Toward the copular status of Chinese clefts—Evidence from diachronic syntax

Data This paper develops a substantive link between three independent and chronologically separate diachronic patterns in Classical Chinese. In each development, a newly copularized (reanalyzed from lexical sources) morpheme occurs in both a copular clause and a cleft. The three parallel diachronic patterns are shown in the following diagram and exemplified in (1-3). (a)-examples illustrate copular uses (where modals, negation and adverbs precede copula verb heads in Classical Chinese), and (b)-examples illustrate clefts.

<table>
<thead>
<tr>
<th>Copula</th>
<th>Grammatical change pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wei</td>
<td>Emergence (via reanalysis) of copula clause &amp; cleft (1300-1050 BC) ⇒ (Copula &amp; cleft) Simultaneous decline in Classical Chinese (600-400 BC)</td>
</tr>
<tr>
<td>Shi</td>
<td>Emergence of copula clause &amp; cleft (~500 AD) ⇒ (Copula &amp; cleft) Simultaneous decline in modern Cantonese &amp; Hakka (18th century AD)</td>
</tr>
<tr>
<td>Xi</td>
<td>Emergence of copula clause &amp; cleft (~1100 AD) ⇒ (Copula &amp; cleft) Simultaneous decline in modern Mandarin (18th century AD)</td>
</tr>
</tbody>
</table>

(1) a. Ya bin qi wei chen. b. Wei di ta wo nian.
   Noble Bin FUT COP minister COP god curse my harvest
   “The Noble Bin will be the minister.”
   (both: Collections of Oracle Bones, 13th - 11th century BC)

(2) a. Yizhou yuan bu shi yongren. b. Fei shi du shinai you zhenru ye.
   Yizhou originally NEG COP mediocre.person NEG COP delivery start have dharma PRT
   “Yizhou was originally not a mediocre person.”
   (both: Lectures on the Vimalakirti Sutra, 8th century AD)

(3) a. Ci yi bu xi hongwu jiuzhi. b. Xi ningxia zongbingguan chuzhi.
   This also NEG COP hongwu old.rule COP ningxia officer in.charge
   “This was also not the Hongwu reign’s old rule.”
   (both: Collections by Yu Qian, 1457-1510 AD)

All the three copula morphemes underwent independent decline processes: Wei disappeared from copular clauses and clefts by 6 - 4th century BC. Shi’s functions in copular clauses and clefts are retained in modern Mandarin yet lost in modern Cantonese and Hakka (all descendants of Classical Chinese). Xi exhibits the opposite pattern: Productive uses in copular clauses and clefts remain in modern Cantonese/Hakka but not in Mandarin. Individual emergence and decline processes are independently observed in previous case studies (Yue-Hashimoto 1969; Peyraube & Wiebusch 1994; Pulleyblank 1995; Bisang 1998; Tang 2009; Meisterernst 2010). The novel observation in this paper is that these three similar processes form a recurring pathway.

The copular approach to Chinese clefts The copular approach to Chinese clefts posits that clefts are underlyingly a copular structure. One proposal, in the spirit of Percus (1997), proposes that the subject of the copula verb is occupied by a headless relative taking a covert definiteness determiner that extraposes to the right of the focused phrase at surface syntax (cf. Li & Thompson 1989). An implementation of (4) is in (5):

(4) Shi Zhangsan Yao lai. [modern Mandarin]
   COP Zhangsan will come
   “It is Zhangsan that will come.”

(5) [[DEF e1] shi [Zhangsan]] [∅head Op Yao lai]i (Percus syntax)

Another proposal, by Hole (2011), proposes that, in clefts, the copula verb takes a small clause (CP) argument (see also Cheng 2008). The focused phrase moves to [Spec, CP] of the small clause, and predicate abstraction applies to the CP predicate. The C0 head functions as a special definite determiner, deriving a maximal event reading of the CP predicate.

