examples use epithets to avoid the confound noted by McCloskey (1990), however, Sichel (2014: 667) argues that, when factors such as register and information structure are controlled for, the relevant examples do not show WCO effects after all (though see Hewett 2023: 426, fn. 78 for a qualification to this). In addition, resumption in Hebrew relative clauses has been argued to show reconstruction effects (Sichel 2014). Importantly, however, Sichel (2014) shows that this only holds for obligatory resumption contexts. Resumptive pronouns that alternate with gaps do not exhibit reconstruction, which Sichel attributes to the fact that both movement and base-generation derivations are available with resumption, with a preference for gaps where possible. This makes it significantly harder to diagnose when exactly movement is involved in resumption.

For this reason, Akan appears to be the clearest Type IV profile that has been identified thus far.[15] According to the results of our investigation, Akan passes all three relevant movement diagnostics (albeit only with secondary crossover effects detectable), yet still lacks island-sensitivity. There appears to be a genuine mismatch between island effects and other movement properties. The question that now follows from these findings is how one should then analyze resumption in Akan. This will be addressed in the following section.

controversial or subject to additional caveats. First, as discussed in footnote 2, the island-sensitivity of resumption in Welsh is actually not so clear-cut. For Irish, the profile discussed is only for $a^N$-chains. As McCloskey (2002) shows, $a^L$-chains have Type II properties. The reason for the brackets around cyclicity effects is that there are so-called 'mixed chains' in which there can be both $a^N$ and $a^L$ complementizers in the same dependency. While this can be readily analyzed as a kind of prolepsis, it certainly introduces another complication. Finally, since the baseline example of WCO in Akan is acceptable, for reasons discussed in section 3.4, the argument for crossover effects relies on more complicated arguments.

[15]However, it should be noted that a movement derivation of resumption even in light of island-insensitivity was pursued as early as Perlmutter (1972) (also see Pesetsky 1998). The important distinction here, however, is that this line of analysis was not pursued in light of mismatched diagnostics for movement.

### 4.2 Analytical consequences

If Akan constitutes a genuine example of a mismatched Type IV resumption profile, then how can we go about reconciling the tension between the lack of island-sensitivity with the other apparent evidence for movement? Given the current state of our theoretical understanding of resumption, it seems that there are essentially two options: either Akan resumption is derived by movement and some other process is responsible for the lack of island effects, or resumption in Akan must not involve movement, thereby giving us the lack of island violations, and all apparent evidence for movement must then receive an alternative explanation. We will argue that the latter approach, utilizing pure base generation or mixed chains, is not a sufficient explanation of the Akan pattern. Instead, we believe that a movement-based account is currently the best analysis available, while it does admittedly leave open the issue of how to derive island-insensitivity, for which we will consider two possible solutions.

#### 4.2.1 Akan resumption as base generation?

The first approach we will discuss is to take island-sensitivity at face value, i.e. as indicative of a base generation derivation, and try to find other explanations for the putative evidence for movement that appears to be in conflict with this conclusion. It is certainly true that the full cross-linguistic picture involving phenomena like reconstruction and crossover effects is murky, as indicated by the table in (66). Both island-sensitive and island-insensitive languages have been argued to show reconstruction and crossover effects, so it is rather unclear why this variation should exist if they are straightforward diagnostics for movement vs. base generation (see Salzmann 2017*b*: 196-206 for discussion). It seems that, taken on their own, neither of these effects can be said to conclusively indicate that movement or base generation is involved.

As discussed in section 3.4, the presence or absence of crossover effects may ultimately prove inconclusive. Following the conclusions in Hewett (2023), primary crossover configurations are uninformative as to which element is the resumptive (in the absence of epithets as bound variables), while secondary crossover effects are compatible with base generation on a theory that prohibits indirect binding from Ā-positions. Ultimately, the strength of secondary crossover in Akan as a diagnostic for movement will depend on the particular binding-theoretic assumptions one adopts. In Büring's (2004) theory, secondary crossover does not uniquely diagnose a movement derivation for resumption.

