

NPs in Mandarin Chinese: A Head-Function Approach

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As it is well known, nominal complexes in Mandarin Chinese (MC) can appear in argument position either bear (1), with a classifier, with a numeral and a classifier ((2) vs. (3)), with a demonstrative (4), with modifiers, or with some combinations of these ((5) vs. (6); (7)) (cf. Cheng & Sybesma 1999, 2012; Bošković & Hsieh 2013; Her & Tsai 2020; Jiang et al. 2022).

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| <p>(1) wo mai-le [shu].
1.SG buy-PERF book
'I bought {a/the book / ∅/the books}.'</p> | <p>(4) wo mai-le [zhe shu].
1.SG buy-PFV DEM book
'I bought this book.' (only singular)</p> |
| <p>(2) wo mai-le [san ben shu].
1.SG buy-PERF three CL book
'I bought three books.'</p> | <p>(5) wo mai-le [zhe san ben shu].
1.SG buy-PFV DEM three CL book
'I bought these three books.'</p> |
| <p>(3) *wo mai-le [san shu].
1.SG buy-PERF three book
Intended: 'I bought three books.'</p> | <p>(6) *wo mai-le [san ben zhe shu].
1.SG buy-PFV three CL DEM book
Intended: 'I bought these three books.'</p> |

The different combinatorics in MC nominal complexes and their possible interpretations ((7), (8)) show that they have to be analysed as left-branching NPs, i.e. where the head of the structure is the noun.

- (7) wo mai-le [**da de zhe san xiang shu**].
1.SG buy-PFV big DE DEM three CL_m ≈ 'box' book
'I bought these three big boxes of books.' or
'I bought three boxes of these big books.' or
'I bought these three boxes of big books.'
Not possible: 'I bought three big boxes of these books.'
- (8) [**guanyu yuyanxue de**] [**da de**] san xiang [**haokan de**] shu
about linguistics DE big DE three CL_m ≈ 'box' nice DE book
'three big boxes of nice books about linguistics'

Furthermore, modifiers, classifiers, and demonstratives show a similar syntactic behaviour, all of them being optionally attached to the N projection. On the other hand, only modifiers can be iterated. This syntactic behaviour and the flexible combinatorics of these elements within NPs can be accounted for by means of a *head-function structure* (cf. Van Eynde 2006, 2021), that is, assuming that N is the head and further elements attached to the N projection act as functors marking it and therefore also determining which further elements can be attached to it.

This type of analysis distinguishes languages like MC on the one hand from languages such as German and English on the other, which (in an NP-approach) select a determiner as a specifier – i.e. in a *head-specifier structure* (cf. Pollard & Sag 1994; Müller & Machicao y Priemer 2019; Machicao y Priemer & Müller 2021). That is, our analysis suggests a two-way typology of languages which is parallel to the NP/DP parameter proposed in the minimalist tradition but without having to assume a (in some cases) silent syntactic D layer (Chierchia 1998; Bošković 2008; i.a.).

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