Getting the progressive under control: Mandarin vs. English

1 The puzzle

Like English, Mandarin has a progressive morpheme:

(1) (Fumu hui jia de shihou) Zhangsan zai/zhengzai zuo gongke.  
   ‘(When his parents returned home,) Zhangsan was doing his homework.’

But unlike English, the progressive in Mandarin is ungrammatical in control complements:

(2) Zhangsan dasuan (fumu hui jia de shihou) PRO (*zai/*zhengzai) zuo gongke.  
   ‘Zhangsan decided to be doing his homework (when his parents return home).’

(3) Lisi quan Zhangsan (fumu hui jia de shihou) PRO (*zai/*zhengzai) zuo gongke.  
   ‘Lisi urged Zhangsan to be doing his homework (when his parents return home).’

Research question: What is the source of this difference between Mandarin and English?

Plan for this talk:

- **Hypothesis A**: The Mandarin facts reflect something universal about the semantics of control and the progressive; English obscures the relevant principles because it allows coercion, while Mandarin (being a highly analytic language in the sense of Huang 2015) does not.


- *The verdict*: HypA is conceptually more appealing while HypB is empirically more appealing; ultimately, a synthesis of the two may be the most attractive approach.

- **Beyond the progressive**: Other aspectual markers in Mandarin control complements.

2 Hypothesis A

**Ingredient #1**: Control verbs select for action-denoting complements (Lasnik and Fiengo 1974).

(4) John believes [that it’s raining].  
   \[ \rightarrow J \ \text{believes some proposition.} \]

(5) John tried [PRO to leave].  
   \[ \rightarrow J \ \text{tried some action.} \]

(6) John persuaded Bill [that it’s raining].  
   \[ \rightarrow J \ \text{caused B to believe some proposition.} \]

(7) John persuaded Bill [PRO to leave].  
   \[ \rightarrow J \ \text{caused B to intend some action.} \]
**Ingredient #2:** The progressive is a stativizer (function from actions to states; Vlach 1981)

(8) John ran when I arrived.  \((\text{running follows arriving})\)
(9) John was in the room when I arrived.  \((\text{being in room precedes and overlaps with arriving})\)
(10) John was running when I arrived.  \((\text{running precedes and overlaps with arriving})\)

**Interim conclusion:** Control verbs should be incompatible with progressive complements.

**Ingredient #3:** English allows state→action coercion (cf. De Swart 1998).

(11) John decided [PRO to be doing his homework when his parents return home].
\[\approx \text{John decided [PRO to make it the case that he is doing his homework when his parents return home].}\]
(12) (?) Be doing your homework now!
\[\approx \text{Make it the case that you are doing your homework now!}\]

**Ingredient #4:** Unlike English, Mandarin disallows coercion in general (Lin and Liu 2005).

(13) *Zhangsan kaishi yi-ben shu.  
\(\text{Intended: ‘Zhangsan began reading/writing a book.’}\)
(14) piaoliang de tiaowuzhe  
\(\text{‘dancer who is beautiful’}\)
\(\text{NOT: ‘dancer who dances beautifully’}\)

**Upshot of Hypothesis A:** The difference between Mandarin and English reduces to highly general principles: universal properties of control and the progressive, coupled with the unavailability of coercion in Mandarin, which possibly relates to the status of Mandarin as a highly analytic language.

**3 Hypothesis B**

*Hypothesis A makes a clear prediction:* Stative predicates should be ungrammatical in Mandarin control complements.

This prediction is borne out for predicates headed by you ‘have’ and shi ‘be’ (15), but is incorrect for at least some other kinds of stative predicates (16)!

(15) a. *Lisi quan Zhangsan you che.  
\(\text{Intended: ‘Lisi urged Zhangsan to have a car.’}\)

b. *Lisi quan Zhangsan shi ta-de pengyou.  
\(\text{Intended: ‘Lisi urged Zhangsan to be his friend.’}\)
a. Lisi quan Zhangsan zhu zai Beijing.
   Lisi urge Zhangsan live at Beijing.
   ‘Lisi urged Zhangsan to live in Beijing.’

b. Lisi quan Zhangsan ai ta muqin.
   Lisi urge Zhangsan love 3SG mother.
   ‘Lisi urged Zhangsan to love his mother.’

These considerations motivate:

(17) **Hypothesis B:** Mandarin control verbs combine with vP complements (Grano 2012, 2015, 2017).

→ Progressive zai is ruled out because AspP is higher than vP.
→ Functional items you ‘have’ and shi ‘be’ are also conceivably above vP.

Additional support for Hypothesis B comes from object fronting (Grano 2017, building on Paul 2005; Lin 2011):

(18) Lisi renwei [Zhangsan hanbao chi-le].
   Lisi believe Zhangsan burger eat-PRF
   ‘Zhangsan believes that Zhangsan ate the burger.’

(19) *Lisi quan Zhangsan [PRO hanbao chi].
   Lisi urge Zhangsan burger eat
   Intended: ‘Lisi urged Zhangsan to eat the burger.’

If object fronting targets a functional head above vP (as argued by Paul 2005), then Hypothesis B immediately explains (18)–(19).

4 **Synthesizing the two hypotheses?**

In spite of its empirical advantages, Hypothesis B faces a conceptual challenge: Why should Mandarin control verbs be unlike their English counterparts in combining with vP complements?

A synthetic (syntax-semantics interface) approach, where semantic types play the key role:

- vPs (including stative vPs) denote properties of eventualities (type ⟨ε, t⟩) (Kratzer 1996).
- Control verbs select for ⟨ε, t⟩ complements.
- Asp is type ⟨⟨ε, t⟩, ⟨i, t⟩⟩ (Kratzer 1998), and hence AspP is type ⟨i, t⟩ (property of time intervals).
- English allows coercion from ⟨i, t⟩ into ⟨ε, t⟩; Mandarin does not.

On this account:

- The notion ‘action’ is recast type-theoretically as ‘property of eventualities’, which encompasses not just events but also states, avoiding the faulty prediction of Hypothesis A.
- The semantic type ‘properties of eventualities’ maps onto the syntactic category vP, bringing in the insights from Hypothesis B and achieving a solution at the interface between syntax and semantics.
5 Conclusions and open questions

Central conclusion: The ban on progressive marking in Mandarin control complements may be yet another manifestation of Mandarin’s highly analytic nature, in this case underpinned by the tight meaning-form correspondence between the semantic type ‘property of eventualities’ and the syntactic category ‘VP’.

Beyond the progressive: In contrast with progressive *zai*, perfective *-le* and experiential *-guo* are judged acceptable in control complements for some speakers:

(20) %Lisi quan Zhangsan [PRO chi-le/-guo food].
    Lisi urge Zhangsan eat-PRF/EXP food
    ‘Lisi urged Zhangsan to eat.’

Option 1: Perfective and experiential syntactically/semantically distinct from the progressive?

Option 2: (20) instantiates non-local realization of matrix aspect, enabled by the suffixal status of *-le* and *-guo* (cf. Huang 1989; Li 1990).

Come to Grano and Zhang’s talk “Getting aspectual *-guo* under control in Mandarin Chinese” on Sunday morning (Session 8-C) for relevant experimental data!

References