The Reduplicated Adjective within the Determiner Phrase in Mandarin

Extensive cross-linguistic research has revealed that attributive adjectives follow a strict ordering restriction (Laenzlinger, 2005; Scott, 2002). However, reduplicated adjectives in Mandarin raise a challenge to this well-established generalization, i.e., they must violate the ordering restriction, in contrast to their non-reduplicated counterparts that respect the ordering restriction. In this paper, I argue that reduplicated adjectives violate the ordering restriction by undergoing movement and reject the position that they are base generated at their surface position. Furthermore, the investigation of the position of reduplicated adjectives lends support to a three layer functional makeup of nominal phrases, that is, DP, NumP and NP (Abney, 1987; Cheng and Sybesma, 1999; Ritter, 1991).

In Mandarin, monosyllabic attributive adjectives that indicate SIZE, SHAPE and COLOR have to follow ordinals (Laenzlinger, 2005; Scott, 2002), as is evidenced by the contrast between (1) and (2).

ORDINAL > SIZE > SHAPE > COLOR

But when the second adjective (*hong* "red") gets reduplicated, the ordering restriction has to be violated: the reduplicated adjective has to precede the ordinal (the contrast between (3) and (4)).

In order to answer the question of how the reduplicated adjective at the surface position is derived, I make the following assumptions. First, the determiner phrase in Mandarin has the structure illustrated in (5), which contains three projections, DP, NumP and NP (Tang, 1990). Second, the evidence that that the monosyllabic attributive adjective can not get stranded from the NP ellipsis (the contrast between (6a) and (6b)) supports a structure in which the adjective is inside NP ((7)). Third, the evidence that the reduplicated adjective can stay between the demonstrative and the ordinal ((8)) indicates that it is outside NP ((9)).

Regarding how the reduplicated adjective at the surface position (as in (9)) is derived, there are two hypotheses: base-generation (10) and movement (11) and these two hypotheses predict different interpretations for this phrase. The base generation hypothesis predicts (9) to have only one interpretation, that is, the very red flower among all the first ones. The movement hypothesis, however, predicts (9) to have two interpretations, both the very red flower among all the first ones and the first flower among all the very red ones. An intuition test shows the result that only the latter interpretation is available, which is compatible with the movement hypothesis. Furthermore, based on the evidence that the reduplicated adjective can get stranded from the NumP (the comparison between (12a) and (12b)), it is argued that the position of the reduplicated adjective in (9) is derived because the reduplicated adjective moves and adjoins to NumP.

To sum up, the fact that the reduplicated adjective can stay between NumP and DP (13) is explained in terms of movement and adjunction. The surface position of the reduplicated adjective supports the structure of the determiner phrase that has three layers, DP, NumP and NP.

Examples

- (1) diyi duo hong hua first classifier red flower "the first red flower"
- (2) *hong diyi duo hua red first classifier flower
- (3) hong hong de diyi duo hua red red de first classifier flower "the very red first flower"
- (4) *diyi duo hong hong de hua first classifier red red de flower
- (5) [DP zhe [NumP diyi duo [NPhua]]]

this first classifier flower "the first flower"

- (6)a.Lisi mai le [NumP diyi jian [NP huang [N chenshan]]] Lisi buy tense-marker first classifier yellow shirt "Lisi has bought the first yellow shirt."
 - b.*Zhangsan mai le [NumP diyi jian [NP lan [N e]]] Zhangsan buy tense-marker first classifier blue (shirt)
- (7) [DP zhe [NumP diyi jian [NP huang [N chenshan]]]] this first classifier yellow shirt "the first yellow shirt"
- (8) Zhangsan mai le [DP na [NumP [hong hong de][Num diyi duo [NP hua]]]] Zhangsan buy tense-marker that red red de first classifier flower "Zhangsan has bought that very red first flower."
- (9) [DP zhe [NumP [hong hong de] [Num diyi duo [NP hua]]]] this red red de first classifier flower "this very red first flower"
- (10) [DP zhe [NumP [hong hong de] [Num diyi duo [NP hua]]]] this red red de first classifier flower "this very red first flower"
 - Interpretation: the very red flower among all the first ones

Interpretation A: the very red flower among all the first ones Interpretation B: the first flower among all the very red ones

- (12)a. Wo mai le [DP zhe [NumP [hong hong de] [Num diyi duo [NP hua]]]] I buy tense-marker this red red de first classifier flower "I have bought this very red first flower."
 - b. Ta mai le [DP zhe [NumP [bai bai de] [Num e]]] he buy tense-marker this white white de "He has bought this very white (first flower)."
- (13) [DP zhe [NumP [hong hong de]_i [Num disyi duo [NP t_i [N hua]]]]] this red red de first classifier flower "this very red first flower"

References

- Abney, S. 1987. *The English Noun Phrase in its Sentential Aspect*. PhD Dissertation, MIT, Cambridge, MA.
- Cheng, L. L-S. and R. Sybesma. 1999. Bare and not-so-bare nouns and the structure of NP. *Linguistic Inquiry* 30 (4): 509-542.
- Cinque, G. 1999. Adverbs and Functional Heads. Oxford University Press, New York.
- Laenzlinger, C. 2005. French adjective ordering: Perspectives on DP-internal movement types. *Lingua* 115 (5): 645-689.
- Ritter E. 1991. Two functional categories in Noun Phrases: Evidence from modern Hebrew. In S. Rothstein (ed.), *Syntax and Semantics 25: Perspectives on Phrase Structure*, pp. 37-62. Academic Press, New York.
- Scott, G-J. 2002. Stacked adjectival modification and the structure of nominal phrases. In G. Cinque (ed.), *Functional Structure in the DP and IP: The Cartography of Syntactic Structures Volume I*, pp. 91–120. Oxford University Press, Oxford.
- Tang, C-C. J. 1990. *Chinese Phrase Structure and the Extended X-bar Theory*. PhD Dissertation, Cornell University, Ithaca, NY.