

Mandarin morphosyntax reading note

Jinyuan Wu

July 19, 2022

This note is my reading note of 朱德熙 (2009). It can be seen as a preparation of [this draft](#), which is premature and possibly will never be finished, especially by someone without systematic linguistic training like me. Still, the theoretical orientation of this note is well introduced in the above link, as well as in [my notes about CGEL](#), [my notes about Latin](#), and [this note about how descriptive grammars work](#). 朱德熙 (2009) is commonly referred to as a typical structuralist book of Chinese. I do not say “structuralist grammar” because the book is also a textbook about structuralism, mostly in Bloomfield’s brand and strikingly close to the The Cambridge Grammar of the English Language (CGEL) (Huddleston and Pullum, 2002) approach summarized in the above notes, with a lot of argumentation, more than what ordinary grammars contain.

1 About Zhu’s book

1.1 The object language

The object language, “Chinese”, needs some clarification. It means Standard Modern Chinese or Standard Modern Mandarin, often abbreviated as Mandarin in the English speaking world. In mainland China it is called 普通话. In Taiwan and Singapore it (with small variations) is called 国语.

Standard Mandarin – like other languages – is an evolving language. Certain usages documented in Zhu’s book have already been obsoleted.

1.2 Organization of chapters

The book can be divided into several parts:

- Chapters 1-6 are about morphology and lexical categories. Lexical categories discussed in details are either nominal or verbal.
- Chapters 7-10 together give a top-down analysis of syntactic constructions without coordination. Serial verb constructions are *not* introduced in these chapters.
- Chapter 11 is about coordination.
- Chapter 12 is about serial verb construction.
- Chapter 13-14 are about prepositions and adverbs.
- Chapter 15 is about clause types.
- Chapter 16 is about sentence final particle (SFP).
- Chapter 17 is about clause linking without canonical coordination.
- Chapter 18 is about ellipsis and inversion, which may be roughly said to be about information packaging.

This organization is an example of § 2.2 in [this note about how descriptive grammars work](#). The relation between the first six chapters and the following four is the item and arrangement strategy relation. Within the chapters 7-10, we see the top-down partition of clauses and NPs introduced in § 3 and § 4 in [this note about how descriptive grammars work](#). This is typical in structuralist works: it is a direct reflection of the top-down analysis of syntactic structures (see § 2.2.2 and § 3 in [this note about how descriptive grammars work](#)).

The noun-verb distinction (§ 2.2.3 in [this note about how descriptive grammars work](#)) is only reflected in nominal categories being introduced in chap. 4, while verbal categories being

introduced in chap. 5. The NP structure is introduced in chap. 10, together with their clausal counterparts.

The relation between the first twelve chapters and chapters 13 and 14 is the relation between canonical constructions and their counterparts with adjunction. The relation between the first fourteen chapters and chap. 15 is the relation between canonical constructions and non-canonical ones related to the former ones by transformation rules.

Chapters 7, 8, 9, 10, 13, and 14 constitute a system quite similar to the chapter 4-8 in CGEL: first clausal complements, including the external complement – the subject – and internal complements, then NPs, then how the two are modified, by adjectives and adverbs, or by more complicated PPs.

Chapter 16 actually can be placed before chap. 13. This is not the order used in the book, the reason of which, in generative terms, seems to be that SFPs are merged in higher projections than what is involved from chap. 7 to chap. 15. Zhu, however, regard most of SFPs as a part of the predicate. The contradiction between the arrangement of chapters and the explicit analysis of SFPs as a part of the predicate in § 16.1.1 in 朱德熙 (2009) is actually self-consistent: the mutual relation between the predicate and the SFPs is parallel to the mutual relation between the verb stem and the aspectual markers: the aspectual markers are introduced in higher functional projections than the verb stem, in the same way SFPs are introduced in higher functional projections than the predicate. The verb stem and the aspectual markers being analyzed as two immediate constituents of a “word” reflects post-syntactic processes, not constituency relations and dependency relations created by the syntax proper. If this is acceptable – which is the case in most descriptive grammars – then since phonologically and especially from the perspective of prosody, SFPs are closer to the predicate, it is of course also acceptable to place the SFPs into the predicate.