As for reconstruction effects, it has been argued that these can be derived in a base-generated Ā-dependency by assuming that the resumptive pronouns is derived by a process of deletion of NP within the DP that leaves the D head stranded. Applied to Akan, where the resumptive is homophonous with the definite determiner *nó*, a resumptive dependency would look as follows (see Arkoh & Matthewson 2013 and Hein & Georgi 2021 for analyses along these lines):

(67) *Resumption as NP deletion*
[ … [$_{DP}$ NP nó ] … [ … [$_{DP}$ ~~NP~~ nó ]]]

On this view, the elided NP could contain the relevant material responsible for reconstruction effects for Principle C or variable binding, for example. It is also clear, however, that not all resumption can be derived like this (see e.g. Bulgarian *deto*-relatives), which leaves open the question of how to determine which kind exists in a given language. Furthermore, section 4.2.2 will present a language-internal challenge for upholding the analysis in (67) for Akan.

If certain tests such as reconstruction and crossover do not unambiguously diagnose movement, then it seems that we are left with cyclicity effects such as the tonal overwriting pattern in the Asante Twi dialect as perhaps the most compelling potential evidence for a movement approach to resumption in Akan. It is then incumbent on a base generation analysis to provide an alternative account of this pattern that does not tie it to syntactic movement at all.

The first possibility would be to consider the domain of tonal overwriting as being defined over the linear string, such that overwriting applies to all verbs in the sentence that are linearly crossed by certain types of Ā-dependencies (e.g. those in relative clauses and focus constructions). Examples in Korsah & Murphy (2020) such as (68) illustrate that movement from the matrix clause does not trigger tonal overwriting in the lower clause. However, this would also be compatible with the aforementioned view that it is about the verbs that are crossed by the dependency in a purely linear sense.

(68) a. Kofí **ka**-a [$_{CP}$ sɛ́ ɔ-**dɔ** Ámꜜmá ]
Kofi say-PST that 3SG.SBJ-love Ama
'Kofi said that he loves Ama.'

b. Hwáń$_1$ na ɔ$_1$-**ká**-a [$_{CP}$ sɛ́ ɔ-**dɔ** Ámꜜmá ] ?
who FOC 3SG.SBJ-say-PST that 3SG.SBJ-love Ama
'Who said that he loves Ama?'

This alternative hypothesis can be conclusively dismissed, however, by considering cases in which a verb is linearly crossed while not being along the path of syntactic movement. If we take a sentential subject as in (69a) as a baseline, movement of a lower object will, under standard assumptions, not pass successive-cyclically through the complement clause to the noun 'rumour' inside the subject DP, although it does cross it linearly. As (69b) shows, the verb inside the noun complement clause does not receive any high tones. For this reason, it becomes clear that we must reject a linear-based approach to tonal overwriting.[16]

(69) *Tonal reflex only affects verbs along the movement path*

a. [$_{DP}$ Atésɛ́ḿ [$_{CP}$ sɛ́ Kofí **pɛ** Ámꜜmá ]] **yɛ-ɛ** Kwakú yá.
rumour that Kofi like Ama make Kwaku pain
'[The rumour that Kofi likes Ama] pained Kwaku.'

b. Hwáń$_1$ na [$_{DP}$ atésɛ́ḿ [$_{CP}$ sɛ́ Kofí **pɛ** Ámꜜmá ]] **yɛ́-ɛ** no$_1$ yá nó?
who FOC rumour that Kofi like Ama make 3SG pain CD
'Who did [the rumour that Kofi likes Ama] pain?

The fact that it is the syntactic path to the resumptive is relevant could, however, still be captured by an alternative approach to long-distance dependencies that uses a chain of base-generated binding dependencies. This approach is sometimes referred to as *iterative prolepsis* and has been proposed for long-distance dependencies in a number of other languages (e.g. Finer 1997; McCloskey 2002; Davies 2003; Adger & Ramchand 2005; Boeckx 2008; Schneider-Zioga 2009). This is arguably the only analytical option available for tonal overwriting on the base generation view, as far as we can tell.

