

# Agreeing and non-agreeing resumptive pronouns in Sinitic languages

Ka-Fai Yip

Yale University

Georgetown Syntax Reading Group

November 9, 2023

*(Part of the content is developed from collaborative work with Comfort Ahenkorah and Xuotong Yuan)*

## Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Agreeing vs. non-agreeing resumptive pronouns</b>	<b>4</b>
2.1	Phi-feature mismatches . . . . .	4
2.2	A- and A'- movement dependencies . . . . .	7
2.3	Locality effects . . . . .	9
2.4	Connectivity effects . . . . .	12
2.5	Interim summary . . . . .	14
<b>3</b>	<b>Two types of resumption</b>	<b>15</b>
<b>4</b>	<b>A novel generalization on the animacy of antecedents</b>	<b>19</b>
4.1	Variations in animacy restrictions . . . . .	20
4.2	Correlation with plural markers . . . . .	21
<b>5</b>	<b>A stranding approach to movement-derived resumption</b>	<b>23</b>
<b>6</b>	<b>Conclusion</b>	<b>26</b>

# 1 Introduction

Resumption displays a diverse cross-linguistic profile, which raises challenges to a unified theory. For example, resumptive pronouns usually match their antecedents with phi-features.

- (1) There are guests<sub>i</sub> **who**<sub>i</sub> I am curious about what {**\*it**<sub>i</sub> is/ **they**<sub>i</sub> are} going to say.

However, non-agreeing resumptive pronouns (NRPs) are attested in Sinitic languages, including Cantonese, Mandarin, and Shanghainese (Xu 1999):

- (2) Non-agreeing resumption in three Sinitic languages

- a. Nidi syu<sub>i</sub> ne, nei siu-zo \*(**keoi**<sub>i</sub>)! (cf. 3PL *keoidai*) [C(antonese)]  
these books TOP you burn-PFV 3SG  
Lit.: 'These books, you burn it!' (i.e. These books, burn them!)
- b. Zhexie shu<sub>i</sub>, ni shao-le ??(**ta**<sub>i</sub>)! (cf. 3PL *tamen*) [M(andin)]  
these books you burn-PFV 3SG  
Lit.: 'These books, you burn it!' (i.e. These books, burn them!)
- c. Diqng meqzy<sub>i</sub> nung gue-teq \*(**i**<sub>i</sub>)! (cf. 3PL *i la*) [S(hanghainese)]  
these things you throw-PFV 3SG  
Lit.: 'These things, you throw it away!' (i.e. These books, throw them away!)

This raises a question on whether they can be analyzed on a par with agreeing resumptive pronouns (ARPs).

Furthermore, there are two prominent approaches to movement-derived resumption, both of which have been used to derive NRPs in other languages:

- (3) a. **Partial Copy Deletion** (van Urk 2018; Scott 2021; Georgi and Amaechi 2023)  
E.g. Dinka, Swahili, Igbo
- b. **The Big-DP hypothesis/stranding approach** (Boeckx 2003, see also Aoun, Choueiri, and Hornstein 2001)  
E.g. Scottish Gaelic, Standard Arabic

Another question is then whether partial deletion or stranding better analyzes NRPs in Sinitic languages.

(4) Overview of the talk

- a. I argue for a non-uniform treatment of resumption.  
ARPs are base-generated pronouns, whereas NRPs are movement-derived, supporting the non-uniform view (see Hewett 2023 for more discussion).
- b. I present a novel argument in favor of the stranding approach.  
Mandarin, unlike Cantonese and Shanghainese, only allows inanimate antecedents for NRPs, mirroring the animacy restrictions of Mandarin's plural marker on common nouns.
- c. I also point out some non-trivial challenges faced by the stranding approach but not by the partial deletion approach.

(5) Issues that are not discussed today

- a. *The licensing environment of NRPs*  
Imperatives for Mandarin (Yip and Yuan 2023), subjunctives for Shanghainese (Zhu 2023), non-asserted clauses for Cantonese (Man 1998)
- b. *The objecthood/"disposal" requirement*  
NRPs must be a direct object that bears a patient thematic role (Yip and Yuan 2023). Specifically, they are "disposal" objects (cf. Cheung 1992).
- c. *Resumption vs. expletives/functional markers*<sup>1</sup>  
NRPs are *not* expletives nor "functional markers" (against Wu and Cao 2016; Zhu 2023), as evidenced by their requirement on object definiteness and verb transitivity.

1. NRPs should be distinguished from a non-referential, expletive use of third person singular pronouns like *ta* 'it' in Mandarin, as in *Wǒmen hē tā gè sān bēi*, literally "we drink **it** three glasses (of wine)" (Lin 1994; Lin and Zhang 2006; Wu and Matthews 2010). This use of *ta* imposes an *indefinite* constraint on the object (i.e. the sentence "\*we drink it these three glasses of wine" with a definite object is not acceptable). NRPs, however, (i) require a *definite* object being displaced, and (ii) cannot occur in double object constructions.

## 2 Agreeing vs. non-agreeing resumptive pronouns

### 2.1 Phi-feature mismatches

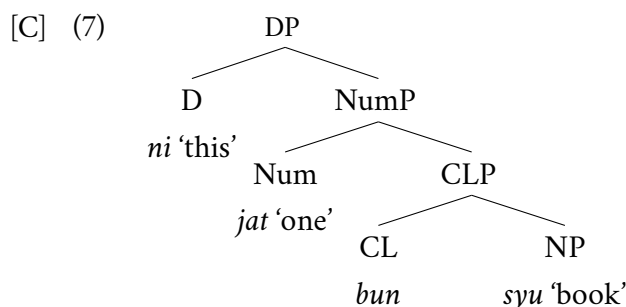
Pronouns in the three Sinitic languages differ in (i) **number** features and (ii) **person** features:

Cantonese			Mandarin			Shanghainese		
SG		PL	SG		PL	SG		PL
1	<i>ngo</i>	<i>ngodei</i>	1	<i>wo</i>	<i>women</i>	1	<i>ngu</i>	<i>aq-la(q)</i>
2	<i>nei</i>	<i>neidei</i>	2	<i>ni</i>	<i>nimen</i>	2	<i>nung</i>	<i>na</i>
3	<b><i>keoi</i></b>	<i>keoidei</i>	3	<b><i>ta</i></b>	<i>tamen</i>	3	<b><i>i</i></b>	<i>yi-la(q)</i>

Table 1: The pronominal systems in the three Sinitic languages

I assume a nominal structure in Chinese as the following:

- (6) Ni    jat    bun    syu  
       this one CL    book  
       ‘this (one) book’



### Number mismatches

First, the following types of nominals require plural anaphora, including compound reflexives, reciprocals, and pronouns.<sup>2</sup>

- (8) Types of nominals requiring plural anaphora (sorted by the level encoding plurality)
- N level:** plural marker *-men* in Mandarin → [to be discussed later](#)
  - CL level:** plural/group classifiers (numeral ‘one’) → ✓ **NRPs**
  - Num level:** numerals higher than ‘one’ → ✓ **NRPs**
  - D level:** Pronouns → ✓ **NRPs**
  - Coordinated DPs** → ✓ **NRPs**

2. Simplex reflexives like *zigei* ‘self’ [C] do not have phi-features.

(9) Plural nominals only bind plural compound reflexives in Cantonesea. *CL level*

[Ni jat **di** jijyun]<sub>i</sub> mgeidak-zo {**\*keoi-zigei<sub>i</sub>**/ **keoidei-zigei<sub>i</sub>**} ge zikzaat  
 this one CL.PL senator forget-PFV 3SG.self 3PL.self GE duty  
 ‘These senators forgot their own duties.’

b. *Num level*

[Ni **gei** go jijyun]<sub>i</sub> mgeidak-zo {**\*keoi-zigei<sub>i</sub>**/ **keoidei-zigei<sub>i</sub>**} ge zikzaat  
 this several CL senator forget-PFV 3SG.self 3PL.self GE duty  
 ‘These several senators forgot their own duties.’

c. *D level*

[**Keoidei** (gei go jijyun)]<sub>i</sub> mgeidak-zo {**\*keoi-zigei<sub>i</sub>**/ **keoidei-zigei<sub>i</sub>**} ge zikzaat  
 3PL several CL.PL senator forget-PFV 3SG.self 3PL.self GE duty  
 ‘They/ these senators (lit. they senators) forgot their own duties.’

d. *Coordinated DPs*

[[Ni go jijyun] **tung** [go go jijyun]]<sub>i</sub> mgeidak-zo {**\*keoi-zigei<sub>i</sub>**/ **keoidei-zigei<sub>i</sub>**} ge  
 this CL senator and that CL senator forget-PFV 3SG.self 3PL.self GE  
 zikzaat  
 duty  
 ‘This senator and that senator forgot their own duties.’

