

Two types of subject resumption in Akan^{*}

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1. Introduction

➤ Resumptive pronouns

- Pronominal elements that appear in a position in which syntactic gaps might have occurred
- Usually agree with the antecedent in *phi*-features (McCloskey 2017)

(1) There are guests_i **who_i** I am curious about what *it_i is/ **they_i** are} going to say. (adapted from McCloskey 2017:1)

- **Non-agreeing resumptive pronouns (RPs)¹**

- Found widely in African languages: Dinka (van Urk 2018), Igbo (Georgi & Amaechi 2022), Swahili (Scott 2021), Yorùbá (Adesola 2010), as well as in:
 - Sinitic languages like Cantonese, Mandarin, Shanghainese (Xu 1999, Yip & Ahenkorah 2023)
 - Irish, Welsh, Scottish Gaelic (Boeckx 2003 and references therein)
- Recently attracts much interest on how it sheds light on the copy theory of movement

(2) { **ḿ/ gí/ yá/ ànyí/ únù/ há** } ká Ézé kwè-rè nà yá
 1SG.ACC 2SG.ACC 3SG.ACC 1PL.ACC 2PL.ACC 3PL.ACC FOC Eze believe-rV in 3SG.ACC
 ‘Eze believes in me/you(sg)/him~her/us/you(pl)/them.’ (Igbo, Georgi & Amaechi 2022, ex.37)

(3) **Wewe** ndi-ye amba-ye Hadija a-li-kutana na-we-ye
 2SG COP-1 AMBA-1 Hadija 1-PST-meet with-2SG/1
 ‘It’s you who Hadija met with.’ (Swahili, Scott 2021:823; ye = 3SG pronoun)

- **Non-agreeing RPs in the Asante Twi dialect of Akan (Kwa, Niger-Congo)** (cf. Korsah 2016)
 - *Subject* RPs, in addition to agreeing RPs (allowed in other environments)
 - Third person (number-neutral) inanimate ϵ

(4) Non-agreeing resumptive pronoun in Akan

A-sukuu-foɔ, **no** tumi { _i / ε_i / *wɔ_i } tu ndwom (subject movement)
 PL-student-PL DET can 3.IN/ 3PL.AN sing song
 ‘The students can sing.’ [Akan, Asante Twi]

(5) Main claims

- Both **non-agreeing** and **agreeing** RPs are attested in Akan (empirical)
- Non-agreeing RPs involve **movement dependencies**, agreeing RPs do not (analytic)
- Copy Deletion** may apply **partially** to the lower copy on the **featural level**, where the residue feature is realized as non-agreeing RPs (theoretical)

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¹ Abbreviations: 1, 2, 3=first/second/third person; AN/IN=animate/inanimate; CD=clausal determiner; COMP=complementizer; DET=determiner; FOC=focus marker, PL=plural; POSS=possessive; PST=past tense marker; REL=relative marker; SG=singular.

Roadmap:

§2: Non-agreeing RPs

§3: Movement properties

§4: Proposal: partial Copy Deletion

§5: Concluding remarks

2. Non-agreeing resumptive pronouns

2.1. *Pronoun inventories*

➤ Asante Twi Akan

- *Phi*-features: person, number, and animacy
- Case: nominative vs. accusative (e.g. *no* ‘it/her/him’ for 3SG.AN)
- (Nominative) third person inanimate: ϵ

(6) Nominative pronouns in Akan²

	SG	PL
1	<i>me</i>	<i>yen</i>
2	<i>wo</i>	<i>mo</i>
3(anim.)	ɔ	wɔ
3(inanim.)	ϵ	

2.2. *Resumptive pronouns with featural mismatch*

➤ Akan (Asante Twi) subject RPs (Korsah 2016)³

- **Mismatch** in *phi*-features with the antecedents (except for number, due to syncretism)
- Alternates with gaps (in A-movement contexts, not mentioned by Korsah 2016)
- Only occur in *subject* positions
- Only found in Asante Twi (vs. the Fante dialect of Akan, Korsah 2016)⁴

(7) **M-mofra no_i** { $_i$ / ϵ_i } tu ndwom (mismatch in animacy, cf. 3PL.AN *wɔ*)
 PL-child DET 3.IN sing song
 ‘The children sing.’