1.3 Terminology

The terminology used in the book is closer to the CGEL approach rather than the Basic Linguistic Theory (BLT) approach. It should be noted that the book is written in Mandarin Chinese, in which certain linguistic terms do not have morpheme-to-morpheme counterparts in English or already have different meaning than their morpheme-to-morpheme counterparts in English.

To keep the rest of this note fluent, issues of term translations are summarized in this section.

1.3.1 Theoretical orientation

Terminology reflects the theoretical orientation of a grammar. The term *head* is the lexical head and not the functional head. Therefore, we have notions like noun phrase, verb phrase, etc., in which the head is defined as the noun, the verb, etc. and not the determiner or the light verb.

1.3.2 Word classes

For lexical categories, 体词 means ‘referential word’ i.e. nominal words. Its direct translation would be ‘body-word’, which may be understood by some as ‘content word’ i.e. ‘lexical word’. The term 谓词 means ‘verbal word’. The direct translation would be ‘commenting-word’, which may be understood as somehow “predicative” in the sense of predicative complements in CGEL. This is not correct: 谓词 means what can head a predicate, thus verbs and adjectives in Chinese. The term 实词 ‘substantial word’ means lexical words, while 虚词 ‘virtual word’ means function words.

1.3.3 Clause structure

The term 谓语 means predicate in the CGEL sense. The term 述语 means predicator in the CGEL sense. Unlike earlier structuralist works which work in the vanilla phrase structure grammar (PSG) framework, 朱德熙 (2009) uses a CGEL-like PSG, where a label of a constituent in a larger construction contains both its category label and its function label, for example both “NP” and “subject”. This idea is made explicit in § 1.3.10. The analysis of 我们班有许多外国留学生 in § 1.3.8 is a good example. Unlike CGEL, 朱德熙 (2009) uses a more compact format in which constituents are illustrated by underlining to show the constituency tree. This is, of

course, merely a notational problem, but somehow it becomes a tradition of the School Grammar analysis of Chinese.

1.4 About this note

This note try to rearrange the content of 朱德熙 (2009) in a way that is both acceptable in the approaches in BLT and CGEL. The order of this note is largely bottom-up. Certain top-down analyses, of course, will be given in the grammar sketch chapter. When obsolete usages appear, I will point them out. When the analysis is problematic, I will discuss why it is problematic and how it can be improved.

2 A grammar sketch

The first chapter in 朱德熙 (2009) may be thought as a grammar sketch chapter, but it contains much discussion on theoretical issues (replicating what is discussed in CGEL § 1.4). This section is a more compact grammar sketch, skipping theoretical commitments which can be found in sources at the beginning of this note. Chapter 3 is also a short one and may be regarded as a part of the grammar sketch.

I will roughly follow Jacques (2021) in the organization of this section. However, since in Chinese, dependency relations are not mainly coded by morphology, I will replace the “nominal morphology” section by “noun phrase” and replace the “verbal morphology” section by “clause structure”, and do not give constituent order a special section, since constituent order is covered by the constituency structure. This is a major difference between CGEL-like “structuralist” grammars and BLT-based “functionalist” grammars (§ 1 in [this note about how descriptive grammars work](#)).

2.1 Parts of speech

Since Chinese does not rich grammatical relation-bearing morphology, purely syntactic tests play the major role in determining parts of speech. Semantics may help but is never decisive (§ 3.1.1 and § 3.1.2 in 朱德熙 (2009)). The word class division given in the book inevitably meets the problem that a word may belong to two categories depending on the context.¹ In the analysis adopted here, words belonging to two categories are only the minority, because otherwise, the two categories can be considered as one (§ 3.2, 3.3 in 朱德熙 (2009)).

2.1.1 Lexical words

Lexical words in Chinese can be roughly divided into nominal ones and verbal ones, or in the Chinese terms, 体词 and 谓词 (for issues on translation between English and Chinese terms, see § 1.3.2). The prototypical role of nominal words is to fill argument slots (or to be more precise, to head a phrase that fills an argument slot). Nominal words rarely appear in the predicator position (though for stylistic purposes, they sometimes do). Verbal words prototypically fill argument slots, but many of them – and clauses without any morphological marking – can regularly appear in argument slots (朱德熙, 2009, § 3.5).