Second, all these types of nominals (setting *-men* in Mandarin aside), allow ARPs and as well as NRPs. The latter case of NRPs shows a number mismatch.

(10) Plural nominals allow ARPs and NRPs in Cantonesea. *CL level*

[Ni jat **di** jijyun]<sub>i</sub>, nei faaidi gongzau {**keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**} laa1.  
 this one CL.PL senator 2SG faster throw.out 3SG 3PL SFP  
 ‘These senators, you (should) quickly throw them out.’

b. *Num level*

[Ni **gei** go jijyun]<sub>i</sub>, nei faaidi gongzau {**keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**} laa1.  
 this several CL senator 2SG faster throw.out 3SG 3PL SFP  
 ‘These several senators, you (should) quickly throw them out.’

c. *D level*<sup>3</sup>

[**KEOIDEI** (gei go jijyun)]<sub>i</sub> ne, nei faaidi gongzau {**keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**} laa1.  
 3PL several CL.PL senator TOP 2SG faster throw.out 3SG 3PL SFP  
 ‘THEY/ THESE senators (lit. they senators), you (should) quickly throw them out.’

3. Bare pronouns in general disfavor a topic position unless with a stress accompanied by pointing (i.e. deixis).

d. *Coordinated DPs*

[[Ni go jijyun] **tung** [go go jijyun]]<sub>i</sub> ne, nei faaidi gongzau {**keoi**<sub>i</sub>/ **keoidei**<sub>i</sub>}  
 this CL senator and that CL senator TOP 2SG faster throw.out 3SG 3PL

laa1.

SFP

‘This senator and that senator, you (should) quickly throw them out.’

The same applies to Mandarin and Shanghainese (data not shown here).

**Person mismatches**

In Cantonese, mismatches in person features are also possible.<sup>4</sup>

(11) First and second person DPs allow NRPs in Cantonese

- a. Nei heoi gewaa, Aaming gongming waa wui zoeng [**ngodei** gei go]<sub>i</sub> dou  
 2SG go if, Ming claim say will DISP 1PL several person all  
 saat-saai **keoi**<sub>i</sub> gaa3!  
 kill-ALL 3SG SFP

‘If you go, Ming said explicitly that he will kill us (lit.: we several people) all!’

- b. Aaming waa soeng zoeng [**neidei** ni baan jan]<sub>i</sub> cyunbou deoilam-saai **keoi**<sub>i</sub>.  
 Ming say want DISP 2PL this CL<sub>group</sub> person all kill-ALL 3SG  
 ‘Ming said he wants to kill you (lit.: you this group of people) all.’

Person mismatches with bare first and second person pronouns are severely degraded, though bare *third* person pronouns are allowed.

- (12) a. Aaming waa wui zoeng [??**ngodei**/ \***neidei**]<sub>i</sub> dou deoilam-saai **keoi**<sub>i</sub>.  
 Ming say will DISP 1PL 2PL all kill-ALL 3SG  
 Int.: ‘Ming said he will kill us/you all.’  
 b. Aaming waa wui zoeng [\***ngo**/ \***nei**]<sub>i</sub> saat-zo **keoi**<sub>i</sub>.  
 Ming say will DISP 1SG 2SG kill-PERF 3SG  
 Int.: ‘Ming said he will kill me/you.’  
 c. Aaming waa wui zoeng [**keoidei**/ **keoi**]<sub>i</sub> saat-zo **keoi**<sub>i</sub>.  
 Ming say will DISP 3PL 3SG kill-PERF 3SG  
 Int.: ‘Ming said he will kill them/it.’

Person mismatches are not testable in Mandarin due to an animacy restriction (to be discussed in §4). In Shanghainese, such person mismatches seem impossible according to my preliminary data, though further examination is needed.

4. First person DPs with NRPs are in general more acceptable than second person DPs.

Note that such person mismatches are reported in Wuhan Mandarin for *bare* pronouns (Zhao 2023).

(13) First and second person pronouns allow NRPs in Wuhan Mandarin

- a. Li mo xiang ba **wo<sub>i</sub>** suai **ta<sub>i</sub>**! (1SG + 3SG NRP)  
 2SG NEG want DISP 1SG dump 3SG  
 ‘Don’t you try to dump me!’
- b. Wo xiang ba **li<sub>i</sub>** sa **ta<sub>i</sub>**! (2SG + 3SG NRP)  
 1SG want DISP 2SG kill 3SG  
 ‘I want to kill you!’

(adapted from Zhao 2023, ex. 4b-c)

## 2.2 A- and A'- movement dependencies

### A' movement

Typical A'-movement dependencies in Chinese include topicalization, relativization, and focus fronting. Reproduced from (2):

(14) Topicalization

- a. Nidi syu<sub>i</sub> (ne), nei siu-zo \*(**keoi<sub>i</sub>**)! (cf. 3PL *keoidei*) [C(antonese)]  
 these books TOP you burn-PFV 3SG  
 Lit.: ‘These books, you burn it!’ (i.e. These books, burn them!)
- b. Zhexie shu<sub>i</sub>, ni shao-le ??(**ta<sub>i</sub>**)! (cf. 3PL *tamen*) [M(andardin)]  
 these books you burn-PFV 3SG  
 Lit.: ‘These books, you burn it!’ (i.e. These books, burn them!)
- c. Diqng meqzy<sub>i</sub> nung gue-teq \*(**i<sub>i</sub>**)! (cf. 3PL *i la*) [S(hanghainese)]  
 these things you throw-PFV 3SG  
 Lit.: ‘These things, you throw it away!’ (i.e. These books, throw them away!)

Also other A'-movement dependencies (illustrated in Cantonese):

(15) Relativization

- Go di [CP ngodei jiu zikhak laai-saai {<sub>-i</sub>/ **keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**}] ge  
 that CL.PL 1PL must immediately arrest-ALL 3SG 3PL GE  
 taamgun<sub>i</sub>  
 corrupt.official  
 ‘Those corrupt officials who we must arrest immediately’

(16) Focus fronting

Hai [ni di syu]<sub>i</sub> nei jinggoi faaidi tai-saai {<sub>-i</sub>/ **keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**}  
 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).'

**A-movement: Object shift marked by disposal markers**

As exemplified in (17) in Cantonese, an object may move locally to a pre-verbal position with a disposal marker *zoeng*, comparable to object shift from VP to a *v*P-internal position (Travis 2010). In the base position, crucially, non-agreeing *keoi* may alternate with a gap, but the agreeing plural RP *keoidei* is banned. The ban on ARPs is expected if they are pronouns which are subject to Binding Principle B. On the other hand, that NRPs are permitted are quite surprising given that RPs cross-linguistically exhibit pronoun-like properties (e.g. the Highest Subject Restriction).

