Finiteness Contrasts without Tense in Mandarin Chinese

1 Introduction

An influential view of the syntax-semantics of tense and aspect (see e.g. Kratzer 1998):

\[(1) \quad TP_t \leftarrow \text{truth value} \]
\[ T_i \quad \text{AspP(i)} \leftarrow \text{property of time intervals} \]
\[ \text{Asp}_{(st, it)} \quad \text{VP}_{(st)} \leftarrow \text{property of eventualities} \]

To what extent is the architecture in (1) universal? (See Tonhauser 2015 for a recent overview.)

Is (1) correct for Mandarin Chinese?

Jo-wang Lin (2003; 2006; 2010; 2012): Mandarin lacks the syntactic category Tense; sentences are type \( \langle it \rangle \) and the context determines how the leftover \( i \)-argument is dealt with (“Hypothesis A”).

Sybesma (2007); Tzong-Hong Jonah Lin (2015): Mandarin has Tense: a silent but syntactically represented \( i \)-argument that combines with AspP to yield a truth value (“Hypothesis B”).

\[(2) \quad \text{Hypothesis A:} \]
\[ \quad \text{AspP}_{(it)} \]
\[ \quad \text{Asp}_{(st, it)} -\text{guol-le/zai/} \]
\[ \quad \text{VP}_{(st)} \]

\[(3) \quad \text{Hypothesis B:} \]
\[ \quad \text{TP}_t \]
\[ \quad T_i \quad \text{AspP}_{(it)} \]
\[ \quad \text{Asp}_{(st, it)} -\text{guol-le/zai/} \]
\[ \quad \text{VP}_{(st)} \]

Jonah Lin’s argument for Hypothesis B goes as follows (my logical reconstruction):

\[(4) \]
\[ a. \quad \text{Premise 1:} \quad \text{Mandarin has a finite/nonfinite distinction.} \]
\[ b. \quad \text{Premise 2:} \quad \text{If a language has a finite/nonfinite distinction, it has Tense.} \]
\[ c. \quad \text{Conclusion:} \quad \text{Mandarin has Tense.} \]

This argument is valid, but is it also sound?

→ If we understand “finite/nonfinite distinction” loosely to mean that some clauses in Mandarin can stand alone as unembedded assertions but others cannot, I am prepared to accept Premise 1.

→ But Premise 2 deserves scrutiny: Finiteness (on any sensible definition) interacts with tense in tensed languages. But the literature on finiteness (mostly) does not attempt to reduce finiteness to tense. (See e.g. Bianchi 2003; Adger 2007; Amritavalli 2014; Ritter and Witschko 2014; Eide 2016.)
A cautionary passage from Adger 2007:23:

“It is important, at the outset, to emphasize that there is no guarantee that the traditional notion of finiteness will find any place in a theory of language: it names a possibly open-ended set of phenomena and may very well have no satisfactory definition. Within generative grammar, the question is not what finiteness is, but whether providing an insightful account of the phenomena requires such a notion in the first place. If it does, then there is no expectation that the notion will be unitary or that it will correspond in any deterministic way to the traditional idea.”

In this light, the plan now is to.

Section 2: Review Jonah Lin’s arguments for a finite/nonfinite distinction and assess whether the data can be explained without the assumption that Mandarin has Tense. *(Tentative answer: Yes)*

Sections 3–4: Assess two other empirical domains that are bound up with tense and finiteness in languages like English and ask whether they provide any evidence for or against Tense in Mandarin:

- The position of the subject in main clauses
- The distribution of control

*(Tentative answer: No clear evidence for or against Tense.)*

Section 5: Tentatively conclude that there is more than one way to be “nonfinite” (construed loosely), some of which may have nothing to do with Tense. There is no clear positive evidence in favor of Tense in Mandarin; whether to posit it has to do with what one thinks the null hypothesis should be.

2 Jonah Lin’s (2015) argument for Tense

| Some relevant previous literature: Does Mandarin have a finite/nonfinite distinction? |
|-----------------------------------|----------------------------------------|
| **No:** Xu 1985–1986; Y. Huang 1994; Hu, Pan, and Xu 2001; Jo-wang Lin 2010; 2012 |

Jonah Lin’s (2015) data and proposal in a nutshell:

Some embedded clauses in Mandarin pattern like matrix clauses with respect to three properties:

A. They allow clause-final le:

(5) \[ \text{Ni weishenme mei gaosu wo \[ta bu qu Aodaliya le\]?} \]
\[ 2SG why \quad \text{NEG tell} \quad 1SG 3SG \text{NEG go Australia LE} \]
‘Why didn’t you tell me that she no longer wants to go to Australia?’ (Paul 2015:287)

