Non-agreeing resumptive pronouns and partial Copy Deletion[*]

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(This is a work in progress, comments are very much welcome!)

1. Introduction

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

(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]
  - ▫ Object RPs in Cantonese (Hong Kong)
  - ▫ Subject RPs in Akan (Asante Twi)
  - ▫ In addition to agreeing RPs (which are allowed in other environments)

(2) Non-agreeing resumptive pronoun in Cantonese

Nei	jiu	zoeng	**di**	**syu$_i$**	tai-jyun	{ $\_i$ / **keoi$_i$** / ***keoidei$_i$** }	(object movement)
2SG	must	DISP	CL.PL	book	read-finish	3SG 3PL	

'You must finish reading the books.' [Cantonese]

(3) Non-agreeing resumptive pronoun in Akan

A-sukuu-foɔ$_i$	**no**	tumi	{ $\_i$ / **ɛ$_i$-** / ***wɔ$_i$-**}	tu	ndwom	(subject movement)
PL-student-PL	DET	can	3SG.IN-/ 3PL.AN-sing	song		

'The students can sing.' [Akan]

(4) Main claims
  a. Both **non-agreeing** and **agreeing** RPs are attested in Cantonese and Akan   (empirical)
  b. Non-agreeing RPs involve **movement dependencies**, agreeing RPs do not   (analytic)
  c. **Copy Deletion may apply *partially*** to the lower copy,   (theoretical)
     whose residue is realized as non-agreeing RPs

[1] Abbreviations: 1, 2, 3 = first, second, third person respectively; ADD = affixal additive quantifier; ALL = affixal universal quantifier; AN/IN = animate/inanimate; DET = determiner; DISP = disposal marker; CD = clausal determiner; CL = classifier; COMP = complementizer; MOD = modifier marker; NEG = negation; PERF = perfective aspect marker; PL = plural; PROG = progressive aspect marker; PST = past tense marker; REL = relative marker; SFP = sentence-final particle; SG = singular; TOP = topic marker.

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

➢ Cantonese
- *Phi*-features: person and number
  - ▫ Plural morpheme *-dei*
- Third person singular: $\boxed{\textbf{\textit{keoi}}}$

(5) Pronouns in Cantonese

	SG	PL
1	*ngo*	*ngodei*
2	*nei*	*neidei*
3	***keoi***	*keoidei*

➢ Akan Twi
- *Phi*-features: person, number, and animacy
- Third person singular inanimate: $\boxed{\varepsilon\text{-}}$

(6) Nominative pronouns in Akan

	SG	PL
1	*me-*	*yɛn-*
2	*wo-*	*mo-*
3(anim.)	*ɔ-*	*wɔ-*
3(inanim.)	*ɛ-*	*ɛ-*

- Case (not discussed today)
  - ▫ Subject pronouns have proclitic forms, while object pronouns have different free-standing forms (e.g. *no* 'it/(s)he' for 3SG.AN and 3SG.IN)

2.2. Resumptive pronouns with featural mismatch

➢ Cantonese object RPs ("dummy" pronouns in Cheung 1992, Man 1998, Mai 2003)
- **Mismatch** in *phi*-features with the antecedents
- Alternates with gaps in disposal constructions[2]

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[2] Note that 3SG *keoi* also optionally occurs with post-verbal objects, where no apparent gap is found (=i). However, observe that bare nouns are banned in (i). An indefinite reading of the object CL-N (*cf.* Cheng & Sybesma 1999) is also not available. Moreover, an agreeing pronoun is disallowed. The same restrictions are found in the disposal *zoeng*-constructions with pre-verbal objects, as (ii) shows. We take this as evidence for object movement in cases like (i), where the post-verbal objects move to a *v*P-internal position lower than the verb (=iii), on a par with object shift (Travis 2010). Hence, 3SG *keoi* alternates with a gap in (i).

