

Jussive agreement with non-agreeing resumptive pronouns in Mandarin Chinese^{*}

Ka-Fai Yip, Xuetong Yuan

Yale University, University of Connecticut

at the 16th edition of the Brussels Conference on Generative Linguistics (BCGL 16)

CRISSP of KU Leuven, Brussels

October 5-6, 2023

Contents

1	Introduction	2
2	Jussives as the licensing condition of NRPs	3
2.1	Matrix clause types	4
2.2	Performative modals	5
2.3	Negation	7
2.4	Embedding predicates	8
3	The patient object restriction on NRPs	10
3.1	Grammatical functions	10
3.2	Thematic roles	11
4	The movement properties of NRPs	12
4.1	Locality	12
4.2	Connectivity effects	14
5	Proposal: jussive agreement	15
6	Concluding remarks	17

^{*}Acknowledgment: For judgment of the Mandarin data, we thank Fulang Chen, Mingjiang Chen, Zixi Liu, Richard Luo, Qi Wu, Herbert Zhou, and Miranda Zhu. For discussions and comments, we thank Fulang Chen, Magdalena Kaufmann, Jim Wood, the Yale syntax community, and members of the Partial Deletion reading group. We are particularly grateful to Raffaella Zanuttini for her guidance. All the errors are of course our own responsibilities.

1 Introduction

While imperative/jussive clauses are known to have interaction with (null) subjects, verbal morphology, modals, negation, and speaker-addressee relations (Potsdam 1996; Portner 2007; Zanuttini 2008; Zanuttini, Pak, and Portner 2012; Pak, Portner, and Zanuttini 2022; Kaufmann 2012; Alcázar and Saltarelli 2014; Liao and Wang 2022, *i.a.*), whether **objects** interact with jussive clauses is, however, less understood.¹

(1) The interaction of jussives with:

- a. Subjects (e.g. exceptional null subjects in non-pro-drop languages)
- b. Verbal morphology (e.g. infinitival/special imperative morphology)
- c. Modals (e.g. performativity)
- d. Negation (e.g. prohibitives)
- e. Speaker-addressee relation and embeddability (e.g. speech-style particles)
- f. 🗨️ **Objects?**

This study reports such a case of interaction with **objects**, which is observable in a particular movement context. The core data comes from non-agreeing resumptive pronouns (NRPs) in Mandarin Chinese (first reported by Xu 1999), exemplified in (2a). An NRP is strongly preferred when an *object* is topicalized in an imperative (vs. 2b).²

- (2) a. Zhexie shu_i, ni shao-le ??(ta_i)! (3PL antecedent vs. 3sg NRP)
 these books you burn-PFV 3sg
 Lit.: ‘These books, you burn it!’ (i.e. These books, burn them!)
- b. Ni shao-le zhexie shu (*ta_i)!
 you burn-PFV these books 3sg
 ‘You burn these books!’

Mandarin Chinese does not have *overt* syntactic marking of the imperative/jussive clause type (except prohibitive negation, Yuan 1993; also Liao and Wang 2022 for Taiwan Southern Min). As we will show, the licensing environment of NRPs exactly aligns with **jussive (imperative, promissive, exhortative) clauses**. This striking sensitivity of NRPs to jussives suggests that jussive is a syntactically active notion even in a language without inflectional morphology.

1. While receiving less attention, null objects, with a definite interpretation, may also be exceptionally licensed in imperatives clauses in English. For a recent discussion, see Bošković (2023).

2. The data in this study are confirmed by seven native speakers of Mandarin Chinese. Discrepancies in judgment are indicated by “%”.

(3) Overview of the talk

- a. We show that the NRP exhibits a multifaceted empirical profile that involves:
 - (i) licensing by jussive clauses,
 - (ii) patient roles of objects, and
 - (iii) movement-derived properties.
- b. We argue that the intricate pattern can be accounted for by an **Agree** relation between the **NRP** and **jussive** head, coupled with interface conditions on partial Copy Deletion:

$$[_{CP} \text{C-jussive } [_{TOPP} \text{DP}_{[TOP]} [\text{Top } [_{TP} \dots [_{VP} \text{V} <\text{DP}>= \text{NRP}_{[TOP][JUSSIVE]}]]]]]]$$
- c. We conclude that NRPs can be viewed as syntactic markers of jussive clauses in Mandarin Chinese, which offers support for jussive being a **syntactic** clause type with interaction with *objects*.
- d. We also briefly discuss the interaction of jussive with objects in other languages.

Before proceeding, we note that NRPs in other Sinitic languages (e.g. Cantonese/Shanghainese) have a wider distribution (Xu 1999; Man 1998; Yip and Ahenkorah 2023), but they similarly require an NRP (vs. gap) just like (1a).

- (4) a. Nidi syu_i ne, nei siu-zo *(keoi_i)! (Cantonese)
 these books TOP you burn-PFV 3SG
 Lit.: 'These books, you burn it!' (i.e. These books, burn them!)
- b. Diqng meqzy_i nung gue-teq *(i_i)! (Shanghainese)
 these things you throw-PFV 3SG
 Lit.: 'These things, you throw it away!' (i.e. These books, throw them away!)

