

FOCUS AS AN ANCHORING CONDITION

SZE-WING TANG AND THOMAS HUN-TAK LEE

The Hong Kong Polytechnic University & City University of Hong Kong

ctswtang@polyu.edu.hk, rlhtlee@uxmail.cityu.edu.hk

Generalized Anchoring Principle (GAP) requires that sentences be either tensed or focused in the sense that it highlights an item in contrast to a set of alternatives supplied by the context of utterance. ‘Incompleteness’ of some Chinese sentences is attributed to GAP. Parametric variation between Chinese and English with respect to the application GAP is due to the (non)existence of an empty particle.

1. Introduction

- ‘Incomplete’ (非自足 *feizizu*) sentences in Chinese: sentences cannot stand alone as independent utterances (Lu 1986, Kong 1994, Shen 1995).

(1) %張三寫信。
%Zhangsan xie xin
Zhangsan write letter
‘Zhangsan writes/wrote letters.’

(2) %他吃了蘋果。
%Ta chi-le pingguo
he eat-Perf apple
‘He eats/ate apples.’

- Devices that make incomplete sentences complete: (i) adding a sentence final particle *le*, (ii) quantifying the object NP, (iii) negating the clause, or (iv) embedding it within a larger sentence.

(3) 他吃了蘋果了。 (sentence final particle)
Ta chi-le pingguo le
he eat-Perf apple Part
‘He has eaten apples.’

(4) 他吃了三個蘋果。 (numeral object)
Ta chi-le san-ge pingguo.
he eat-Perf three-Cl apple
‘He ate three apples’

- (5) 它沒吃蘋果。 (negation)
 Ta mei chi pingguo
 he not eat apple
 ‘He didn’t eat an apple.’
- (6) [他吃了蘋果]就走了。 (embedded clause)
 [Ta chi-le pingguo] jiu zou-le.
 he eat-Perf apple then leave-Perf
 ‘After he ate apples, he left.’
- PROPOSAL: GAP.
- (7) *Generalized Anchoring Principle (GAP)*
 Every sentence must be either tensed or focused at the LF interface level.
- Temporal anchoring: an event is anchored with respect to the moment of speech or a reference event Enç (1987).
 - Focus anchoring: an item is anchored with respect to a reference set of items, or an event is anchored vis-à-vis a reference set of events.

2. The data

- Other data of incomplete sentences in Chinese (Kong 1994):
- (8) %張三跑出去。 (directional phrase)
 %Zhangsan pao-chuqu
 Zhangsan run-outside
 ‘Zhangsan ran outside.’
- (9) %我寫好。 (resultative compound)
 %Wo xie-hao
 I write-finish
 ‘I finished writing.’
- (10) %他寫一個小時。 (duration/frequency phrase)
 %Ta xie yige xiaoshi
 he write one hour
 ‘He wrote for one hour.’
- (11) %張三跑三趟。
 %Zhangsan pao san-tang.
 Zhangsan run three-times
 ‘Zhangsan ran three time.’
- Some unmodified but complete sentences: e.g. certain stative verbs.

- (12) 我是老師。
 Wo shi laoshi.
 I be teacher
 ‘I am a teacher.’
- (13) 張三討厭李四。
 Zhangsan taoyan Lisi.
 Zhangsan dislike Lisi
 ‘Zhangsan dislikes Lisi.’
- There is a subject-object asymmetry with respect to incompleteness (Kong 1994).
- (14) %張三的學生寫信。
 %Zhangsan de xuesheng xie xin
 Zhangsan Mod student write letter
 ‘Zhangsan’s student writes/wrote letter.’
- (15) %這個年輕人站起來。
 %Zhege nianqing ren zhan-qilai
 this young person stand-up
 ‘This young person stood up.’
- Salvaging devices for making the incomplete sentences free: having an aspect marker *guo* and temporal adverbs (Lu 1986, Kong 1994):
- (16) 張三寫過信。 (experiential marker)
 Zhangsan xie-guo xin.
 Zhangsan write-Exp letter
 ‘Zhangsan had written a letter before.’
- (17) 張三常常吃蘋果。 (temporal adverb)
 Zhangsan changchang chi pingguo.
 Zhangsan often eat apple
 ‘Zhangsan often eats apples.’
- (18) 我明天寫一個小時。
 Wo mingtian xie yi-ge xiaoshi
 I tomorrow write one-Cl hour
 ‘I will write for an hour tomorrow.’
- (19) 他站不起來。 (potential complement)
 Ta zhan bu qilai.
 he stand not up
 ‘He cannot stand up.’
- Salvaging devices for making the incomplete: adding a modal verb and a numeral or an adjective in the object (Kong 1994).