(17) Disposal object shift in Cantonese<sup>5</sup>

- a. Nei jiu [<sub>v</sub>P tai-jyun<sub>k</sub> [<sub>VP</sub> *t<sub>k</sub>* di syu ]] (baseline)  
 2SG must read-finish CL.PL book  
 'You must finish reading the books.' [C]
- b. Nei jiu [<sub>v</sub>P zoeng **di** **syu<sub>i</sub>** tai-jyun<sub>k</sub> [<sub>VP</sub> *t<sub>k</sub>* {<sub>-i</sub>/ **keoi<sub>i</sub>**/ \***keoidei<sub>i</sub>**} ]]  
 2SG must DISP CL.PL book read-finish \_ 3SG 3PL  
 'You must finish reading the books.' [C]

Disposal object shift is A-movement since it only targets direct objects with a patient theta-role (at least in Cantonese; vs. Mandarin *ba* that can be causative), indicative of a [*θ*] feature. Importantly, it creates new binding possibilities, one of the signature A properties:

5. Note that non-agreeing *keoi* may also occur with post-verbal objects, where no apparent gap is found, as in (i). We argue that (i) indeed has the structure in (ii), where the object does undergo object shift, followed by verb movement to a higher position, thus neutralizing the word order change. This analysis is supported by a telic restriction on verbs and a definite restriction on objects (aligning with object shift, Travis 2010).

- (i) Nei jiu tai-jyun **di** **syu<sub>i</sub>** {<sub>-i</sub>/ **keoi<sub>i</sub>**/ \***keoidei<sub>i</sub>**}  
 2SG must read-finish CL.PL book \_ 3SG 3PL  
 'You must finish reading the books.' [C]
- (ii) [<sub>Asp</sub>P Asp-*v*-V<sub>k</sub> [<sub>v</sub>P Obj<sub>i</sub> [<sub>VP</sub> *t<sub>k</sub>* <Obj><sub>i</sub>=*keoi*]]]



(17) Disposal object shift creates new binding possibilities in Cantonese

- a. \*Ngo hoeng keoi<sub>i</sub> jyunbun ge fongcoeng [<sub>VP</sub> teoi [mui jat go loubiu]<sub>i</sub>  
 I towards 3SG original GE direction push every one CL road.sign  
 gwoheoi].  
 over

Int.: 'I pushed each road sign towards its original direction.'

- b. Ngo zoeng [mui jat go loubiu]<sub>i</sub> hoeng keoi<sub>i</sub> jyunbun ge fongcoeng [<sub>VP</sub> teoi  
 I DISP every one CL road.sign towards 3SG original GE direction push  
 \_<sub>i</sub> gwoheoi].  
 over

'I pushed each road sign towards its original direction.'

Shanghainese also allows NRPs in disposal object shift.<sup>6</sup>

(18) Disposal object shift in Shanghainese

- Nung ne [diqng meqzy]<sub>i</sub> gue teq {<sub>i</sub>/ \*yila<sub>i</sub>}.  
 you DISP these things throw ASP 3SG 3PL  
 'Throw these things away.'

(Xu 1999, ex.6, with ARP added)

Surprisingly, Mandarin disallows NRPs in disposal object shift.<sup>7</sup>

(19) NRPs are banned in disposal object shift in Mandarin

- Ni ba [zhexie shu]<sub>i</sub> shao-le {\_<sub>i</sub>/ \*ta<sub>i</sub>/ \*tamen<sub>i</sub>}!  
 you DISP these things burn-PFV \_ 3SG 3PL  
 'You burn these books!'

## 2.3 Locality effects

To begin with, the NRPs may be separated from the antecedent across CP boundaries. That is, long-distance dependencies are possible.

6. Note that NRPs are also possible in passives in Shanghainese (Xu 1999; Zhu 2023), but not in Cantonese nor Mandarin.

7. Xu (1999) also noted this fact, but his notation is "?", which seems to suggest marginality. All my Mandarin informants rejected NRPs in disposal object shift.

(20) The resumption dependency with NRPs can be long-distancea. *Relativization* [C]

Go di [CP Aaming gokdak [CP ngodei jiu zikhak laai-saai {<sub>i</sub>/ **keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**}] ge taamgun<sub>i</sub>  
 that CL.PL Ming think 1PL must immediately arrest-ALL 3SG  
 3PL GE corrupt.official

‘Those corrupt officials who Ming thinks that we must arrest immediately’

b. *Topicalization* [M]

Zhexie shu<sub>i</sub>, wo tingshuo [embedded Lisi mingling ni [embedded shao-le {<sub>i</sub>/ **ta<sub>i</sub>**/ **tamen<sub>i</sub>**}]  
 these books 1SG hear Lisi order 2SG burn-PFV \_ 3SG  
 3PL

‘(As for) these books, I heard that Lisi ordered you to burn it.’

Second, NRPs, like gaps, are sensitivity to islands. In contrast, ARPs do not show island sensitivity. An example is illustrated in (21) in Cantonese, which involves relativization across an adjunct island boundary.

(21) NRPs are sensitive to adjunct islands in Cantonese

Go di [CP [Adjunct jyugwo ngodei laai-saai {\*\_<sub>i</sub>/ \***keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**}] daaigaa zau  
 that CL.PL if 1PL arrest-ALL \_ 3SG 3PL everyone then  
 wui hou hoisam] ge **taamgun<sub>i</sub>**.  
 will very happy MOD corrupt.official

‘Those corrupt officials<sub>i</sub> who if we arrested them<sub>i</sub> all everyone will be very happy’ [C]

The same holds for complex DP islands, sentential subject islands, and coordinated structures:<sup>8</sup>

(22) NRPs are sensitive to other islands in Cantonesea. *Complex DP islands*

Ni gei go jan<sub>i</sub> ne, ngo teng-dou [DP [CP Aaming bik nei jiu  
 this several CL person TOP I hear-ACHV Ming force 2SG must  
 gongzau-saai {\*\_<sub>i</sub>/ \***keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**}] ge siusik ].  
 throw.out-ALL \_ 3SG 3PL GE news

‘(As for) these people, I heard the news that Ming forced you to throw {\*it/them} out.’

8. Left Branch Extraction is also banned, but this could be attributed to the independent restriction that only objects have NRPs. In LBE contexts, the NRP is a possessor rather than a patient object.

b. *Sentential subject island*

Ni di jan<sub>i</sub>, [subject Aaming bik nei gongzau {\*\_i/ \*keoi<sub>i</sub>/ keoidei<sub>i</sub>} ]  
 this CL.PL person Ming force 2SG throw.out \_ 3SG 3PL  
 jatdi dou m-sayzai.  
 at.all all not-realistic

‘These people, that Ming forced you to throw {\*it/them} out is not realistic at all.’

c. *Coordination structure*

Ni di hoksaang<sub>i</sub>, Aaming giu nei [conjunct gongzau {\*\_i/ \*keoi<sub>i</sub>/ keoidei<sub>i</sub>} ]  
 this CL.PL hoksaang, Ming ask 2SG throw.out \_ 3SG 3PL  
 ji [conjunct m-hou haak-can di lousi ].  
 and don’t scare CL.PL teacher

‘These students, Ming asks you to throw {\*it/them} out and (meanwhile) don’t scare the teachers.’

Mandarin NRPs show the same sensitivity, as compared to ARPs.

(23) NRPs are sensitive to complex DP islands in Mandarin

a. Zhexie shu<sub>i</sub>, wo tingshuo-le [DP [CP Lisi mingling ni shao-le {\*ta<sub>i</sub>/tamen<sub>i</sub>} ]  
 these books I hear-PFV Lisi order you burn-PFV 3SG/3PL  
 de xiaoxi ].  
 DE news

‘(As for) these books, I heard the news that Lisi ordered you to burn {\*it/them}.’

b. Wo tingshuo-le [DP [CP zhexie shu<sub>i</sub> Lisi mingling ni shao-le ta<sub>i</sub> ] de xiaoxi ].  
 I hear-PFV these books Lisi order you burn-PFV 3SG DE news  
 Lit.: ‘I heard the news that (as for) these books Lisi ordered you to burn it.’