- **Road map**

§2: Licensing by jussives

§5: Proposal: jussive agreement

§3: Patient object requirement

§6: Concluding remarks

§4: Movement properties

2 Jussives as the licensing condition of NRPs

We show that NRPs always occur in a jussive clause, and other clause types (or the lack of directive force associated with jussives) cannot license NRPs. That is, the occurrence of NRPs is dependent on jussives.

(5) The licensing condition of NRPs

- a. $[_{CP} \text{ C-jussive } \dots [_{TP} \dots [_{VP} \text{ V } \textbf{NRP}]]]$
 b. $*[_{CP} \text{ C-other } \dots [_{TP} \dots [_{VP} \text{ V } \textbf{NRP}]]]$

Licensing conditions		Non-agreeing RPs	Agreeing RPs
Matrix clause type	Jussive	✓	✓/✗
	Declarative	✗	✓
	Interrogative	✗	✓
Modal	Performative	✓	✓
	Descriptive	✗	✓
Negation	Prohibitive	✓	✓
	Non-prohibitive	✗	✓
Embedding predicates	‘advise/order’-type	✓	✓
	‘believe’-type (doxastic)	✗	✓

Table 1: Jussives as the licensing condition of NRPs

2.1 **Matrix clause types**

First, NRPs in Mandarin are licensed only in **jussive** clauses. In root clauses, NRPs are licensed in *imperatives*, as we have already seen (reproduced below). In (6), the obligation is placed on the *addressee*. Here, an agreeing resumptive pronoun (ARP) is also acceptable for some speakers.³

(6) Imperatives license NRPs

Zhexie shu_i, **ni** shao-le {**ta_i**/%tamen_i}!
 these books 2SG burn-PFV 3SG/3PL (obligation on addressee)
 Lit: ‘These books, you burn it/them!’

NRPs are also licensed in other jussive clauses, like *promissives* in (7), where the obligation is placed on the *speaker* (with ‘I’ as the subject), and *exhortatives* in (8), where the obligation is placed on both the *speaker* and the *addressee* (with ‘we’ as the subject).

(7) Promissives license NRPs

Zhexie shu_i, **wo** shao-le {**ta_i**/%tamen_i}!
 these books 1SG burn-PFV 3SG/3PL (obligation on speaker)
 Lit: ‘These books, I burn it/them!’

3. One of our informants rejected the use of plural pronouns for referring to inanimate entities, regardless of the clause type. In this case, whether the use of singular pronoun is “non-agreeing” is not clear since there are no “agreeing” counterparts. Note that other speakers we consulted all accepted the use of plural pronouns for inanimate entities in non-jussives.

(8) Exhortatives license NRPs

Zhexie shu_i, **women** shao-le {**ta_i**/%tamen_i}! (obligation on speaker+addressee)
 these books **1PL** burn-PFV **3SG/3PL**
 Lit: ‘These books, we burn it/them!’ (i.e., Let’s burn these books!)

Crucially, the obligation cannot be placed on a non-discourse participant (i.e. ‘he/she/they’):⁴

(9) *Zhexie shu_i, **tamen** shao-le **ta_i**! (*obligation on non-participant)
 these books **3PL** burn-PFV **3SG**
 Lit: ‘These books, they burn it/them!’

Moreover, other clause types, like declaratives or interrogatives in (10), also do not license NRPs.

- (10) a. Zhexie shu_i, wo yijing shao-le {***ta_i**/tamen_i}. (declarative)
 these books I already burn-PFV **3SG/3PL**
 ‘I already burnt these books.’
 b. Zhexie shu_i, ni yijing shao-le {***ta_i**/tamen_i} ma? (interrogative)
 these books you already burn-PFV **3SG/3PL** SFP
 ‘Have you burnt these books?’

2.2 Performative modals

NRPs are also licensed under **performative uses** of modals. It is well-known that **deontic modals** can be used *descriptively* or *performatively*, the latter resulting in a jussive clause with directive force (Kamp 1973; Portner 2007; Kaufmann 2012, *i.a.*).

- (11) a. You **should** go to confession, but you’re not going to. (descriptive, Portner 2007, ex.31a)
 b. You **should** sit down right now. (performative, Portner 2007, ex.28)

On its descriptive use, the sentence *reports* a pre-existing obligation/permission, to which the speaker may or may not be committed to. On its performative use, the speaker *issues* a command/permission with commitment to it.

With NRPs, the modalized sentence in (12a) can *only* be performative, rendering continuation like ‘but I think you do not need to’ in (12b) and responses like ‘True!/False!’ in (12c) infelicitous.

(12) The obligatory *performative* use of deontic modals with NRPs

- a. A: Zhexie shu_i, ni **yao/yinggai** shao-le **ta_i**!
 these books you **must/should** burn-PFV **3SG**
 Lit: ‘These books, you must/should burn it.’

4. This is different from Italian (and English to a limited extent), where root jussives with third-person subjects like *Che venga anche lui* ‘(See to it that) he comes as well!’ in Italian or *Someone seat the guests!* in English are acceptable (Zanuttini, Pak, and Portner 2012).

- b. A: ... # but I think you don't need to burn them.
- c. B: # True!/# False!

Notice that with the presence of a plural ARP, the descriptive reading is possible and even sometimes preferred, as in (13). The descriptive reading can be facilitated under a context where the obligation is sourced from some regulations that the speaker does not agree.