- (20) 張三應該寫信。 (modal)
 Zhangsan yinggai xie xin.
 Zhangsan should write letter
 ‘Zhangsan should write a letter’
- (21) 張三願意跑出去。
 Zhangsan yuanyi pao-chuqu
 Zhangsan willing run-outside
 ‘Zhangsan is willing to go outside.’
- (22) 他吃了爛蘋果。 (adjective)
 Ta chi-le lan pingguo.
 he eat-Perf rotten apple
 ‘He has eaten rotten apples.’
- (23) 他吃了毒藥。
 Ta chi-le du-yao
 he eat-Perf poison-drug
 ‘He has taken poison.’
- (24) %他吃了藥。
 %Ta chi-le yao.
 he eat-Perf drug
 ‘He has taken medication.’
- Salvaging devices for making the incomplete: embedding and juxtaposing an incomplete sentence with a parallel one in a contrast structure.
- (25) 他寫信，我看電視。
 Ta xie xin, wo kan dianshi.
 he write letter, I watch TV
 ‘He will write letters, and I will watch TV.’
- Salvaging devices for making the incomplete: having a generic interpretation.
- (26) 張三寫信。
 Zhangsan xie xin.
 Zhangsan write letter
 ‘Zhangsan (always) writes letters’
 (with context implying genericity or habitual reading)
- Salvaging devices for making the incomplete: interrogatives and imperatives.
- (27) 張三寫信？ (interrogative)
 Zhangsan xie xin?
 Zhangsan write letter
 ‘Zhangsan write a letter?’

- (28) 張三寫信還是打電話？
 Zhangsan xie xin haishi da dianhua?
 Zhangsan write letter or make phone
 ‘Did Zhangsan write a letter or make a phone call?’
- (29) (給我) 寫信！ (imperative)
 (Gei wo) xie xin!
 for me write letter
 ‘Write a letter for me!’
- (30) *Contexts that contribute to sentence completeness in Chinese (preliminary)*
 (a) existence of the sentence final particle *le*
 (b) existence of the experiential aspect marker *guo*
 (c) existence of temporal adverbs
 (d) objects with a numeral
 (e) objects with an adjective
 (f) modal
 (g) negation
 (h) embedding
 (i) in contrastive contexts
 (j) in interrogatives
 (k) in imperatives

3. Previous analyses of the data

- ‘Incompleteness’ is related to ‘information quantity’ (信息量 *xinxiliang*) (Kong 1994).
- (31) %他吃了飯。
 %Ta chi-le fan.
 he eat-Perf rice
 ‘He had a meal.’
- (32) 他離了婚。
 Ta li-le hun.
 he leave-Perf marriage
 ‘He has divorced.’
- (33) 他加入了香港語言學學會。
 Ta jiaru-le Xianggang Yuyanxue Xuehui.
 he join-Perf Hong Kong linguistics society
 ‘He has joined the Linguistic Society of Hong Kong.’

- PROBLEM 1: It is impossible to quantify.
- PROBLEM 2: It will leave most of the data unaccounted for, e.g. the role of sentence final particles, modal auxiliaries, aspect markers, etc.?
- PROBLEM 3: Turning to vague notions of information quantity will blur the picture by admitting dubious contrasts, e.g. (31) and (32-33).
- ‘Incompleteness’ is related to the distinction between ‘bounded’ (有界 *youjie*) vs ‘unbounded’ (無界 *wujie*) (Shen 1995).