- Only occur in *object* positions[3]

(7) Nei jiu zoeng **di syu**$_i$ tai-saai { _$_i$/ **keoi**$_i$} (mismatch in number, cf. *keoidei*)
 2SG must DISP CL.PL book read-ALL 3SG
 'You must read all the books.' [Cantonese]

(8) [(?)]Aaming wui zoeng **ngodei geigo**$_i$ dou saat-saai { _$_i$ / **keoi**$_i$} gaa! (Pers & Num, cf. *ngodei*)
 Ming will DISP 1PL several ALL kill-ALL 3SG SFP
 '(Don't go!) Ming will kill us (lit.: we several people) all!' [Cantonese]

- Also found in Mandarin (more restricted) and Shanghainese (Xu 1999)[4]

➢ Akan (Asante Twi) subject RPs (Korsah 2016)[5]
 - **Mismatch** in *phi*-features with the antecedents
 - Alternates with gaps[6]
 - Only occur in *subject* positions

(9) **M-mofra no**$_i$ { _$_i$/ **ɛ$_i$-** } tu ndwom (mismatch in animacy and number, cf. *wɔ*)
 PL-Child DET 3SG.IN- sing song
 'The children sing.' [Akan]

(10) **Yɛn miensa**$_i$ { _$_i$/ **ɛ$_i$-** } tu-u ndwom (mismatch in person, cf. *yɛn*)
 1PL three 3SG.IN- sing-PST song
 'We three sang.' [Akan]

- Only found in Asante Twi (*cf.* the Fante dialect of Akan, Korsah 2016)[7]

(i) Nei jiu tai-jyun *(**di**) **syu**$_i$ (**keoi**$_i$/ *****keoidei**$_i$)
 2SG must read-finish CL.PL book 3SG 3PL
 'You must finish reading the books / *books / *some books.'
(ii) Nei jiu zoeng *(**di**) **syu**$_i$ tai-jyun { _$_i$/ **keoi**$_i$/ *****keoidei**$_i$ }
 2SG must DISP CL.PL book read-finish 3SG 3PL
 'You must finish reading the books / *books / *some books.'
(iii) Post-verbal objects: [$_{AspP}$ Asp-*v*-V [$_{vP}$ Obj$_i$ [$_{VP}$ … <Obj>$_i$=*keoi*]]]

[3] Man (1998) notes that non-agreeing object RPs only occur in non-asserted contexts, such as interrogative, imperatives and modal contexts. This might be a preference instead of a restriction, since asserted contexts like (i) also allow non-agreeing RPs:

(i) Houcoi keoi bong ngo gaaudim-saai **di je**$_i$ **keoi**$_i$ zaa!
 fortunately 3SG help 1SG settle-ALL CL.PL thing 3SG SFP
 'Fortunately, he helped me to settle all those things! (Otherwise, I'd be in a mess.)' [Cantonese]

[4] Non-agreeing object RPs are more restricted in Mandarin in two ways. First, the antecedents in Cantonese may be animate (=(8)) or inanimate (=(7)), while Mandarin only allows inanimate antecedents for non-agreeing RPs. Second, Cantonese non-agreeing RPs may occur in a variety of contexts (see footnote 3), whereas Mandarin non-agreeing RPs can only occur in imperatives.

[5] 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.

[6] Note that Korsah (2016) only discusses non-agreeing RPs in A'-dependencies, where gaps are systematically banned. As will be shown in (9)-(10) and Section 3, gaps are allowed and alternate with non-agreeing RPs in the A-dependencies.

[7] In Fante Akan, only agreeing RPs are allowed, as shown below.