(13) The descriptive use of deontic modals with ARPs

- a. A: Zhexie shu_i, ni yao/yinggai shao-le **tamen_i**.
these books you must/should burn-PFV 3PL
'(According to these ridiculous regulations,) these books, you must/should burn them.'
- b. A: ... but I think you don't need to burn them.
- c. B: True!/ False!

The contrast is more salient if the subjects are in first-person or third-person. The use of NRPs enforces a performative reading, whereas the use of ARPs generally leads to a descriptive reading.⁵

(14) Deontic modals with a first-/third-person subject

- a. Zhexie shu_i, wo yao/yinggai shao-le {**ta_i**/tamen_i}.
these books 1SG must/should burn-PFV 3SG/3PL
NRP: 'These books, I must/should burn it! (# though I don't think I need to)'
ARP: 'These books, I must/should burn them.' (though I don't think I need to)
- b. Zhexie shu_i, yuehan yao/yinggai shao-le {**ta_i**/tamen_i}.
these books John must/should burn-PFV 3SG/3PL
NRP: 'These books, John must/should burn it!' (# though I don't think he needs to)
ARP: 'These books, John must/should burn them.' (though I don't think he needs to)

Permission modal *keyi* 'may' and disposition modal *hui* 'will' may also license NRPs under a performative reading: suggestion for *keyi* 'may' and promissive for *hui* 'will'.

- (15) Zhexie shu_i, wo jintian hui kan-le **ta_i**.
these books I today will read-PFV 3SG
Lit.: 'These books, I will read it today.' (you have my word.)

- (16) Zhexie binggan_i, women keyi chi-le **ta_i**.
these cookie we should eat-PFV 3SG
Lit.: 'These cookies, we can eat it.' (let's do it.)

5. In third-person subject cases, there is a contrast regarding whether an overt modal is present. Without an overt modal, third-person subjects are in general banned in "bare" jussives without a modal (as in (9)), whereas the performative use of an overt deontic modal allows third-person subjects (as in (14b)). The contrast suggests that 'bare' jussives in Mandarin cannot be analyzed as *simply* having a covert modal.

This contrasts with epistemic and dynamic modals. While they do not license a performative/directive use (Portner 2007), they also do not license NRPs as in (17)-(18).

(17) Epistemic modals

Zhexie shu_i, ni/wo/yuehan {keneng/ yiding} shao-le {*ta_i/tamen_i} (le)
 these books you/I/John probably/ definitely burn-PFV 3SG/3PL SFP
 ‘You/I/John {probably/definitely} burnt these books.’

(18) Dynamic modals

Zhexie shu_i, ni/wo/yuehan {gan/ neng} jiu zheyang shao-le {*ta_i/tamen_i}
 these books you/I/John dare/ can then like.this burn-PFV 3SG/3PL
 ‘You/I/John {dare to/can} burn these books just like that.’

2.3 Negation

Another piece of evidence comes from negation. Mandarin has three forms of negation: *bu* ‘not’, *mei*(you) ‘didn’t’, and *bie* ‘don’t’. *Bie* ‘don’t’ is a **prohibitive negation** that only occurs in jussive clauses (strictly speaking, only imperatives and exhortatives) (see also Liao and Wang 2022 for Taiwan Southern Min). The other two forms, *bu* (neutral negation) and *meiyou* (perfective negation), do not occur in jussive clauses.⁶

- (19) a. Ni **bie** shao-le zhexie shu!
 2SG PROH burn-PFV these books
 ‘(You) don’t burn these books!’
 b. *Ni **bu/meiyou** shao(-le) zhexie shu!
 2SG not/not.PFV burn-PFV these books
 Int.: ‘(You) don’t burn these books!’

Importantly, with the presence of NRPs, only the prohibitive negation *bie* ‘don’t’ is allowed. *Bu* and *meiyou* are banned. (20b) is unacceptable regardless of the intended meaning (either as command or assertion).

- (20) a. Zhexie huaping_i, nei **bie** za-le ta_i!
 these vase 2SG PROH break-PFV 3SG
 Lit.: ‘These vases, (you) don’t break it!’
 b. *Zhexie huaping_i, nei **bu/meiyou** za(-le) ta_i.
 these vase 2SG NOT/NOT.PFV break-PFV 3SG
 Lit.: ‘These vases, (you) don’t/didn’t break it.’

6. Except for *bu* in *buyao* ‘don’t’ where the deontic modal *yao* ‘should/must’ is negated, expressing a prohibitive reading.

With a plural ARP, on the other hand, *meiyou* and *bu* may be licensed in a declarative clause.

- (21) a. Zhexie huaping_i, nei **meiyou** za-le **tamen_i**.
 these vase 2SG **NOT.PFV** break-PFV 3PL
 ‘These vases, you didn’t break them.’
- b. Zhexie huaping_i, Zhangsan **bu** za **tamen_i** le.
 these vase Zhangsan **NOT** break 3PL SFP
 ‘These vases, Zhangsan no longer breaks them.’

Note that prohibitive negation can only occur in jussives where an obligation is placed *on the addressee* (i.e., imperatives and exhortatives). The prohibitive negation is not allowed in promissives, where the obligation is only placed *on the speaker*. This is different from NRPs - which, as we have already seen, occur in **all three** types of jussive clauses.

