Jussive agreement with non-agreeing resumptive pronouns in Mandarin Chinese

Introduction. Previous studies in imperative/jussive clauses have mainly focused on how addressee/speaker interact with person features via the jussive C head (Zanuttini 2008, Zanuttini et al. 2012, *i.a.*). This study reports an understudied case of interaction of *jussive* clauses with *argument structure*, and, to an indirect extent, with *linearization of movement chains*. The core data comes from non-agreeing resumptive pronouns (NRPs) in Mandarin Chinese, exemplified in (1a). NRP is required when an *object* is topicalized in an imperative (vs. 1b).

(1) a. Zhexie shu$_i$ ne, ni shao-le *(**ta$_i$**)!   b. Ni shao-le zhexie shu (***ta$_i$**)!
      these books TOP you burn-PFV 3SG   you burn-PFV these books 3SG
      Lit.: 'These books, you burn it!' (i.e. These books, burn them!)   (3PL antecedent vs. 3SG NRP)

The NRP exhibits a multifaceted empirical profile that involves (i) licensing by jussive clauses, (ii) patient roles of objects, and (iii) movement-derived properties. We argue that the intricate pattern can be accounted for by an *Agree* relation between the NRP and the jussive head, coupled with interface conditions on partial Copy Deletion. This account sheds light on how addressee/speaker in the clausal periphery may interact with the core argument structure via the jussive head. Before proceeding, we note that our discussion is limited to NRPs in Mandarin only. NRPs in other Sinitic languages (e.g. Cantonese & Shanghainese) are reported to display non-identical distribution (Xu 1999, Yip & Ahenkorah 2022).

Jussives license NRPs. First, NRPs in Mandarin are licensed only in **jussive** clauses. In root clauses, NRPs are licensed in *imperatives*, *promissives*, and *exhortatives* (2), but *not* in declaratives or interrogatives (3).

(2) Zhexie shu$_i$ {ni/ wo/ women/ *tamen} shao-le **ta$_i$**! (addr./spkr./addr.+spkr. vs. non-participant)
     these books you I we they burn-PFV 3SG
     Lit: "These book, you/I/we/*they burn it!"

(3) a. Zhexie shu$_i$, wo yijing shao-le (***ta$_i$**).   b. Zhexie shu$_i$, ni yijing shao-le (***ta$_i$**) ma?
      these books I already burn-PFV 3SG   these books you already burn-PFV 3SG SFP
      Int: "I already burnt these books."   Int: 'Have you burnt these books?'

Second, 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 an imperative/jussive clause with directive force (Kamp 1973; Kaufmann 2012; Portner 2007, *i.a.*). On its descriptive use, the sentence *reports* a pre-existing obligation/permission. On its performative use, the speaker *issues* a command/permission. With NRPs, the modalized sentence in (4) can *only* be performative, rendering responses like 'True!/False!' infelicitous.

(4) a. Zhexie shu$_i$, {ni/wo/yuehan} yao shao-le **ta$_i$**!   (deontic modals: ^{OK}NRP)
      these books you/I/John should burn-PFV 3SG
      Lit: 'These books, you/I/John should burn it.'
    b. # True!/# False!   (deontic modals + NRP: performative vs. #descriptive)

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 (5).

(5) Zhexie shu$_i$ ni/wo/yuehan {keneng/ gan} shao-le (***ta$_i$**)   (epistemic & dynamic modals: *NRP)
    these books you/I/John probably/ dare burn-PFV 3SG
    'You/I/John probably burnt them' (epistemic) / 'You/I/John dared to burn these books.' (dynamic)

Third, NRPs can only be embedded under **advise predicates** like 'advise'/'order' (6a), but not doxastic predicates like 'believe' (6b). Assuming that 'advise/order' takes an embedded imperative (as attested in Korean data in Portner 2007), (6) shows that NRPs can only be licensed in *embedded jussives* but *not* embedded declaratives. Note that the patterns remain the same with the topicalized antecedent in either matrix or embedded clauses.

(6) a. (Zhexie shu$_i$) Xiaoming$_j$ {mingling/ jianyi} wo$_k$ [(zhexie shu$_i$) shao-le **ta$_i$**]
      these books Xiaoming order/ advise I these books burn-PFV 3SG
      'Xiaoming ordered/advised me to burn these books.'
    b. (Zhexie shu$_i$) Xiaoming$_j$ xiangxin [(zhexie shu$_i$) wo$_k$ shao-le (***ta$_i$**)]
      these books Xiaoming believe these books I burn-PFV 3SG
      "Xiaoming believed that I burnt these books."

NRPs always bear patient role. Only (direct) objects that bear a **patient** role can be realized as NRPs. Not only subjects/indirect objects disallow NRPs (data not given due to space), but non-patient objects also disallow NRPs. In (7a), the object is a causee rather than a patient. Crucially, only the agreeing RP *tamen* 'they' but not

NRP is allowed in imperative (7b). This is further supported by (8), where NRPs block the idiomatic reading. It is expected if no patient role is assigned to the object as part of the idiom. Together with the jussive licensing, the NRP always refers to the patient upon which the addressee/speaker (/matrix subject in embedded jussives) is obligated to impose actions, showing interaction of **addressee/speaker** with **argument structure**.