B. They allow object fronting (Fu 1994; Lu 1994; Ernst and Wang 1995; Paul 2002, 2005):

(6) \[ \text{Zhangsan renwei [Lisi hanbao}_1 \chi-le \quad t_1].} \]
\[ \text{Zhangsan think Lisi burger eat-PRF} \]
‘Zhangsan thinks that the burger, Lisi ate.’ (Lin 2011:60)
C. They disallow wide scope for object-position quantifiers:

(7) Zuotian, xiaozhang gaosu yi-wei jiaoshou [ta zhidao-le mei-ge xuesheng].
    yesterday principal tell one-CL professor 3SG instruct-PRF every-CL student
    ‘Yesterday, the principal told one professor that he instructed every student.’
    ‘one’ > ∀; ∀ > ‘one’
    (modeled after Lin 2013:280)

Other embedded clauses pattern unlike matrix clauses with respect to these properties:

(8) a. *Zhangsan neng [qu Taibei le].
    Zhangsan be.able go Taibei LE
    Intended: ‘Zhangsan is able to have gone to Taipei.’
    *neng > le
    
    Zhangsan be.able go Taibei LE
    ‘It has become the case that Zhangsan is able to go to Taipei.’
    le > neng
    (Lin 2011:53)

(9) *Zhangsan jiao Lisi [PRO hanbao1 chi t1].
    Zhangsan ask Lisi burger eat
    Intended: ‘Zhangsan asked of Lisi that the burger, she eat.’ (Lin 2011:60)

(10) Zuotian, xiaozhang yaoqiu yi-wei jiaoshou [PRO zhidao mei-ge xuesheng].
    yesterday principal ask one-CL professor instruct every-CL student
    ‘Yesterday, the principal asked one professor to instruct every student.’
    ‘one’ > ∀; ∀ > ‘one’
    (Lin 2015:324)

Jonah Lin’s (2011; 2013; 2015) proposal: The bracketed clauses in (8-a), (9) and (10) all involve a nonfinite TP (a TP whose head does not supply a reference time).

(11) a. VP
    V
gaosu/renwei
    TP[+finite]

    b. VP
    V
    neng/jiaolyaoqiu
    TP[-finite]

My alternative suggestion (Grano 2012, 2015): The bracketed clauses in (8-a), (9) and (10) are all structurally truncated. To a rough first approximation: they project only to vP.

(12) a. VP
    V
    CP
gaosu/renwei

    b. VP
    V
    vP
    neng/jiaolyaoqiu
How does ‘clause truncation’ account for the three observed properties?

→ Ban on clause-final le: Follows immediately: le sits either in a clause-peripheral (Paul 2015) or clause-medial position (Erlewine 2016), in any case outscoping vP and hence unavailable in a clause that projects only to vP.

→ Ban on object fronting: Follows immediately, if we adopt Paul’s (2005) proposal that object fronting is movement to [Spec, InnerTopP], where InnerTop is a functional projection above vP.

(13)  \[ \text{ForceP} > \text{TopicP} > \text{FocusP} > \text{IP} > \text{InnerTopicP} > \text{InnerFocusP} > vP \] (cf. Paul 2005:112)

→ Possibility of wide scope for object position quantifier: Does not follow immediately, but follows with auxiliary assumption that QR in Mandarin can target vP but no higher in the clause (a point of parametric variation).

Cross-linguistic support: In many languages, a subset of control verbs give rise to so-called ‘restructuring’ or ‘clause union’ effects that have been fruitfully analyzed using a ‘clause truncation’ approach. (See, among many others, Wurmbrand 2001; Cinque 2004; Grano 2012, 2015 and references therein.)


| Consequences for the Tense debate: Clause truncation provides a plausible account of Jonah Lin’s nonfiniteness diagnostics, with no need to appeal to Tense after all. |

3 The position of the subject in main clauses

Above I assumed following Paul (2005) and others that Mandarin clauses project IP:

(14)  \[ \text{ForceP} > \text{TopicP} > \text{FocusP} > \text{IP} > \text{InnerTopicP} > \text{InnerFocusP} > vP \]

What is the motivation for IP? And what is IP if not TP?

Motivation for IP (loosely following Ernst 1994):

Data like the following show that InnerTopicP as well as at least some adverbs project over negation, aspect, and modals:

(15)  Wo \text{huasheng}, \text{bu neng chi} \text{t}_1.  
     1SG peanut NEG can eat  
     ‘I can’t eat peanuts.’ (Ernst and Wang 1995:241)

(16)  Ta \text{huoche}, \text{mei-you ganshang} \text{t}_1.  
     3SG train NEG-PRF catch  
     ‘He didn’t catch the train.’ (modeled after Paul 2002:2)

(17)  Baoshan \text{you mei-you tian biaoge}.  
     Baoshan again NEG-PRF fill form  
     ‘Baoshan again didn’t fill out the form.’ (Ernst 1994:202)
Assuming X-Bar Theory, the surface position of the subject must be in the Spec of some functional head above InnerTopP. We call this position IP.

