Clausal subordination and coordination in the nominal domain in Mandarin Chinese
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Despite the efforts to unify so-called noun-complement clauses (NCCs) and relative clauses (RCs) in studies that focus on different languages, either by analyzing the former as relatives or by analyzing the latter as complements, it has been argued that NCCs and RCs in Mandarin Chinese should be of different syntactic statuses (i.e., complements versus adjuncts), based on a series of different behaviors (e.g., an NCC must stay closer to the head noun than any RC, RCs but not NCCs can be stacked, an NCC cannot be coordinated with an RC, etc.) (Huang, 2016), though both precede the head noun and are introduced by *de*. It has also been proposed that the *de*s that link the two types of clauses are also different, based on evidence from Taiwanese (Li, 2012). In this abstract, I provide new evidence based on coordination to support this line of argument. I also suggest that NCCs (and maybe VCCs, too) in Mandarin are DPs.

The main observation is, when two NCCs are conjoined, the first conjunct cannot contain *de*; when two RCs are conjoined, the first conjunct may or may not contain a *de*.

(1) Conjunction:

a. [*Mīmi yào cízhí*] (*de) *hé* [*Lìli yào huàn xiàngmù-zǔ*] *de chuányán*
   [Mimi will resign] (*de) and [Lili will change project-team] *de* rumor
   'the rumor that Mimi will resign and the rumor that Lili will be assigned to another project' (NCC)

b. [*xiàndàihuà bǐjiào chí*] (*de*) *hé* [*fāzhǎn bǐjiào màn*] *de dìfāng*
   [modernization relatively late] (*de*) and [develop relatively slow] *de* place
   'places where modernization started relatively late and where development is relatively slow' (RC)

The pattern in (1b) can be easily understood if the *de* following an RC is analyzed as the overtly realized functional head that type-lifts a predicate into a modifier (Rubin, 2003): conjunction may happen before or after *de* is merged. As for (1a), I argue that the ungrammaticality created by the additional *de* cannot be attributed to constituency (i.e., by assuming that *de* forms a constituent with the head noun). It has been proposed that *de* is a functional head that projects along the NP spine. Such an analysis however has one unwelcome result: *de*-N sequences cannot be coordinated in any case (2a); this is quite unexpected since, with the Cl(assifier) being a head projecting above NP that requires to phonologically cliticize to an element preceding it (3a versus 3b), Cl-N sequences can nevertheless be coordinated (2b).

(2) Coordination of *de*-N sequences and of Cl-N sequences:

a. *de-N and *de*-N:
wǒ tīngshuō-le [*Mīmi yào cízhí*] *de yìcè hé* (*de) *chuányán*
I hear-Asp [Mimi will resign] *de* surmise and (*de) rumor
'I heard about the surmise and rumor that Mimi will resign'

b. Cl-N and Cl-N:
kàn-zhe dāng [*gè jiàoxùn*] *hé* [*gè lèhe*] *ba*. (Google)
watch-Asp treat…as [Cl lesson] and [Cl fun] SF.Prt.
'Just watch it as if it is a lesson and a joke.'

(3) Distribution of the bare Cl:

a. *zuìjìn zuò-le* [*gè mèng*] *tǐng kǒngbù de* (BCC corpus)
   recently do-Asp [Cl dream] quite scary *de*
   'had a dream recently and it's quite scary'

b. *[*gè mèng*] *tǐng kǒngbù de*
   *[Cl dream] quite scary *de*
   'the dream is quite scary'

Given the evidence above, I assume that the *de* following the NCC merely indicates subordination and is attached to the outermost projection that is merged to the nominal. This explains why the coordination site must be below *de* for NCCs.

I also refute a conjunction-reduction analysis, under which the prenominal clausal elements are not directly conjoined, but instead, two nominals are conjoined and subsequently the head noun is deleted. That this analysis may not be on the right track can be told from the test of quantifiers/numerals.