To see how this might work, consider the following example from Kinande in (70). As Schneider-Zioga (2009) discusses, long distance dependencies trigger wh-agreement (in this case *kyo*) in each clause containing the dependency.

(70) *Long-distance dependency in Kinande* (Schneider-Zioga 2009: 47)
ekihi$_1$ kyo Kambale asi [$_{CP}$ nga kyo Yosefu akalengekanaya [$_{CP}$ nga
what WH-AGR Kambale know COMP WH-AGR Yosefu thinks COMP
kyo Mary' akahuka ___$_1$ ]]
WH-AGR Mary cooks
'What does Kambale know that Yosefu thinks that Mary cooks?'

[16]Thanks to Matthew Hewett for pointing out this possibility and suggesting the context in (69) to test it.

Furthermore, Schneider-Zioga (2009) shows that long-distance movement in Kinande lacks reconstruction effects, unlike local movement. This leads her to conclude that long-distance dependencies in the language are not formed by successive-cyclic movement, but rather by a series of successive binding dependencies (which may themselves involve clause-local movement of the operator/pronoun within the clause), as shown in (71).

(71) $[_{CP}\ pro_1\ [_{C'}$ kyo $[_{TP} \ldots\ [_{CP}\ pro_1\ [_{C'}$ kyo $[_{TP} \ldots\ [_{CP} \ldots\ pro_1 \ldots\ ]]]]]]]$

On this view, the presence of wh-agreement could be linked to the presence of a binder in the specifier of C, for example, much like McCloskey (2002) assumes for $a^N$-chains in Irish. The question now is whether we can apply the same analysis to Akan. We could in principle assume that tonal overwriting on a verb in a given clause is triggered by the presence of a base-generated *pro*-binder within that clause, for example. Here, the major challenge would be to differentiate between those base generation structures which trigger tonal overwriting and those which do not (in the *déé*-construction, for example).

As noted by a reviewer, this general line of analysis could give us a way to deal with the challenge of movement reflexes inside islands without actually needing to posit movement out of the island. As schematized in (72), a potential analysis could be that the lower operator moves to the edge of the island and is then bound by a higher operator which also moves within the higher clause.

(72) DP $[_{CP}\ pro_1\ [_{C'}$ C $[_{TP} \ldots$ ___ $\ldots\ [_{island}\ \ pro_1 \ldots\ [_{TP} \ldots$ ___ $\ldots\ ] \ldots\ ]]]]$

If the tonal reflex on a verb in Asante Twi tracks Ā-movement from, say, Spec-$v$P to Spec-CP, then we would correctly predict that we find the reflex both inside and outside the island without actually having to posit movement out of the island.

One of the major issues with such an approach is that it is not obvious why both base-generated operators would be compelled to move. As we have seen, Akan does in fact allow base generation in principle, as indicated by the absence of tonal overwriting in the *déé*-construction, for example; (62). For this reason, we might expect to find 'mixed chains' of the kind described for both Irish (McCloskey 2002) and Selayarese (Finer 1997) once direct base generation without movement is permitted in the grammar. In other languages that have both base generation and movement strategies to form an Ā-dependency, there is apparently no requirement for movement in the lower half of the dependency, for example. This can be seen by the absence of the familiar morphological reflexes of successive-cyclicity in the lower clause. If long-distance dependencies were formed as in (72), we might expect Akan to allow mixed chains in which the operator in the lower clause does not move (73). The consequence of this would be that we find tonal overwriting in the higher, but not in the lower clause.[17]

(73) DP $[_{CP}\ pro_1\ [_{C'}$ C $[_{TP} \ldots$ **V́** $\ldots$ ___ $\ldots\ [_{CP}\ \ pro_1\ [_{C'}$ C $[_{TP} \ldots$ **V** $\ldots\ pro_1 \ldots\ ] \ldots\ ]]]]]$

This prediction is not borne out. Long-distance dependencies always exhibit tonal overwriting in all subordinate clauses along the path of movement.

