Mandarin "Descriptive Complements" are Adjuncts

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Introduction: The descriptive complement construction (DCC) is a common type of serial-predicate in Mandarin (Huang, 1982). The basic form is shown in (1). The modifying predicate is introduced by the overt (1b) particle DE. In this paper, we argue that the main predicate in the Mandarin DCC is the linearly first predicate, v_1. This is in line with Mei (1972), Huang (1988), etc. This is contra previous accounts that the linearly second predicate, v_2, of the DCC is the main predicate within a small-clause as argued by Chao (1968), Tai (1973), Tsai (2012). Our account of the relative scope of each predicate explains asymmetries in the distribution of negation within the construction. The same scopal properties additionally account for other phenomena in Mandarin such as the perfective aspect alternation. On this account the descriptive projection occupies a verbal adjunct position rather than being a real complement.

Negation: A classic challenge (Chao 1968) to the main-first predicate account is the apparently asymmetric ability of v_2 to be negated. The relevant pattern is shown in (2) in which the negating morpheme *bu* appears to the left of its modified content. The argument can be stated simply: assume that only the main predicate can be directly negated and in DCC v_1 cannot be negated. It then follows that v_1 is not the main predicate. This claim is simply not true. In fact, negation can precede v_1 in many subordinate clauses, e.g. example (3) from Hui (2012). Below, we examine what can explain these alternations.

Perfective Aspect Alternation: There exist two perfective aspect markers in Mandarin in complementary distribution (Wang, 1965; Teng, 1973). *Le* occupies a suffix position to non-negated verbs while *you* is an auxiliary before negated or reduplicated predicates (Huang, 1988; Po-lun and Pan, 2001). This alternation is shown in (4). Since *le* requires a bounded event (**?**) and because it scopes over the *bu+verb* combination (Huang 1988), the two forms are incompatible; an event which did not happen does not qualify as bounded and the derivation fails at LF.

The negative form *mei* appears before the perfective auxiliary *you* which is higher up in the structure. The scope of negation and event-boundedness is then flipped with a reading more akin to "it is not the case that β" where β is the phrase marked as perfective. The difference in scope is diagrammed below in (5). Negative *mei* scopes over the aspectual marker *you* which dominates the whole VP while *bu* scopes under aspect marking *le* within the VP.

Main Predicate in DCC: If we take the second predicate v_2 to be a right-adjunct to v_1 then the relevant judgments result from the same argument. Negation is an adverbial in specifier position (Ernst 1995). As usual the semantic scope is the domain that it c-commands. When negation is in spec-v_1, the derivation fails at LF since the adverbial v_2 cannot modify an event which did not occur. See (6). It is possible to negate either the content of v_2, i.e. the manner adverbial as in (8), or the total content [$v_1 + v_2$] (see 7). For negation to be high enough in the structure to take scope over both v_1 and v_2, it needs to be supported by an element above v_1 such as the copula *shi* or the auxiliary *you*. For sentences like (3), which are the matrix to an embedded clause, we simply have to posit the presence of a phonologically-null auxiliary. This may be something semantically akin to what ends up translated as *'if'*.

Status as Adjunct: Crucially, the modifying projection introduced by DE needs to occupy an adjunct rather than complement position. Consider a sentence like (6). If DeP were a complement, as a basic transitive object is, it would properly scope under negation. It is by DE taking scope over negation in such a case that we can explain the ungrammaticality.

(1) a. Ta (pao   bu)   pao-de hen kuai.
He (run.V step.N) run-DE very fast
'He runs very fast.'

b. *Ta pao (bu)   hen kuai.
He run.V (step.N) very fast
'He runs very fast.'

(2) a. Tamen pao de bu   kuai
They   run DE NEG fast
'They do not run fast.'

b. *Tamen bu   pao de kuai
They   NEG run DE fast
'They do not run fast.'

c. Tamen bu   pao (bu)
They   NEG run (steps)
'They do not run.'

(3) [Ni bu   pao de kuai] bu   xing
you NEG run DE fast   NEG acceptable
'If you don't run fast, it's not OK.'

(4) a. Ta mai-le   zidian
He buy-PERF dictionary
'He bought a dictionary'

b. Ta bu   mai zidian
He NEG buy dictionary
'He doesn't buy dictionaries'

c. *Ta bu   mai-le   zidian
He NEG buy-PERF dictionary
'He didn't buy a dictionary'

d. Ta mei you   mai zidian
He NEG PERF buy dictionary
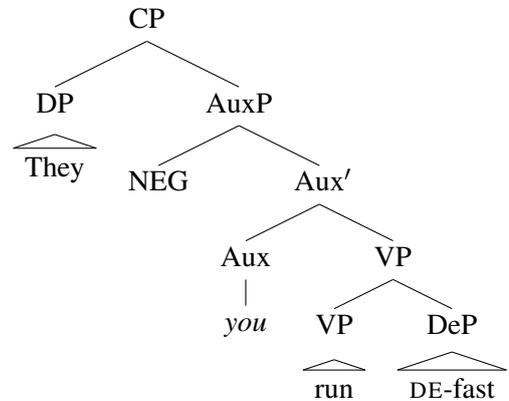'He didn't buy a dictionary'

(5) a. *[[bu   mai]$_{V^0}$ le]$_{V'}$ zidian
[[NEG buy]$_{V^0}$ PERF]$_{V'}$ dictionary
Intended: 'didn't buy a dictionary'

b. [[mei you]$_{AUX^0}$ [mai
[[NEG PERF]$_{AUX^0}$ [buy
zidian]$_{VP}$]$_{AUXP}$
dictionary]$_{VP}$]$_{AUXP}$
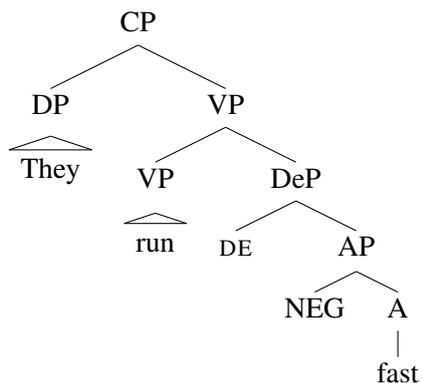'didn't buy a dictionary'

(6) *tamen [bu   pao]$_V$ [de kuai]$_{DeP}$
they   NEG run   DE fast
Intended: 'They do not run fast'
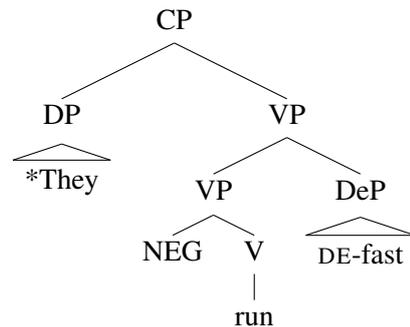
(7) tamen [mei you]$_{AUX}$ [pao de kuai]$_{VP}$
they   NEG PERF   run DE fast
'They did not run fast.'

(8) tamen pao [de [bu   kuai]$_{AP}$]$_{DeP}$
they   run DE NEG fast
'They do not run fast.'

Selected References: Chao (1968. Language and symbolic systems. Ernst (1995). Negation in mandarin chinese. Huang (1982). Logical relations in Chinese. Huang (1988). Wo pao de kuai and chinese phrase structure. Soh and Kuo (2005). Perfective aspect and accomplishment situations in mandarin chinese. Tsai (2012). Descriptive complement constructions as concealed pseudoclefts in chinese.