(ii) [**N-nyipa du pɛ**]$_i$ na {**wɔ**$_i$- /*****ɔ**$_i$-} 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]

3. Movement properties of non-agreeing resumptive pronouns

3.1. Local and long-distance movement

➢ TP-internal "local" A-movement[8]
- Cantonese: Object movement
  - ▫ From the complement of V to the edge of vP (*cf.* object shift, Travis 2010)
  - ▫ Non-agreeing RPs: ✓, alternate with gaps
  - ▫ Agreeing RPs: ✗, are banned

(11) Nei jiu [$_{v}$P tai-jyun [VP t_V **di syu**]]   (baseline)
  2SG must   read-finish   CL.PL book
  'You must finish reading the books.'   [Cantonese]

(12) Nei jiu [$_{v}$P zoeng **di syu$_i$** tai-jyun [VP t_V {$\_i$/ keoi$_i$/ *keoidei$_i$ }]] (object movement)
  2SG must   DISP CL.PL book read-finish   3SG   3PL
  'You must finish reading the books.'   [Cantonese]

- Akan: Subject movement
  - ▫ From the edge of vP to the edge of TP
  - ▫ Non-agreeing RPs: ✓, alternate with gaps
  - ▫ Agreeing RPs: ✗, are banned

(13) [TP ɛnora [$_{v}$P **A-sukuu-foɔ$_i$ no** tu-u ndwom]]   (baseline)
  yesterday   PL-student-PL DET sing-PST song
  'The students sang yesterday.'   [Akan]

(14) [TP **A-sukuu-foɔ$_i$ no** ɛnora [$_{v}$P {$\_i$/ ɛ$_i$- / *wɔ$_i$-} tu-u ndwom]] (subject movement)
  PL-student-PL DET yesterday   3SG.IN-/ 3PL.AN- sing-PST song
  'The students sang yesterday.'   [Akan]

➢ A-bar movement beyond TP
- Focus movement
  - ▫ Cantonese: ✓ gaps, ✓ non-agreeing RPs, ✓ agreeing RPs

(15) Hai **ni di syu$_i$** nei jinggoi faaidi tai-saai {$\_i$/ keoi$_i$/ keoidei$_i$}   (monoclausal)
  FOC this CL.PL book 2SG should faster read-ALL   3SG 3PL
  'It is these books that you should read them all ASAP (but not those).'   [Cantonese]

(16) Hai **ni di syu$_i$** ngo gokdak [CP nei jinggoi faaidi tai-saai {$\_i$/ keoi$_i$/ keoidei$_i$}] (long-dist.)
  FOC this CL.PL book 1SG think   2SG should faster read-ALL 3SG 3PL
  'It is these books that I think that you should read them all ASAP (but not those).'   [Cantonese]

  - ▫ Akan: ✗ gaps, ✓ non-agreeing RPs, ✓ agreeing RPs

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[8] In this talk, we limit to local A-movement only. Cross-clausal A movement for objects (e.g. canonical long passives) is not common in Cantonese, if not unattested. Similarly, Cross-clausal subject raising is also rare in Akan.

(17) **Ama**_i_ na { *__i_ / **ɛ**_i_- / ɔ_i_-} pɛ sika no (monoclausal)
Ama FOC 3SG.IN 3SG.AN want money CD
'It is Ama who wants the money.' [Akan]

(18) **Ama**_i_ na Kofi dwene-e [_CP_ sɛ {*__i_ / **ɛ**_i_- / ɔ_i_-} pɛ 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.' [Akan]

- Relativization
  □ Cantonese: ✓ gaps, ✓ non-agreeing RPs, ✓ agreeing RPs

(19) Go di [_CP_ ngodei jiu zikhak laai-saai { __i_/ **keoi**_i_/ keoidei_i_}] ge **taamgun**_i_ (mono.)
that CL.PL 1PL must immediately arrest-ALL 3SG 3PL MOD corrupt.official
'Those corrupt officials who we must arrest immediately.' [Cantonese]

(20) Go di [_CP_ Aaming gokdak [_CP_ ngodei jiu laai-saai { __i_/ **keoi**_i_/ keoidei_i_}]] ge **taamgun**_i_ (ld.)
that CL.PL Ming think 1PL must arrest-ALL 3SG 3PL MOD corr.official
'Those corrupt officials who Ming thinks that we must arrest.' [Cantonese]