Furthermore, if a long-distance Ā-dependency terminates within an island, tonal overwriting

[17] van Urk (2017) reports this kind of pattern for Dinka. While Dinka has a reflex of successive-cyclicity involving a particle *ké* at the edge of $v$P (van Urk & Richards 2015; van Urk 2018), this it not found when the dependency that reaches into the island terminates in a resumptive pronoun rather than a gap (van Urk 2017). The analysis that van Urk proposes is that there is base generation within the island and movement outside of it.

on all verbs inside the island is also obligatory. What this would then entail is that base generation must be ruled out in (73) even when the lower CP is an island. If long-distance Ā-dependencies were formed by a series of proleptic binding relations, then there would have to be some additional requirement that each of the binders moves within its local clause. This raises the challenge of adequately restricting the theory. Once a language permits base generation as a strategy, as Akan clearly does, then it is unclear how to uniformly enforce movement of these base-generated operators, as would have to be the case.

One possibility could be to assume that the relevant binders are generated in Spec-$v$P and must move to Spec-CP in order to remain accessible (however, note that this raises non-trivial questions about the locality of binding relations, as binding is typically not subject to such restrictions). Again, in order to account for the lack of a tonal reflex in *déé*-constructions, we would have to stipulate that base generation directly in Spec-CP is only possible in matrix clauses. Once again, this does not solve the restrictiveness problem. We would then predict mixed chains of the kind that is attested in Irish, namely base generation in the highest clause and movement in the lower clause (74). In Akan, this would correspond to a long-distance dependency with tonal overwriting in the lower clause, but not in the higher clause.

(74) DP [$_{CP}$ *pro*$_1$ [$_{C'}$ déé [$_{TP}$ … **V** … [$_{CP}$ *pro*$_1$ [$_{C'}$ C [$_{TP}$ … **V́** … ___ … ] … ]]]]]

This is not a pattern that we find. Akan does not, to the best of our knowledge, exhibit mixed chains of any kind. Assuming that Ā-dependencies in Akan are composed of a series of propletic binding relations raises the problem of then adequately constraining this mechanism. Once we have base generation and movement of operators, we seem to incorrectly predict the kind of mixed chains we find in Irish and other languages.

Furthermore, there is another challenge faced by the approach in (72). On this view, the absence of island effects would be due to the fact that there is never actually any movement out of the island rather than any kind of island repair mechanism. But recall that this is only true for movement of nominals. Ā-displacement of VPs and PPs is subject to island constraints, as we saw in (27) and (29). Furthermore, long-distance extraction of these categories leads to tonal overwriting, see (26) and (28), showing that they require a movement derivation. The problem is that, in order to derive the island-sensitivity of PP and VP extraction, the island-avoiding derivation in (75a) must be unavailable. Instead, movement must be proceed out of the island, as in (75b).

(75) a. DP *pro*$_1$ … ___ … [$_{island}$ *pro*$_1$ … ___ … ]

b. *PP *pro*$_1$ … [$_{island}$ ___ … ___ ]

This leads to a further issue in constraining the prolepsis theory of Ā-dependencies in Akan. While admittedly the island-insensitivity of nominal extraction is also challenging for the movement-based analysis we will discuss in the following section, neither of the solutions we will discuss there (island obviation by resumption or category-discriminating islands) extends straightforwardly to a theory involving a series of binding dependencies between null operators.

In sum, the base generation alternative struggles to capture the distribution of the tonal reflex of displacement in a restricted way. Since it is clear that Akan must allow base generation as option in principle, a theory employing iterative prolepsis must posit *ad hoc* restrictions on where operators may be base-generated, while also enforcing a general requirement that they move. As we have shown, this appears to predict that we should find mixed chains of the

kind we do in Irish and Selayarese, contrary to fact. In addition, there is no further supporting evidence for the base generation approach beyond the lack of island effects (e.g. the absence of reconstruction effects as in Kinande).