(4) Against conjunction-reduction:

a. [*xīnjiàn de*] *hé* [*zhèngzài jiànshè zhōng de*] *shí-sān-gè mián-fǎngzhī-chǎng* (BCC)
   [new-built *de*] and [Asp build in *de*] ten-three-Cl cotton-textile-factory

'thirteen cotton mills that are newly built or under construction' (13 cotton mills in total)

Not: 'thirteen cotton mills that are newly built and thirteen cotton mills that are under construction' (26 cotton mills in total)

b. [*"huísù   hé   dìguī"   tǐxiàn   zài nǎlǐ*]   *hé* [*zěnme tǐxiàn*]   *de liǎng-gè*
   ["backtracking   and recursion" reflect   at where]   and [how   reflect]   *de* two-Cl
   wèntí   (Google)
   question
   'the two questions of where "backtracking and recursion" are reflected and how they are reflected' (two questions, not four questions)

Note that NCCs can be conjoined by the connective *hé* (1a), which also connects nominals and cannot connect matrix clauses (5a). In contrast, the connective *érqiě*, which connects predicates and matrix clauses, cannot be used to conjoin two NCCs if one of them is interrogative (*érqiě* can be used if both are declarative). The same can be said for some verb complement clauses (5b). Therefore, I claim that in Mandarin, NCCs, and some VCCs too, are nominal in nature (see also Pietraszko, 2019 for a DP analysis of Ndebele embedded CPs).

(5) Matrix-embedded asymmetry:

a.   CP *érqiě/*hé* CP (matrix):
[*nǐ   qù bù   héshì*],   *érqiě/*hé* [*nǐ   dǎsuàn zěnme shuōfú   tā   ne?*]
[you   go Neg   suit],   and/and   [you   plan   how   persuade   3rdS   SF-Prt?]
'You should not go, and besides, how are you going to persuade her?'

b.   KNOW [CP *érqiě?*/*hé* CP]:
wǒ zhīdào [[*wǒ   yīnggāi duànliàn*]   *érqiě?*/*hé* [*zěnyàng   duànliàn   yǒuxiào*]]
I   know   [[I   should exercise]   and/and   [how   exercise   efficient]]
'I know that I should exercise and how to exercise efficiently.'

RCs cannot be DPs, however: it is possible to connect two RCs with *érqiě*.

(6) *nà-xie* [*chángqī   cúnzài de*] *érqiě* [*xùnsù èhuà   de*] *huánjìng-wèntí* (BCC)
   that-Cl [long-term   exist   *de*] and   [rapid deteriorate *de*] environment-problem
   'those environmental problems that have existed for a long time and rapidly deteriorate'

The DP analysis of complement clauses (and not for RCs) is further corroborated by two facts. One of them is, when predicating on an argument via the copula *shì*, NCCs cannot be followed by *de* while RCs must be followed by *de*. In (7a), the NCC itself denotes an individual while in (7b), a covert head noun may be posited after *de* and then the post-copular constituent is of the individual type.

(7) Predication:

a.   NP copula NCC(*-*de*):
zhè-gè-xiāoxi   jiù shì   [*dì-jiǔ-jiè   yìshù-jié   jiāng   zài Guǎngdōng jǔxíng   (*de*)]
this-Cl-news   just COP   [Ord-nine-Cl   art-festival will   at   Guangdong hold   (*De)]
'the news is exactly that the nineth art festival will be held in Guangdong' (Google)

b.   NP copula RC*(-*de*):
zhè-gè-xiāoxi   jiù shì   [*gāi-méitǐ   píng-kōng   biānzào   *de*)]
this-Cl-news   just COP   [the-media   out of-thin air   fabricate   *(De)]
'this news is just something the media fabricated out of thin air' (Google)

The other fact is, when an NCC occurs before a demonstrative, *de* can be omitted and it is possible to insert an inanimate pronoun *tā* (8a, paralleling 8c, which contains a proper name), while when an RC occurs before a demonstrative, though *de* can be omitted, it is impossible to insert the inanimate pronoun *tā* (8b).

(8) a.   [*yào-bú-yào   tǐjiǎn*]   (*tā*)   *zhè-gè wèntí*
         [need-Neg-need physical-examination]   (it)   this-Cl question
         'the question of whether physical examinations are required'

   b.   *nǐ zuótiān   tuījiàn   (**tā*)   *nà-běn shū*
        you yesterday   recommend (*it)   that-Cl book
        'the book you recommended yesterday'

   c.   *Dà-hóng-dēnglóng Gāo-gāo Guà*   (*tā*)   *zhè-bù diànyǐng*
        Raise the Red Lantern   (it)   this-Cl film
        '*Raise the Red Lantern this film*'

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