(8) **Yɛn miensa_i** { $_i$ / ϵ_i } tu-u ndwom (mismatch in person, cf. 1PL *yɛn*)
 1PL three 3.IN sing-PST song
 ‘We three sang.’

2.3. *Not a subject expletive*

➤ While Akan is a language that disallows null subjects (i.e., subject EPP), the non-agreeing RP does not occur in constructions with expletives in other subject EPP languages (e.g., English)

- Cannot be **weather-it**

(9) Nsuo ϵ to (Weather reports)
 water 3.IN fall
 ‘It rains.’ (lit.: ‘Water falls.’)

² While the notation in the literature often treats nominative pronouns like proclitics (e.g. “ $\text{ɔ}=\text{”}$ in Campbell 1998 or “ ɔ- ” in Korsah 2016), they do not necessarily cliticize onto the verb. We thus represent them without clitic notations.

(i) ɔ tae tu ndwom
 3SG.AN often sing song
 ‘S/he often sings.’

³ See Korsah & Murphy (2019) and Hein & Georgi (2021) for object RPs. They also discuss movement properties of objects RPs, which are not entirely the same with the (non-)agreeing subject RPs to be discussed here.

⁴ In Fante Akan, only agreeing RPs are allowed, as shown below.

(ii) [**N-nyipa du pɛ**]_i na { **wɔ_r- / *ɔ_r-** } hyia-i. (Korsah 2016:110)
 PL-person ten only FOC 3PL- / DFLT- meet-PST
 ‘Only ten people (as opposed to more people) met.’ [Akan, Fante]

(10) ε cannot be a subject expletive in weather reports

- a. ε tɔ nsuo (referential)
3.IN fall water
NOT: ‘It is raining’
ONLY: ‘Something falls water.’
- b. ε tɔ (referential)
3.IN fall
‘It falls (something falls).’

- Cannot be **existential-*there***

- (11) Obi ε wɔ hɔ (Existential constructions)
someone 3.IN be.LOC LOC
‘There is someone.’ (Lit.: ‘Someone is there.’)

(12) ε cannot be a subject expletive in existential constructions

- a. *ε wɔ {hɔ} obi {hɔ}
3.IN be.LOC LOC someone LOC
Int.: ‘There is someone.’
- b. *Hɔ ε wɔ obi
LOC 3.IN be.LOC someone
Int.: ‘There is someone.’

➤ Cannot occur in **subject-less** constructions

- **Imperatives** in Akan do not have a (null) subject
 - Overt 2nd person pronouns in imperatives are vocatives instead of subjects
 - No null 2nd person subjects: 2nd person reflexives are banned

- (13) a. Bra ha!
come here
‘Come here!’
- b. Wo, bra ha! (vocative)
2SG come here
‘You, come here!’

- (14) a. *Bo(bɔ) mo-ho (mo-ho)!
hit.RED 2PL-self RED
Int.: ‘You all hit yourself!’
- b. Mo_i tae bobɔ mo-ho_i mo-ho_i (reflexives in declaratives)
2PL often hit.RED 2PL-self RED
‘You often hit yourself.’

- ε cannot occur in subject-less imperatives
 - Though it can resume an overt 2nd person subject independently

- (15) a. *ε bra ha!
3.IN come here
Int.: ‘Come here!’
- b. *Wo, ε bra ha! (vocative)
2SG 3.IN come here
Int.: ‘You, come here!’

- (16) Mo_i tae ε_i bobɔ mo-ho_i mo-ho_i
2PL often 3.IN hit.RED 2PL-self RED
‘You (should) hit yourself.’