### 4.2.2 Akan resumption as movement

Given the fact that base generation cannot provide a fully satisfactory account of the properties of resumption in Akan, cyclicity effects in particular, we will argue that the best approach to the Akan data currently available is one involving a movement derivation of resumption. On this view, the island-insensitivity that we observe with nominal extraction must then be explained by some other assumption(s).

The first analytical possibility to account for the apparently contradictory movement diagnostics is to assume, as Korsah & Murphy (2020) do, that Akan resumption is uniformly derived by movement and that the availability of a resumptive pronoun is directly responsible for obviating island effects. On their view, islands are PF constraints that penalize gaps in certain structural configurations. Furthermore, they assume that such constraints can be obviated by a resumptive pronoun at the tail of the dependency (a kind of grammaticalized intrusive resumption). Korsah & Murphy (2020) propose a rule of *Pronoun Conversion* that turns the lowest DP in a movement chain into a pronoun, as schematized in (76). This is essentially the equivalent of Fiengo & May's (1994) notion of 'vehicle change', but applying at PF.

(76) *Pronoun Conversion*
$[_{CP}\ DP_1\ [_{TP}\ \ldots\ [\ \ldots\ DP_1\ \ldots\ ]]] \Longrightarrow [_{CP}\ DP_1\ [_{TP}\ \ldots\ [\ \ldots\ pro_1\ \ldots\ ]]]$

While this seems to give a straightforward reconciliation of the evidence for movement with island-insensitivity, it complicates our view of islands significantly. Korsah and Murphy must assume that islands are representational constraints, i.e. that they hold at PF. This view does in fact have some precedent, see e.g. (Perlmutter 1972; Pesetsky 1998; Merchant 2001; Lasnik 2001; Hornstein et al. 2007; Boeckx 2012; Griffiths & Lipták 2014). For example, Pesetsky (1998: 365) argues for a similar representational view of island constraints, as in (77).

(77) $^{*}\alpha\ \ldots\ [_{\text{island}}\ \ldots\ \beta\ \ldots\ ]$, where $\beta$ is the trace of $\alpha$ and unpronounced.

On this view, Pronoun Conversion would create a PF representation that complies with the general formulation of island constraints in (77). A complication to this approach is the fact that islands in Akan are obviated by resumption even if the resumptive pronoun undergoes pro drop. Recall that we saw that the apparent animacy distinction in resumption was shown to be blocked in certain obligatorily pronoun contexts, which we took to show that movement of DPs always results in a resumptive pronoun. In order to satisfy the constraint in (77), the representational island constraint must be checked before pro drop applies (an instance of counter-bleeding). This would necessitate that pro drop be a relatively late process on the PF branch, arguably complicating the architecture of the post-syntax.

Furthermore, recall from section 3.1 that Hein & Georgi (2021) raised an empirical problem for Korsah and Murphy's account. While both PPs and VPs lack resumptives and also give rise to island effects, Hein & Georgi showed that certain types of nominal expressions, namely idiom chunks, predicate nominals and non-specific indefinites, also lack overt resumptives in obligatory pronoun contexts (much like PPs and VPs), yet are still insensitive to islands (unlike VP and PP extraction). This serves to weaken the link between overt resumption and island-insensitivity that underlies the proposal of Pronoun Conversion. In response to this, there are two options: One can abandon this approach to island obviation in favour of an alternative approach (such as Hein and Georgi's, which we will discuss in a moment) or one could seek an independent explanation for why the class of nominals discussed by Hein and

Georgi appears incompatible with overt resumption.