- (22) a. **Women bie** shao-le zhexie shu (ba)! (exhortative)
 1PL **PROH** burn-PFV these books SFP
 ‘Let’s not burn these books.’
- b. ***Wo bie** shao-le zhexie shu (ba)! (promissive)
 1SG **PROH** burn-PFV these books SFP
 Int.: ‘I won’t burn these books. (you have my word)’

2.4 Embedding predicates

NRPs can only be embedded under **advise predicates** like ‘advise/order’, as illustrated in (23a). These predicates are argued to take embedded imperatives (as evidenced by, for example, the clause type markers in Korean, Portner 2007; see also Crnič and Trinh 2009; Kaufmann and Poschmann 2013).

(23) Embedded jussives taken by ‘advise/order’ predicates license NRPs

- a. Zhexie shu_i, Xiaoming **mingling** ni/wo/yuehan [shao-le {**ta_i**/tamen_i}]
 these books Xiaoming **order** you/I/John burn-PFV **3SG/3PL**
 ‘Xiaoming ordered you/me/John to burn these books.’
- b. Zhexie shu_i, Xiaoming **jianyi** ni/wo/yuehan [shao-le {**ta_i**/tamen_i}]
 these books Xiaoming **advise** you/I/John burn-PFV **3SG/3PL**
 ‘Xiaoming advised you/me/John to burn these books.’

Additional support for the embedded clauses being jussives comes from the embeddability of prohibitive negation *bie* ‘don’t’. *Bie* may even co-occur with NRPs in these embedded jussives:

(24) Embedded jussives with prohibitive negation and NRPs

Zhexie shu_i, Xiaoming mingling ni [bie shao-le ta_i]
 these books Xiaoming order you PROH burn-PFV 3SG
 ‘Xiaoming ordered you to not burn these books.’

Other examples of the licensing predicates are listed in (25).⁷

(25) Other embedding predicates that license NRPs

- a. Object control: *jiao* ‘ask (someone to do something)’, *yao* ‘demand’, *yaoqiu* ‘request’, *rang* ‘let’, *quan* ‘urge’
- b. Subject control: *jihua* ‘plan’
- c. Non-control: *xiwang* ‘hope’

A short note here is that the patterns remain the same with the topicalized antecedent in either matrix or embedded clauses:

- (26) Xiaoming jianyi ni/wo/yuehan [zhexie shu_i shao-le {ta_i/tamen_i}]
 Xiaoming advise you/I/John these books burn-PFV 3SG/3PL
 ‘Xiaoming advised you/me/John to burn these books.’

Importantly, doxastic predicates like ‘believe’ in (27) do not license an embedded NRP. Hence, NRPs can only be licensed in *embedded jussives* but *not* embedded declaratives.

- (27) (Zhexie shu_i) Xiaoming xiangxin [(zhexie shu_i) wo shao-le {*ta_i/tamen_i}]
 these books Xiaoming believe these books I burn-PFV 3SG/3PL
 ‘Xiaoming believed that I burnt these books.’

Taking stock, NRPs are licensed by jussives, including imperatives, promissives, and exhortatives, suggesting that they establish some syntactic dependency with the jussive projection.

- (28) [_{CP} C-jussive ... [_{TP} ... [_{VP} V NRP]]]]

3 The patient object restriction on NRPs

The distribution of NRPs is not only restricted by clause types, but also by grammatical functions and theta roles. Specifically, only **direct objects** that bear a **patient role** may be an NRP.⁸

7. The licensing predicates do not have Huang (2022)’s “Type III” predicates (compare: Type II *jihuan* ‘plan’ vs. Type III *shefa/changshi* ‘try’, the latter of which cannot license NRPs), which are argued to be restructuring predicates that take a reduced clause like *vP/VP*.

8. There is also a telicity constraint on the predicate as observed by Xu (1999), which we set aside for now.

3.1 Grammatical functions

First, **subjects** cannot be NRPs. Note that the subject is constructed as inanimate (as well as other cases below) so as to avoid violations of an animacy constraint, which will be discussed in §3.2.

(29) A subject cannot be an NRP

- a. Wo xiwang [zhexie taifeng] bie chuidao-le zheke shu!
1SG hope these typhoons PROH blow.down-PFV this tree
'(I hope) these typhoons don't blow down this tree!'
- b. *Zhexie taifeng_i, wo xiwang **ta_i** bie chuidao-le zheke shu!
these typhoons 1SG hope **3SG** PROH blow.down-PFV this tree
'I hope these typhoons don't blow down this tree!'

Second, an **indirect object**, unlike direct objects, also cannot be an NRP.

(30) An indirect object cannot be an NRP

- a. Ni yinggai song-gei [zhexie gongsi] yibi qian!
2SG should give-to these companies one money
'You should give these companies an amount of money!'
- b. *Zhexie gongsi_i, nei yinggai song-gei **ta_i** yibi qian!
these companies 2SG should give-to **3SG** one money
Lit.: 'These companies, you should give it an amount of money!'

Last but not least, an **object of a preposition** also cannot be an NRP. Note that preposition-stranding is not allowed in Mandarin Chinese and an resumptive pronoun is needed after the preposition with topicalization, but the resumptive pronoun can only be an agreeing one (plural) instead of the NRP in this case.

