Does the Williams Cycle apply to Mandarin Chinese?

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1 Introduction

- As long observed, there is an apparent correlation between the *height* (*landing site*) and *locality domain* of different *movement types* (A vs $\bar{A}$).

  ➔ Raising to subjects (A-movement) lands on Spec, TP and may cross a non-finite TP (but not a finite CP).

  ➔ *Wh*-movement ($\bar{A}$-movement) lands on Spec, CP and may cross a finite CP.

  ➔ Traditionally, this correlation is viewed as an A/$\bar{A}$ distinction and explained by the *Ban on Improper Movement* (see e.g., Chomsky 1973).
- The *Williams Cycle* (WC): The height-locality correlation is encoded directly in the grammar.

(1) The *Williams Cycle* (Williams 1974, 2003, 2013)
Movement to SpecXP cannot proceed from SpecYP or across YP, where Y is higher than X in the functional sequence.

➔ Recently, WC effects have received cross-linguistic support, e.g., in Finnish (Poole 2022), Hungarian (Egressy 2025), Georgian (Bondarenko 2024), and Swahili (Meadows 2024), among others.

★ **Our question**: Does the WC apply to Mandarin Chinese?

➔ *Yes*: Meadows and Yan (2025) (henceforth **YM25**) argue for WC effects in Mandarin.
(available on `https://ling.auf.net/lingbuzz/008904`)

➔ *No*: Mandarin allows *hyperraising* (HR) to subject across a finite CP, a direct counterexample to the WC (Chen 2023, 2025b; Lee and Yip 2024).

➔ **Resolution**: Either HR is explained away with extra assumptions (Meadows 2024), or the WC does not apply.

★ **Our claim**: The WC does *not* apply to Mandarin.

➔ We reexamine YM25's arguments and argue that the apparent WC effects in Mandarin either reduce to the independently diagnosable distribution of pure [$\bar{A}$] vs. composite [A/$\bar{A}$] probes, or disappear once an independent pragmatic requirement is satisfied.

➔ The WC must be *parameterized* and *cannot* be universal.

Road map:

§2: Apparent WC effects in Mandarin
§3: Against WC effects in Mandarin
§3.1: Hyperraising
§3.2: Object topicalization and distribution of A/$\bar{A}$-probes
§3.3: VP-copy fronting and subject identity
§4: Conclusion

2 Apparent Williams Cycle effects in Mandarin

- YM25 argue for WC effects in Mandarin based on two movement dependencies:

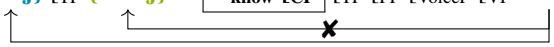
  ❶ *Object topicalization* (which they call *object shift*)

  ❷ *VP-copy fronting* (which they call *verb doubling*)

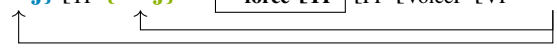
  ➔ Both may target either a **TP/IP-external (high)** or a **TP/IP-internal (low)** position, with the **internal (low)** variant exhibiting *apparent locality restrictions*.
- Specifically, YM25 argue for a systematic height-locality correlation as schematized in (2–3):

(2) Object topicalization across (a) CP, (b) TP, and (c) FP boundaries

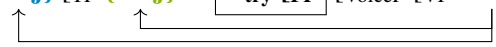
a. [CP **{Obj}** [TP **{*Obj}** ... **V$_{know}$ [CP]** [TP [FP [VoiceP [VP ... *t* ...



b. [CP **{Obj}** [TP **{Obj}** ... **V$_{force}$ [TP]** [FP [VoiceP [VP ... *t* ...

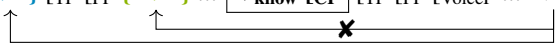


c. [CP **{Obj}** [TP **{Obj}** ... **V$_{try}$ [FP]** [VoiceP [VP ... *t* ...

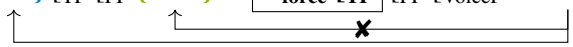


(3) VP-copy fronting across (a) CP, (b) TP, and (c) FP boundaries
(generalization to be challenged)
N.B. Both the fronted and in-situ VPs are spelled out.

a. [CP **{VP}** [TP [FP **{*VP}** ... **V$_{know}$ [CP]** [TP [FP [VoiceP ...<VP>...



b. [CP **{VP}** [TP [FP **{*VP}** ... **V$_{force}$ [TP]** [FP [VoiceP ...<VP>...



c. [CP **{VP}** [TP [FP **{VP}** ... **V$_{try}$ [FP]** [VoiceP ...<VP>...