Similar patterns, again, apply to other types of islands:

(24) NRPs are sensitive to other islands in Mandarina. *Adjunct island*

Zhe-jiben shu<sub>i</sub>, wo tingshuo [adjunct ruguo Zhangsan mingling ni shao-le  
 this-several book I hear if Zhangsan order 2SG burn-PFV  
 {\*ta<sub>i</sub>/tamen<sub>i</sub>} ], laoshi jiu hui hen shangxin.  
 3SG/3PL teacher will be very sad

‘These several books, I heard that if Zhangsan orders you to burn {\*it/them}, the teacher will be very sad.’

b. *Sentential subject island*

Zhe-jige huaping, [subject Zhangsan jianyi ni za-le {*\*ta<sub>i</sub>*/tamen<sub>i</sub>} ] bingbu  
 this-several vase Zhangsan suggest 2SG break-PFV 3SG/3PL not  
 heshi.  
 appropriate

‘These several vases, that Zhangsan suggests you break {it/them} is not appropriate.’

c. *Coordination structure*

Zhe-jige huaping, Zhangsan jianyi ni [conjunct za-le {*\*ta<sub>i</sub>*/tamen<sub>i</sub>} ] er  
 this-several vase, Zhangsan suggest 2SG break-PFV 3SG/3PL and  
 [conjunct bie shao-le zhe-jiben shu ].  
 don’t burn-PFV this-several book

‘These several vases, Zhangsan suggests you break {it/them} and (meanwhile) don’t burn these few books.’

## 2.4 Connectivity effects

### Idiomatic preservation

When part of an idiom is displaced, the idiomatic meaning is preserved with gaps and non-agreeing RPs only, as shown by (25) in Cantonese. With agreeing RPs, only the literal reading is available. Assuming idioms form a constituent, idiom preservation suggests that the displaced objects/subjects were part of the idioms in an early derivational stage. Only non-agreeing RPs allow the displaced parts to reconstruct back for idiomatic interpretation, indicating movement.

(25) Non-agreeing RPs preserve idiomatic readings in Cantonese

**Di seoi<sub>i</sub>** nei jinggoi ceoi-maai {<sub>i</sub>/ **keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**} sin.  
 CL.PL water 2SG should blow-ALSO \_ 3SG 3PL SFP

Literal: ‘As for that (lit. those) water, you should blow them first.’ (gap, *keoi*, *keoidei*)

Idiomatic: ‘As for those chit-chats, you should finish them first.’ (gap, *keoi*)

The same holds for Mandarin. (26) shows an idiom ‘to blow bull leather’ which idiomatically means ‘to brag’. The idiomatic reading ‘to brag’ is only available with the NRP in (27a), but not with the plural ARP in (27b). The latter only gives rise to the odd literal reading ‘to blow bull leather’.<sup>9</sup>

(26) %Ni qu chui-le zhexie niupi!. [M]

2SG go blow-PFV these cow.skin

Lit.: ‘You go blow these bull leather (i.e. cow skins)!’

Idiom.: ‘You go brag about these things!’

9. Some speakers reject the baseline in (26) due to the modification of part of the idiom *niupi* ‘cow skin’ with the plural classifier *xie*. For other speakers who accepted the baseline, the contrast in (27) held.

(27) Idiomatic reading is preserved with NRPs in Mandarin

- a. Zhexie niupi<sub>i</sub>, ni qu chui-le **ta<sub>i</sub>!** (✓ idiomatic)  
 these cow.skin 2SG go blow-PFV 3SG  
 Lit.: ‘These bull leather (i.e. cow skins), you go blow it!’  
 Idiom.: ‘These things, you go brag about!’
- b. Zhexie niupi<sub>i</sub>, ni qu chui-le **tamen<sub>i</sub>!** (✗ idiomatic)  
 these cow.skin 2SG go blow-PFV 3PL  
 Only lit.: ‘You go blow these bull leather (i.e. cow skins)!’

**Reconstruction for variable binding**

Reconstruction for variable binding is also found with NRPs. In (28a), the reflexive *keoizigei* ‘him/herself’ in the head noun is bound by the. Here, I assume a head-raising analysis of relative clauses (see Aoun and Li 2003). The moved head noun is reconstructed back to the gap/NRP position for variable binding. This contrasts with the ARP in (28b) which is degraded.

(28) NRPs allow reconstruction for variable binding in Cantonese

- a. [[**Mui jat go hoksaang**]<sub>k</sub> dou soeng sau-maai {<sub>i</sub>/ **keoi<sub>i</sub>**} ge [go di **keoizigei**<sub>k</sub>  
 every one CL student all want hide 3SG GE that CL.PL 3SG.self  
 ge hakliksi]<sub>i</sub> (✓ reconstr.)  
 GE dark.history  
 Lit.: ‘The secrets<sub>i</sub> of himself/herself<sub>k</sub> which every student<sub>k</sub> wants to hide (it)<sub>i</sub>’
- b. ??[[**Mui jat go hoksaang**]<sub>k</sub> dou soeng sau-maai **keoidei<sub>i</sub>**] ge [go di **keoizigei**<sub>k</sub>  
 every one CL student all want hide 3PL GE that CL.PL 3SG.self  
 ge hakliksi]<sub>i</sub> (✗ reconstr.)  
 GE dark.history  
 Lit.: ‘The secrets<sub>i</sub> of himself/herself<sub>k</sub>’s which every student<sub>k</sub> wants to hide them<sub>i</sub>’

The same holds for Mandarin, illustrated by topicalization. In (29a), the controller (i.e. ‘everyone’) binds the reflexive variable *taziji* ‘him/herself’ contained in the topicalized nominal.

(29) NRPs allow reconstruction for variable binding

- a. [Naxie **taziji**<sub>i</sub> de shu]<sub>i</sub>, wo mingling [**mei yige ren**]<sub>j</sub> gankuai shao-le **ta<sub>i</sub>.**  
 those 3SG.self DE book 1SG order every one person quickly burn-PFV 3SG  
 Lit.: ‘Those books<sub>i</sub> of him/herself<sub>i</sub>’s, I ordered everyone<sub>j</sub> to burn it<sub>i</sub>.’ (i.e., I ordered everyone<sub>j</sub> to burn his/her<sub>j</sub> books.) (✓ reconstr.)

- b. ??[Naxie **taziji<sub>i</sub>** de shu]<sub>i</sub>, wo mingling [**mei yige ren<sub>j</sub>**] gankuai shao-le **tamen<sub>i</sub>**.  
 those 3SG.self DE book 1SG order every one person quickly burn-PFV 3PL  
 Lit.: ‘Those books<sub>i</sub> of himself/herself’s, I ordered everyone<sub>j</sub> to burn them<sub>i</sub>.’ (i.e., I ordered everyone<sub>j</sub> to burn his/her<sub>j</sub> books.) (✗ reconstr.)

### Crossover effects

Then, consider the strong crossover (SCO) configuration where a phrase moves across an intervening co-referential pronoun ([**XP<sub>i</sub>** ... pronoun<sub>i</sub> ... <**XP**><sub>i</sub>]). SCO is generally disallowed due to the obligatory reconstruction nature of A'-movement, which leads to Principle C violation. In (30), NRPs and gaps in Cantonese display SCO effects topicalization, but not ARPs, suggesting again a contrast in availability of reconstruction.<sup>10</sup>

- (30) NRPs are subject to SCO effects in Cantonese (topicalization)

**Go di taamgun<sub>i</sub>** ne, Aaming tengman [<sub>CP</sub> keoidei<sub>i</sub>] gokdak [<sub>CP</sub> daaigaa dou  
 that CL.PL corrupt.official TOP Ming hear 3PL think everyone all  
 soeng laai-saa {\*\_i/ **\*keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**} ]].  
 want arrest-ALL \_ 3SG 3PL

‘As for those corrupt officials<sub>i</sub>, M heard they<sub>i</sub> think everyone wants to arrest them<sub>i</sub> all.’ [C]

Weak crossover (WCO) effects are a bit different: a phrase cannot A'-move across a *non*-commanding co-referential pronoun ([**XP<sub>i</sub>** ... [<sub>YP</sub> ... pronoun<sub>i</sub> ...] ... <**XP**><sub>i</sub>]). In (31), while gaps and NRPs in Cantonese are banned in WCO, ARPs are not. This again suggests movement with NRPs but not with ARPs (though see Hewett 2023 for a potential confound of using primary crossover).

