

Control theory and the syntax of aspect: A view from Mandarin Chinese

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Overview: Debate persists over whether Mandarin has a finite/nonfinite distinction, some scholars arguing that complement clauses split into two classes in a way that is naturally explained by such a distinction (C.-T. J. Huang 1982, 1989; Li 1985, 1990; Cheng 1989; C.-C. J. Tang 1990; T.-C. Tang 2000; T.-H. J. Lin 2011), and others arguing that the alleged diagnostics for the split suffer counterexamples that preclude such an analysis (Xu 1985-6; Y. Huang 1994, 1995; Hu *et al.* 2001). Taking aspect marking in controlled complements as its central empirical domain, this paper stakes out a hybrid position: I side with the former scholars in maintaining that Mandarin complement clauses split into two classes, but I side with the latter scholars in eschewing the finite/nonfinite split. Rather, I argue, complement clauses come in two sizes: controlled clauses are *v*Ps whereas non-controlled clauses are CPs.

Central data and argument: I argue with Huang 1989; Cheng 1989; Li 1990 and against Xu 1985-6, Y. Huang 1994, 1995; Hu *et al.* 2001 that aspect markers in controlled complements like in (1) are (superficially nonlocal) instantiations of matrix aspect (2a) rather than local instantiations of embedded aspect (2b). Evidence comes from the observation that the morphemes *bu* ‘not’, *zai* PROG and *mei-tian* ‘every-day’ are clause-locally incompatible with the aspect marker *-guo* (3), but not if a clause boundary separates the two incompatible elements (4). Crucially, sentences in which the aspect marker appears in a controlled complement (5) pattern like the clause-local incompatibility cases, which is expected on the matrix analysis (2a) but not on the embedded analysis (2b).

Analysis: The matrix analysis is derived as follows. First, Mandarin non-controlled complements are CPs whereas controlled complements are *v*Ps. This is independently motivated by the fact that non-controlled complements have an InnerTopic Phrase (which resides above *v*P) whereas controlled complements do not (Ernst & Wang 1995; Paul 2005). Second, aspect placement involves a Pesetsky & Torrego (2007) architecture whereby a matrix-level interpretable but unvalued aspectual head enters into an Agree relation with an uninterpretable but valued aspectual suffix base-generated on a verbal stem. Given V-to-*v* movement, phase-bound Agree, and Chomsky’s (2001) version of the Phase Impenetrability Condition, we accurately predict that a matrix aspectual head can establish an Agree relation with a matrix suffix (6a/c) or with an embedded suffix across a *v*P (control) boundary (6b), but not with an embedded suffix across a CP (non-control) boundary (6d).

Implications: The analysis implies that Mandarin lacks a finite/nonfinite distinction; rather, all empirical contrasts between controlled and non-controlled complements follow from a (*v*P vs. CP) split in complement size. Given that *v*P lacks the structure to assign Case to its [Spec,*v*P] subject, the analysis also supports the view that controlled positions are non-Case positions. The upshot is that at least some of the burden of explaining the distribution of control can be shifted away from contrasts in finiteness and related properties — which are notoriously difficult to justify in languages like Mandarin — and onto other properties that interact with the availability of Case assignment, viz., splits in complement size that are in some sense made available for free by the architecture of the clause.

Countenancing variation: For some speakers, sentences like (1) are unacceptable, and for yet other speakers, sentences like (1) are acceptable but give rise to an actuality entailment (Bhatt 1999; Hacquard 2006) whereby the truth of the complement clause is asserted. I argue that we can make sense of both of these groups of speakers via the proposal that for them, bare verbal stems enter the derivation with features that count as interveners for Agree, thereby ruling out (6b). For the actuality entailment speakers, I suggest that (1) has an alternative paratactic parse with local aspect realization (‘Zhangsan urged Lisi **and** Lisi ate-EXP an apple’), thereby explaining the actuality entailment à la what Giannakidou & Staraki

(2013) say about a similar phenomenon in Greek.

- (1) Zhangsan quan Lisi1 [PRO1 chi-**guo** yi-ge pingguo].
 Zhangsan urge Lisi eat-EXP one-CL apple
 ‘Zhangsan urged Lisi to eat an apple.’
- (2) a. [ASP [... V_{matrix} ... [... V_{embedded} ...]]] MATRIX ANALYSIS
 b. [... V_{matrix} ... [ASP [... V_{embedded} ...]]] EMBEDDED ANALYSIS
- (3) a. Zhangsan **bu** quan(*-**guo**) Lisi [PRO chi yi-ge pingguo].
 Zhangsan NEG urge-EXP Lisi eat one-CL apple
 ‘Zhangsan doesn’t/won’t urge Lisi to eat an apple.’
 b. Zhangsan **zai** quan(*-**guo**) Lisi [PRO chi yi-ge pingguo].
 Zhangsan PROG urge-EXP Lisi eat one-CL apple
 ‘Zhangsan is urging Lisi to eat an apple.’
 c. Zhangsan **mei-tian** quan(*-**guo**) Lisi [PRO chi yi-ge pingguo].
 Zhangsan every-day urge-EXP Lisi eat one-CL apple
 ‘Every day, Zhangsan urges Lisi to eat an apple.’
- (4) a. Zhangsan **bu** zhidao [Lisi chi-**guo** yi-ge pingguo].
 Zhangsan NEG know Lisi eat-EXP one-CL apple
 ‘Zhangsan doesn’t know that Lisi ate an apple.’
 b. Zhangsan **zai** zhenglun [Lisi chi-**guo** yi-ge pingguo].
 Zhangsan PROG argue Lisi eat-EXP one-CL apple
 ‘Zhangsan is arguing that Lisi ate an apple.’
 c. Zhangsan **mei-tian** shuo [Lisi chi-**guo** yi-ge pingguo].
 Zhangsan every-day say Lisi eat-EXP one-CL apple
 ‘Every day, Zhangsan says that Lisi ate an apple.’
- (5) a.*Zhangsan **bu** quan Lisi [PRO chi-**guo** yi-ge pingguo].
 Zhangsan NEG urge Lisi eat-EXP one-CL apple
 b.*Zhangsan **zai** quan Lisi [PRO chi-**guo** yi-ge pingguo].
 Zhangsan PROG urge Lisi eat-EXP one-CL apple
 c.*Zhangsan **mei-tian** quan Lisi [PRO chi-**guo** yi-ge pingguo].
 Zhangsan every-day urge Lisi eat-EXP one-CL apple
- (6) a. Asp[iA:___] [vP ... v+**V-guo**[uA:EXP] ... [vP PRO ... v+V ...]]
 |_____Agree_____↑
- b. Asp[iA:___] [vP ... v+V ... [vP PRO v+**V-guo**[uA:EXP] ...]] ← structure of (1)
 |_____Agree_____↑
- c. Asp[iA:___] [vP ... v+**V-guo**[uA:EXP] ... [CP ... v+V ...]]
 |_____Agree_____↑
- d.*Asp[iA:___] [vP ... v+V ... [CP ... v+**V-guo**[uA:EXP] ...]] ← PIC violation!
 |_____X_____↑

Selected references: Hu et al. 2001. Is there a finite vs. nonfinite distinction in Chinese? *Linguistics* 39:1117-1148. J. Lin 2011. Finiteness of clauses and raising of arguments in Mandarin Chinese. *Syntax* 14:48-73. Paul 2005. Low IP area and left periphery in Mandarin Chinese. *Recherches linguistiques de Vincennes* 33:111-133.