➔ YM25 assume the functional sequence $\boldsymbol{C} \succ \boldsymbol{T} \succ (\boldsymbol{M}^{\boldsymbol{Deo}}) \succ \boldsymbol{F} \succ \boldsymbol{Voice} \succ \boldsymbol{V}$, where
(a) **CPs** are taken by **'know'-type** verbs;
(b) **TPs** are taken by **'force'-type** (effectively object control) verbs;
(c) **FPs** are taken by **'try'-type** (effectively subject control) verbs (*cf.* Huang 2022).

➔ **External (high)** object topicalization and VP-copy fronting land within CP and may cross CP.

➔ **Internal (low)** object topicalization lands within TP and may cross TP (but not CP).

➔ **Internal (low)** VP-copy fronting lands within FP and may cross FP (but not CP or TP).

- To account for (2–3), YM25 assume:

  ❶ *Level Embedding Approach* (Williams 2003): Embedded and matrix clauses are built in parallel in separate workspaces (and merge later).

  ❷ *Strict Cycle Condition*: Movement must occur within the cycle in which the relevant phrases are built, with YP built later than XP if Y is higher than X in the functional sequence.

  ➔ **External (high)** object topicalization and VP-copy fronting occur within the CP cycle, built after TP and FP cycles.

  ➔ **Internal (low)** object topicalization occurs within the TP cycle and cannot cross CP, built after the TP cycle.

  ➔ **Internal (low)** VP-copy fronting occurs within the FP cycle and cannot cross CP or TP, built after the FP cycle.

  ➔ **Generally**: Movement from an embedded XP to the matrix XP must occur within the XP cycle and cannot cross YP, if YP is built after XP (i.e., if Y is higher than X in the functional sequence).

3 Against Williams Cycle effects in Mandarin

★ Contra YM25, we argue *against* the existence of Williams Cycle in Chinese. Our counter-arguments are three-fold:

❶ Mandarin Chinese allows hyperraising, which directly contradicts the WC.

... as for the apparent WC effects in (2-3):

❷ We corroborate Chen's (2023, 2025) analysis that **external (high)** vs. **internal (low)** object topicalization are triggered by *different probes*—pure [Ā] vs. composite [A/Ā]—which have *different distributions*.

➔ Under such a view, the generalization in (2) reduces to a single case of improper *composite A/Ā-movement after Ā-movement* (Longenbaugh 2017; Chen 2023, 2025a), which in turn follows from the Ban on Improper Movement.

❸ We identify a *previously unnoticed pragmatic requirement on VP-copy fronting*: the understood subjects of the fronted and in-situ VPs must be co-referential.

➔ Once this *subject identity* requirement is satisfied, the generalization in (3) breaks down.

3.1 Hyperraising in Mandarin Chinese

- Mandarin (as well as Cantonese) allows **hyperraising** (HR): **A-movement from finite CPs**.

  ➔ Lee and Yip (2024): HR out of CPs taken by raising attitude adverbs (RAVs) encoding indirect evidentiality

  ➔ Chen (2025b): HR out of CPs taken by attitude verbs passivized with *bei*

(4) Hyperraising with raising attitude adverbs

a. Wo tingshuo/ganjue [$_{CP}$ (shuo) **na chang yu** bu hui ting]. (Baseline, transitive AVs)
1SG hearsay/feel.like COMP that CL rain not will stop
'I heard that/ feel like the rain will not stop.'

b. **Na chang yu** tingshuo/ganjue [$_{CP}$ (shuo) __ bu hui ting]. (Hyperraising, RAVs)
that CL rain hearsay/feel.like COMP not will stop
'It is heard/felt that the rain will not stop.' (Adapted from Lee and Yip 2024:1529n5)