- (31) NRPs are subject to WCO effects in Cantonese (topicalization)

**Go di sailou<sub>i</sub>** ne, Aaming gokdak [<sub>CP</sub> [<sub>DP</sub> keoidei<sub>i</sub>] aamaa] jinggoi gaauhou {\*\_i/  
 that CL.PL child TOP Ming think 3PL.POSS mum should teach.well \_  
**\*keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**} ].  
 3SG 3PL

‘As for those kids<sub>i</sub>, Ming thinks that their<sub>i</sub> mum should teach them<sub>i</sub> to behave well.’ [C]

## 2.5 Interim summary

10. Such configurations are difficult hard to construct in Mandarin due to (i) the animacy constraint (see §4), and (ii) the imperative licensing environment (Yip and Yuan 2023).

		Cantonese/Shanghainese		Mandarin	
		NRP	ARP	NRP	ARP
Locality	Within binding domain (TP)	✓	✗	✗	✗
	Outside binding domain (within 1 CP)	✓	✓	✓	✓
	Long-distance (across CPs)	✓	✓	✓	✓
A/A'	A'	✓	✓	✓	✓
	A	✓	✗	✗	✗

Table 2: The dependency between NRPs and the antecedents

Movement properties	NRPs	ARPs
Island sensitivity	✓	✗
Idiom preservation	✓	✗
Reconstruction for binding	✓	✗
Subject to SCO effects	✓	✗
Subject to WCO effects	✓	✗

Table 3: The movement properties of NRPs

### 3 Two types of resumption

#### (32) Three desiderata

- Featural mismatch (morphological forms);
- Movement properties (syntactic distribution);
- Exemption from Binding Principle B (in local A movement) (syntactic distribution).

The above three properties align well with each other: NRPs show movement properties and exemption from Binding Principle B (except Mandarin for the latter), whereas ARPs show the opposite. Hence, I suggest that ARPs are base-generated pronouns, whereas NRPs are movement-derived.

#### Agreeing resumption: base-generated pronouns

I suggest that ARPs are base-generated pronouns. When they occur, the antecedents are also base-generated at the surface position. In other words, there is only anaphoric relation, but not movement dependency, between the antecedents and the agreeing RPs.

#### (33) Agreeing RPs as base-generated pronouns

- Syntax: [antecedent<sub>[D],[ϕ],...</sub> ... [pronoun<sub>[D],[ϕ]</sub> ...]] (base-generation)
- PF: [antecedent<sub>[D],[ϕ],...</sub> ... [agreeing RPs ...]] (Vocabulary Insertion)

That agreeing RPs are base-generated captures their contrast with NRPs.

First, agreeing RPs are pronouns born with phi-features, which observe the general matching requirement of phi-features with their antecedents. This explains the morphological form.

Second, they are base-generated and do not show movement properties. However, one can imagine ARPs being systematically ambiguous between a base-generated form and a movement-derived form (cf. Aoun, Choueiri, and Hornstein 2001).

There are two different types of movement properties. The first type, island non-sensitivity, offers positive evidence for a base-generated form and cannot rule out the purported movement-derived parse. On the other hand, the second type, like idiom preservation, offers negative evidence against a movement-derived form and can rule out the movement-derived parse.

- (34) a. Island-non-sensitivity  
       → ARPs can be base-generated.  
       b. Connectivity effects (excluding crossover effects, cf. Hewett 2023)  
       → ARPs cannot be movement-derived → ARPs must be base-generated.

Third, they establish anaphoric/pronominal dependencies with their antecedent, and cannot be bound in the local binding domain (e.g. TP) due to Binding Principle B. Thus, agreeing RPs cannot participate in local A movement configurations, as opposed to non-agreeing RPs.<sup>11</sup>

## Non-agreeing resumption: movement-derived

Unlike ARPs, NRPs are movement-derived:

- (35) Non-agreeing NPs are movement-derived  
       [ DP [ ... [ <sub>VP</sub> V <DP>=**NRP** ] ] ] ] ]  
       ↑  
       \_\_\_\_\_

There are two prominent approaches to movement-derived resumption: partial Copy Deletion (e.g. van Urk 2018; Scott 2021; Georgi and Amaechi 2023) vs. big DP hypothesis qua stranding (e.g. Aoun, Choueiri, and Hornstein 2001; Boeckx 2003). They can both derive the above-mentioned three properties (non-agreeing form, movement, exemption from Principle B). Below, I illustrate how they work for Cantonese.

11. Agreeing RPs are allowed in local/mono-clausal A'-movement configurations, where the antecedents are base-generated at the left periphery (e.g. Spec CP). We follow Bošković 2016 and assume that the phasal edge belongs to the higher binding domain. Thus, the antecedents are outside the binding domain TP and are able to bind agreeing RPs without violating Principle B. As a result, the Highest Subject Restriction (McCloskey 2017) does not apply in both languages.



## NRPs derived by partial Copy Deletion

The proposal below is adopted from Yip and Ahenkorah (2023). First, I assume Late Insertion in the Distributed Morphology framework (Halle and Marantz 1993, *et seq.*), i.e., functional elements like pronouns are spelled out through Vocabulary Insertion in the Phonological Form (PF).

### (36) Vocabulary Items of pronouns in Cantonese

[D,+author]  $\leftrightarrow$  *ngo*

[D,+addressee]  $\leftrightarrow$  *nei*

[D,+pl]  $\leftrightarrow$  *dei*

[D]  $\leftrightarrow$  *keoi*

I propose that Copy Deletion may apply *partially* and only deletes a subset of the features on the lower copy. In the case of non-agreeing RPs, a DP is moved and all the features other than [D] on the lower copy are deleted, as schematized in (37). [D] is then realized as the default pronoun via Vocabulary Insertion.

### (37) NRPs as Partial Copy Deletion (CD)

Syntax:  $\alpha_{[D],[\phi],...} \dots \beta_{[D],[\phi],...}$  ; where  $(\alpha, \beta)$  is a chain created by movement

PF: (i) *Full CD*  $\alpha_{[D],[\phi],...} \dots \beta_{[D],[\phi],...}$  ; surface string =  $\alpha$

(ii) *Partial CD*  $\alpha_{[D],[\phi],...} \dots \beta_{[D],[\phi],...}$  ; surface string =  $\alpha \dots$  exponent of [D]

To derive the non-agreeing RP *keoi* in (38), the plural object moves from VP to Spec  $\nu$ P, creating two copies at both positions in Narrow Syntax (=39a-b). In the PF, Copy Deletion applies partially on the lower copy to delete the plural feature, categorical feature *n* and the root, leaving [D] intact (=39c). Finally, [D] is realized as the third person singular *keoi* by Vocabulary Insertion (=39d).

- (38) Nei jiu  $[_{\nu P}$  zoeng **di** **syu**<sub>*i*</sub> tai-jyun<sub>*k*</sub>  $[_{VP}$  *t<sub>k</sub>* **keoi**<sub>*i*</sub> ]]
- 2SG must DISP CL.PL book read-finish 3SG
- 'You must finish reading the books.'

[C]

### (39) The derivation of Cantonese non-agreeing RP *keoi* in (38)

a. Baseline (Syn.)  $[_{\nu P}$  zoeng  $\nu$ -V  $[_{VP}$  *di syu*<sub>[D,+pl,n, $\sqrt{book}$ ]] ...]</sub>

b. Obj. mvt. (Syn.)  $[_{\nu P}$  zoeng *di syu*<sub>[D,+pl,n, $\sqrt{book}$ ]]  $\nu$ -V  $[_{VP}$  <*di syu*<sub>[D,+pl,n, $\sqrt{book}$ ]]> ...]</sub></sub>

c. Partial CD (PF)  $[_{\nu P}$  zoeng *di syu*<sub>[D,+pl,n, $\sqrt{book}$ ]]  $\nu$ -V  $[_{VP}$  <*di syu*<sub>[D,+pl,n, $\sqrt{book}$ ]]> ...]</sub></sub>

d. VI (PF)  $[_{\nu P}$  zoeng *di syu*<sub>[D,+pl,n, $\sqrt{book}$ ]]  $\nu$ -V  $[_{VP}$  <**keoi**<sub>[D]</sub>> ...]</sub>

## NRPs derived by big DP + stranding

I propose that NRP are D heads that may take another DP. To derive the non-agreeing form, I assume that only D with a pure [D] feature that can take another DP.