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

(21) **M-mofra no**_i_ [_CP_ aa { *__i_ / **ɛ**_i_- / wɔ_i_-} kɔ-ɔ sukuu enora no] (monoclausal)
PL-child DET REL 3SG.IN 3PL.AN go-PST school yesterday CD
'The children who went to school yesterday' [Akan]

(22) **M-mofra no**_i_ [_CP_ aa me dwene [_CP_ sɛ {*__i_ / **ɛ**_i_- / wɔ_i_-} kɔ-ɔ 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' [Akan]

- Other A-bar movements not shown here:
  □ *Wh*-movement (only in Akan, not Cantonese)
  □ Topicalization/ left-dislocation (Akan only allows agreeing RPs)
  □ Right-dislocation (Akan only allows agreeing RPs)

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), idiom preservation suggests that the displaced objects/subjects were part of the idioms in an early stage of derivation
  ➔ *movement for gaps and non-agreeing RPs*, but not agreeing RPs

(23) **Di seoi**_i_ nei jinggoi ceoi-maai { __i_/ **keoi**_i_/ keoidei_i_} sin (VO idioms)
CL.PL water 2SG should blow-ALSO 3SG 3PL SFP.first
Literal: 'As for those (that) water, you should blow them first.' (gap, *keoi*, *keoidei*)
Idiomatic: 'As for those gossips, you should finish them first.' (gap, *keoi*) [Cantonese]

(24) **Me pɔnkɔ$_i$** dabiara {**_$_i$** / **ɛ$_i$-**   / **ɔ$_i$-**} pɛ ntem   (SV idioms)
POSS horse daily 3SG.IN 3SG.AN want quickly
Literal: 'My horse is always eager.' (gap, ɛ-, ɔ-)
Idiomatic: 'I am always in a hurry.' (gap, ɛ-)   [Akan]

➢ Island sensitivity
  • Island sensitivity: ✓ gaps, ✓ non-agreeing RPs, ✗ agreeing RPs
    (Note: Akan gaps are independently banned in A-bar dependencies)
  • Agreeing RPs ameliorate island violations
  • Configuration: [XP$_i$ … [$_{island}$ *gap$_i$/*non-agreeing RP$_i$/^{OK}agreeing RP$_i$] …]

(25) Go di [$_{CP}$ [$_{Adjunct}$ jyugwo ngodei laai-saai { *_$_i$ / *keoi$_i$/keoidei$_i$}]]   (adjunct island)
that CL.PL if 1PL arrest-PERF 3SG 3PL
daaigaa zau wui hou hoisam] ge taamgun$_i$
everyone then will very happy MOD corrupt.official
'Those corrupt officials$_i$ who if we arrested them$_i$ all everyone will be very happy'   [Cantonese]

(26) **M-mofra no$_i$** [$_{CP}$ aa me te-e [$_{NP}$ n-konkonsa fa-a wɔn ho (complex NP island)
PL-child DET REL 1SG hear-PST PL-rumor take-PST 3PL.POSS body
[$_{CP}$ sɛ {*_$_i$ / *ɛ$_i$- / 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'   [Akan]

➢ 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: ✓ gaps, ✓ 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

(27) **Go di taamgun$_i$** ne, Aaming tengman [$_{CP}$ **keoidei$_i$** gokdak (SCO in topicalization)
that CL.PL corrupt.official TOP Ming hear 3PL think
[$_{CP}$ daaigaa dou soeng laai-saai {*_$_i$/ *keoi$_i$/keoidei$_i$}]]
everyone all want arrest-ALL 3SG 3PL
'As for those corrupt officials$_i$, Ming heard that they$_i$ think that everyone wants to arrest them$_i$ all.'[C]