A possible way of pursuing the latter approach would be to try to argue that there is a more general constraint that disallows overt pronouns that are co-indexed with nominals of the kind discussed by Hein & Georgi (2021). Resumptive pronouns would then also happen to fall under this more general constraint. To show this, we would want to find contexts in which an overt non-resumptive pronoun may not be refer to a nominal of the relevant type, yet a silent pronoun may. In practice, this is difficult to test because the nominals in question are not easy to construe as referential. Nevertheless, we were able to construct the relevant test sentences. Consider the example in (78) where we are trying to refer back to a predicate nominal, a noun-type that Hein and Georgi show to reject a resumptive pronoun.

(78) Na Kwadwo pɛ sɛ ɔ-yɛ odusini$_1$, nanso ɔ-a-n-yɛ ?bi$_1$ /
PST Kwadwo want COMP 3SG-FUT-be herbalist but 3SG-PERF-NEG-be INDEF
*no$_1$ / ⸺$_1$
3SG.OBJ
'Kwadwo wanted to become a herbalist, but he did not become (one)'.

Here, the only possible pronoun forms are a silent (dropped) pronoun (indicated as a gap) or, somewhat marginally, an overt indefinite pronoun *bi*. An overt anaphoric pronoun *no* is ruled out. This could be taken as indication that pronouns referring to predicate nominals must obligatorily dropped.[18]

In a similar vein, we can construct cases in which the anaphoric pronoun is contained inside an adjunct clause. Taking a different kind of nominal here, that is a non-specific indefinite, we observe the same effect. The anaphoric pronoun in the adjunct must be null when it refers to the indefinite 'people' (79a). The pattern is reversed if the extracted NP is specific, where an overt pronoun becomes obligatory (79b).[19]

(79) a. Nípa na Kofi súró ⸺$_1$ [$_{CP}$ ésánesé ɔ-fɛ́ré { ⸺$_1$ / *nó$_1$ } ]
person FOC Kofi fear because 3SG.SBJ-be.shy.of 3SG.OBJ
'It's people that Kofi really fears because he is shy of (them).'
b. Nípa yi$_1$ na Kofi súró nó$_1$ [$_{CP}$ ésánesé ɔ-fɛ́ré { *⸺$_1$ / nó$_1$ } ]
person this FOC Kofi fear 3SG.OBJ because 3SG.SBJ-be.shy.of 3SG.OBJ
'It's this person that Kofi really fears because he is shy of him.'

A possible way of interpreting this is that there is a more general process (e.g. an obligatory pro-drop rule) that applies to pronouns that are co-indexed with the class of nominal expressions that Hein & Georgi identified. Whatever process applies to block overt forms of anaphoric pronouns would then arguably equally apply to resumptive pronouns, too. While these findings are still tentative, this would potentially offer a way to reconcile Hein & Georgi's findings with the Pronoun Conversion proposal outlined above.

An alternative route is to pursue an entirely different account of island obviation, as Hein & Georgi (2021) do. Hein & Georgi seek to derive island-insensitivity in Akan from the nature of island constraints themselves. In particular, they argue that island constraints may be

[18]However, note that this an example of one of Postal's (1994; 1998) antipronominal contexts for English, however. This could potentially provide an independent reason why an overt pronoun is ruled out. With that said, if antipronominal contexts are characterized in semantic terms (Poole 2017), i.e. rejecting pronouns of a certain semantic type, it is unclear why the unpronounced version of this pronoun should differ in this regard.

[19]This is a typical parasitic gap configuration, however it is unclear if Akan has parasitic gaps at all. If (79a) did contain a parasitic gap, we would expect it to alternative with an overt pronoun, as it does not. Furthermore, it would be somewhat puzzling why no parasitic gap is possible (79b). One would have to say that parasitic gaps may only be licensed by certain types of nominal extraction. For these reasons, we reject this possible line of analysis.

category-discriminating, presumably on a language-specific basis. The idea that islands may be category-sensitive has some precedent in work by Cinque (1990) and Postal (1998) who discuss so-called 'selective' islands that are sensitive to the type of extractee involved. Contrasts of the kind in (80) have been discussed in the literature, which may seem to indicate that extraction of PPs from wh-islands differs from extraction of DPs (though see Szabolcsi 2006 for discussion of further factors).