(40) The big DP structure (to be revised in §5)

- a.  $[_{DP\text{-big}} D\text{-NRP}_{[D]} [_{DP} \dots ]]$
- b.  $*[_{DP\text{-big}} D\text{-ARP}_{[D,\phi]} [_{DP} \dots ]]$

In order to capture the Principle B violation, I assume that only a *phrase* participates in pronominal dependency (i.e. only DP level denotes referentiality). A head does not. In other words,  $D_{[D]}$  itself not subject to Principle B, but DP formed by  $D_{[D]}$  is. This explains why (40) is can be formed.

- (41) a. Binding Principle applies:  $[_{DP} D\text{-pronoun}_{[D]}]_i \dots DP_i$   
 b. Binding Principle does not apply:  $[_{DP\text{-big}} D\text{-NRP}_{[D]}]_i [_{DP} \dots ]$

The derivation of (38) is shown below:

(42) The derivation of Cantonese non-agreeing RP *keoi* in (38)

- a. Baseline  
 $[_{VP} \text{zoeng } \nu\text{-V } [_{VP} [_{DP1} D_{[D]} [_{DP2} \text{di syu}_{[D,+pl,n,\sqrt{book}}]] \dots ]]$
- b. Obj. mvt.  
 $[_{VP} \text{zoeng } [_{DP2} \text{di syu}_{[D,+pl,n,\sqrt{book}}]] \nu\text{-V } [_{VP} [_{DP1} D_{[D]} <[_{DP2} \text{di syu}_{[D,+pl,n,\sqrt{book}}]]>] \dots ]]$
- c. Full CD (PF)  
 $[_{VP} \text{zoeng } [_{DP2} \text{di syu}_{[D,+pl,n,\sqrt{book}}]] \nu\text{-V } [_{VP} [_{DP1} D_{[D]} <[_{DP2} \text{di syu}_{[D,+pl,n,\sqrt{book}}]]>] \dots ]]$
- d. VI (PF)  
 $[_{VP} \text{zoeng } [_{DP2} \text{di syu}_{[D,+pl,n,\sqrt{book}}]] \nu\text{-V } [_{VP} [_{DP1} \text{keoi}_{[D]}] \dots ]]$

## A prediction on ATB movement

The proposed account not only derives the contrast between non-agreeing RPs and agreeing RPs, but also makes a prediction on whether they are compatible with each other in ATB-movement configurations. Assuming that the dependencies between the antecedent and RPs in each of the conjuncts must be the same (e.g. both are movement dependencies), a non-agreeing RP in one conjunct is predicted to be *incompatible* with an agreeing RP in another conjunct, due to a mix of movement and base-generation dependencies. Non-agreeing RPs are predicted to be only compatible with non-agreeing RPs or gaps. The predictions are schematized in (43).<sup>12</sup>

- (43) a. Non-agreeing RPs are predicted to be compatible with gaps/non-agreeing RPs  
 i. Antecedent<sub>j</sub> ...  $[ \dots \text{non-agreeing RPs}_j ]$  &  $[ \dots \{ \_j / \text{non-agreeing RPs}_j \} ]$   
 ii. Antecedent<sub>j</sub> ...  $[ \dots \{ \_j / \text{non-agreeing RPs}_j \} ]$  &  $[ \dots \text{non-agreeing RPs}_j ]$

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

- b. Agreeing RPs are predicted to be not compatible with gaps/non-agreeing RPs
- \*Antecedent<sub>j</sub> ... [ ... agreeing RPs<sub>j</sub> ] & [ ... {<sub>j</sub> / non-agreeing RPs<sub>j</sub>} ]
  - \*Antecedent<sub>j</sub> ... [ ... {<sub>j</sub> / non-agreeing RPs<sub>j</sub>} ] & [ ... agreeing RPs<sub>j</sub> ]
- (44) Non-agreeing RPs pair with gaps but not agreeing RPs in ATB-movement in Cantonese
- Non-agreeing RPs ... <sup>OK</sup>gaps/<sup>OK</sup>non-agreeing RPs/\*agreeing RPs  
 Godi [ngo gokdak [Aaming soeng zikhak laai-saai **keoi<sub>k</sub>**] ji [Aafan  
 those I think Ming want immediately arrest-ALL 3SG and Fan  
 m-soeng zikhak laai-saai {<sub>k</sub>/ **keoi<sub>k</sub>**/ \***keoidei<sub>k</sub>**}]] ge **taamgun<sub>k</sub>**.  
 not-want immediately arrest-ALL \_ 3SG 3PL MOD corrupt.officials  
 ‘Those corrupt officials<sub>k</sub> who I think [Ming wants to arrest them<sub>k</sub> all immediately] and [Fan  
 doesn’t want to arrest them<sub>k</sub> all immediately]’ [C]
  - Agreeing RPs ... \*gaps/?non-agreeing RPs/<sup>OK</sup>agreeing RPs  
 Godi [ngo gokdak [Aaming soeng zikhak laai-saai **keoidei<sub>k</sub>**] ji [Aafan  
 those I think Ming want immed. arrest-ALL 3PL and Fan  
 m-soeng zikhak laai-saai {\*\_<sub>k</sub>/ ??**keoi<sub>k</sub>**/ **keoidei<sub>k</sub>**}]] ge **taamgun<sub>k</sub>**.  
 not-want immed. arrest-ALL \_ 3SG 3PL MOD corrupt.officials

## 4 A novel generalization on the animacy of antecedents

Let’s take an excursion here and examine the range of antecedents that permit NRPs, focusing on animacy. I will argue in §5 that the generalization we obtained constitutes an argument for the stranding approach over the partial deletion approach.

Mandarin has a strong preference for the antecedents of NRPs to be *inanimate*. Such an (in)animacy preference is not found in Cantonese and Shanghainese.

Upon closer examination, the variations are correlated with the availability of *plural markers*, on three levels:

- (45)
- Cross-linguistic (Mandarin vs. Cantonese/Shanghainese)
  - Language-internal (animacy restrictions of plural *-men* in Mandarin)
  - Individual (variations in non-human animate DPs).

Language	Antecedents with NRPs		
	Human	animate	inanimate
Mandarin	*	%	OK
Cantonese	OK	OK	OK
Shanghainese	OK	OK	OK

Table 4: Variations in animacy restrictions

(46) Generalization on antecedents permitting NRPs

If the noun in a DP cannot be attached by a plural marker, the DP can take an NRP.

## 4.1 Variations in animacy restrictions

In Mandarin, human DPs cannot take NRPs as in (c) (*contra.* Xu 1999),<sup>13</sup> in contrast to inanimate DPs in (a). There are variations in non-human animate DPs in (b). 4 out of 8 informants accepted (b), and the other 4 found it either degraded or ungrammatical.

(47) The inanimacy preference in Mandarin

- a. Context: A dialogue in a movie:

Zhexie ren<sub>i</sub>, ni qu zai-le { \***ta<sub>i</sub>** / **tamen<sub>i</sub>** }! (✗ human)  
 this-CL.PL person you go butcher-PFV 3SG/ 3PL  
 ‘You go kill (lit. butcher) those people!’

- b. Zhexie yazi<sub>i</sub>, ni qu zai-le { %**ta<sub>i</sub>** / **tamen<sub>i</sub>** }! (✓/✗ non-human animate)  
 this-CL.PL duck you go butcher-PFV 3SG/ 3PL  
 ‘You go butcher those ducks!’

- c. Zhexie shu<sub>i</sub>, ni shao-le { **ta<sub>i</sub>** / %**tamen<sub>i</sub>** }! (✓ inanimate)  
 this-CL.PL book 2SG burn-PFV 3SG/ 3PL  
 Lit: ‘These books, you burn it/them!’

In Cantonese, however, such animacy restrictions are not found. All three types of antecedents allow NRPs.