E.g. turning an activity sentence like (34) into an accomplishment as in (35)

- (34) %他吃了蘋果。
 %Ta chi-le pingguo
 he eat-Perf apple
 ‘He eats/ate apples.’ (=2)
- (35) 他吃了三個蘋果。
 Ta chi-le san-ge pingguo.
 he eat-Perf three-CI apple
 ‘He ate three apples’ (=4)
- Inserting a perfective aspect marker, a sentence final particle, or temporal adverbs will impose a boundary on the event signified.
- (36) 他馬上寫信。
 Ta mashang xie xin.
 he immediately write letter
 ‘He immediately started letter-writing.’
- (37) 禮堂已經響起掌聲。
 Litang yijing xiangqi zhangsheng.
 hall already sound-up applause
 ‘In the hall applause was already heard’
- (38) %禮堂響起掌聲。
 %Litang xiangqi zhangsheng.
 hall sound-up applause
- PROBLEM 1: The aspect marker *le* is not distinguished from the sentence final particle *le*.
 - PROBLEM 2: Quantifying an object is inadequate for making a sentence complete.
- (39) %他吃三碗飯。
 %Ta chi san-wan fan
 he eat three-bowl rice
 ‘He ate three bowls of rice.’
- PROBLEM 3: Is there a mismatch between *chi* ‘eat’ and *pingguo* ‘apple’ in (34)?
- (40) John ate rice.

- PROBLEM 4: A whole range of other contexts that contribute to sentence completeness do not seem to be related to boundedness per se, e.g. negation, embedding, modal auxiliary insertion, and contrast.

4. GAP: tense and focus as anchoring conditions

- GAP is imposed at the LF interface from the external systems that make use of the information provided by C_{HL} .
- Temporal anchoring: sentences may be anchored by using temporal adverbs.
- Perfective *le* makes no contribution to temporal anchoring; it marks only termination or an arbitrary final endpoint of an event (Smith 1991).

(41) %他寫信。

%Ta xie xin.

he wrote letter

‘He writes/wrote a letter.’

(42) %他寫了信。

%Ta xie-le xin.

He write-Perf letter

‘He wrote a letter.’

(43) 他昨天寫了信。

Ta zuotian xie-le xin.

he yesterday write-Perf letter

‘He wrote a letter yesterday.’

(44) 他明天寫了信才走。

Ta mingtian xie-le xin cai zou.

he tomorrow write-Perf letter then leave

‘Tomorrow, he will leave after writing a letter.’

(45) 他每天都寫了信才走。

Ta meitian dou xie-le xin cai zou.

he everyday all write-Perf letter then leave

‘Every day, he leaves after writing a letter.’

- Particle *le* and experiential *guo* can be regarded as markers of past events.

(46) 他吃了飯了。

Ta chi-le fan le

he eat-Perf rice Part

‘He has had a meal.’

- (47) 他去過加州。
 Ta qu-guo Jiazhou.
 he go-Exp California
 ‘He has visited California before.’
- We have shown that some incomplete sentences become complete when they are used as imperatives. The default temporal interpretation of Chinese imperatives is present (Yuan 1993).
- (48) (給我) 寫信!
 (Gei wo) xie xin!
 for me write letter
 ‘Write a letter for me!’
- (49) 明天上我家吃晚飯!
 Mingtian shang wo jia chi wanfan!
 tomorrow come I home eat dinner
 ‘Come to my home to have dinner tomorrow!’
- In embedding, the clause is linked to a larger context which itself will have temporal anchoring.
- (50) [他吃了蘋果]就走了。
 [Ta chi-le pingguo] jiu zou-le.
 he eat-Perf apple then leave-Perf
 ‘After he ate apples, he left.’
- A modal auxiliary signifies that we are talking about a future event in the world defined by the speaker’s desire that may or may not take place in the actual world and we may interpret the sentence as denoting an individual level property.
 - stative predicates
 - Negation *bu*: an activity or a state, or a modal interpretation;
 Negation *mei*: an event
 - Negation: inducing focus effects in contrasting the situation or event depicted with an alternative set of situations or events.
 - Contrast structures have a ‘list reading’.
 - A question denotes a set of propositions that constitute the possible/true answers to it (Hamblin 1971 and Karttunen 1977)).
- (51) 張三寫信還是打電話?
 Zhangsan xie xin haishi da dianhua?
 Zhangsan write letter or make phone
 ‘Did Zhangsan write a letter or make a phone call?’ (= (28))
- (52) a. {Zhangsan wrote a letter}
 b. {Zhangsan made a phone call}