**Does I⁰ have semantic content?** It is tempting to analyze it as Tense.

But consider Ritter & Wiltschko’s (2014) Parametric Substantiation Hypothesis, according to which there is a universal anchoring category INFL whose substantive content varies cross-linguistically:

(18) **ENGLISH:** TENSE marking
    a. John *is* happy.
    b. John *was* happy.

(19) **HALKOMELEM** (Central Coast Salish): LOCATION marking
    a. í qw’eyílex tútl’ò
       PROX dance he
       ‘He is/was dancing [here].’
    b. li qw’eyílex tútl’ò
       DIST dance he
       ‘He is/was dancing [there].’ (Ritter and Wiltschko 2014:1341)

(20) **BLACKFOOT** (Algonquian): PERSON marking
    a. Kitsinóóʰ⁴poaawa
       kit-in-o-ʰ⁴-oaawa
       2-see.TA-1:2-LOCAL-2PL
       ‘I saw you (pl.).’
    b. Kitsinóóḵiʰ⁴poaawa
       kit-in-o-ʰ⁴-ḵ⁴-oaawa
       2-see.TA-2:1-LOCAL-2PL
       ‘You (pl.) saw me.’
    c. Anna pookááwa inoyíwa anni imitááyi
       ann-wa pookaa-wa ino-yii->();wa ann-yi imitaa-yi
       DEM-PROX child-PROX see.TA-3:4-NONLOCAL-PROX DEM-OBV dog-OBV
       ‘The child saw the dog.’ (Ritter and Wiltschko 2014:1314)

**Upshot:** Positing a tense semantics for Mandarin IP is no more or less warranted by the data than positing a location or person semantics. Possibly, its sole function is to host and/or license the subject, with no semantic content (*contra* Ritter & Wiltschko’s claim that IP is universally contentful).

### 4 The distribution of control

In English, the distribution of control is intimately tied up with (non)finiteness:

(21) a. John claims [that Bill/*PRO is a genius]. 
    b. John claims [*Bill/PRO to be a genius].

**FINITE: NO CONTROL**

**NONFINITE: CONTROL**

Mandarin has control as well (22) (cf. (23)):

(22) Zhangsan₁ xiangyao [PRO₁/-₂ likai].
    Zhangsan wants leave
    ‘Zhangsan wants to leave.’

(23) Zhangsan₁ shuo [pro₁/-₂ hen xihuan Lisi].
    Zhangsan say very like Lisi
    ‘Zhangsan says s/he/they really like Lisi.’
In Grano 2012, 2015, I proposed that the distribution of control in Mandarin is regulated by clause size: full clauses are not controlled whereas truncated clauses (vPs) are controlled.

But according to Zhang (2016), some control clauses in Mandarin admit topicalization:

(24) A-Bao dasuan [zhe-ge kaosheng PRO bu luqu t\textsubscript{1}].
    A-Bao plan this-CL applicant NEG enroll
    ‘A-bao planned not to enroll this applicant.’ (Zhang 2016:291)

Consequently, we cannot identify control clauses with truncated clauses, contra Grano 2012, 2015.

But then what does regulate the distribution of control in Mandarin?

**Landau (2004):** the distribution of control is tied to clausal T and Agr features (roughly speaking, control obtains whenever T or Agr or both are not positively specified).

→ This approach lends itself to a theory-internal argument for the existence of Tense (and Agreement?) in Mandarin.

But **Landau’s (2015)** more recent theory of control divorces the distribution of control from Tense altogether. Instead, the important regulating factors are in the complementizer layer.

**Upshot:** Depending on the theory of control one adopts, the fact that Mandarin has control does not entail that Mandarin has Tense.

5 Wrapping up

Two ways of being “nonfinite” in a (possibly) tenseless language:

- having a truncated clausal architecture
- having a controlled (referentially dependent) subject (in virtue of some other clausal properties)

Nowhere in the above did we see a positive argument that Mandarin lacks Tense. Rather, the argumentation has all been negative: none of the potential arguments for Tense go through.

So the warranted conclusion is not “Mandarin lacks Tense” but rather “There is no positive evidence for Tense in Mandarin.”

Two approaches to formulating the null hypothesis (based on Matthewson 2001):

(25) **No variation hypothesis:** Some languages have Tense, therefore all languages (including Mandarin) have Tense unless shown otherwise.

(26) **Transparent mapping hypothesis:** There is no evidence for Tense in Mandarin; therefore Mandarin does not have Tense unless shown otherwise.

Both approaches can be fruitful starting points; my aim was to show that positing Tense in Mandarin falls squarely in the “No variation” approach; there is no Mandarin-internal evidence for Tense.

Download the full paper (Grano 2017, “Finiteness contrasts without Tense? A view from Mandarin Chinese”, ms., Indiana University) from pages.iu.edu/~tgrano.