(6) [VP shi [CP [Spec Zhangsan,1] [c- C0 [+def] [TP t1 [VP Yao lai]]]]] (Hole syntax)

The focus movement approach to Chinese clefts Under a focus movement approach, Chinese clefts are not headed by a copula verb. Rather, the copula moves to the left periphery with the focused phrase (Teng 1979, Hu 1982, Zhu 1996). Specifically, assuming a Rizzi-style articulated CP, it is argued that the focused phrase in the cleft undergoes focus movement to [Spec, FocP] from its base position at FinP to check the [exhaustive] feature (Hiraiwa &
Ishihara 2002). Subsequently, the copula morpheme in FinP undergoes remnant movement to a projection structurally higher than FocP (e.g. TopP, cf. É Kiss 1998, Meinunger 1998). A focus-based implementation of (4) is as follows.

\[
\text{(7) } \text{[TopP} \text{shi} [\text{FocP} \text{Zhangsan} [\text{Foc} \text{Foc}^0 \text{[FinP} e_i \text{yao lai]})]
\]

**Evidence for a copular approach** I argue that the recurring pathway identified in Classical Chinese is compatible with a copular approach to clefts. Specifically, after reanalysis of a lexical item into a copula takes place, learners acquire the newly copularized item as an element of copula verbs within their lexicon. Assuming that lexical insertion is triggered, such that the new element is inserted to the copula verb head position in the syntax, we would expect that the same copula element occurs in all constructions that host a copula verb projection. This includes the cleft construction, which is a copular clause construction within learners’ grammar, according to the copular approach. In other words, the recurring diachronic pathway is reduced to a reanalysis-and-extension process (Harris & Campbell 1995): the reanalysis of a morpheme as instantiating a copula verb category results in the extension of this morpheme to structures that host the copula verb category. The copular approach also readily accounts for the coordinated decline pattern witnessed in the three morphemes wei, shi and xi: it follows from the homogeneity of copular and cleft structures that the loss of productivity of a given copula verb predicts that it ceases to be used in both copular clauses and clefts.

**Problems for a focus movement approach** One issue encountered by a focus-based approach is the lack of clear motivations for why copula morphemes demonstrate a recurring trend of moving to a projection higher than FocP (except for the need to derive the correct word order). A more severe difficulty is that the focus approach fails to account for the simultaneous decline of the copular and cleft use. Such analysis would commit to positing two homophonous lexical entries for the copula morpheme that occurs in copular clauses and in clefts, respectively. A direct consequence is the absence of convincing reasons why both lexical entries’ loss should be closely correlated.

**Semantic evidence** Several recent semantic proposals that derive the exhaustive reading of clefts based on a copular syntax (without focus movement) are applicable in Chinese. For example, Büring & Križ (2013) assume with a copular approach that the cleft structure contains a definite operator. Crucially, the definite description projects a conditional presupposition (8a). Accordingly, an exhaustive reading is derived for (4), as is shown in (8b). This semantics is in principle compatible with both the Percus-syntax and the Hole-syntax.

\[
\text{(8) a. A structure of the form [COP aP] b. Given the structure } [\text{shi} [\text{Zhangsan} [\text{yao lai}]]] \\
\text{Presupposes: } [\text{a}] \text{ not a proper part of } [\text{P}]. \text{ Presupposes: } [\text{Zhangsan}] \text{ not a proper part of } [\text{will come}].
\]

If the situation includes more than one individual who will come (e.g. Zhangsan and Lisi), [Zhangsan] will be a proper part of [will come], falsifying the presupposition. If no individuals will come in the situation, the presupposition is satisfied, but the at-issue semantic content (i.e., what is asserted) will be false. Thus, the only way to satisfy both the presupposition and the assertion is for Zhangsan to be the maximal (only) individual who will come, hence an exhaustive reading.

**Structural Evidence** Syntactically, focus movement predicts island sensitivity. This prediction is not borne out by the following constructed Complex NP island example in Mandarin (based on three Northern Mandarin speakers I consulted):

\[
\text{(9) Shi } [\text{na-pian lunwen}]_i \text{ ta xiangxin hui you } [\text{ken jieshou e}_i \text{ de pingwei}.] \\
\text{COP } [\text{that-CLF paper}]_i \text{ he believe will have willing.to accept } e_i \text{ REL reviewer}
\]

“It is [that paper] that he believes there will be reviewers [who are willing to accept e_i].”

The circumvention of island effects might be due to the availability of empty pronounal within Chinese complex NPs (Lin 2005; Li 2007), suggesting that (9) does not involve a movement-created operator-variable binding relation. This finding is compatible with a copular analysis that posits no focus movement, and is consistent with the diachronic data.