The fact that verbal categories can fill argument slots or in colloquial words “be used as nouns” urges some to put the verbal categories under the nominal categories, so thus there is only one mega lexical category in Chinese: the nominal category or the Noun. The analysis adopted here does not aim to organize lexical categories in a binary branching classification tree, so the ordinary nominal-verbal distinction is maintained.

Whether Chinese has a separate adjective category has been debated for decades. Based on a line of reasoning similar to the above verb-as-noun analysis, some linguists argue that the so-called adjectives should be put under the verb category, since they can fill the predicator slot

¹Formally, we may say the word prototypically belong to one category, and its usage as a word in another category involves zero derivation or conversion. From a Distributed Morphology perspective, however, we can also say that the stem of that word can be merged with two categorizers, and here we are faced with the same problem that urged linguists to give up transformational rules.

The most appropriate term for this process – zero-derivation, conversion or something else – is still debated, and I will skip this topic in this note.

without any morphological marking (Li and Thompson, 1989). Since verbs and most alleged adjectives show different morphological behaviors in duplication, the verb-adjective distinction is kept, and the two are placed under the verbal category.

There still exist a (much smaller) number of alleged adjectives that shows different morphosyntactic properties with the adjectives in the verbal category. They can be marginally used as heads of NPs, while they do not have duplication variants. These “adjectives” are thus placed under the nominal category. Thus we have two types of adjectives. In 朱德熙 (2009), nominal adjectives are called 区别词 ‘distinction word’, while verbal adjectives are called 形容词 ‘adjective’.

There are more nominal categories than the ordinary noun category and the nominal adjective category. Numerals, for examples, are in another nominal category. Chinese has a rich classifier system, and most classifiers still have strong nominal properties and thus they constitute yet another nominal category. 朱德熙 (2009) calls them 量词 ‘measure word’, because many classifiers have the meaning of “unit”. There is also a location word class, including 里 in 在房子里, which is sometimes said to be the postposition class.

2.1.2 Function words

Unlike the case in English or Latin (see § 2.2.5 in my notes about Latin), in Chinese, there is no synchronic or diachronic ways to regularly form adverbs from fossilized phrases or from adjectives via derivations which can be seen as forming a peripheral argument with the meaning of “in the manner of ...”. Thus what can be uncontroversially called adverbs in Chinese form only a small category, which is placed as one type of function words in 朱德熙 (2009).

So-called Chinese prepositions are all historically verbs. The distribution of so-called preposition phrases is also highly restricted, rendering people to ask whether they are constituents at all. Despite 朱德熙 (2009) calls them 介词 ‘adposition’, these words are better regarded as introduced in serial verb constructions (§ 2.4.4), instead of English-like and Latin-like peripheral argument slots. Thus, in this note, I call these “prepositions” *coverbs*, following the terminology in Po-Ching and Rimmington (2015).

Another group of function words in Chinese is the SFP. They are named 语气词 ‘speech force word’ in 朱德熙 (2009), revealing the fact that they are about in the Force projection(s) – though 朱德熙 (2009) somehow insists on them being a part of the predicate (§ 1.2, TODO: more ref).

2.1.3 Overview of all categories

The comprehensive classification of parts of speech can be found in 朱德熙 (2009, § 3.6). Two categories that are neither lexical nor function are the ideophone class and the interjection class.

2.2 Morphology

Chinese does not have inflection at all, except the aspectual markers, which may be argued to be agglutinating suffixes (§ 6.1). The rest of morphology is all derivational. Morphological devices attested include duplication, compounding and affixation. No internal change, infix or circumfix is attested.

A question causing endless controversy and confusion is “what is a word”.

2.3 Nominal categories, morphology, and the NP

2.3.1 The NP template

No morphological case, number, and gender categories are attested in Chinese. There is a word class system or in other words classifier system, however. In most cases when a numeral appears in a NP, a classifier follows immediately after the numeral. Attributives – both adjectives and relative clauses – follow the classifier. The demonstrative, if any, appears before the numeral, and even when there is no numeral, there is frequently also a classifier.