(48) No animacy restrictions in Cantonese

- a. [Ni di jan]<sub>i</sub>, nei jinggoi saat-saai { **keoi<sub>i</sub>** / **keoidei<sub>i</sub>** }. (✓ human)  
 this CL person 2SG should kill-ALL 3SG/ 3PL  
 ‘You should kill those people.’

13. Xu (1999) ex. 4 with *zhe bang xiaotou* ‘this gang of thieves’, ex. 13 with *zhexie jiahu* ‘these chaps’.

- b. [Ni di aap]<sub>i</sub>, nei jinggoi saat-saai {**keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**}. (✓ animate)  
 this CL duck 2SG should kill-ALL 3SG/ 3PL  
 ‘You should kill those ducks.’
- c. [Ni di syu]<sub>i</sub>, nei jinggoi siu-saai {**keoi<sub>i</sub>**/ **keoidei<sub>i</sub>**}. (✓ inanimate)  
 this CL book 2SG should kill-ALL 3SG/ 3PL  
 ‘You go kill (lit. butcher) those people!’

Shanghainese also allows both human and inanimate DPs to take NRPs:

(49) No animacy restrictions in Shanghainese

- a. [geq-nge gning]<sub>i</sub> ngu io ciacueq-teq **i<sub>i</sub>**. (✓ human)  
 this-clfpl person I will solve-asppn it  
 ‘These men, I will get rid of.’ (adapted from Zhu 2023, ex. 7)
- b. [Diqnge meqzy]<sub>i</sub> nung gue-teq **i<sub>i</sub>**! (✓ inanimate)  
 these things you throw-PFV 3SG  
 Lit.: ‘These things, you throw it away!’

## 4.2 Correlation with plural markers

The animacy restrictions of NRP antecedents mirror the animacy restrictions of plural marker *-men* in Mandarin. *-Men* can only attach to human nouns, and, for some speakers, animate nouns as well. Crucially, it cannot attach to inanimate nouns.<sup>14</sup>

(50) The animacy restrictions of plural marker *-men* in Mandarin

- a. Ren/xueshang-**men** (✓ human)  
 person/student-PL  
 ‘people/students’
- b. %Gou/yazi-**men** (✓/✗ animate)  
 dog/duck-PL  
 ‘dogs/ducks’
- c. \*Shu/zhuozi-**men** (✗ inanimate)  
 book/table-PL  
 ‘books/tables’

For human vs. inanimate DPs where the patterns hold across individuals, we get the following correlation:

14. I think Zeljko Boskovic for drawing my attention to this correlation.

(51) Correlation between *-men* and NRPs (Part 1)

- a. Human DPs can be attached by *-men* and cannot take an NRP.
- b. Inanimate DPs cannot be attached by *-men* and can take an NRP.

For animate DPs combining with *-men*, there are individual variations. Strikingly, the variations in animate-DP-*men* **correlate** with the variations in whether animate-DPs can take an NRP. There are three group of speakers:

(52) Correlation between *-men* and NRPs (Part 2)

- a. Group I: Speakers who reject animate-DP-*men* and allow animate-DPs to take NRPs.
- b. Group II: Speakers who accept animate-DP-*men* and disallow animate-DPs and animate-DP-*men* to take NRPs.
- c. Group III: Speakers who accept animate-DP-*men* and allow animate-DPs to take NRPs, but disallow animate-DP-*men* to take NRPs.

(53) Group III speakers

- a. Zhexie yazi<sub>i</sub>, ni qu zai-le **ta<sub>i</sub>!**  
 this-CL.PL duck you go butcher-PFV 3sg  
 'You go butcher those ducks!'
- b. \*Zhexie yazi-**men**<sub>i</sub>, ni qu zai-le **ta<sub>i</sub>!**  
 this-CL.PL duck-PL you go butcher-PFV 3sg  
 'You go butcher those ducks!'

The above is summarized below. Importantly, there are no speakers (that accept NRPs for inanimate DPs) who (i) reject both *-men* and NRPs for animate DPs, or (ii) show a flipped contrast such that animate-DP-*men* can take NRPs but animate-DP cannot.

	animate-DP- <i>men</i>	animate-DP + NRP	animate-DP- <i>men</i> + NRP
Group I (n=2)	*	OK	*
Group II (n=4)	OK	?/??/*	*
Group III (n=3)	OK	OK	*
Unattested I	*	*	*
Unattested II	OK	*	OK

Table 5: Three groups of Mandarin speakers varying w.r.t. the animacy restrictions

The generalization holds beyond Mandarin. Recall that Cantonese and Shanghainese do not have the animacy restrictions on the antecedents. Strikingly, the plural markers in both languages can only occur in pronouns, but they cannot combine with nouns. This confirms the generalization on a cross-linguistic level.

(54) Plural markers in Cantonese and Shanghainese cannot combine with nouns

- a. keo**idei** vs. \*hoksaang-**dei** [C]  
       3PL            student-PL  
       'they / students'
- b. **ila** vs. \*isang-**la** [S]  
       3PL        doctor-PL  
       'they / doctors'

- (55) a. Cross-linguistic (Mandarin vs. Cantonese/Shanghainese)  
       b. Language-internal (animacy restrictions of plural *-men* in Mandarin)  
       c. Individual (variations in non-human animate DPs).

(56) Generalization on antecedents permitting NRPs

If the noun in a DP cannot be attached by a plural marker, the DP can take an NRP.

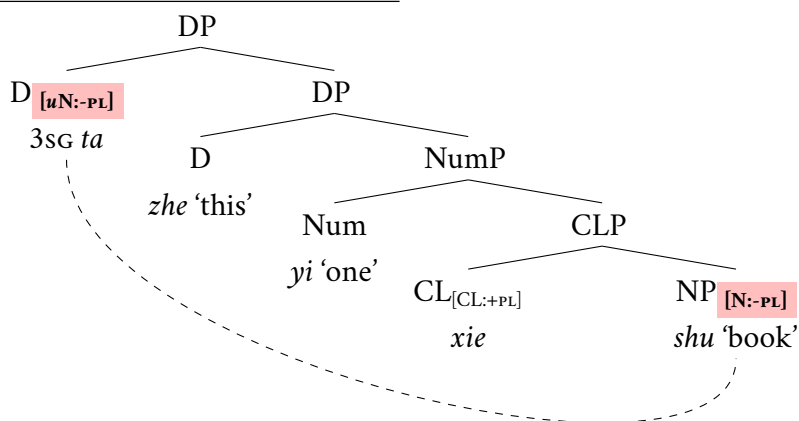
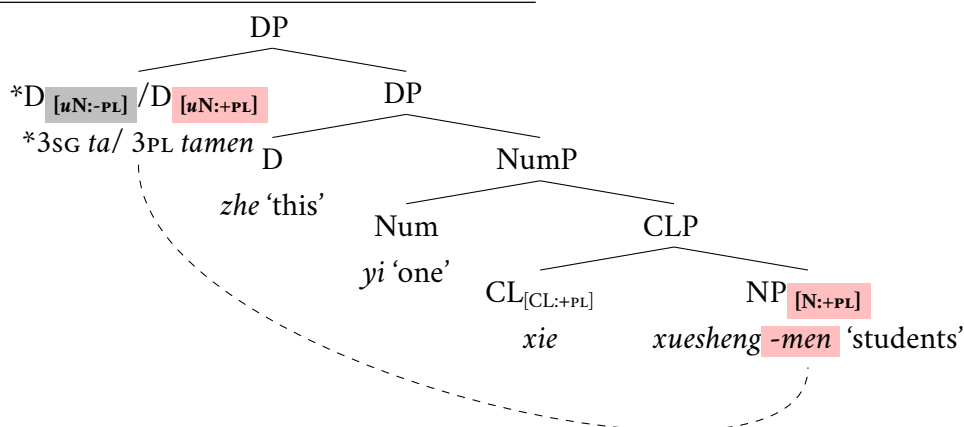
## 5 A stranding approach to movement-derived resumption

The big-DP + stranding approach is able to capture the generalization of animacy restrictions by making the following assumptions:

(57) Three assumptions

- a. *-Men* carries [N:+PL,+animate] features and can attach to animate nouns (cf. *-dei* in Cantonese being [D,PL]).  
       (Individual variations: [animate] may be [human] for some speakers)
- b. *-Men* is **optionally** pronounced.
- c. The D in big DP structures carries [*u*N:±-PL] that must Agree with a NP with the corresponding features [N:±-PL]  
       (Plural features on other levels like Num and CL are irrelevant)

The proposed big DP structure is the following. In effect, NRPs can only combine with inanimate nouns, whereas ARPs may combine with animate nouns.