(5) Hyperraising with passivized attitude adverbs

a. Jingcha renwei/huaiyi/xiangxin [$_{CP}$ (shuo) **Zhangsan** hui mousha Lisi]. (Baseline, active)
police think/suspect/believe COMP Zhangsan will murder Lisi
'The police thought/suspected/believed that Zhangsan will murder Lisi'

b. **Zhangsan**$_i$ bei (jingcha) renwei/huaiyi/xiangxin [$_{CP}$ (shuo) __$_i$ hui mousha Lisi]. (Hyperraising, passive)
Zhangsan BEI police think/suspect/believe COMP will murder Lisi
Lit. 'Zhangsan was thought/suspected/believed that (he) will murder Lisi (by the police).' (Chen 2025b, ex.101, adapted)

- The landing site is on **SpecTP**, and yet a finite CP is crossed.

  ➔ Evidence: the HR-subject may be a *wh*-word and/or a quantifier that resists topicalization, e.g., *henduo* 'many' NP and *duoshao* 'how many' NP.

  ➔ See Lee and Yip 2024 for other arguments.

(6) {a. ***Henduo ren**/ b. ***duoshao ren**/ c. ^{OK}Zhangsan} ne, __ bu hui lai {a/c. ba./ b. ne?}
Many person how.many person Zhangsan TOP not will come SFP SFP
Int.:'Many people/Zhangsan, won't come. / How many people are such that (they) won't come?' (Topicalization)

(7) a. **Henduo ren** tingshuo/ganjue [$_{CP}$ (shuo) __ bu hui lai]. (Hyperraising with RAVs)
Many person hearsay/feel COMP not will come
'It is heard/felt that many people will come.' (Lee and Yip 2024:1548, translated to Mandarin)

b. **Duoshao ren** bei (jingcha) renwei/huaiyi/xiangxin [$_{CP}$ (shuo) __ hui mousha Lisi]?(Hyperraising with *bei*)
how.many person BEI police think/suspect/believe COMP will murder Lisi
'How many people are thought/suspected/believed that (they) will murder Lisi (by the police)?'

> ★ The existence of HR in Mandarin shows that WC effects are **not general** to all the dependencies even within one language. The WC is stipulated only for dependencies that conform to it, raising concerns on circular argumentation.

3.2 Object topicalization and distribution of A/Ā-probes

- It has long been observed that **external (high)** and **internal (low)** object topicalization exhibit different *locality profiles* (see e.g., Qu 1994; Ting 1995; Shyu 1995; Kuo 2009; Chen 2023, 2025a), as seen in (8).

  ➔ **Internal (low)** object topicalization can only cross non-finite complement clauses (taken by subject and object control verbs), but not a finite CP.

  ➔ **External (high)** object topicalization can cross both non-finite clauses and finite CPs.

  ⚠ This is the *sole* motivation for YM25's WC-based account.

(8) a. Topicalization with **'know'-type** verbs
{**Zhe-ben shu$_i$**} meiyou-ren {***zhe-ben shu$_i$**} xiangxin/zhidao [$_{CP}$ Lisi hui kan _$_i$].
this-CL book no-person this-CL book believe/know Lisi will read
'{This book}, no one {*this book}, believes/knows that Lisi will read (it).'

b. Topicalization with **'force'-type** and **'try'-type** verbs
{**Zhe-ben shu$_i$**} meiyou-ren$_j$ {**zhe-ben shu$_i$**} dasuan/changshi [PRO$_j$ bipo/mingling Lisi$_k$ [PRO$_k$ kan _$_i$]].
this-CL book no-person this-CL book plan/try force/order Lisi read
'{This book}, no one {this book}, planned/tried to force/order Lisi to read (it).'

- Importantly, **external (high)** and **internal (low)** object topicalization also exhibit different *A/Ā-properties* (Chen 2023, 2025a; *cf.* Qu 1994; Ting 1995; Shyu 1995; Kuo 2009), e.g., (9), with respect to Principle A reconstruction.[1]

(9) **External (high)** and **internal (low)** object topicalization differ in Principle A reconstruction

a. **Ta-ziji$_{i/j}$-de erzi** Zhangsan$_i$ dasuan/changshi [PRO$_i$ bipo/mingling Lisi$_j$ [PRO$_j$ ma __ yidun]].
3SG-self's son Zhangsan plan/try force/order Lisi scold severely
'His$_{i/j}$ son, Zhangsan$_i$ planned/tried to force/order Lisi$_j$ to scold (him) severely.'

b. Zhangsan$_i$ **ta-ziji$_{i/*j}$-de erzi** dasuan/changshi [PRO$_i$ bipo/mingling Lisi$_j$ [PRO$_j$ ma __ yidun]].
Zhangsan 3SG-self's son plan/try force/order Lisi scold severely
'Zhangsan$_i$, his$_{i/*j}$ son, planned/tried to force/order Lisi$_j$ to scold (him) severely.'

