Contradictory (Forward) Lifetime Effects and the Non-Future Tense in Mandarin Chinese

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The Debate: Tense in Chinese?

It is a well-established view that Chinese has no (past) tense morphology:

• In an out of the blue context, (1) can be interpreted as either a past or a present event.

  (1) mali zai xue-xi.

  Mary PROG study

  ‘Mary was/is studying.’

But whether or not Chinese has a syntactic tense with a phonologically empty T node remains an unsettled debate. There are three hypotheses on the market:

1. Tenseless: Jiang (2013) and much other work.


3. Tense: Many Future/Non-Future languages may have been misanalyzed as tenseless.

The Current Study

Tense is an element at the syntax-semantics interface; the most convincing evidence must involve both syntactic and semantic evidence.

• Structural evidence: Finiteness → T node (T. H. Lin, 2015)

• Insufficient, difficult to make a connection (Grano, 2017)

• Semantically, tense encodes temporal meaning.

• “In view of […] involvement in temporal interpretation, it seems reasonable to identify it as the T we already know from other languages.” (Sybesma, 2017, p.7)

We focus on a linguistic phenomenon called “Lifetime Effects”

• Lifetime effects refer to the inferences about the lifetime of the individual in sentences like ‘Mary is/was blue-eyed’.

• Chausal tense interacts with temporal information in the nominals.

• Contradictory effects: one living and one dead individual in the subject position

• In principle, neither tense is appropriate in English (Mittwoch, 2008)

(2) Sausuureal and Chomskysyari? ‘were both linguists.’

• This temporal phenomenon has the potential of shedding light on the syntactic structure of Tense.

Processing Lifetime Effects

Context: This house was built for Bill Stevens, the actor, who died last year. The one over there belongs to his brother, John Stevens; he now lives in America.

• English: (3) They are? [were] both very handsome.

• Chinese: (4) ta-men dou shi hen yinjing de nanren.

3PL both BE very handsome

They both be very handsome man.

Four experiments hosted on Amazon Mechanical Turk

Acceptability judgements:

• Prediction: A covert past tense analysis predicts that contradictory lifetime inferences would arise in Chinese just as in English.

• Result: Sentences with contradictory lifetime effects were judged as significantly less acceptable in English but not in Chinese (Fig. 1 vs Fig. 2), potentially undermining the hypothesis that Chinese has a covert tense specified for [APAST].

• Self-paced reading:

• Results: English and Chinese participants showed similar reading time disruption in sentence wrap-up effects.

• Suggestive that Chinese is unlikely to be completely tenseless.

Toward a new typology of tense:

• The morpho-semantic features of tense can be schematized below: the interval NOW has two boundaries: Past/Non-Past, Future/Non-Future.

• Languages grammaticalize (at least) one boundary, and the relevant temporal features are held in a TP.

• Tense is a universal category with binary feature distinction, with parametric choices between either [APAST] or [AFUTURE].

• These features may be encoded overtly or covertly; some languages can lack the overt morpho-phonological marking of the values of these features.

• Many Future/Non-Future languages may have been misanalyzed as tenseless.

Non-Future Tense in and beyond Chinese

Recent research on the Future/Non-future tense distinction in Chinese:

• A phonologically null-future tense in the bare predicates (Chen, 2017; Li, 2016, Sun, 2014).

• A future morpheme jiang which projects a T node and alternates with the covert non-future morpheme (Huang, 2015).

Several predictions made in Matthewson’s (2006) proposal, which are further fleshed out in Mucha (2013), are borne out in Chinese:

• Prediction #1: If there is a covert, underspecified tense node, superfically tenseless sentences can refer to present and past events at the same time.

• Saussure and Chomsky both be linguists.

• Prediction #2: Future time reference requires overt grammatical marking.

• Ten years later, (s)he will become an artist.

Summary:

• Evidence from the online processing of contradictory lifetime inferences and empirical observations about “forward lifetime effects” suggest that both covert past tense and tenseless accounts of Chinese are inadequate.

• Chinese bare predicates possess a phonologically null tense with the [-FUTURE] feature. This non-future tense, together with the potential a future tense morpheme jiang, suggests that Chinese does have a syntactic T node.

Future directions:

• Similar (forward) lifetime effects are expected to be found in other languages that lack overt tense morphology.

• Even superficially “tenseless” languages may be alternatively analysed as possessing a covert tense (e.g. Tonhauser, 2011).

• This is because the temporal reference of each tense cannot be separated by the NOW interval.

Selected References