(28) **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 {*_$_i$/*ɛ$_i$- / 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?'   [Akan]

➢ Weak crossover effects
- Weak crossover: moves across a *non*-c-commanding co-referential pronominal elements
- WCO effects: ✓ gaps, ✓ 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 …]

(29) **Go di sailou$_i$** ne, Aaming gokdak [$_{CP}$ [***keoidei$_i$*** aamaa]   (WCO in topicalization)
that CL.PL child   TOP Ming   think   3PL.POSS mum

jinggoi gaauhou   { *$_{-i}$/ ***keoi$_i$**/**keoidei$_i$**}]
should teach.well   3SG   3PL
'As for those kids$_i$, Ming thinks that their$_i$ mum should teach them$_i$ to behave well.'   [Cantonese]

(30) **Asukuufoɔ ben$_i$**   na Ama te-e   [$_{CP}$ sɛ   [***wɔn$_i$*** tikya]   dwene   (WCO in *wh*-mvt.)
Student.PL   which   FOC Ama hear-PST   COMP POSS   teacher   think

[$_{CP}$ sɛ   {*$_{-i}$/***ɛ$_{i}$-**   / **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?'   [Akan]

3.3. Interim summary
- Gaps and non-agreeing RPs are allowed in local A-movement, but not agreeing RPs
  - i.e. gaps and non-agreeing RPs may associate with the antecedents *locally*
    → **no Binding B violation** → non-agreeing RPs do not pattern with referential pronouns
- In Akan, gaps are not available in A'-movement

(31) Distribution by movement types

		Gap		Non-agreeing RPs	Agreeing RPs
		Cantonese	Akan	(*keoi* and *ɛ-*)	
Local A-mvt.		YES	YES	YES	NO
A-bar mvt.	monoclausal	YES	NO	YES	YES
	long-distance	YES	NO	YES	YES

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

(32) Movement properties

	Gap		Non-agreeing RPs	Agreeing RPs
	Cantonese	Akan	(*keoi* and *ɛ-*)	
Idiom preservation	YES	YES	YES	NO
Island sensitivity	YES	—	YES	NO
Strong crossover effects	YES	—	YES	NO
Weak crossover effects	YES	—	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)
- Recap: pronouns in Cantonese and Akan

(33) Pronouns in Cantonese

	SG	PL
1	*ngo*	*ngodei*
2	*nei*	*neidei*
3	**keoi**	*keoidei*

(34) Nominative pronouns in Akan

	SG	PL
1	*me-*	*yɛ-*
2	*wo-*	*mo-*
3(anim.)	*ɔ-*	*wɔ-*
3(inanim.)	*ɛ-*	*ɛ-*

- Featural compositions of the pronouns
  - The most unmarked (default) pronouns: 3SG **keoi** and 3SG.IN **ɛ-**

(35) Vocabulary Items of Cantonese pronouns

[D, +author]	↔	*ngo*
[D, +addressee]	↔	*nei*
[D, +pl]	↔	*dei*
[D]	↔	**keoi**

(36) Vocabulary Items of Akan pronouns

[D, +animate, +pl]	↔	*wɔ-*
[D, +author, +pl]	↔	*yɛ-*
[D, +addressee, +pl]	↔	*mo*
[D, +animate]	↔	*ɔ-*
[D, +author]	↔	*me-*
[D, +addressee]	↔	*wo--*
[D]	↔	**ɛ-**

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

➢ Key components:
- Copy Deletion may apply *partially*, deleting all the features on the lower copy *except the label*
  - If the lower copy is a DP, delete everything except the label [D]
  - *Cf.* various proposals of distributed/scattered deletion (e.g. left branch extraction, as in Bošković 2001, 2015; Fanselow & Ćava 2002; and predicate fronting, as in Bentzen 2008, Larson 2020, van Urk 2021)
- The remaining [D] realizes as a default pronoun in the PF by Vocabulary Insertion
  - [D] ↔ *default pronoun*
- We will discuss the potential motivation for partial CD in concluding remarks