- While non-agreeing RPs in Yorùbá have been treated as subject expletive pronouns (Adesola 2010), we propose that Akan **cannot** be analyzed in this way
- Instead, we suggest that non-agreeing RPs in Akan are the “**spell out**” of **subject traces**, i.e., it is a result of **movement**

3. Movement properties of non-agreeing resumptive pronouns

3.1. Local and long-distance movement

➤ TP-internal “local” A-movement

- From the edge of vP to the edge of TP

□ ✓ gaps, ✓ non-agreeing RPs, ✗ agreeing RPs

- No topic/focus interpretation (or any A'-related discourse restrictions)⁵

(17) [TP ϵ no_r [_{vP} a-sukuu-fo_rno tu-u ndwom]] (baseline)
yesterday PL-student-PL DET sing-PST song
'The students sang yesterday.'

(18) [TP A-sukuu-fo_rno ϵ no_r [_{vP} {_{-i} / ϵ_i / w_oi} tu-u ndwom]] (subject movement)
PL-student-PL DET yesterday 3.IN/ 3PL.AN sing-PST song
'The students sang yesterday.'

➤ Raising: long-distance A-movement crossing a non-finite clause

- Multiple realization of non-agreeing RPs

(19) [TP A-sukuu-fo_rno [_{vP1} (ϵ_i) tumi [_{vP2} (ϵ_i) tu ndwom]]]
PL-student-PL DET 3.IN can 3.IN sing song
'The students can sing.'

➤ A-bar movement beyond TP

- Relativization

□ ✗ gaps, ✓ non-agreeing RPs, ✓ agreeing RPs

(20) M-mofra no_i [_{CP} aa {*_{-i} / ϵ_i - / w_oi-} k_o-_o sukuu enora no] (monoclausal)
PL-child DET REL 3SG.IN 3PL.AN go-PST school yesterday CD
'The children who went to school yesterday'

(21) M-mofra no_i [_{CP} aa me dwene [_{CP} se {*_{-i} / ϵ_i - / w_oi-} k_o-_o sukuu no]] (long-dist.)
PL-child DET REL 1SG think COMP 3SG.IN 3PL.AN go-PST school CD
'The children who I think went to school'

- Focus movement

□ ✗ gaps, ✓ non-agreeing RPs, ✓ agreeing RPs

(22) Ama_i na {*_{-i} / ϵ_i - / \mathfrak{r}_i -} pe sika no (monoclausal)
Ama FOC 3SG.IN 3SG.AN want money CD
'It is Ama who wants the money.'

(23) Ama_i na Kofi dwene-e [_{CP} se {*_{-i} / ϵ_i - / \mathfrak{r}_i -} pe sika no] (long-distance)
Ama FOC Kofi think-PST COMP 3SG.IN 3SG.AN want money CD
'It is Ama who Kofi thought that she wants the money.'

- Wh-movement behaves alike (data not shown here)

⁵ Not even specificity, since FCIs (free-choice items) like “any students” may be resumed by ϵ .

3.2. Movement properties of non-agreeing RPs

➤ Idiom preservation

• Idiom meaning is preserved: ✓ gaps, ✓ non-agreeing RPs, ✗ agreeing RPs

- Only literal meaning for agreeing RPs
- Assuming idioms form a constituent (in a local domain) in an early stage of derivation ...
 → **movement** for gaps and non-agreeing RPs, but not agreeing RPs

(24) Me pɔnkɔ_i dabiara {_{-i} / ϵ_i^- / ɔ_i^- } pɛ ntem (SV idioms)
 POSS horse daily 3SG.IN 3SG.AN want quickly
 Literal: ‘My horse(, it) is always eager.’ (gap, ϵ^- , ɔ^-)
 Idiomatic: ‘I am always in a hurry.’ (gap, ϵ^-)

➤ Island sensitivity

• Island sensitivity: ✓ non-agreeing RPs, ✗ agreeing RPs (Subj gaps independently banned in A'-mvt)

- Agreeing RPs ameliorate island violations
- Configuration: [XP_i ... [_{island} *gap_i / *non-agreeing RP_i / ^{OK}agreeing RP_i] ...]

