The syntax of complex sentences in Chinese

Call for papers for a special Linguistic Analysis issue

The notion of *complex sentence* implies the dichotomy between *main clause*, on the one hand, and *adjunct clause* or *subordinate clause*, on the other. *Subordinate clause* is foremost a semantic label, which does not necessarily reflect the structural hierarchy. *Adjunct clause* started out as a syntactic notion within X-bar theory, but its use was extended to cover all types of non-main clauses, irrespective of whether they were actually syntactically adjoined to the main clause or not. In this call for papers, we use the terms *main clause* and *adjunct clause*, notwithstanding the hybrid syntactic-semantic nature of the latter. In other words, these terms are used as pre-theoretical notions, which do not reflect the syntactic structure involved. In fact, to determine the precise hierarchy between *main clause* and *adjunct clause* in Chinese complex sentences is the very motivation underlying this special issue.

This investigation is necessary because the structure of complex sentences in Chinese has hardly been studied within the generative framework. This is surprising insofar as complex sentences served as crucial testing ground for binding theory in the wake of Huang (1982), in particular the binding construal possibilities for *zìji* 'self' (cf. Huang/Li/Li 2009, ch. 9 for discussion and references). The wealth of studies on *zìji* 'self' hardly ever addressed the question of the internal structure of complex sentences, but implicitly took for granted the identity between Chinese and English in this domain. This might partly be due to the fact that for a long time syntactic theory did not provide many structural options for the analysis of complex sentences other than right or left adjunction to the main clause. However, even within the adjunction scenario more fine-grained approaches to complex sentences existed.

For example, Haiman (1978) back in the seventies argued for an analysis of conditional clauses in English and other languages as topics from a semantic and morphosyntactic point of view. Similarly, when Greenberg's (1963: 111) universal 14 ("In conditional statements, the conditional clause precedes the conclusion as the normal order in all languages.") is transposed into structural terms, the conditional clause occupies a position higher than the consequent clause, as demonstrated by Whitman (2008: 235):

(1) [S'] If conditionals are specifiers of S' [S] they precede the consequent

This can be directly applied to Chinese where conditional clauses are in fact clausal topics and as such precede the consequent as well. Translating the X-bar schema with an S-adjunction of the clausal topic in (1) into a split CP \grave{a} la Rizzi (1997), this results in a configuration where the conditional clause is located in the specifier position of Topic Phrase, whose head can be realized optionally by topic markers such as ne (cf. Gasde & Paul 1996):

(2) [TopP [cond.cl. Rúguǒ tā bù lái] [Top' [Topo ne] [TP wǒ jiù zìjǐ qù]]] if 3SG NEG come TOP 1SG then self go 'If he doesn't come, then I'll go on my own.'

Other types of adjunct clauses are likewise to be analyzed as clausal topics:

(3) [TopP [inferential.cl. Jìrán tā yijīng lái -le] [Top', [Topo ne] since 3SG already come-PERF TOP [TP wŏmen jiù zhíjīe gēn tā shuō]]].

1PL then directly to 3SG say 'Since he is already here, we can talk to him directly.'

- (4) [TopP [concessive.cl.] Suīrán tā hěn piàoliàng] [Top' [Topo ∅] although 3SG very pretty [TP wŏ háishì bù xihuān tā]]].

 1SG still NEG like 3SG 'Although she is pretty, I still don't like her.'
- (5) [TopP [causal.cl.] Yīnwei tā méi yǒu shíjiān] [Top', [Top∘ Ø] because 3SG NEG have time [TP wǒ zhǐ néng zìjǐ qù]]].

 1SG only can self go
 'Because he has no time, I cannot help but going on my own.'

While the topic position occupied by these different types of adjunct clauses is evident, the categorial identity of the so-called "conjunctions" (rúguð 'if', jìrán 'since', suīrán 'although', yīnwèi 'because') is not clear. First of all, these "conjunctions" very probably do not form a homogeneous class, i.e. it is not excluded that some are adverbs (i.e. phrases) and some are heads (i.e. complementizer). For example, rúguð 'if', jìrán 'since', suīrán 'although' can also occur to the right of the subject and in that respect pattern with sentential adverbs such as xiǎnrán 'naturally', qíshí 'in fact', xìnghǎo 'fortunately' (cf. Paul (to appear) for discussion and references):

- (6) $[T_{opP} [c_{ond.cl.}]$ Tā rúguờ bù lái $][T_{op}, T_{op}]$ ne $[T_{P}]$ wờ jiù zìjǐ qù]]] 3SG if NEG come TOP 1SG then self go 'If he doesn't come, then I'll go on my own.'
- (7) [TopP [concessive.cl. Tā suīrán hĕn piàoliàng] [Top', [Top∘ Ø] 3SG although very pretty [TP wŏ háishì bù xihuān tā]]].

 1SG still NEG like 3SG
 'Although she is pretty, I still don't like her.'
- (8) {Xiǎnrán /Qíshí} tā {xiǎnrán/qíshí} huì shuō fǎwén naturally/ in.fact 3sg naturally/in.fact can speak French 'Naturally/In fact, he can speak French.'

