## Mandarin Gapless Relative Clause as Reduced Relative Clause

**Overview:** In Mandarin, nouns such as 'sound' and 'smell' can be modified by a gapless relative clause (Zhang 2008, Tsai 2008, Cheng and Sybesma 2005). This paper proposes a new analysis of Mandarin gapless relative clauses as a reduced relative clauses with a nominalized vP structure with new evidence that (1) subject of a gapless relative clause can be optionally marked with genitive and (2) aspectual markers are infelicitous for syntactic reasons.

(1) Langlang tan ganqing de shengyin hen dongren.
 Langlang play piano REL sound very moving.
 'The sound of Langlang's piano playing is very moving.'

**Background**: Zhang (2008) shows that a gapless RC cannot be coordinated with a regular RC. This suggests a gapless RC is structurally different from a regular RC.

(2) \* Wo ganjuedao-le [[Lulu mai de cai] he [ta chao cai de weidao]
I Fell-ASP [[Lulu buy DE vegetable] and [he fry vegetable DE smell]
Intended 'I felt the smell of the vegetables that Lulu bought and that he fried.'
cited from Tsai (2008,112)

Cheng and Sybesma (2005) claim that gapless relative clauses must be generic because aspectual markers are infelicitous.

(3) a. \* ta chang-guo (nei-shou ge) de shengyin.
he sing-EXP that-CL song DE sound.
Intended: 'the voice that he had when he sang (the) song before.'

b. ta chang (nei-shou ge) de shengyin.
he sing-EXP that-CL song DE sound.

'the voice of his singing that song.'

Cheng and Sybesma (2005,75)

**Evidence for Reduced Structure**: I argue that a reduced RC analysis (cf. Hale 2002, Miyagawa 2008) captures the data above better. Crucially, aspectual markers are infelicitous in gapless relative clause because Asp Head is not available.

First, I argue that the vP of gapless RC is nominalized. In gapless RC, subject can be optionally marked with a Possessive marker de and subject can be absent. Genitive case marking of the subject of an RC suggests that the RC is a reduced RC (cf. Miyagawa 2008).

(4) a. Langlang de tan gangqin de shengyin.

Langlang POSS play piano DE sound.

'The sound of Langlang's playing the piano.'

Gapless RC

b. \* Langlang de zuotian tan guo de quzi.

Langlang POSS yesterday play EXP DE song.

Intended: 'The song that Langlang played yesterday.'

RC

(5) Wo tingdao tan gangqin de shengyin.

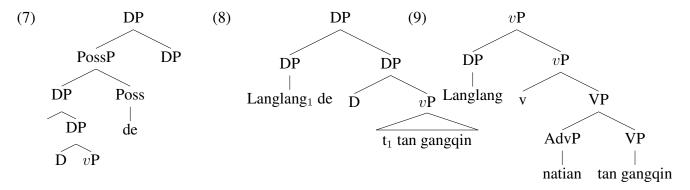
I hear play piano DE sound.

'I heard the sound of piano playing.'

Second, I argue that aspectual markers are infelicitous for the lack of AspP in gapless RC, not because of genericity requirement, contra Cheng and Sybesma(2005). A temporal modifier such as 'that day' can occur in gapless RC, making the clause specific.

(6) Langlang na tian tan gangqin de shengyin hen bang.Langlang that day play piano DE sound very good.'The sound of Langlang's playing the piano that day was very good.'

**Analysis**: Adopting Miyagawa(2008)'s analysis, I propose that Mandarin Gapless RC has a reduced structure of vP, the vP is nominalized by a null D head, and the optional genitive marking of the subject results from movement of subject to Spec,DP. De is not a Relational particle here as in regular RC, but a Possessive marker like 's' in English.



This analysis immediately predicates that aspectual markers are infelicitous in gapless RC because of the lack of AspP structure, without wrongly predicting that gapless RC must be generic. Because AdvP in Mandarin can attach to VP (Ernst 1994), temporal adverb such as *natian* 'that day' is allowed.

A reduced RC analysis is also semantically well motivated. Because vP is semantically  $\lambda e[P(e)]$ , an event predicate, by nominalizing vP we get an instantiated event from the set described by P. This analysis says that the Head noun is related to this event. If the gapless RC has a full AspP structure, the semantics would be  $\lambda i[P(i)]$  instead and we would not be able to relate the Head noun to the event anymore.

**Conclusion:** This paper proposes a new analysis of Mandarin gapless RC as reduced RC with vP structure. It is preferable to a full RC analysis, because it explains the optional genitive subject marking and infelicity of aspectual markers. My analysis also suggests that gapless relative crosslinguistically are reduced in structure given the semantic motivation of relating the Head noun to an event.

word count: 490

**References:** Cheng, L. and Sybesma, R. 2005. A Chinese Relative. *Organizing Grammar: Studies in Honor of Henk van Riemsdijk:* 6976 • Ernst, T.1994. Functional Categories and the Chinese Infl. *Linguistics 32, no.* 2: 191-212.• Hale, Ken.2002. On the Dagur Object Relative: Some Comparative Notes. *Journal of East Asian Linguistics 11, no.* 2:109-22.• Miyagawa, Shigeru.2008. Genitive Subjects in Altaic.In*Proceedings of the Workshop on Altaic Formal Linguistics (WAFL4), MITWPL,56*:181-98• Tsai, Hui-Chin Joyce.2008. On Gapless Relative Clauses in Chinese. *Nanzan Linguistics: Special Issue 5*: 109-24. Zhang, Niina.2008. Gapless Relative Clauses as Clausal Licensors of Relational Nouns. *Language and Linguistics 9, no. 4*: 1003-1026.