(25) M-mofra no_i [_{CP} aa me te-e [_{NP} n-konkansa fa-a wɔn ho (complex NP island)
 PL-child DET REL 1SG hear-PST PL-rumor take-PST 3PL.POSS body
 [_{CP} sɛ {_{-i} / ϵ_i^* / wɔ_i } fa-a pen no]]]
 COMP 3SG.IN / 3PL.AN take-PST pen DET
 ‘The children_i who I heard a rumor about them_i that they_i took the pen’

➤ Crossover effects: see Appendix 6.1

3.3. Interim summary

- Gaps and non-agreeing RPs are allowed in local A-movement, but not agreeing RPs
 → **no Binding B violation** → non-agreeing RPs do not pattern with referential pronouns
- In Akan, gaps are not available in A'-movement

(26) Distribution by movement types

		Gap	Non-agreeing RP (ϵ)	Agreeing RPs
A-mvt.	monoclausal	YES	YES	NO
	long-distance (non-finite)	YES	YES	NO
A-bar mvt.	monoclausal	NO	YES	YES
	long-distance (finite)	NO	YES	YES

- Gaps and non-agreeing RPs show movement properties, but not agreeing RPs

(27) Movement properties

	Gap	Non-agreeing RP (ϵ)	Agreeing RPs
Idiom preservation	YES	YES	NO
Island sensitivity	—	YES	NO
Strong crossover effects	—	YES	NO
Weak crossover effects	—	YES	NO

4. Proposal: partial Copy Deletion

4.1. Theoretical background

- Copy Theory of Movement (Chomsky 1995, Nunes 1995, Nunes 2004, Bošković & Nunes 2007)
 - Movement creates copies
 - XP ... <XP>
 - **Copy Deletion** applies to the lower copy in typical cases, deleting all the features
- Distributed Morphology (Halle & Marantz 1993 *et seq.*)
 - Functional elements only have SynSem features in syntax (i.e. no phonological content)
 - Get phonological content through **Vocabulary Insertion** *post-syntactically* (i.e. in the PF)
 - Featural compositions of the pronouns⁶
 - The most unmarked (default) pronouns: 3.IN ϵ

(28) Nominative pronouns in Akan

	SG	PL
1	<i>me</i>	<i>yɛn</i>
2	<i>wo</i>	<i>mo</i>
3(anim.)	<i>ɔ</i>	<i>wɔ</i>
3(inanim.)	ϵ	

(29) Vocabulary Items of Akan pronouns

[D, +author, +pl]	↔	<i>yɛn</i>
[D, +addressee, +pl]	↔	<i>mo</i>
[D, +animate, +pl]	↔	<i>wɔ</i>
[D, +author]	↔	<i>me</i>
[D, +addressee]	↔	<i>wo</i>
[D, +animate]	↔	<i>ɔ</i>
[D]	↔	ϵ

4.2. Non-agreeing RPs as a result of partial Copy Deletion

- Key components:
 - Copy Deletion is ordered before VI in the PF (e.g., van Urk 2018)

(30) Narrow Syntax → Morphology → Linearization (Copy Deletion) → VI → Phonology → ...
PF

- Copy Deletion may apply *partially*, deleting all the features on the lower copy *except* [D]
 - Concerning the subject movement in Akan (see Appendix 6.2 for why [D] is special)
 - Cf. van Urk (2018), Scott (2021), Georgi & Amaechi (2022)⁷

- The remaining [D] realizes as a default pronoun in the PF by Vocabulary Insertion
 - [D] ↔ *default pronoun*

(31) Partial and Full Copy Deletion

Syntax: $\alpha_{[D],[\phi],...} \dots \beta_{[D],[\phi],...}$; where (α, β) is a chain created by movement
 CD: (i) *Full* $\alpha_{[D],[\phi],...} \dots \beta_{[D],[\phi],...} \rightarrow$ surface string = α
 (ii) *Partial* $\alpha_{[D],[\phi],...} \dots \beta_{[D],[\phi],...} \rightarrow$ surface string = $\alpha \dots$ exponent of D (=default pronoun)

⁶ Presumably, [+author] and [+addressee] entail [+animate].