At first sight, the same observation also seems to hold for *yīnwèi* 'because':

(9) [TopP [causal cl. Tā yīnweì méi you shijiān] [Top, [Top, Ø] 3SG because NEG have time [TP míngtiān de huìyì jiù bèi qǔxiāo-le]]]. tomorrow SUB meeting then PASS cancel-PERF 'Because he has no time, tomorrow's meeting was canceled.'

However, this is somewhat puzzling, because given the existence of the preposition $y\bar{\imath}nw\dot{e}i$ 'because of', it would appear more plausible to analyze $y\bar{\imath}nw\dot{e}i$ in example (4) as a head as well, i.e. as a complementizer. If one wants to accommodate a C-analysis of $y\bar{\imath}nw\dot{e}i$ 'because' with the position it occupies in example (9), it is necessary to postulate a TopP hosting $t\bar{a}$ above the CP headed by $y\bar{\imath}nw\dot{e}i$ 'because'; as a consequence, an empty pronoun coreferential with $t\bar{a}$ 'he' has to be present in the clausal complement of $y\bar{\imath}nw\dot{e}i$ 'because'. This TopP (labeled TopP₂) in turn occupies the specifier position of the matrix TopP₁:

(10) [TopP1 [TopP2 Tāi [causalCP yīnweì [TP proi méi you shijiān]]] [Top1' [Top1° Ø] 3SG because NEG have time [TP míngtiān de huìyì jiù bèi qǔxiāo-le]].

tomorrow SUB meeting then PASS cancel-PERF
'Because he has no time, tomorrow's meeting was canceled.'

In principle, this opens the possibility of analyzing $r\'ugu\~o$ 'if', jir'an 'since', $su\~ur\'an$ 'although' as C-heads as well and to derive their position to the right of $t\=a$'s/he' (cf. (6) - (8) above) not by their sentential adverb status, but by topicalization of the subject $t\=a$'s/he'. To decide between these two competing analyses and their ramifications is one of the central research questions to be addressed and hopefully solved in this special issue.

The categorial identity of the temporal adjunct clause with *de shíhòu* 'SUB moment' = 'when' is another longstanding problem in Chinese syntax, which still awaits a satisfactory analysis. In general it is analyzed as a gapless relative with *shíhòu* as head noun ('the moment when...'), on a par with *de dìfang* 'the place where'. However, given the paradigm of temporal postpositions, i.e. heads, such as *yǐqián* 'before', *yǐhòu* 'after', *yǐlái* 'since' taking a clausal complement, it is in principle not excluded to assign head status (i.e. C) to *deshíhou*.

- (11) Tā dào Běijīng de shíhou /yǐqián/yǐlái, wūran jiù yǐjīng hěn yánzhòng le. 3SG arrive Beijing SUB moment/before/since pollution then already very serious SFF 'When/Before he arrived at Beijing, the pollution had already been very bad.' 'Since he arrived at Beijing, the solution has been very bad.'
- (12) Tāmen jié hūn de dìfang jiù zài fǎguó. 3PL unite marriage SUB place indeed in France 'The place where they got married is indeed in France.'

Let us now leave the issue of the categorial identity of "conjunctions" and return to the syntactic properties of complex sentences themselves. One influential account of adverbial clauses, hence complex sentences is that by Haegeman (2012), as well as her earlier and subsequent works. (Note that Haegeman uses the term *adverbial clause* rather than *adjunct clause*.) She establishes a correlation between the internal syntax of adverbial clauses, i.e. the (non) availability of argument fronting, on the one hand, and their degree of "integration" (central vs peripheral) with the main clause, on the other.

- (13) *When [the second chapter] my students couldn't handle last week, I returned to the intro. (Haegeman 2012: x; (2a))
- (14) When [last week] my students couldn't handle the second chapter last week, I returned to the intro.

Phenomena such as argument fronting are considered to be typical of main clauses, hence *Main Clause Phenomena* (MCP). Importantly, MCP are not restricted to main clauses, but also exist in a relatively well-defined subset of adverbial clauses, viz. the "peripheral" adverbial clauses in Haegeman's work. (Also cf. Heycock 2006 for an overview of MCP, also known as *embedded root phenomena*.) In earlier approaches, the incompatibility of central adverbial clauses with argument fronting was accounted for by the truncation account (cf. Haegeman 2006) postulating a reduced left periphery for central adverbial clauses, hence incapable of hosting fronted arguments. By contrast, Haegeman (2012) proposes a movement account for the derivation of central adverbial clauses, in combination with selective

intervention as discussed in Starke (2001) and Rizzi (2004). More precisely, "temporal and conditional clauses are hidden relatives [and derived by movement; VP&WP] in which argument fronting is ruled out by intervention" (Haegeman 2012: 285).

