Overview

I reanalyse what has been named a ‘bare conditional’ in Mandarin as a \textit{wh}-correlative. The proposal has repercussions not just for the typology of correlatives, but also for our understanding of \textit{wh}-movement in in-situ languages, and the asymmetry between \textit{wh}-nominals and \textit{wh}-adverbials in Mandarin.

Background

Cheng & Huang (1996) dubbed the Mandarin construction in (1) as a ‘bare conditional’, which has the defining property of involving a pair of \textit{wh}-phrases matched in both form and number:

\begin{equation}
\text{Ni ai chi \textit{shenme}, wo gei ni zhu \textit{shenme}.}
\end{equation}

\begin{equation*}
\text{you love eat what I for you cook what}
\end{equation*}

‘I cook whatever you love to eat for you.’

They analysed (1) as a conditional where two \textit{wh}-indefinites are unselectively bound by a covert necessity operator. This account faces many problems: (i) unlike conditionals, the construction in (1) allows non-interrogative use of \textit{wh}-adverbials \textit{zenme} ‘how’ and \textit{weishenme} ‘why’; (ii) the conditional paraphrase of (1) is permitted only under a generic context but not an episodic context (Huang, 2010); (iii) the pair of \textit{wh}-phrases cannot be indefinites due to a violation of the Novelty Condition (Chierchia, 2000).

Matching effect

I propose that a \textit{wh}-correlative analysis for (1) captures its key properties. Correlatives are left-adjointed relative clauses with a corresponding proform in the main clause (Bhatt 2003). Mandarin \textit{wh}-correlatives exhibit a “matching effect” which imposes strict identity requirement on the two \textit{wh}-phrases: neither of the \textit{wh}-phrases can be replaced by a pronoun or a definite description (2); nor can the NPs inside complex \textit{wh}-phrases differ even minimally (3). Recent accounts proposing a question-based semantics for (1) have no resources to capture this matching effect on the form of \textit{wh}-phrases (Liu 2018).

\begin{equation}
\text{Ni xiang qing \textit{shei}, wo jiu qu qing \{\textit{shei} / *\textit{ta} / *\textit{na-ge ren}\}.}
\end{equation}

\begin{equation*}
\text{you want invite who I PRL go invite who / 3SG / that-CL person}
\end{equation*}

‘I will go invite whoever you want to invite.’

\begin{equation}
\text{Na-ge \textit{haizi} zai ku, na-ge \{\textit{haizi} / *\textit{xiahai}\} jiu shi e le.}
\end{equation}

\begin{equation*}
\text{which-CL child PROG cry which-CL \{child / child\} PRL be hungry PERF.}
\end{equation*}

‘Whichever child is crying must be hungry.’

Proposal

I propose a movement-based account for \textit{wh}-correlatives using the following three key ingredients: \textit{wh}-movement, clausal A’-movement, and morphological reanalysis \textit{Fusion}. I argue that the pair of identical \textit{wh}-phrases in \textit{wh}-correlatives are derivationally related to each other. The sentence is base-generated like an English free relative, but with the \textit{wh}-word appearing in situ inside the relative clause.

To derive a \textit{wh}-correlative, I argue that the \textit{wh}-phrase first undergoes \textit{wh}-movement for relativization (4a), then the relative clause A’-moves to a topic position (4b). I assume the copy theory of movement and suggest that copies delete unless morphological reanalysis blocks deletion. After the correlative clause is fronted, the lower copy of the \textit{wh}-phrase fuses with the D (4c), blocking deletion. The fused element is spelled out as an overt determiner in Hindi, but results in multiple spell-out of \textit{wh}-phrases in Mandarin, a determiner-less language. The different spell-out rules captures the typological relations between Hindi and Mandarin correlatives.

The derivation involves \textit{Step 1} \textit{wh}-movement for relativization and \textit{Step 2} fronting of the correlative:
Evidence for Step 1: I take relativization to involve wh-movement and island effects to be signatures of this movement. In (5), island effects arise as the result of extracting the wh-phrase out of an island in the correlative clause: the wh-nominal shenme ‘what’ in the correlative clause is inside an adjunct phrase zai … zhongtu ‘in the middle of’, incurring an island violation due to the movement in Step 1.

(5) *Ni [zai shenme zhongtu] shoushang, wo jiu bikai shenme
you in what during injure I PRL avoid what
Intended ‘I will stay away from whatever thing/event during which you got injured.’

Evidence for Step 2: The wh-phrase in the main clause is also sensitive to island constraints, as a result of Step 2. First, (6) shows that shenme ‘what’ in the main clause cannot be extracted from an adjunct island:

(6) *Shenme kongbu, Yuehan jiu [zai shenme zhongtu] shuizhao.
what scary John PRL during what middle fall-asleep
Intended: ‘John falls asleep during the middle of whatever is scary.’

Further, reconstruction under Principles A and C suggests the correlative clause originates from below the subject of the main clause: the long-distance reflexive ziji in the correlative clause can be bound by John if the latter is in the subject (7a) but not the object (7b) position of the main clause. In (8), John in the correlative clause cannot be co-indexed with the subject pronoun ta, which c-commands John at LF.

(7) a. Shei shanghai-le ziji, Yuehan jiu baofu-le shei.
who hurt-PERF self John PRL revenge-PERF who
‘John took a revenge on whoever hurt him (=John).’

b. *Shei chumai-le ziji, shei jiu baofu-le Yuehan.
who betray-PERF self who PRL revenge-PERF John
Intended: ‘Whoever betrayed John took a revenge on him.’

(8) ??Shei da-le Yuehan, ta jiu taoyan shei.
who hit-PERF John 3SG PRL hate who
Intended: ‘John hates whoever hit him.’

Wh-movement & wh-in-situ The current proposal derives relativization via wh-movement. I’ve shown wh-nominals to be island-sensitive in wh-correlatives, leading to an analysis thereof. However, this runs counter to Huang’s (1982) observation that wh-nominals are island-insensitive in Mandarin questions. Why are wh-nominals sensitive to islands in wh-correlatives but not questions? Borrowing insights from Nishigauchi (1990/2012), I suggest that the answer lies in the availability of (covert) pied-piping of an island containing a wh-nominal in both questions and wh-correlatives. Evidence for this comes from the fact that, although wh-phrases show island effects in the correlative clause (5) as well as the main clause (6), the sentence becomes acceptable if the islands containing the pair of wh-phrases are identical:

(9) Zhangsan xihuan [shei qing de zuojia], Lisi jiu taoyan [shei qing de zuojia].
Zhangsan like who invite REL author Lisi PRL hate who invite REL author
‘Lisi hates the authors invited by whoever invited the author Zhangsan likes.’

This may suggest that pied-piping of the island involving wh-nominals is operative: in (9), the entire island including the wh-phrases is pied-piped, satisfying the matching effect. Clausal pied-piping occurs in both wh-correlatives and questions, but multiple spell-out occurs only in wh-correlatives since there’s no Fusion with D involved in questions, creating the illusion that wh-nominals are “island-insensitive” in Mandarin questions. It is only in wh-correlatives that we observe the outcome of clausal pied-piping. Meanwhile, wh-adverbials don’t have this option of pied-piping large constituents that contain a wh-phrase (Cable 2010), explaining the nominal/adverbial asymmetry in Mandarin questions.