⁷ See also various proposals of distributed/scattered deletion for *left branch extraction* (e.g., Fanselow & Ćavar 2002), *predicate fronting* (e.g., Landau 2006, Larson 2023, van Urk 2024), and *discontinuous predicates* (e.g., Chan, Lee & Yip 2022).

➤ Implementation

(32) **N-nam-fo-nom no;** ϵ tu ndwom
 PL-friend-PL-PL DET 3IN sing song
 ‘The friends sing.’

(33) The derivation of Akan non-agreeing RP ϵ - in (32)

a. Baseline	(syntax)	[_{TP}	T [_{vP} DP _[D, +pl, +anim, n, √FRIEND] ...]]
b. Subj. mvt.	(syntax)	[_{TP} DP _[D, +pl, +anim, n, √FRIEND]	T [_{vP} <DP _[D, +pl, +anim, n, √FRIEND] > ...]]
c. Partial CD	(PF)	[_{TP} DP _[D, +pl, +anim, n, √FRIEND]	T [_{vP} <DP _[D, +pl, +anim, n, √FRIEND] > ...]]
d. VI	(PF)	[_{TP} <i>n-nam-fo-nom no</i>	T [_{vP} < ϵ > ...]]

➤ Deriving the properties of non-agreeing RPs

• **Featural mismatch**

- Only the label [D] survives Copy Deletion, and all the phi-features are deleted
- Hence the form is always the *default pronoun* – but not the agreeing pronouns, or any other pronouns with phi-features

• **Movement properties**

- Non-agreeing RPs are the realization of the “trace”, i.e. the lower copy of movement chains

• **Local A-movement: no Binding Condition B violation**

- Non-agreeing RPs are not genuine pronouns w/ anaphoric dependency with the antecedent
 - They are not subject to the Binding Principle
 - They can occur with the antecedent in a local binding domain, i.e., local A-movement

➤ More on partial deletion

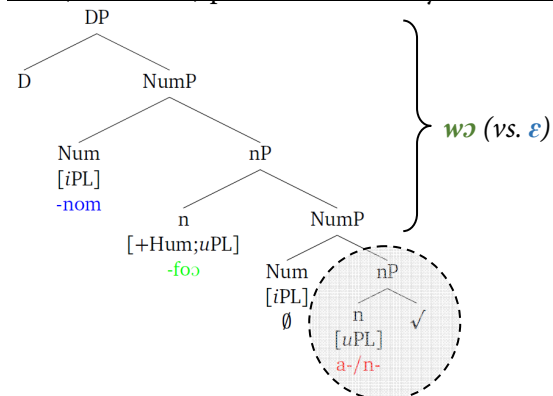
- Syntactically constrained partial **deletion**: Deleting a certain syntactic domain
 - van Urk (2018), Georgi & Amaechi (2022)
- Partial **pronunciation/non-deletion**: Delete everything except for certain features that survive deletion
 - Scott’s (2021) MaxElide and the current proposal
- Georgi & Amaechi (2022) propose that our Akan (and Cantonese) data can be captured by DPD:

(34) Dynamic partial deletion (DPD):

Partial deletion applied to the copy of an XP deletes the lowest functional projection in the extended projection of XP.