(31) A prepositional object cannot be an NRP

- a. Ni yinggai [yong zhe-jizhi bi] xie zuoye!
2SG should use this-several pen write homework
'You should use these several pens to do your homework!'
- b. *Zhe-jizhi bi_i, ni yinggai [yong **ta_i**] xie zuoye!
this-several pen 2SG should use **3SG** write homework
Lit.: 'These several pens, you should use it to do your homework!'
- c. Zhe-jizhi bi_i, ni yinggai [yong ***(tamen_i)**] xie zuoye!
this-several pen 2SG should use **3PL** write homework
'These several pens, you should use *(them) to do your homework!'

3.2 Thematic roles

Apart from grammatical functions, the thematic role of the objects also matters. Only a **patient/theme (object)** may be an NRP. In (32a), the object is a **causee** rather than a patient. Crucially, only the agreeing RP *tamen* ‘they’, but not the NRP, is allowed in imperative (32b).

- (32) a. Ni qu qi-lei **zhexie ma!**
 you go ride-tired **these horse**
 “You go ride these horses until they get tired!”
 (i.e. go cause these horses to be tired by riding them!)
- b. **Zhexie ma_i**, ni qu qi-lei {***ta_i**/tamen_i}!
 these horse you go ride-tired **3sc/3PL**
 “You go ride these horses until they get tired!”

It should be noted that even for a patient object, there is a general preference for having an inanimate object over an animate object. Human objects are generally not acceptable, as shown in (a). For non-human animate objects like ‘chicken’, NRPs, though not entirely natural, may still be acceptable *modulo* speaker variations, as well as the choice of the predicate.

(33) The inanimacy preference of NRPs

- a. Context: A dialogue in a movie:
 Zhexie ren_i, ni qu zai-le {***ta_i**/tamen_i}! (✗ human)
 these person you go butcher-PFV **3sc/3PL**
 ‘You go kill (lit. butcher) those people!’
- b. Zhexie ji_i, ni qu zai-le {%**ta_i**/tamen_i}! (✓/✗ non-human animate)
 these chicken you go butcher-PFV **3sc/3PL**
 ‘You go butcher those chickens!’ (more acceptable if the chickens are perceived as meat)

While we could not give a full explanation here, we speculate that the inanimacy preference may be related to the patient requirement, since inanimate entities are the prototypical patient/theme.

In short, together with the jussive licensing, the NRP always refers to the **patient object** upon which the addressee or the speaker (or the matrix subject, as in embedded jussives) is obligated to impose actions. This can be understood as an interaction of **addressee/speaker** with **argument structure** in **jussive** clauses.

4 The movement properties of NRPs

We argue that NRPs are not base-generated pronouns or object expletives.⁹ Rather, they are derived by movement, and, as we will propose, they are the (partial) realization of the lower copy/trace.

(34) The resumption dependency with NRPs is movement

... [TopP DP_[TOP] [Top [TP ... [VP V **NRP=ta**]]]]

↑

Movement properties		Non-agreeing RPs	Agreeing RPs
Locality (§4.1)	Long distance	✓	✓
	Island sensitivity	✓	✗
Connectivity (§4.2)	Idiom preservation	✓	✗
	Reconstruction for binding	✓	✗

Table 2: The movement properties of NRPs

4.1 Locality

First, the NRPs may be separated from the antecedent (i.e., the topicalized nominal) across a clause boundary, as can be seen from the embedded jussives in §2.4 above. As shown in (35), the embedded jussives may be further embedded in another (declarative) CP, yet allowing the NRP with the antecedent in the matrix clause.

(35) The resumption dependency with NRPs can be long-distance

- a. Zhexie shu_i, Lisi mingling ni [embedded shao-le {**ta_i**/tamen_i}].
 these books Lisi order you burn-PFV 3SG/3PL
 ‘(As for) these books, Lisi ordered you to burn it.’
- b. Zhexie shu_i, wo tingshuo [embedded Lisi mingling ni [embedded shao-le
 these books 1SG hear Lisi order 2SG burn-PFV
 {**ta_i**/tamen_i}]].
 3SG/3PL
 ‘(As for) these books, I heard that Lisi ordered you to burn it.’

Second, while the resumption dependency can be long-distance, no island boundaries may intervene between the antecedent and the NRP, as illustrated by the complex DP island in (36a). Note that if the topicalization does not cross an island boundary as in (36b), the NRP can still be used.

9. The use of NRPs here should be distinguished from a non-referential, expletive use of *ta* ‘it’, as in *Wōmen 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). As far as we know, the NRP use of *ta* requires a *definite* object being displaced instead.

(36) The resumption dependency with NRPs cannot cross a complex DP island

- a. Zhaxie shu_i, wo tingshuo-le [DP [CP Lisi mingling ni shao-le {*ta_i/tamen_i}]
 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 zhaxie shu_i Lisi mingling ni shao-le ta_i] 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 apply to other types of islands:¹⁰

(37) The resumption dependency with NRPs cannot cross other types of islands

- a. *Adjunct island*
 Zhe-jiben shu_i, wo tingshuo [adjunct ruguo Zhangsan mingling ni shao-le
 this-several book I hear if Zhangsan order 2SG burn-PFV
 {*ta_i/tamen_i}], 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_i, [subject Zhangsan jianyi ni za-le {*ta_i/tamen_i}] 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_i, Zhangsan jianyi ni [conjunct za-le {*ta_i/tamen_i}] 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.’