➔ **Internal (low)** object topicalization *does not reconstruct for Principle A*, and more generally exhibits *mixed A/Ā-properties* associated with *composite A/Ā-movement*.

➔ **External (high)** object topicalization *reconstructs for Principle A*, and more generally exhibits *Ā-properties* associated with *Ā-movement* (and certain mixed A/Ā-properties *only at intermediate movement steps through successive Spec, VoicePs*; see Chen 2023, 2025a for details).

⚠ This is completely overlooked and remains unexplained in YM25's WC-based account.

1. Cross-linguistically, there is variation in whether A-movement shows Principle A reconstruction effects. In English, both A-movement and Ā-movement show Principle A reconstruction effects (Belletti and Rizzi 1988; Pesetsky 2013), while in Dutch, only Ā-movement shows Principle A reconstruction effects (see e.g., Neeleman & Van De Koot 2010). Mandarin is unlike English and like Dutch in that only Ā-movement shows Principle A reconstruction effects. See Chen (2023, 2025a) for more discussion.

- Other A/Ā properties (Chen 2025a):

Properties	A	Ā	Dinka, English, Mandarin composite A/Ā-movement	Mandarin IP-internal topicalization	Mandarin IP-external topicalization
New antecedents for anaphor binding	✓	*	✓	✓	*
No weak crossover	✓	*	✓	✓	*[2]
No reconstruction for Principle C	✓	*	✓	✓	*
Long-distance ... ... crossing c-commanding NPs	*	✓	✓	✓	✓
Long-distance ... ... crossing finite CPs	*	✓	✓(D) * (E, M)	*	✓

★ **Our view**, corroborating Chen (2023, 2025a)'s analysis: **External (high)** vs. **internal (low)** object topicalization are triggered by *different probes*—pure [Ā] vs. composite [A/Ā]—which have *different distributions* (*cf.* van Urk 2015; Fong 2019; Lohninger, Kovač, and Wurmbrand 2022; Lohninger 2025 for a featural typology).

➔ **Internal (low)** object topicalization is triggered by a *composite probe* [ϕ+TOP] on the ***internal (low)*** *Top head*, as illustrated in (10a), while **external (high)** object topicalization is triggered by a *pure Ā probe* [TOP] on the ***external (high)*** *Top head*, as illustrated in (10b).

(10) a. **Internal (low)** object topicalization as successive-cyclic composite A/Ā-movement

$[_{IP}\ Subj_{i\,[\phi]}\ Infl_{[\phi]}\ [_{TopP}\ \mathbf{Obj_{j\,[\phi],[TOP]}}\ Top_{[\phi+TOP]}\ \ldots\ [_{VoiceP}\ t_i\ \mathbf{t_j}\ Voice_{[\phi+TOP]}\ \ldots\ \mathbf{t_j}\ (\ldots)\ ]]]$

A/Ā-movement; A/Ā-movement

b. **External (high)** object topicalization via intermediate composite AĀ-movement

$[_{TopP}\ \mathbf{Obj_{i\,[\phi],[TOP]}}\ Top_{[TOP]}\ [_{IP}\ Subj_{j\,[\phi]}\ Infl_{[\phi]}\ \ldots\ [_{VoiceP}\ \mathbf{t_i}\ t_j\ Voice_{[\phi+TOP]}\ \ldots\ \mathbf{t_i}\ (\ldots)\ ]]]$

Ā-movement; A/Ā-movement

➔ The Mandarin *Voice head* hosts both [A] and [Ā] features.
As such, both **internal (low)** and **external (high)** object topicalization can involve intermediate composite A/Ā movement steps through Spec, VoicePs, associated with mixed A/Ā-properties.