- **However**, applying DPD to a 3PL animate DP in Akan would predict **an agreeing RP**
 - which we have shown to have **no** movement properties
 - Cf. the split number approach in Ahenkorah (2024)
- Analytically, we need a larger deletion domain

(35) The (unattested) prediction made by DPD in Akan



4.3. Against a big DP + stranding approach

- A prominent alternative: movement-derived RPs as stranding (e.g. Aoun, Choueiri, and Hornstein 2001, Boeckx 2003, cf. the comprehensive discussion in Hewett 2023)
 - The non-agreeing RP is a D head that takes another DP, and stranded after movement

(36) A hypothetical derivation of Akan non-agreeing RP ϵ - in (32) (to be rejected)

a. Baseline	(syntax)	[TP	T	[_{VP}	[DP ₁ D _[D]	[DP ₂ _[D, +pl, +anim, n, √FRIEND]] ...]]
b. Subj. mvt.	(syntax)	[TP DP ₂ _[D, +pl, +anim, n, √FRIEND]	T	[_{VP}	[DP ₁ D _[D]	<[DP ₂ _[D, +pl, +anim, n, √FRIEND] >] ...]]
c. Full CD	(PF)	[TP DP ₂ _[D, +pl, +anim, n, √FRIEND]	T	[_{VP}	[DP ₁ D _[D]	<[DP ₂ _[D, +pl, +anim, n, √FRIEND] >] ...]]
d. VI	(PF)	[TP <i>n-nam-fo-nom no</i>	T	[_{VP}	< ϵ >	...]]

- Problem #1: Such “big-DPs” **can never be pronounced together** in the language

(37) * _{[DP₁ ϵ [DP₂ n-nam-fo-nom no]]}	(38) * _{[DP₁ [DP₂ n-nam-fo-nom no] ϵ]}
3IN PL-friend-PL-PL DET	PL-friend-PL-PL DET 3IN
Int.: ‘the friends’	Int.: ‘the friends’

- Problem #2: **Multiple** realization of non-agreeing RPs
 - You can **only strand once!**
 - Spell out of intermediate copies at ν P edges (van Urk 2018)

(39) [_{TP} A-sukuu-fo_i no [_{νP₁} (ϵi) tumi [_{νP₂} (ϵi) tu ndwom]]]	(=(19))
PL-student-PL DET 3.IN can 3.IN sing song	
‘The students can sing.’	

- We conclude that the stranding approach is **untenable** at least for Akan

4.4. Agreeing RPs as base-generated pronouns

- Another type of resumption: Agreeing RPs
 - We suggest that they are **base-generated pronouns**
 - When they occur, the antecedents are also base-generated at the surface position
 - **Anaphoric relation** between the agreeing RPs and the antecedents

(40) Agreeing RPs as base-generated pronouns

Syntax:	[antecedent _{[D],[φ]} ... [... [D] , [φ] ...]]	(base-generation)
PF:	[antecedent _{[D],[φ]} ... [... <i>agreeing RPs</i> ...]]	(Vocabulary Insertion)

- Deriving the properties of agreeing RPs
 - **Featural matching**
 - Born with *phi*-features which are not subject to Copy Deletion
 - Featural matching: required in pronominal dependencies, that holds cross-sententially:

(41) Me hu-u n-kwaala no_i ϵ no _a . Na w_i di agoro _.
1SG see-PST PL-child DET yesterday PST 3PL eat game
‘I saw the children yesterday. They _i were playing.’

- **Lack of movement properties**
 - The surface position of the antecedents results from base-generation, but not movement from the (agreeing-)RP position
- **Banned in local A-movement: Binding B violation**
 - The agreeing RPs are bound by the antecedent in their binding domain

(42) *_{[TP} A-sukuu-fo_i no εnora [_{VP} wɔ_i tu-u ndwom]] (= (18), Binding domain: TP)
 PL-student-PL DET yesterday 3PL.AN sing-PST song
 Int.: ‘The students sang yesterday.’

- In A'-dependencies, the antecedents are outside the binding domain TP (i.e. Spec,CP) and are able to bind the pronouns without violating Binding B (cf. Bošković 2016: the phasal edge belongs to the higher binding domain)

(43) [_{FocP/CP} John_j (ankasa_j) na [_{TP} (*ankasa_j) [_{VP} ε tu-u ndwom no]]]
 John REFL FOC REFL 3SG.IN sing-PST song DET
 ‘It is John_j himself_j who sang the song.’