(80) a. *[$_{PP}$ About whom ] do you wonder [$_{CP}$ whether to worry ___$_{PP}$ ] ?
b. [$_{DP}$ Who ] do you wonder [$_{CP}$ whether to worry about ___$_{DP}$ ] ?

In a similar vein, Hein & Georgi suggest that islands in Akan do not apply to extraction of phrases with a 'nominal core', i.e. which contain an NP. This is because they also argue the class of nominal expressions that do not show resumptives and yet are still island-insensitive (predicate nominals, non-specific indefinites and idiom chunks) are NPs rather than DPs. While a fully-fledged theory of category-sensitive islands has, to the best of our knowledge, not yet been worked out, it is clear that the proposal by Hein & Georgi (2021) would require significant complications, as it is not just the category of the extracted element which matters, but also its internal structure (i.e. whether it contains a 'nominal core').[20]

On Hein & Georgi's (2021) analysis, there is no direct link between the availability of a resumptive pronoun and sensitivity to islands. Hein & Georgi (2021) instead propose a deletion-based account in which resumptives in Akan are derived from deletion in the lowest copy applies to NPs, VPs and PPs, but not DPs. This leads to the view of resumptive pronouns as a stranded D head that is found only with DP-extractees (81).

(81)

| | |
|---|---|
| DP lowest copy: | VP lowest copy: |
| [DP D NP ] → [DP $\boxed{\text{D}}$ ~~NP~~ ] | [VP V XP ] → [VP ~~V~~ ~~XP~~ ] |
| NP lowest copy: | PP lowest copy: |
| [NP N XP ] → [NP ~~N~~ ~~XP~~ ] | [PP P NP ] → [PP ~~P~~ ~~NP~~ ] |

On this view, predicate nominals, idiom chunks and non-specific indefinites are incompatible with (resumptive) pronouns because the deletion rule applies to NPs (in addition to VPs and PPs), meaning that there is no stranded determiner that could be realized as a pronoun. Nevertheless, since category-sensitive island effects apply to phrases with a 'nominal' core, both DP and NP extraction is island-insensitive regardless of the availability of a resumptive.

It is worth mentioning that adopting this particular analysis of resumption for Akan has been argued against by Korsah & Murphy (2020) on the basis of haplology effects. As pointed out by Saah (1994), a sequence of homophonous determiner *nó*'s in Akan are not possible. As (82a) shows, if the first *nó* is a resumptive pronoun, then this may occur adjacent to a clausal determiner. If the first of the determiner sequence is also a genuine determiner, however, then this is ruled out and one of them must be deleted.[21]

[20] The precise definition of a 'nominal core' is relevant when considering PP- and VP-extraction since these may also contain an NP, meaning that the constraint should presumably not be formulated in terms of straightforward domination of an NP category. For this reason, defining island-insensitivity in terms of nominal extended projections (Grimshaw 2000) might ultimately be the more desirable approach.

[21] Actually, it is not even a requirement that the determiners be homophonous for this effect to obtain. In relative clauses, the clausal determiner actually 'agrees' with the head noun, as seen with relatives clauses with a head noun that have the proximal determiner *yi* (see Saah 1994: 157). Here, this also triggers the same form of the clausal determiner (Saah 2010). This CD may appear next to a resumptive pronoun (ia), however, when adjacent to a genuine determiner, the CD must be absent (ib).

(i) a. [$_{DP}$ papa yi [$_{CP}$ *Op*$_1$ aa [$_{DP}$ maame no ] pɛ nó$_1$ yi ] ba-aɛ
man PROX REL woman DET love 3SG.OBJ CD come-PST

(82) *Determiner haplology effect* (Saah 1994: 153–154):

a. [$_{DP}$ Abɔfrá [$_{CP}$ *Op*$_1$ áa Kofí hú-u **nó**$_1$ **nó** ]] á-ba
child REL Kofi saw-PST 3SG.OBJ CD PERF-come
'The child that Kofi saw has come.'

b. [$_{DP}$ Onípá [$_{CP}$ *Op*$_1$ áa ɔ$_1$-tó-o [$_{DP}$ ndwóḿ **nó** ] (***nó**) ]] yɛ-ɛ
person REL 3SG.SBJ-throw-PST song DEF CD do-PST
adé
something
'The person who sang the song did well.'