10. Left Branch Extraction is also banned, but this could be attributed to the patient object requirement. In LBE contexts, the NRP is a possessor rather than a patient object.

4.2 Connectivity effects

First, idiomatic meaning is preserved with the use of NRPs. (38) shows an idiom ‘to blow bull leather’ which idiomatically means ‘to brag’.¹¹

- (38) %Ni qu chui-le zhexie niupi!
 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!’

The idiomatic reading ‘to brag’ is only available with the NRP in (39a), but not with the plural ARP in (39b). The latter only gives rise to the odd literal reading ‘to blow bull leather’.

(39) Idiomatic reading is preserved with NRPs

- a. Zhexie niupi_i, ni qu chui-le **ta_i!** (✓ 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_i, ni qu chui-le **tamen_i!** (✗ idiomatic)
 these cow.skin 2SG go blow-PFV 3PL
 Only lit.: ‘You go blow these bull leather (i.e. cow skins)!’

Second, reconstruction for variable binding is also found with NRPs. In (40a), the controller (i.e. ‘everyone’) binds the reflexive variable *taziji* ‘him/herself’ contained in the topicalized nominal.

(40) NRPs allow reconstruction for variable binding

- a. [Naxie **taziji_i** de shu]_i, wo mingling [**mei yige ren**]_j gankuai shao-le **ta_i**.
 those 3SG.self DE book 1SG order every one person quickly burn-PFV 3SG
 Lit.: ‘Those books_i of him/herself_i’s, I ordered everyone_j to burn it_i.’ (i.e., I ordered everyone_j to burn his/her_j books.) (✓ reconstr.)
- b. *[Naxie **taziji_i** de shu]_i, wo mingling [**mei yige ren**]_j gankuai shao-le **tamen_i**.
 those 3SG.self DE book 1SG order every one person quickly burn-PFV 3PL
 Lit.: ‘Those books_i of him/herself_i’s, I ordered everyone_j to burn them_i.’ (i.e., I ordered everyone_j to burn his/her_j books.) (✗ reconstr.)

Taking stock:

(41) The resumption dependency with NRPs is movement

... [TopP DP_[TOP] [Top [TP ... [VP V **NRP=ta**]]]]

11. One Northern Mandarin speaker we consulted rejected the baseline in (38). The second author, who is a Northern Mandarin native speaker, shares the judgment. The oddness comes from modifying part of the idiom *niupi* ‘cow skin’ with the plural classifier *xie*. For other speakers who accepted the baseline, the contrast in (39) held.

5 Proposal: jussive agreement

To account for the empirical patterns above, we propose that the NRP establishes two separate dependencies: (i) *agreement* with the **jussive C head**, (ii) *movement* dependency with the antecedent (i.e. topicalization):

$$(42) \quad [_{CP} C\text{-jussive} [_{TopP} DP_{[TOP]} [\text{Top} [_{TP} \dots [_{VP} V <DP>= \text{NRP}_{[TOP][JUSSIVE]}]]]]]]$$

We propose that the **non-agreeing form** of the NRP is derived by **partial Copy Deletion**. The proposal involves three key ingredients.

- (43) a. The [JUSSIVE] feature on the NRP, which is only present on objects with a patient role
- b. The lower copy but not the higher copy agrees with the jussive C head
- c. Two interface conditions on chain resolution, that give rise to partial Copy Deletion

First, the [JUSSIVE] feature on the NRP captures its licensing condition: there must be a jussive C head to agree with the NRP. We further suggest that only objects with a patient role (i.e., “disposal” objects) bear this feature - which is, the *patient* that receives the action directly *from the addressee/speaker* (in root jussives) or the matrix subjects with the obligation (in embedded jussives).

Second, we assume that the higher copy of the topicalized object does *not* agree with the jussive C head. The leading idea is it only agrees with the topic head and does not carry an accessible [JUSSIVE] feature. This is in a sense similar to Criterial Freezing (Rizzi 2006; although it usually concerns further movement, as compared to agreement). For concreteness, we assume with Obata and Epstein (2011) that A'-movement only moves A' features. Thus, the higher copy only carries the A' [TOP] feature agreed with Top.¹² The [JUSSIVE] feature only stays at the lower copy. In effects, it creates a configuration like below, where only the lower copy but not the higher copy of the object carries [JUSSIVE].

$$(44) \quad [_{CP} C\text{-jussive} [_{TopP} DP_{[TOP]} [\text{Top} [_{TP} \dots [_{VP} V <DP>_{[TOP][JUSSIVE]}]]]]]]$$

Third, we further borrow the insight from Fanselow and Cavar (2002) that partial Copy Deletion (CD) may apply over full CD when the two copies agree with different heads, as given in (45). In the case of NRPs, the higher copy agrees with Top and the lower copy agrees with C_{jussive}, hence both copies need to be spelt out.

- (45) An interface condition (simplified)

In a chain $\langle C_1, C_2 \rangle$, spell out both C_1 and C_2 if they agree with different heads.

- (46) The interface condition in Fanselow & Cavar (2002:88)

Suppose $C = \langle C_1, C_2 \rangle$ is formed because a strong feature of H has attracted XP and suppose that H checks the operators features $f_1 \dots f_k$ of XP. Then the categories bearing $f_1 \dots f_k$ must be spelt out in C_1 .