➔ The Mandarin *C head* only hosts pure [Ā] features.
As such, for **internal (low)** object topicalization, cross-CP movement is ruled out due to improper *composite A/Ā-movement after Ā-movement* (Longenbaugh 2017; Chen 2023, 2025a), which in turn follows from the Ban on Improper Movement, as illustrated in (11), while for **external (high)** object topicalization, the cross-CP movement step is associated with Ā-properties.

(11) Improper composite A/Ā-movement after Ā-movement

$*[_{IP}\ [_{TopP}\ \mathbf{Obj_{j\,[\phi],[TOP]}}\ Top_{[\phi+TOP]}\ \ldots\ [_{VoiceP}\ \ldots\ \mathbf{t_j}\ \ldots\ [_{CP}\ \mathbf{t_j}\ C_{[TOP]}\ \ldots\ \mathbf{t_j}\ (\ldots)\ ]]]]$

✘ A/Ā; ✘ A/Ā; Ā

★ What YM25 claims to be WC effects in object topicalization reduce to language-specific distribution of A/Ā-probes, which can be diagnosed independently, based on A vs. Ā-properties associated with the specific movement steps.

➔ Note that one cannot simply augment a correlation between height and A/Ā-properties with the WC, as Georgian TP-internal *wh*-movement is pure Ā rather than composite A/Ā (Bondarenko 2024).

★ The A/Ā properties **cannot** be reduced to WC effects. Composite probes are independently needed, which essentially renders the WC **superfluous** (at least in Mandarin).

2. *Modulo* the height of the pronouns tested. Chen (2025a) observes a difference between pronouns higher and lower than VoiceP, only the latter of which shows the lack of crossover and reconstruction for Principle C. She proposes that IP-external topicalization requires a prior intermediate movement to VoiceP which hosts [A/Ā] probes, but the second movement to $TopP_{external}$ is pure Ā.

3.3 VP-copy fronting and subject identity

- *VP copying* occurs when the same verb takes both a (post-verbal) object and a (second) post-verbal phrase, e.g., a resultative or degree phrase headed by *de* (Gouguet 2006; Cheng 2007; *i.a.*), e.g., (12a).

  ➔ The *VP-copy* (VP1) is an adjunct (see e.g., C.-T. J. Huang 1982, 1992; Cheng 2007).

  ➔ V1 is derived from V2 via *sideward movement* (see e.g., Cheng 2007; cf. Nunes 2004).

(12) a. Lisi hui [$_{VP2}$ [$_{VP1}$ **kan** zhe-ben shu] **kan**-de [$_{DEP}$ ~~de~~ hen kuai]].
Lisi will read this-CL book read-DE DEG fast
'Lisi will reading this book read (it) fast.'

b. {[$_{VP2}$ **kan zhe-ben shu**]} Lisi {[$_{VP2}$ **kan zhe-ben shu**]} hui [$_{VP1}$ t_{VP2} **kan**-de [$_{DEP}$ ~~de~~ hen kuai]].
read this-CL book Lisi read this-CL book will read-DE DEG fast
'Lisi reading this book will read (it) fast.'

(13) VP copying via sideward movement (adapted from Cheng 2007:160)

a. [$_{VP}$ V [$_{DEP}$ ...]] (Baseline)

b. [$_{VP}$ V [$_{DEP}$ ...]] V (Sideward movement)
Copy

c. [$_{VP1}$ V [$_{DEP}$ ...]] [$_{VP2}$ V <Merge> DP/bare noun] (Taking objects)

d. [$_{VP1}$ [$_{VP2}$ V DP/bare noun] [$_{VP1}$ V [$_{DEP}$ ...]]] (Adjunction)

e. (Subj) [$_{VP2}$ V DP/bare noun] (Subj) ... [$_{VP1}$ t_{VP2} [$_{VP1}$ V [$_{DEP}$ ...]]] (*Optional*: Further movement)
Move

- YM25 observe that **external (high)** and **internal (low)** VP-copy fronting exhibit different *locality profiles*, as in (14).[3]

  ➔ **Internal (low)** VP-copy fronting lands on **FP**, and can only cross complement clauses taken by 'try'-type verbs (claimed to take **FP**), but not those taken by 'force'-type verbs (claimed to take TP) or finite CPs.