- Highest subject restrictions do not apply
- agreeing RPs are allowed in mono-clausal A'-dependencies

- **Lack of movement properties**
 - Antecedents result from base-generation, but not movement from the RP position

5. Concluding remarks

- Two types of resumption
 - The dual nature of resumptive pronouns and cross-linguistic variations (Rouveret 2011, Hewett 2023)
 - Some behave like **traces**, e.g. Vata (Koopman 1983)
 - Some behave like **base-generated pronouns**, e.g. Irish (McCloskey 1990), Arabic (Hewett 2023)
 - Some in-between, e.g. Swedish (Engdahl 1985)
 - **Both types** are attested in Akan
 - Manifested as different morphological forms
 - Cf. two types of RPs in Igbo (Georgi & Amaechi 2022) & Swahili (Scott 2021)
 - Cf. *Strong-weak* distinction in Welsh (Tallerman 1983) and Hausa (Tuller 1986)

(44) Two types of (subject) resumption in Akan

	Generation	Features	Relation with the antecedent
Non-agreeing RPs	Partial Copy Deletion	[D]	Movement dependency
Agreeing RPs	Base-generation	[D] + [phi]	Pronominal dependency

- Partial Copy Deletion
 - Independently needed apparatus in “distributed/scattered” deletion: *split XP* (e.g., Fanselow & Ćavar 2002), *predicate fronting* (e.g., Landau 2006), *discontinuous predicates* (e.g., Chan, Lee & Yip 2022).
 - How partial CD interacts with Vocabulary Insertion and gives a form phonologically distinct from (any subpart of) the full copy
 - The deletion domain: maximal, instead of syntactically constrained

- Remaining issues and further steps
 - The (non-)alternation of non-agreeing RPs and gaps
 - A-bar movement: RPs always needed
 - A movement: **optionality** of non-agreeing RPs
 - Where in the system to attribute the optionality to?
 - Object RPs in Akan (Korsah & Murphy 2019)
 - Also movement-derived
 - Comparing Subj vs. Obj RPs:

	Subj RPs	Obj RPs
Phi-feature mismatches	✓	✗
Multiple realization	✓	✗
Island sensitivity	✓	✗
Idiomatic reading	✓	✓
Reconstruction for Principle C	✓	✓
WCO	✓	✓

- Two ways to achieve movement-derived resumption?

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6. Appendices

6.1. Crossover effects

- Strong crossover effects (i.e., reconstruction for Binding C)
 - Strong crossover: moves across a *c*-commanding co-referential pronominal elements (i.e. the moved constituent is bound by the pronominal elements)
 - SCO effects: ✓ non-agreeing RPs, ✗ agreeing RPs
 - Agreeing RPs are inert to SCO effects
 - Configuration: [XP_i ... [pronoun_i ... [*gap_i/*non-agreeing RP_i/^{OK}agreeing RP_i]] ...]
 - Note: to avoid Binding B violation for the *c*-commanding pronouns (by the moved XP), all the examples below involve doubly embedded structure
 - XP and the pronouns are not in a local domain

(45) **Politicians** *ben_i* na Ama te-e [CP sɛ *wɔ_i* dwene (SCO in *wh*-movement)

Politicians which FOC Ama hear-PST COMP 3PL think
 [CP sɛ {*__i/*_ε_i} / *wɔ_i*] bɛ di nkonim]]
 COMP 3SG.IN/ 3PL.AN will eat victory

‘Which politicians_i did Ama hear that they_i think that they_i will win?’

- Weak crossover effects
 - Weak crossover: moves across a *non-c*-commanding co-referential pronominal elements
 - WCO effects: ✓ non-agreeing RPs, ✗ agreeing RPs
 - Agreeing RPs lack WCO effects
 - Configuration: [XP_i ... [... pronoun_i ...] ... *gap_i/*non-agreeing RP_i/^{OK}agreeing RP_i ...]