This is reminiscent of Chinese temporal clauses involving...de shíhòu as outlined above. Similarly, conditional clauses ending in dehuà (analysed as a non-root C in Paul 2015: 293) have been parsed as huà 'word(s)' preceded by a relative clause. This type of analysis is controversial, because it has not been worked out in full detail; in particular it has not been systematically checked whether the entire range of phenomena observed is indeed compatible with a relative clause analysis. Furthermore, both temporal and conditional clauses are not limited to those involving de shíhòu and dehuà, respectively. There are also the cases illustrated in (12) above where the postpositions yǐqián 'before', yǐhòu 'after', yīlái 'since' select a clausal complement and where accordingly a relative clause analysis is excluded. Conditional clauses likewise display a large variety and can be completely "bare" (cf. (15) below) or contain items such as rúguŏ (cf. (2) above), yàoshì, wànyī 'if, in case of' etc. whose categorial identity still needs to be determined.

(15) $[T_{opP} [c_{ond.cl.} T\bar{a} \quad b\dot{u} \quad l\acute{a}i] [T_{op'} [T_{op'} \emptyset] [T_{P} \quad w\check{o} \quad ji\dot{u} \quad z\dot{i}j\check{i} \quad q\dot{u}]]]$ 3SG NEG come TOP 1SG then self go 'If he doesn't come, then I'll go on my own.'

The preceding discussion leads to a set of related questions touching both on the categorial status of the so-called adjunct clauses themselves and their hierarchical position with respect to the main clause, potentially to be formulated in terms of *central* vs *peripheral* integration. In addition, it must be examined whether the availability of argument fronting *within* the adverbial clause can indeed serve as a diagnostic for the derivation by movement of the adverbial clause itself, as claimed by Haegeman (2012: 285).

The non-exhaustive list below provides the research questions to be addressed in this special issue and for which contributions are invited that provide solid evidence in favor of the analysis they propose.

- (1a) What is the precise structural hierarchy for the configurations
 - i) adjunct clause > main clause
 - ii) main clause > adjunct clause
- (1b) Which type of adjunct clause (temporal, conditional, concessive, purposive etc.) must precede/follow the main clause, and which type may appear in either position?
- (2) How can the configurations in (i) and (ii) be distinguished from the "afterthought" construction (cf. Chao Yuen Ren 1968: 2.14.3; Lu Jianming 1980, Gasde & Paul 1996)? The main evidence for the "added-on" nature of the afterthought part already known from the literature is the unacceptability of "conjunctions" in the main clause (cf. (iii)), the obligatory adjunction of the afterthought to the right of an SFP, if the main clause is a CP (cf. (iv)) and the faster tempo (*piu mosso*) for the afterthought, as observed by Chao Yuen Ren (1968: 132).
 - (iii) Wǒ (*jiù) bù cānjiā huìyì le, rúguǒ tā lái dehuà 1SG then NEG attend meeting SFP if 3SG come C[-root] (*Then) I won't attend the meeting, if he comes.'
 - (iv) *Wŏ bù cānjiā huìyì , rúguŏ tā lái dehuà le 1SG NEG attend meeting if 3SG come C[-root] SFP

- (3) Are adjunct clauses merged *in situ* in their respective surface positions or do they move there?
- (4) What are the possible categorial lables discernible for adjunct clauses? Proposition: TP or CP; Adposition Phrase with a clausal complement; DP with a relative clause?
- (5) Which of the so-called conjunctions are heads, i.e. adpositions or complementizers, and which are phrases, i.e. adverbs?
- (6) Are there constraints on material in the left periphery of adjunct clauses which distinguish them from main clauses? If yes, do these constraints depend on the category of the adjunct clause?
- (7) Does Chinese replicate the *Main Clause Phenomena* observed for English and other languages? In other words, can we identify a subset of embedded clauses which display the same set of phenomena as main clauses and therefore have to be distinguished from those embedded clauses that strictly exclude MCP?
- (8) Does Chinese allow to choose between the truncation approach and the movement approach?

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Recap of "Call for papers" and important information for submissions

Linguistic Analysis (http://linguisticanalysis.com) invites contributions for a special issue, edited by Victor Junnan Pan and Waltraud Paul, that will focus on the syntax of *complex sentences* in Chinese. The main goal of the special issue is to determine the precise hierarchy between *main clause* and *adjunct clause* in the different types of complex sentences.

Such an investigation is necessary, because the structure of complex sentences in Chinese has hardly been studied within the generative framework. This is surprising insofar as complex sentences served as crucial testing ground for binding theory in the wake of Huang (1982), in particular the binding construal possibilities for *ziji* 'self' (cf. Huang/Li/Li 2009, ch. 9 for discussion and references). The wealth of studies on *ziji* 'self' hardly ever addressed the question of the internal structure of complex sentences, but implicitly took for granted the identity between Chinese and English in this domain.

For this special issue, we welcome original full-length articles couched in any formal framework that provide solid evidence for the analysis they propose. Submitted articles will undergo rigorous peer review. Abstracts of 2 pages, including examples and references, should be submitted for consideration by **May 1, 2016** as PDF attachment to victor.pan@univ-paris-diderot.fr and waltraud.paul@ehess.fr. Authors of abstracts selected for inclusion (pending subsequent peer reviewing) will be notified by June 1, 2016. Complete papers ready for review should be sent to the editors before October 3, 2016. Decisions and peer reviews will be sent to the authors no later than December 31, 2016, with expected publication of the special issue by late 2017.