(37) <u>Partial and Full Copy Deletion</u>
Syntax: $\alpha_{[D],[\varphi],...}$ ... $\beta_{[D],[\varphi],...}$; where (α, β) is a chain created by movement
CD: (i) *Full* $\alpha_{[D],[\varphi],...}$ ... $\beta_{[D],[\varphi],...}$ → surface string = α
     (ii) *Partial* $\alpha_{[D],[\varphi],...}$ ... $\beta_{[D],[\varphi],...}$ → surface string = α ... exponent of D (=default pronoun)

➢ Implementation

(38) Nei   jiu   zoeng **di** **syu**$_i$ tai-saai   **keoi**$_i$ (=(7))
2SG   must   DISP   CL.PL book   read-ALL   3SG
'You must read all the books.'   [Cantonese]

(39) <u>The derivation of Cantonese non-agreeing RP *keoi* in (38)</u>
  a. Baseline   (in syntax) $[_{vP}$ *zoeng*   *v*-V $[_{VP}$ *di syu*$_{[\mathbf{D}, +pl, n, \sqrt{BOOK}]}$]]
  b. Object movement   (in syntax) $[_{vP}$ *zoeng di syu*$_{[\mathbf{D}, +pl, n, \sqrt{BOOK}]}$ *v*-V $[_{VP}$ <*di syu*$_{[\mathbf{D}, +pl, n, \sqrt{BOOK}]}$>]]
  c. Partial Copy Deletion (in PF) $[_{vP}$ *zoeng di syu*$_{[\mathbf{D}, +pl, n, \sqrt{BOOK}]}$ *v*-V $[_{VP}$ <*di syu*$_{[\mathbf{D}, +pl, n, \sqrt{BOOK}]}$>]]
  d. Vocabulary Insertion (in PF) $[_{vP}$ *zoeng di syu*$_{[\mathbf{D}, +pl, n, \sqrt{BOOK}]}$ *v*-V $[_{VP}$ <*keoi*$_{[\mathbf{D}]}$>   ]]

(40) **mmofra**   **no**$_i$ **ɛ**$_i$-tu   ndwom   (=(9))
Children   DET   3SG.IN-sing   song
'The children sing.'   [Akan]

(41) <u>The derivation of Akan non-agreeing RP *ɛ*- in (40)</u>
  a. Baseline   (in syntax) $[_{TP}$ T $[_{vP}$ *mmofra no*$_{[\mathbf{D}, +pl, +anim, n, \sqrt{CHILD}]}$ ...]]
  b. Subj. mvt.   (in syntax) $[_{TP}$ *mmofra no*$_{[\mathbf{D}, +pl, +anim, n, \sqrt{CHILD}]}$ T $[_{vP}$ <*mmofra no*$_{[\mathbf{D}, +pl, +anim, n, \sqrt{CHILD}]}$> ...]]
  c. Partial CD   (in PF) $[_{TP}$ *mmofra no*$_{[\mathbf{D}, +pl, +anim, n, \sqrt{CHILD}]}$ T $[_{vP}$ <*mmofra no*$_{[\mathbf{D}, +pl, +anim, n, \sqrt{CHILD}]}$> ...]]
  d. VI   (in PF) $[_{TP}$ *mmofra no*$_{[\mathbf{D}, +pl, +anim, n, \sqrt{CHILD}]}$ T $[_{vP}$ <*ɛ*$_{[\mathbf{D}]}$>   ...]]