The template of NPs, therefore, can be summarized as demonstrative–numeral–classifier–attributive(s)–head noun.

2.4 The verb and the clause

2.4.1 The verb

2.4.2 The subject in a clause

Though completely lacking case morphology, Chinese is a typical syntactically accusative language. The structuralist binary branching works well for Chinese clausal structure (朱德熙, 2009, § 133-136). A clause without preposing – henceforth called a nucleus clause – can be divided into a subject and a predicate, plus possible SFPs. The subject is on the left, and the predicate is on the right, followed by SFPs. The predicate may be a single verbal word (its function is the predicator) plus possible internal complements, possibly modified by adverbs, and in this case we say the predicate is filled by a verb phrase. The predicate may also be

2.4.3 Verb complementation patterns

Clausal complements inside the predicate are said to be internal. Internal complements of the verb include objects and non-argument complements (朱德熙, 2009, 1.3.3-1.3.4), the latter being called 补语 ‘complementing speech’ in 朱德熙 (2009). The term 补语 is frequently translated into *complement* in English, but then it conflicts with the wider definition of complements in CGEL, which includes both arguments and 补语, and such confusion occurs, I use the term *non-argument complement*.

We are sure that non-argument complements are not arguments, because they cannot be filled by nominal constituents. They are indeed complements, if not parts of verb compounding constructions, for reasons given in § ?? in [this draft](#).

Non-argument complements and objects have complicated interplays, and the boundary of non-argument complements is not always clear. Many non-argument complement types are mutually exclusive. The constituent order between some non-argument complements and the object(s) is rigid, while for other non-argument complements it is more flexible. Certain non-argument complement constructions are almost examples of verb compounding, and the so-called complements may be analyzed as a part of the verb complex. Certain non-argument complements are almost objects.

2.4.4 Serial verb constructions

Chinese has rich serial verb constructions, in which the predicate contains more than one main verbs or possibly a main verb and one or more verbal adjectives and coverbs. The distinction between serial verb constructions and some non-argument complement constructions is highly blurred.

2.4.5 Sentence-final particles

SFPs are actually clause-final particles, because they can appear in subordinate clauses, but since this is the standard term I will not alter it. They appear strictly at the end of nucleus clauses. Postposing to the right of SFPs is rare, if possible.

2.4.6 Unattested constructions and categories

2.5 Negation

Chinese does not have a versatile negator. Negation in

2.6 Coordination, clause linking and supplementation

Coordination occurs in all levels of Chinese syntax: NPs, predicates, and clauses. In these constructions different coordination devices are used.

2.7 Subordination

Like all

2.8 Prosody and styles

2.9 Remarkable features

3 Nominal categories

3.1 Nouns

There are two defining properties of the noun class: being able to be modified by a numeral-classifier construction (§ 5.2), and being unable to be modified by adverbs. A word with both of the properties is definitely a noun. Certain verbal words also appear with numerals and classifiers (which may be viewed as zero-derivation into abstract nouns), but they can always be modified by adverbs, so they themselves are not nouns (朱德熙, 2009, § 4.1.1).

Nouns may be classified according to their classes and countability (§ 5.1), their behaviors in possession (§ 5.2).

3.1.1 Duplication of nouns

Duplication of nouns is mainly restricted to kinship terms, like 爷爷 ‘grandpa’, 奶奶 ‘gradma’, 爸爸, 妈妈.

3.2 Classifiers

There are roughly seven types of classifiers.

4 Verbal categories

4.1 Verbs

4.2 Verbal adjectives

5 Noun phrases

5.1 Noun class and the classifier

Possible classifier in a NP headed by a noun gives the noun class of that noun. Roughly there are five classes (朱德熙, 2009, § 4.1.2):

- Countable nouns, whose classifiers themselves denote to discrete objects.
- Uncountable nouns, whose classifiers are

Each class has lots of subclasses.

5.1.1 Numeral

5.2 The possessive construction

5.3 Relative order of noun phrase dependents

6 Verbal morphology

6.1 Aspectual markers

A separate section has to be devoted to 了, 着, and 过, because they code the aspectual system in Chinese. I say *aspectual*, not *aspect*, partly because there are so many well-accepted usage of the term *aspect*, partly because whether the Chinese aspectual system can be safely said to be one of them is still controversial.