(46) **A-sukuu-foɔ** *ben_i* na Ama te-e [CP sɛ [*wɔ_n_i* tikya] dwene (WCO in *wh*-mvt.)
 PL-student-PL which FOC Ama hear-PST COMP POSS teacher think

[CP sɛ {*__i/*_ε_i} / *wɔ_i*] bɛ di nkonim]]
 COMP 3SG.IN/ 3PL.AN will eat victory

‘Which students_i did Ama hear that their_i teacher thinks that they_i will win?’

6.2. Why [D] is special

- [D] plays a crucial role in A-movement in Akan
 - No *phi*-inflection on verbs: [D] is subject to Agree for movement, not *phi*-features
 - Subject movement in Akan
 - A determiner/nominalizer is obligatory for non-DPs to be subjects⁸
 - Clausal determiner *no* (same form with the nominal determiner, cf. Owusu 2022)

(47) CP subjects with the clausal determiner

[[CP Sɛ ɔ tumi tu ndwom] *(no)] ε yɛ adi pa
 COMP 3SG.AN can sing song CD 3SG.IN be thing good

‘That s/he can sing is good.’

⁸ For nominalizers, see the adjective phrase below:

(i) *(ɔ)-kese no ε tu ndwom ‘The big person sings’
 NMZL-big DET 3SG.IN sing song

- **Speculation**: [D] survives since it is *the feature that enters into Probe-Goal relation* (but not *phi*)
 - If [D] enters into Agree relation with some A-Probe (that triggers subject/object movement), ...
 - Possibility **#1**: Feature distinctness
 - Assuming that [D] on DPs are unvalued and requires a case value:
 <[D:**nom**] > ... <[D:**_**] > (the only non-identical feature between the two copies)
 - Identity vs. non-distinctness (see Nunes 1995, 2004 for discussion)
 - Possibility **#2**: Fusion
 - [D] **optionally** fuses with the A-Probes, including the intermediate ones
 - <[D]+[T] > ... <[D]+[v] > ... <[D]+[v] >

6.3. ATB-movement⁹

- ATB-movement: both dependencies must be the same (i.e. **movement**)
- (48) Non-agreeing RPs are predicted to alternate with gaps (in both word orders)
- a. Antecedent ... [... **non-agreeing** ...] & [... **_gap** ...]
 - b. Antecedent ... [... **non-agreeing** ...] & [... **non-agreeing** ...]
- With agreeing RPs: Mixed *base-generation* and *movement* dependencies fail to license ATB-mvt
- (49) Agreeing RPs are predicted to contrast with both gaps and non-agreeing RPs (in both word orders)
- a. *Antecedent ... [... **agreeing** ...] & [... **_gap** ...] (no testable due to the ban of gaps in A'-mvt)
 - b. *Antecedent ... [... **agreeing** ...] & [... **non-agreeing** ...]
 - c. Antecedent ... [... **agreeing** ...] & [... **agreeing** ...]
- (50) Contrasts between agreeing and non-agreeing RPs in Akan
- a. *Antecedent ... [... **non-agreeing** ...] & [... **non-agreeing** ...]*

A-sukuu-foɔ no_k aa me dwene sɛ [ɛ_k kɔ-ɔ school] na
 PL-student-PL DET REL 1SG think COMP 3.IN go-PST school and
 [ɛ_k bɛ ba ahyia no]
 3.IN FUT come afternoon DET

‘The children who I think [went to school] and [will be back in the afternoon].’
 - b. **Antecedent ... [... **agreeing** ...] & [... **non-agreeing** ...]*

***A-sukuu-foɔ no_k aa me dwene sɛ [wɔ_k kɔ-ɔ school] na**
 [ɛ_k bɛ ba ahyia no]
 - c. *Antecedent ... [... **agreeing** ...] & [... **agreeing** ...]*

A-sukuu-foɔ no_k aa me dwene sɛ [wɔ_k kɔ-ɔ school] na
 [wɔ_k bɛ ba ahyia no]

⁹ We thank Martin Salzmann for drawing our attention to ATB-movement. Note that the patterns here are different from Zurich German, where gaps and base-generated resumptives can be “mixed” in ATB-movement (Salzmann 2012).