➢ 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 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

➢ For similar proposals, See Scott (2021) for Swahili and Georgi & Amaechi (2021) for Igbo

4.3. 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

(42) <u>Agreeing RPs as base-generated pronouns</u>

  Syntax: [antecedent$_{[D],[\varphi]}$ … [… **[D]**,[φ] …]]   (base-generation)

  PF: [antecedent$_{[D],[\varphi]}$ … [… *agreeing RPs* …]] (Vocabulary Insertion)

➢ Deriving the properties of agreeing RPs

  • **Featural matching**

    ▫ Born with *phi*-features which are not subject to Copy Deletion

    ▫ Featural matching is a general requirement by pronominal dependencies, which holds cross-sententially:

(43) **Di hoksaang$_i$** mei dou. M-dang **{keoidei$_i$ / *keoi$_i$}** laa.
  CL.PL student   NEG arrive NEG-wait 3PL   3SG SFP.
  'The students$_i$ haven't arrived yet. (I) won't wait for them$_i$.'   [Cantonese]

(44) Me hu-u **n-kwaala no$_i$** ɛnora.   Na wɔ$_i$ di agorɔ.
  1SG see-PST PL-child DET yesterday PST 3PL eat game
  'I saw the children yesterday. They$_i$ were playing.'   [Akan]

  • **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

(45) *[$_{TP}$ Nei jiu [$_{vP}$ zoeng **di** **syu$_i$** tai-jyun [$_{VP}$ t_V **keoidei$_i$**]]] (=(12), Binding domain: TP)
  2SG must DISP CL.PL book read-finish   3PL
  Int.:'You must finish reading the books.'   [Cantonese]

(46) *[$_{TP}$ **A-sukuu-foɔ$_i$** no ɛnora [$_{vP}$ **wɔ$_i$**-tu-u   ndwom]] (=(14), Binding domain: TP)
  PL-student-PL DET yesterday 3PL.AN- sing-PST song
  Int.:'The students sang yesterday.'   [Akan]

    ▫ 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)
      → agreeing RPs are allowed in A'-dependencies

5. Concluding remarks

➢ Two types of resumption
- The dual nature of resumptive pronouns and cross-linguistic variations (Rouveret 2011)
  - Some behave like **traces**, e.g. Vata (Koopman 1983)
  - Some behave like **pronouns**, e.g. Irish (McCloskey 1990)
  - Some in-between, e.g. Swedish (Engdahl 1985)
- *Both* **types** are attested in Cantonese and Akan
  - Manifested as different morphological forms
  - *Cf.* Strong-weak distinction in Welsh (Tallermam 1983) and Hausa (Tuller 1986)

(47) Two types of resumption in Cantonese and 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
- The growing literature of varieties of CD, among which CD may be:
  - distributed/scattered (Bošković 2001, 2015; Fanselow & Ćavar. 2002; Pereltsvaig 2008, Fanselow & Féry 2013; among many others);
  - suspended (e.g. Trinh 2009, Lee 2021); and
  - substituted (Mendes & Ranero 2021)
- Distributed/scattered deletion is essentially partial CD on both higher and lower copies
- Non-agreeing RPs as partial CD on the lower copy

➢ Remaining issues and further steps
- Interpretive properties
  - E.g. reconstruction for scope, specificity effects, quantifier binding, etc.

- The (non-)alternation of non-agreeing RPs and gaps
  - Akan: gaps are systematically banned in A-bar movement
  - Cantonese: gaps are degraded in if the antecedent is "too far away"

(48) Ngo daaseon ni   wan   zoeng   **ni   gin   si**$_i$ (10 σ between the gap & antecedent)
     1SG plan   this time   DISP   this CL   matter
              cungtaudoumei saamhaulukmin   baaiming $^{??}$(**keoi**$_i$)
              thoroughly   clearly   settle.down   3SG
     'This time, I plan to settle down this issue thoroughly and clearly.'   [Cantonese, Mai 2003: 521]

  - Motivations for partial Copy Deletion? (i.e. last resort)
  - How about optional cases?

- Restricting the partiality of Copy Deletion
  - How many features to delete? Why labels are special?
  - Feature hierarchy?