Korsah & Murphy argue that there is no good reason why the haplology constraint should care if the NP complement of the determiner is deleted. The relevant rule should still apply in cases such as (82a), even if the resumptive is a stranded D head. On the Pronoun Conversion analysis, however, the resumptive is still a phrasal constituent and would therefore be immune from a rule that deletes the second in a sequence of adjacent homophonous $D^0$ elements.

For this reason, it seems that both an explanation in terms of Pronoun Conversion and category-sensitive islands faces some complications. While both can adequately reconcile a movement-based derivation of resumption with the lack of island violations with nominal resumption, it is not clear to us which one should be preferred at this point. Nevertheless, it seems that a movement-based derivation of islands coupled with either one of these assumptions can deliver a more satisfactory account of the Akan data than its base generation competitor.

## 5 Conclusion

In this paper, we have discussed the properties of resumption in Ā-dependencies in Akan. While resumptive dependencies in Akan are island-insensitive, they also show various other properties that could be taken to indicate a movement derivation. For example, they show reconstruction, crossover and cyclicity effects. This profile seems to occupy a relatively unusual position in the typology of resumption at present. Despite robust island-insensitivity with nominal extraction, these dependencies fulfil other diagnostics that are often taken to be indicative of movement. Among the possible interpretations of this state affairs, one could argue that these diagnostics do not in fact identify movement after all, or, that this forces us to the conclusion that a movement derivation can still be maintained even in the face of island-insensitivity.

Here, we have argued for the latter conclusion. We have shown that attempting to reconcile the other diagnostics, the tonal overwriting property of displacement constructions in particular, with either a pure base generation approach or mixed chains analysis that involves base generation and movement is ultimately not a tenable solution. Such accounts open up a wider range of derivational possibilities and therefore over-predict the patterns of tonal overwriting that we expect to find. What is more, Akan does in fact seem to have a class of base-generated Ā-constructions which have different properties than those indicated above, which further undermines this line of analysis.

Instead, we believe that an approach involving a movement derivation offers the best way of understanding resumption in Akan. On this view, the various evidence for movement is

'This man who the woman loves came.'

b. [$_{DP}$ papa yi [$_{CP}$ *Op*$_1$ aa ɔ$_1$-pɛ [$_{DP}$ maame no ] (*yi) ] ba-aɛ
man PROX REL 3SG-love woman DET (*CD) come-PST
'This man who loves the woman came.'

This is a useful observation as it is otherwise unclear in (82b) that it is actually the CD which is dropped, as its form is identical to the object's determiner. Examples such as (ib) make this clear, however, as the two forms differ.

accommodated straightforwardly. The central challenge is then accounting for the absence of uniform island effects in the language. We have discussed two potential solutions: (i) Following Korsah & Murphy (2020), resumption is directly responsible for island obviation on the assumption that islands are representational PF constraints or (ii) islands in Akan should be treated as category-discriminating and solely prohibit extraction of DPs, as argued by Hein & Georgi (2021). While both seem viable solutions, we are currently not in a position to adjudicate between these two approaches.

In sum, Akan provides an interesting contribution to the typology of resumptive Ā-dependencies. We have argued that, at least in descriptive terms, it may well provide the strongest case for what we called a 'Type IV' profile of resumption where island-insensitivity conflicts with other putative movement tests. Reconciling the potential tensions between island-(in)sensitivity and other evidence for movement is still an ongoing task that requires further careful investigation of a wider range of languages. At this point, however, it is clear that the cross-linguistic picture of resumption that emerges requires us to go beyond the traditional dichotomy between movement and base generation.

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