  ➔ **External (high)** VP-copy fronting lands on **CP**, and can cross both non-finite clauses (FP/TP) and finite **CPs**.

(14) a. VP-copy fronting with **'know'-type** verbs
{Kan zhe-ben shu} Zhangsan **{*kan zhe-ben shu}** xiangxin/zhidao [$_{CP}$ Lisi hui kan-de hen kuai].
read this-CL book Zhangsan read this-CL book believe/know Lisi will kan-DE DEG fast
'{Reading this book}, Zhangsan {*reading this book} believes/knows that Lisi will read (it) fast.'

b. VP-copy fronting with **'force'-type** verbs
{Kan zhe-ben shu} Zhangsan **{*kan zhe-ben shu}** bipo/mingling Lisi$_j$ [PRO$_j$ kan-de hen kuai].
read this-CL book Zhangsan read this-CL book force/order Lisi read-DE DEG fast
'{Reading this book}, Zhangsan {*reading this book} forced/ordered Lisi to read (it) fast.'

c. VP-copy fronting with **'try'-type** verbs
{Kan zhe-ben shu} Zhangsan **{kan zhe-ben shu}** dasuan/changshi [PRO$_j$ kan-de hen kuai].
read this-CL book Zhangsan read this-CL book plan/try read-DE DEG fast
'{Reading this book}, Zhangsan {reading this book} planned/tried to read (it) fast.'

⚠ Note that their accounts rely on the assumption that the **'try'-type** verbs take **FPs** (lower than TP, ~AspP/vP).

➔ C.-T. J. Huang (2022) and He (2024): *dasuan* 'plan' takes **minimally** a **TP** ("situation", Wurmbrand and Lohninger 2023's Implicational complementation hierarchy) and may accommodate future tense like *yao/jiang* (N. Huang 2015).
➔ Patterning with **'force'-type** verbs like *bipo* 'force'!

➔ Although *changshi* takes an "event" complement and resists *yao/jiang*, its complement may be **as large as TPs**
➔ Allowing semi-complementizer *shuo*, internal topicalization, focus fronting (N. Huang 2018; Liu and Yip 2025)!

3. They do not assume sideward movement, but derive the copying effects from VP movement + partial copy deletion (Meadows and Yan 2023). While this approach is independently problematic with cases where the DEP is a complement rather than adjuncts, one may still implement their WC approach to (13e). Therefore, whether the copying effects are derived by sideward movement or partial copy deletion is immaterial here.

- As it turns out, the meaningful difference between the **'force'-type** and **'try'-type** verbs are **not** the size of complementation, but **whether the controller is a subject or an object**:

  ➔ **'force'-type**: *object control* verbs ➔ matrix subjects and embedded PRO may or may **not** have the same identity

  ➔ **'try'-type**: *subject control* verbs ➔ matrix subjects and embedded PRO have the **same identity**

- Contra YM25, we argue that **internal (low)** VP-copy fronting is not constrained by locality but by *a pragmatic requirement that the understood subjects of the fronted and in-situ VPs must be co-referential*.

  ➔ In (14a-b) with an **internal (low)** VP-copy, the understood subject of the VP-copy is Zhangsan—the matrix subject, while the understood subject of the in-situ VP is Lisi—the embedded subject (PRO, controlled by the matrix object).

  ➔ When the matrix subj. and the embedded subj. PRO are *co-referential* (when the matrix obj. is a reflexive), **internal (low)** VP-copy fronting can cross the complement clause taken by a 'force' type (obj. control) verb: (15a)

  ➔ When the matrix and embedded subj. are *co-referential*, **internal** VP-copy fronting can even cross finite CP: (15b)

(15) a. **{Kan zhe-ben shu}** Zhangsan$_i$ **{kan zhe-ben shu}** bipo/mingling **ta-ziji$_i$** [PRO$_i$ kan-de hen kuai].
read this-CL book Zhangsan read this-CL book force/order 3SG-self read-DE DEG fast
'{Reading this book}, Zhangsan {reading this book} forced/ordered himself to read (it) fast.'

b. **{Kan zhe-ben shu}** Zhangsan$_i$ **{kan zhe-ben shu}** xiangxin/zhidao [$_{CP}$ **ta$_{i/*j}$** hui kan-de hen kuai].
read this-CL book Zhangsan read this-CL book believe/know 3SG will read-DE DEG fast
'{Reading this book}, Zhangsan {reading this book} believes/knows that he will read (it) fast.'