12. Alternatively, one can adopt Safir (2019)'s approach where A'-moved elements are “insulated” by inserting a PP layer.

- (47) a. Syntax: $[[_{XP} a^p [b\ c]^q] [H^p \dots [[_{XP} a^p [b\ c]^q] [H^q \dots [_{XP} a^p [b\ c]^q]]]]]$
 b. PF: $[[_{XP} a^p [\cancel{b\ c}]^q] [H^p \dots [[_{XP} \cancel{a^p} [b\ c]^q] [H^q \dots [_{XP} \cancel{a^p} [\cancel{b\ c}]^q]]]]]$

Instead of pronouncing the *whole* lower copy (i.e. no CD=doubling), an economy principle like (48) (simplified from Landau 2006; van Urk 2018; or MaxElide, Scott 2021) forces spelling out the lower copy in its *minimal* form: a default pronoun with only [D] and no phi-features, the **3sg ta**.

- (48) Economy: Delete as many parts of chain copies as possible.

A derivation is given below:

- (49) A schematic derivation of NRPs in a root jussive clause

- a. $[_{CP} C\text{-jussive} [_{TopP} [Top [_{TP} \dots [_{VP} V DP_{[TOP][JUSSIVE]}]]]]]$ (Narrow Syntax: Baseline)
 b. $[_{CP} C\text{-jussive} [_{TopP} \mathbf{DP}_{[TOP]} [Top [_{TP} \dots [_{VP} V <DP>_{[TOP][JUSSIVE]}]]]]]$ (NS: Topicalization)
 \uparrow
 c. $[_{CP} \mathbf{C\text{-jussive}} [_{TopP} DP_{[TOP]} [Top [_{TP} \dots [_{VP} V <\mathbf{DP}>_{[TOP][JUSSIVE]}]]]]]$ (NS: Jussive agreement)
 \uparrow
 d. $[_{CP} C\text{-jussive} [_{TopP} DP_{[TOP]} [Top [_{TP} \dots [_{VP} V <[_{DP} [D]=\mathbf{ta}\ NP]>_{[TOP][JUSSIVE]}]]]]]$ (PF: *Partial* CD)
 cf. $\dots *[_{VP} V <\mathbf{DP}>_{[TOP][JUSSIVE]}]$ (Full CD: violates (45) \rightarrow **gap is disallowed in (2a)**)
 cf. $\dots *[_{VP} V <DP>_{[TOP][JUSSIVE]}]$ (No CD: violates (48))

While we have seen that the locality effects on the dependency between the topicalized nominal and the NRP are captured by movement, the proposal additionally predicts another type of locality effects on the dependency between the jussive head and the NRP (i.e., the jussive agreement). As an Agree relation, it should be clause/phase-bounded. In other words, the immediate C c-commanding the NRP must be jussive.

- (50) Prediction of the locality effects on jussive agreement

- a. $*[_{CP\text{-matrix}} \mathbf{C\text{-jussive}} \dots [V [_{CP\text{-embedded}} \mathbf{C\text{-declarative}} \dots [V [_{NRP}_{[JUSSIVE]}]]]]]$
 b. $[_{CP\text{-matrix}} \mathbf{C\text{-declarative}} \dots [V [_{CP\text{-embedded}} \mathbf{C\text{-jussive}} \dots [V [_{NRP}_{[JUSSIVE]}]]]]]$

The prediction is borne out in (51). In (51), the immediate C c-commanding the NRP is declarative, and agreement with the matrix jussive head is blocked by the embedded CP phasal boundary. Note that while the antecedent may be outside of the CP phase, it lacks [JUSSIVE] and no agreement between C and the higher copy is possible. Only the agreeing RP *tamen* ‘3PL’ can be used.

- (51) $[_{CP} \mathbf{C_{jus.}} [(zhexie\ shu_i)\ nei\ yao\ shengcheng\ [_{CP} \mathbf{C_{decl.}} [(zhexie\ shu_i)\ ta\ shao\text{-}le\ \{*\mathbf{ta_i}/tamen_i\}]]]]]$
 these book 2SG must claim these book 3SG burn-PFV
 3sg/3PL

‘(These books), you must claim that (these books) s/he burnt {*it/them}.’

6 Concluding remarks

(52) Take home messages

- a. The NRP in Mandarin can only be licensed in jussive clauses, and there is an **Agree** relation between the **NRP** and **jussive** head:

[_{CP} C-jussive [_{TopP} DP_[TOP] [Top [_{TP} ... [_{VP} V <DP>=**NRP**_{[TOP][JUSSIVE]}]]]]]

↑

- b. Jussive is a **syntactic** clause type that has syntactic consequences on the form of resumptives - even in a language without other overt marking of jussives.
- c. The NRP can only be **patient objects** - suggesting some special interaction between objects and jussive clauses!