- Adjectives and numerals: introducing new information in certain contexts and receiving a contrastive stress or contrastive accent.

(53) a. 他吃了毒藥。
 Ta chi-le DU-yao
 he eat-Perf poison-drug
 ‘He has taken POISON drugs.’

b. He has taken *x* drugs.

(54) a. 他吃了三個蘋果。
 Ta chi-le SAN-GE pingguo.
 he eat-Perf three-Cl apple
 ‘He ate THREE apples’

b. He ate *x* apples.

- Chinese sentences may be anchored either by tense or by focus.

(55) *Contexts that contribute to sentence completeness in Chinese*

(i) temporal anchoring

- (a) existence of the sentence final particle *le*
- (b) existence of the experiential aspect marker *guo*
- (c) existence of temporal adverbs
- (d) in imperatives
- (e) embedding

(ii) focus anchoring

- (f) in contrastive contexts
- (g) in an interrogative context
- (h) objects with adjectives and numerals

(iii) temporal & focus anchoring

- (i) modal
- (j) negation

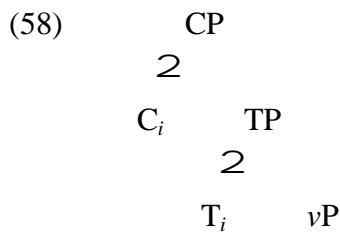
5. Syntax of GAP and parametric variation

- QUESTION: Why can't English invoke a contrast set to anchor the ‘incomplete/tenseless’ sentence?

(56) *He write letters (and I watch TV).

- (57) 他寫信，我看電視。
 Ta xie xin, wo kan dianshi.
 he write letter, I watch TV
 ‘He will write letters, and I will watch TV.’ (= (25))

- Every language should be able to use some way to realize tense.
- Tense is associated with T or Infl (‘T’ henceforth).
- Tense in T is indexical like all other referential expressions and is conceived of as a pronominal variable, in that the truth of a tensed sentence is relative to the speech time (Enç 1987).
- A tense is anchored through its complementizer C.



- The verb or some phrase projected within the verb phrase is related to tense by providing it with a position for expressing eventualities and denoting the event time (Guéron and Hoekstra 1995 and Stowell 1996).
- The semantic function of T is to temporally locate the event time in relation to the speech time.
- English verbs are morphologically ‘impoverished’ when they are introduced into the derivation. The inflectional elements are attached to English verbs in syntax (Lasnik 1995).
- QUESTION: Does Chinese have T?
- There should be a functional projection to house the subject (Huang 1993).
- QUESTION: What is the status of T in Chinese?
- T in Chinese can be morphologically realized as some sentence final particles, such as *le* (Sybesma 1996, Zhang 1997, and Tang 1998).
 □ Particle *le* could be analyzed as overt tense marking in Chinese.
- PROPOSAL: T in Chinese can be optionally realized as a phonologically empty particle.
- The empty particle is a dependent element, anchored through its C.
- The antecedent for the empty particle could be a tense operator or a focus operator.
- If C is interpreted as a tense operator, the event time in T is then fixed relative to

the speech time that is represented in C, yielding a temporal interpretation, as in the contexts in (55a-e).