(Selected) References

Bošković, Željko and Jairo Nunes. 2007. The copy theory of movement: a view from PF. In Jairo Nunes and Norbert Hornstein, eds., *The Copy Theory of Movement (Linguistics Today 107)*, 13–74. Oxford: Blackwell Publishers.

Bošković, Željko. 2001. Floating quantifiers and theta-role assignment. In Minjoo Kim and Uri Strauss, eds., *NELS 31*, 59–78. Georgetown University: GLSA.

Cheung, Hung-nin Samuel. 1992. The pretransitive in Cantonese. In Academia Sinica, ed., *Chinese Languages and Linguistics, Vol. 1: Chinese Dialects*, 241-303. Taipei: Institute of History and Philology, Academia Sinica.

Chomsky, Noam. 1995. *The Minimalist Program.* Cambridge, MA: MIT Press.

Fanselow, Gisbert, and Damir Cavar. 2002. Distributed Deletion. In Artemis Alexiadou, ed., *Theoretical Approaches to Universals*, 65–107. John Benjamins Publishing Company

Georgi, Doreen, and Mary Amaechi. 2021. Resumption in Igbo: two types of resumptives, complex phi-mismatches, and dynamic deletion domains. Ms. University of Potsdam.

Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In Kenneth Hale and Samuel Jay Keyser, eds., *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, 111-176. Cambridge: MIT Press.

Hein, Johannes, and Doreen Georgi. 2021. Asymmetries in Asante Twi A'-movement: On the role of noun type in resumption. In *NELS51*.

Korsah, Sampson, and Andrew Murphy. 2019. Islands and resumption in Asante Twi. In *36th West Coast Conference on Formal Linguistics*, 226-236. Cascadilla Proceedings Project.

Korsah, Sampson. 2016. Beyond resumptives and expletives in Akan. In Doris L. Payne, Sara Pacchiarotti & Mokaya Bosire, eds., *Diversity in African Languages: Selected Papers from the 46th Annual Conference on African Linguistics*, 103-116. Berlin: Language Science Press.

Lee, Tommy Tsz-Ming. 2021. Asymmetries in doubling and Cyclic Linearization. *Journal of East Asian Linguistics* 30, 109–139.

Liejiong, Xu. 1999. A special use of the third person singular pronoun. *Cahiers de Linguistique Asie Orientale* 28(1): 3-22.

Mai, Yun. 2003. Guangzhouhua yi *keoi5* fuzhi shoushi zhe de juze. [Resumptive *keoi5* constructions of patient in Cantonese]. In Bobui Zhan, ed., *Proceedings of the Eighth International Conference on Yue Dialects*, 515-524. Beijing: China Social Science Press.

Man, Patricia Yuk-Hing. 1998. Postverbal KEOI as a marker for nonasserted bounded clauses. In Stephen Matthews, ed., *Studies in Cantonese linguistics*, 53–62. Hong Kong: The Linguistic Society of Hong Kong.

McCloskey, James. 1990. "Resumptive Pronouns, Ā-binding and Levels of Representation in Irish." In Syntax of the Modern Celtic Languages, edited by Randall Hendrick, 199–248. New York, NY: Academic Press.

McCloskey, James. 2017. Resumption. *The Wiley Blackwell Companion to Syntax (Second Edition)*, 1-30. DOI: 10.1002/9781118358733.wbsyncom105

Nunes, Jairo. 1995. The Copy Theory of Movement and Linearization of Chains in the Minimalist Program. Doctoral dissertaion, University of Maryland.

Nunes, Jairo. 2004. *Linearization of Chains and Sideward Movement.* Cambridge, Massachusetts: MIT Press.

Rouveret, Alain. 2011. Some issues in the theory of resumption: A perspective on early and recent research. In Alain Rouveret, ed., *Resumptive Pronouns at the Interfaces*, 1–62. Amsterdam: John Benjamins.

Travis, Lisa. 2010. *Inner Aspect: the Articulation of the VP*. Dordrecht: Springer.