(53) Further questions to explore

- a. Theoretical: Why patient objects? Considering that they receive action which the *addressee* or the *speaker* (or the matrix subject, as in embedded jussives) is obligated to perform, what does the interaction with objects inform us about the nature of the interpretation of jussives?
- b. Analytic: How to account for the variations among Sinitic languages (e.g. Cantonese)?
- c. Cross-linguistic: Do objects in other languages have special behavior in jussives? 🗨️ **Yes!**

We would like to end the paper by pointing out that the link between objects and jussives is not restricted to just Mandarin Chinese. Den Dikken (1992, 1998) observe that *right-peripheral objects* are only allowed in imperatives but not declaratives in Dutch (but see Koopman 2007).¹³

(54) Right-peripheral objects are licensed in imperatives in Dutch

- a. Leg {a. die bal} neer {b. **die bal**}! (Imperative)
 put that ball down **that ball**
 'Put the ball down!'
- b. Jan legde {a. die bal} neer {b. ***die bal**} (Declarative)
 Jan put that ball down that ball
 'Jan put the ball down.'

(Den Dikken 1992, ex.1-5)

Crucially, the right-peripheral objects are only limited to **direct objects**, showing striking similarities with Mandarin.

13. Instead of treating the right-peripheral objects as a result of movement, Den Dikken (1992, 1998) proposes that imperatives in Dutch involve **empty operator movement** of (*direct*) objects, to a specifier of a functional projection that hosts imperative mood.

(55) Only direct objects can surface in the right-peripheral position in imperatives in Dutch

a. *Stuur dat boek op **die jongen!** (Indirect objects)
 send that book up that boy

b. ?Stuur die jongen op **dat boek!** (direct objects)
 send that boy up **that book**

(Den Dikken 1992, ex.23b-c)

Also null objects in English imperatives ... (and many other languages discussed in Bošković 2023):

- (56) a. Open carefully!
 b. *You open carefully!
 c. You open it carefully!

References

- Alcázar, Asier, and Mario Saltarelli. 2014. *The Syntax of Imperatives*. 140. Cambridge University Press.
- Bošković, Željko. 2023. "Object drop in imperatives and the status of imperative subjects."
- Crnič, Luka, and Tue Trinh. 2009. "Embedding imperatives." In *Proceedings of NELS*, 39:227–239.
- Den Dikken, Marcel. 1992. "Empty operator movement in Dutch imperatives." *Language and cognition* 2 (5): 1–64.
- . 1998. "Speaker-oriented particles in Dutch imperatives." *Glott international* 3 (9/10): 23–24.
- Fanselow, Gisbert, and Damir Cavar. 2002. "Distributed Deletion." In *Theoretical Approaches to Universals*, edited by Artemis Alexiadou, 65–107. John Benjamins Publishing Company.
- Huang, C.-T. James. 2022. "Finiteness opacity and Chinese clausal architecture." In *New Explorations in Chinese Theoretical Syntax: Studies in honor of Yen-Hui Audrey Li*, edited by Andrew Simpson, 17–77. Amsterdam: John Benjamins.
- Kamp, Hans. 1973. "Free Choice Permission." In *Proceedings of the Aristotelian Society*, 74:57–74. JSTOR.
- Kaufmann, Magdalena. 2012. *Interpreting Imperatives*. Vol. 88. Springer Science & Business Media.
- Kaufmann, Magdalena, and Claudia Poschmann. 2013. "Embedded imperatives: Empirical evidence from colloquial German." *Language*, 619–637.
- Koopman, Hilda. 2007. "Topics in imperatives." In *Imperative Clauses in Generative Grammar*, 153–180. John Benjamins.
- Landau, Idan. 2006. "Chain Resolution in Hebrew V(P)-fronting." *Syntax* 9 (1): 32–66.
- Liao, Wei-wen Roger, and Yuyun Iris Wang. 2022. "Negative modals and prohibitives." In *New Explorations in Chinese Theoretical Syntax. Studies in honor of Yen-Hui Audrey Li*. Edited by Andrew Simpson, 193–215. Amsterdam and Philadelphia: John Benjamins.
- 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.
- Obata, Miki, and Samuel David Epstein. 2011. "Feature-Splitting Internal Merge: Improper Movement, Intervention and the A/A' Distinction." *Syntax* 14 (2): 122–147.

- Pak, Miok, Paul Portner, and Raffaella Zanuttini. 2022. "Restrictions on indexicals in directive clauses." *Linguistic Inquiry*, 1–15.
- Portner, Paul. 2007. "Imperatives and modals." *Natural Language Semantics* 15 (4): 351–383.
- Potsdam, Eric. 1996. "Syntactic Issues in the English Imperative." PhD diss., University of Santa Cruz.
- Rizzi, Luigi. 2006. "On the form of chains: Criterial positions and ECP effects." In *On Wh movement*, edited by Norbert Corver and Lisa Cheng, 97–133. Cambridge, MA: MIT Press.
- Safir, Ken. 2019. "The A/Ā Distinction as an Epiphenomenon." *Linguistic Inquiry* 50 (2): 285–336.
- Scott, Tessa. 2021. "Two types of resumptive pronouns in Swahili." *Linguistic Inquiry* 52 (4): 812–833.
- 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 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).
- Yuan, Yulin. 1993. *Xiandai Hanyu Qishiju Yanjiu [A Study of Imperative Sentences in Modern Chinese]*. Beijing: Peking University Press.
- Zanuttini, Raffaella. 2008. "Encoding the addressee in syntax: evidence from English imperative subjects." *Natural Language and Linguistic Theory* 26 (1): 185–218.
- Zanuttini, Raffaella, Miok Pak, and Paul Portner. 2012. "A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects." *Natural Language & Linguistic Theory* 30:1231–1274.