- Aspect markers *le* and *guo*, temporal adverbs, negations, and perhaps modals in Chinese are all restricting modifiers for the event time (Stowell 1996).
- If the empty particle in T is linked to a focus operator located in C, T is anchored with respect to a reference set of items, yielding a focus interpretation.
- English does not have the empty particle.

(59) *He write a letter? (interrogative)

(60) *He write a LONG letter. (adjective)

(61) *He write THREE letter. (numeral)

(62) Chinese has an empty particle that English lacks.

- Parametric variation is basically lexical, particularly restricted to visible and detectable properties, for instance, morphology.

□ typology of nominal pronominals in these two languages.

(63) 他走了。 (pronoun)

Ta zou-le.

he leave-Perf

‘He left.’

(64) *pro* 走了。 (*pro*)

pro zou-le.

pro leave-Perf

‘**pro* left.’

(65) Typology of clausal and nominal pronominals in Chinese and English

		Chinese	English
Clausal system	tense marker	—	—
	empty particle	—	*
Nominal system	pronoun	—	—
	<i>pro</i>	—	*

6. Conclusion

- Neither ‘information adequacy’ or ‘boundedness’ can account for sentence incompleteness in Chinese.
- Underlying the completeness of those apparently disparate sentences is related to GAP.
- Oarametric variation between Chinese and English with respect to the application of GAP lies in the (non)existence of an empty particle.

References

- Enç, Mürvet. 1991. The semantics of specificity. *Linguistic Inquiry* 22: 1-25.
- Guéron, Jacqueline, and Teun Hoekstra. 1995. The temporal interpretation of predication. In Anna Cardinaletti and Maria T. Guasti, eds., *Syntax and semantics* 28, 77-107. San Diego: Academic Press.
- Hamblin, C. L. 1973. Questions in Montague English. *Foundations of Language* 10: 41-53.
- Huang, C.-T. James. 1993. Reconstruction and the structure of VP: some theoretical consequences. *Linguistic Inquiry* 24: 103-138.
- Karttunen, Lauri. 1977. Syntax and semantics of questions. *Linguistics and Philosophy* 1: 3-44.
- Kong, Lingda. 1994. Yingxiang Hanyu juzi zizu de yuyanxingshi [Linguistic forms that affect sentence completeness in Chinese]. *Zhongguo Yuwen* 6: 434-440.
- Lasnik, Howard. 1995. Verbal morphology: *Syntactic Structures* meets the Minimalist Program. In Héctor Campos and Paula Kempchinsky, eds., *Evolution and revolution in linguistic theory*, 251-275. Washington, D.C.: Georgetown University Press.
- Li, Charles N., and Sandra A. Thompson. 1981. *Mandarin Chinese: a functional reference grammar*. Berkeley and Los Angeles: University of California Press.
- Lu, Jianming. 1986. Xiandai Hanyu li dongci zuo weiyu wenti qianyi [On verbal predicates in modern Chinese]. *Yuwen Lunji* 2.
- Shen, Jiexuan. 1995. 'Youjie' yu 'wujie' [Boundedness and unboundedness]. *Zhongguo Yuwen* 5: 367-380.
- Smith, Carlota S. 1991. *The parameter of aspect*. Dordrecht: Kluwer Academic Publishers.
- Stowell, Tim. 1996. The phrase structure of tense. In Johan Rooryck and Laurie Zaring, eds., *Phrase structure and the lexicon*, 271-286. Dordrecht: Kluwer Academic Publishers.
- Sybesma, Rint. 1996. Chinese functional projections. Handout of talk given at Theoretical East Asian Linguistics Workshop, April 13, University of California, Irvine.
- Tang, Sze-Wing. 1998. Parametrization of features in syntax. Doctoral dissertation, University of California, Irvine.
- Yuan, Yulin. 1993. *Xiandai Hanyu qishiju yanjiu* [On imperative sentences in Mandarin]. Beijing: Peking University Press.
- Zhang, Ning. 1997. Syntactic dependencies in Mandarin Chinese. Doctoral dissertation, University of Toronto.