(7)   a.   Ni   qu   qi-lei   zhexie ma!   b.   Zhexie ma$_i$,   ni   qu   qi-lei   {(***ta$_i$**)/tamen$_i$}!
      you go ride-tired these   horse   these   horse   you go ride-tired   3SG/3PL
      "You go ride these horses until they got tired!" (i.e. go cause these horses to be tired by riding them!)

(8)   Yuehan$_j$-de mapi$_i$,   ni   qu   pai-le   (#**ta$_i$**)
      John-DE   horse.bottom   you go pat-PFV   3SG
      Without NRP: 'You go flatter John!' (idiomatic) vs. with NRP: '#You go pat John's horse bottom!' (literal)

<u>**NRPs are movement derived.**</u> NRPs are not base-generated pronouns or object expletives (*pace* Wu & Cao 2016). Rather, they are derived by movement, i.e. they are the (partial) realization of the lower copy/trace. Evidence comes from (i) *island sensitivity* in (9), coupled with the (ii) *long-distance dependency* in (6) above.

(9)   Zhexie shu$_i$,   wo tingshuo-le [$_{DP}$ [$_{CP}$ Lisi mingling ni   shao-le   {***ta$_i$**/tamen$_i$}] de xiaoxi].
      these   books I   hear-PFV   Lisi order   you burn-PFV   3SG/3PL   DE news
      '(As for) these books, I heard the news that Lisi ordered you to burn {*it/them}.'   (Complex DP island)

<u>**Proposal: Jussive agreement.**</u> 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):

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

First, the [JUSSIVE] feature on the NRP captures its licensing condition: there must be a jussive C head that agrees with the NRP. We further suggest that only objects with a patient role (i.e. a "disposal" object) 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 only carries the A' [TOP] feature, agreed with Top, but it does not carry the [JUSSIVE] feature. [JUSSIVE] only stays at the lower copy. We further borrow the insight from Fanselow & Cavar (2002) that partial Copy Deletion (CD) may apply over full CD when the two copies agree with different heads, as given in (11). 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. Instead of pronouncing the *whole* lower copy (*i.e.* no CD=doubling), an economy principle like (12) (simplified from Landau 2006, van Urk 2018) comes into place and spells out the lower copy in its *minimal* form: a default pronoun with only [D] and no phi-features, the **3SG *ta***. A derivation is given in (13).

(11)   <u>An interface condition</u>: In a chain <C$_1$,C$_2$>, C$_1$ & C$_2$ need to be spelt out if they agree with different heads.

(12)   <u>Economy</u>: Delete as many chain copies as possible.

(13)   a.   [$_{CP}$ C-jussive [$_{TopP}$ [Top [$_{TP}$ ... [$_{VP}$ V DP$_{[TOP][JUSSIVE]}$]]]]]   (Narrow Syntax: Baseline)
      b.   [$_{CP}$ C-jussive [$_{TopP}$ **DP$_{[TOP]}$** [**Top** [$_{TP}$ ... [$_{VP}$ V <DP>$_{[TOP][JUSSIVE]}$]]]]]   (NS: Topicalization)
      c.   [$_{CP}$ **C-jussive** [$_{TopP}$ DP$_{[TOP]}$ [Top [$_{TP}$ ... [$_{VP}$ V **<DP>**$_{[TOP][\textbf{JUSSIVE}]}$]]]]]   (NS: Jussive agreement)
      d.   [$_{CP}$ C-jussive [$_{TopP}$ DP$_{[TOP]}$ [Top [$_{TP}$ ... [$_{VP}$ V <DP>**ta**$_{[TOP][JUSSIVE]}$]]]]]   (PF: *Partial* CD on lower copy)
        cf. ... *[$_{VP}$ V <DP>$_{[TOP][JUSSIVE]}$]   (*Full* CD: violates (11) → **gap is *dis*allowed in (1a)**)
        cf. ... *[$_{VP}$ V <DP>$_{[TOP][JUSSIVE]}$]   (*No* CD: violates (12))

The proposal receives direct support from **locality effects**. When the NRP is embedded, the immediate C c-commanding it must be jussive. In other words, the jussive agreement is blocked by a CP phasal boundary in (14). 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.

(14)   [$_{CP}$ **C$_{jus.}$** [(zhexie shu$_i$) nei yao   shengcheng [$_{CP}$ **C$_{decl.}$** [(zhexie shu$_i$) ta   shao-le   {***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}.'

<u>**Implications.**</u> **(i)** We have argued for a novel case of jussive agreement in Mandarin Chinese, supporting that jussive is a clause type with syntactic manifestation (e.g. Zanuttini et al. 2012) even in a language without verbal inflection - rather than a pragmatic phenomenon solely attributed to illocutionary force. **(ii)** The agreement also opens up a question of how the addressee/speaker may interact with argument structure via the jussive head.