- To achieve subject identity, we suggest that the subject of the fronted VP-copy is a PRO, which must be controlled by the subject of the in-situ VP or a co-referential NP.

  Cf. VP fronting: the fronted VP is effectively a **VoiceP**, containing the predicate-internal subject trace (Huang 1993). As such, the reflexive pronoun contained within the fronted VP is always bound by the embedded subject in (16b).

(16) a. **Ta-ziji$_{i/j}$** Zhangsan$_i$ xiangxin/zhidao [$_{CP}$ Lisi$_j$ ma-guo _].
3SG-self Zhangsan believe/know Lisi scold-EXP
'Himself$_{i/j}$, Zhangsan$_i$ believes/knows that Lisi$_j$ scolded (him$_i$/himself$_j$)'

b. [$_{VoiceP}$ ***t*$_j$** **Ma ta-ziji$_{j/*i}$**] Zhangsan$_i$ xiangxin/zhidao [$_{CP}$ **Lisi$_j$** bu hui _].
scold 3SG-self Zhangsan believe/know Lisi NEG will
'Scold himself$_{j/*i}$, Zhangsan$_i$ believes/knows that Lisi$_j$ will not (do it).'

➔ Implication for VP-copy fronting: the fronted VP-copy **contains its own subject**, which we assume to be a PRO:

(17) a. [$_{VoiceP}$ **PRO$_i$ Kan zhe-ben shu**] Zhang$_i$ xiangxin/zhidao [$_{CP}$ **ta$_i$** hui [$_{VoiceP}$ ***t*$_i$** [$_{VP}$ kan-de hen kuai]]].
read this-CL book Zhang believe/know 3SG will read-DE DEG fast
'Reading this book, Zhang believes/knows that he will read (it) fast.'

b. Zhang$_i$ [$_{VoiceP}$ **PRO$_i$ kan zhe-ben shu**] xiangxin/zhidao [$_{CP}$ **ta$_i$** hui [$_{VoiceP}$ ***t*$_i$** [$_{VP}$ kan-de hen kuai]]].
Zhang read this-CL book believe/know 3SG will read-DE DEG fast
'Zhang reading this book believes/knows that he will read (it) fast.'

➔ The difference between **external (high)** and **internal (low)** VP-copy fronting lies in the reconstruction possibilities from pure [Ā] vs. composite [A/Ā] probes, parallel to **external (high)** and **internal (low)** object topicalization.

(18) a. [$_{TopP}$ **[$_{VoiceP}$ PRO$_k$ V$_{embed}$-O]**$_{[\phi+TOP]}$ Top$_{[TOP]}$ [$_{TP}$ Subj$_i$ [$_{VoiceP}$ V$_{matrix}$ [$_{CP/TP}$ **Subj$_k$** ...**[$_{VoiceP}$ t V$_{embed}$** *de*P]...
reconstruction

b. [$_{TP}$ **Subj$_i$** [$_{TopP}$ **[$_{VoiceP}$ PRO$_{*k/\#i}$ V$_{embed}$-O]**$_{[\phi+TOP]}$ Top$_{[\phi+TOP]}$ [$_{VoiceP}$ V$_{matrix}$ [$_{CP/TP}$ Subj$_k$ ...**[$_{VoiceP}$ t V$_{embed}$** *de*P]...
bind/control *no reconstruction*

★ YM25's conclusion is based on **incomplete generalization**. With subject identity taken into account, VP-copy fronting does not show WC effects at all, and even **falsifies** the WC in Mandarin Chinese.

4 Conclusion

- The apparent WC effects in Mandarin argued by YM25 can either be reduced to distribution of composite probes, or do not stand due to incomplete generalization.

  ➔ This is a welcome result since Mandarin allows hyperraising (A-movement to SpecTP across finite CP).

★ The upshot is that the WC must be *parameterized* to individual languages and *cannot* be universal.

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