(58) The big DP structure with NRPs(59) The big DP structure with -men taking NPs

One desirable prediction is that ARPs in Mandarin, with an animate antecedent, may actually be movement-derived. This seems to be borne out:

(60) ARPs allow reconstruction for variable binding with an animate antecedent

- a. \*[Taziji<sub>i</sub> de naxie diren]<sub>i</sub>, wo mingling [mei yige shouxia]<sub>j</sub> gankuai sha-le **ta<sub>i</sub>**.  
 3sg.self DE those enemy 1sg order every one sidekick quickly kill-PFV 3sg  
 Lit.: 'Those enemies<sub>i</sub> of him/herself<sub>i</sub>'s, I ordered every sidekick<sub>j</sub> to kill it<sub>i</sub>.'
- b. [Taziji<sub>i</sub> de naxie diren]<sub>i</sub>, wo mingling [mei yige shouxia]<sub>j</sub> gankuai sha-le  
 3sg.self DE those enemy 1sg order every one sidekick quickly kill-PFV  
**tamen<sub>i</sub>**.  
 3pl  
 Lit.: 'Those enemies<sub>i</sub> of him/herself<sub>i</sub>'s, I ordered every sidekick<sub>j</sub> to kill it<sub>i</sub>.' (✓ reconstr.)



While more diagnostics need to be employed to strengthen this argument, this argument is a strong argument against partial Copy Deletion, which would predict deletion of number features across-the-board (though see Dynamic Deletion Domain in Georgi and Amaechi 2023).

However, there are three remaining issues.

- (61) a. The status of the “big-DP”  
 b. Person mismatch in Cantonese (and Wuhan Mandarin)  
 c. Variations in exemption to Principle B

First, Chinese does have a big-DP like constituent that can be pronounced together. However, such a “big-DP” only allows agreeing pronouns including Cantonese. A non-agreeing one only yields a possessive meaning (‘his/her students’). Also, inanimate DPs cannot enter these structures.

- (62) a. Keoidei/\*keoi [ni di hoksaang] [C]  
 3PL/3SG this CL.PL student  
 Lit.: ‘They students’  
 b. Tamen/\*ta [zhexie hoksaang] [M]  
 3PL/3SG this-CL.PL student  
 Lit.: ‘They students’
- (63) a. \*Keoidei/\*keoi [ni di syu] [C]  
 3PL/3SG this CL.PL book  
 Lit.: ‘They books’ (not their books)  
 b. \*Tamen/\*ta [zhexie shu] [M]  
 3PL/3SG this-CL.PL book  
 Lit.: ‘They books’ (not their books)

Second, recall that person mismatch is allowed in Cantonese. If the outer D carries an agreeing number feature, it is not clear that what bans an agreeing person feature.

Third, we need to explain why Mandarin NRPs are different from Cantonese and Shanghainese in obeying Principle B.

The partial deletion approach does not have the first and second problems, but it similarly faces the third challenge.

## 6 Conclusion

- (64) a. I argued for a non-uniform treatment of resumption.  
 ARPs are base-generated pronouns, whereas NRPs are movement-derived, supporting the non-uniform view (see Hewett 2023 for more discussion).
- b. I presented a novel argument in favor of the stranding approach.  
 Mandarin, unlike Cantonese and Shanghainese, only allows inanimate antecedents for NRPs, mirroring the animacy restrictions of Mandarin's plural marker on common nouns.
- c. I also pointed out some non-trivial challenges faced by the stranding approach but not by the partial deletion approach.

## References

- Aoun, Joseph, Lina Choueiri, and Norbert Hornstein. 2001. "Resumption, movement, and derivational economy." *Linguistic Inquiry* 32 (3): 371–403.
- Boeckx, Cedric. 2003. *Islands and Chains: Resumption as Stranding*. John Benjamins Publishing Company.
- Bošković, Željko. 2016. "On the timing of labeling: Deducing Comp-trace effects, the Subject Condition, the Adjunct Condition, and tucking in from labeling." *The Linguistic Review* 33 (1): 17–66.
- Cheung, Hung-nin Samuel. 1992. "The pretransitive in Cantonese." In *Chinese Languages and Linguistics, Vol.1: Chinese Dialects*, 241–303. Taipei: Institute of History / Philology, Academia Sinica.
- Georgi, Doreen, and Mary Amaechi. 2023. "Resumption in Igbo: two types of resumptives, complex phi-mismatches, and dynamic deletion domains." *Natural Language & Linguistic Theory* 41:961–1028.
- Halle, Morris, and Alec Marantz. 1993. "Distributed Morphology and the pieces of inflection." In *The View from Building 20*, edited by Kenneth Hale and Samuel Jay Keyser, 111–176. Cambridge, Massachusetts: MIT Press.
- Hewett, Matthew Russell. 2023. "Types of resumptive  $\bar{A}$ -dependencies." PhD diss., The University of Chicago.
- Lin, Jo-Wang. 1994. "Object Non-referentials, Definiteness Effect and Scope Interpretation." In *North Eastern Linguistic Society*, edited by Merce Gonzalez, 287–301. GLSA.
- Lin, Jo-wang, and Niina Ning Zhang. 2006. "The syntax of the non-referential TA 'it' in Mandarin Chinese." *Language and Linguistics* 7 (4): 799–824.
- Man, Patricia Yuk-Hing. 1998. "Postverbal KEOI as a marker for nonasserted bounded clauses." In *Studies in Cantonese linguistics*, edited by Stephen Matthews, 53–62. Hong Kong: The Linguistic Society of Hong Kong.
- McCloskey, James. 2017. "Resumption." In *The Wiley Blackwell Companion to Syntax (Second Edition)*, edited by Martin Everaert and Henk van Riemsdijk, 1–30. Oxford: Blackwell.
- Salzmann, Martin. 2012. "Deriving reconstruction asymmetries in Across The Board by means of asymmetric extraction+ellipsis." In *Comparative Germanic Syntax*, 353–386. John Benjamins.
- Scott, Tessa. 2021. "Two types of resumptive pronouns in Swahili." *Linguistic Inquiry* 52 (4): 812–833.
- Travis, Lisa deMena. 2010. *Inner aspect*. Dordrecht: Springer.
- van Urk, Coppe. 2018. "Pronoun copying in Dinka Bor and the copy theory of movement." *Natural Language and Linguistic Theory* 36 (3): 937–990.

- Wu, Yicheng, and Daogen Cao. 2016. "Object expletives in Chinese and the structural theory of predication." *International Journal of Chinese Linguistics* 3 (2): 179–200.
- Wu, Yicheng, and Stephen Matthews. 2010. "How different are expletive and referential pronouns? A parsing perspective." *Lingua* 120 (7): 1805–1820.
- Xu, Liejiong. 1999. "A special use of the third person singular pronoun." *Cahiers de Linguistique Asie Orientale* 28 (1): 3–22.
- Yip, Ka-Fai, and Comfort Ahenkorah. 2023. "Non-agreeing resumptive pronouns and partial Copy Deletion." *University of Pennsylvania Working Papers in Linguistics* 29 (1).
- Yip, Ka-Fai, and Xuetong Yuan. 2023. "Defocus leads to syntax-prosody mismatches in right-dislocated structures." In *Proceedings of CLS 59*.
- Zhao, Chen. 2023. "On the special pronoun Ta in the Wuhan dialect of Chinese: a resumptive analysis." *Studia Linguistica* 77 (1): 47–76.
- Zhu, Jialei. 2023. "A more special use of the third person singular pronoun in Shanghainese." *Language and Linguistics* 24 (2): 391–436.