Table 1: Semantic (and then syntactic) classification of non-argument complements besides quantity complements

	directional	resultive	possibility	manner and consequence	time and location
factual	direction complement	result complement	-	manner and consequence complement	time and location complement
potential		potential complement		-	-

7 Verb types, argument structures and clausal dependents

Like the corresponding chapter in CGEL (chap. 4), this section is mainly about canonical clauses. Here “canonical” means the clausal complements transparently displays the argument structure: we only have 王冕经历了父亲的过世, and not 王冕死了父亲. Non-canonical constructions appear only for making argumentation for a complement type (§ 2.4.3 in [this note about how descriptive grammars work](#)).

Needless to say, non-canonical usages may be fossilized and become canonical, as in Old Chinese 示, which is likely to be a fossilized causative construction as in 蔺相如示秦王壁~蔺相如使秦王视壁.

The complement configuration of a canonical clause headed by a verb is the main factor of verb subcategorization.

7.1 Subject and subjecthood

7.2 An overview of internal complements

Classification of non-argument complements is a topic full of chaos. A purely semantics-oriented analysis of non-argument complements can be found in Table 1. This is given in (王理嘉 et al., 2004, 5.8). The classification taken in 朱德熙 (2009) is a little different. First, the manner and consequence complement class is divided into 状态补语 ‘state complement’ and 程度补语 ‘degree complement’, because of the imperfect mapping between the semantics and the syntax: the class of 程度补语 origins from grammaticalized direction complements and result complements, and thus its grammatical properties differs from the rest of the manner and consequence complement class (§ ?? in [this draft](#)). In this note, I accept *state complement* and *degree complement* as the translations of 状态补语 and 程度补语, respectively.

Another semantic class of non-argument complements often seen in textbooks is 数量补语 ‘quantity complement’ (朱庆明, 2005, § 7.1). The status of quantity complements is kind of controversial. Since quantity complements look like nominal arguments and can occur together with other types of non-argument complements, just like objects do, some authors – including Zhu – kick it from the family of complements and assign various names to it, for example semi-object and time expression. 准宾语 ‘semi-object’ is the name used in 朱德熙 (2009).

The time and location complement class is also absent in 朱德熙 (2009), because it can be easily reanalyzed as an instance of serial verb construction.

In conclusion, the classification of internal clausal complements in 朱德熙 (2009)

7.3 Monotransitive indirect object

8 Serial verb constructions and related constructions

8.1 Overview

8.1.1 The linear constituent order

All serial verb constructions in Chinese can be analyzed as created by recursively applying simple serial verb constructions (朱德熙, 2009, § 12.1.4). A simple serial verb construction contains at

least a verbal word and a predicate, with a possible argument intervening the two (how this argument is licensed will be discussed shortly).

Here are some examples (SVC is the abbreviation of *serial verb construction*):

- (1) 我们合唱团一般 [[站着]_{V₁} [唱歌]_{predicate:VP}]_{SVC}
- (2) 我 [[没有]_{V₁} [工夫]_{argument} [[跟着]_{V₁} [你]_{argument} [到处乱跑]_{predicate:VP}]_{predicate:SVC}]_{SVC}

Here I use the notation adopted in 朱德熙 (2009) and name the first verbal word as V₁. The head of the predicate following V₁ is named V₂, if it can be well-defined. If the predicate following V₁ is not itself a serial verb construction, V₂ is just its head. Therefore, the inner most serial verb construction always has a clear and uncontroversial V₂ position. If, however, the predicate following V₁ is a serial verb construction, we are faced with the problem to define the head for serial verb constructions.

There are several reasons for us to define

V₁ can be a verb or a coverb, and V₂ can be a verb, a coverb or a verbal adjective. Adjectives filling the V₁ position are not attested (朱德熙, 2009, 12.1.1, 12.1.2).

8.1.2 The intervening argument

The intervening argument may simply be a complement of V₁. In this case, the structure of the serial verb construction is largely parallel to how preposition phrases are introduced as adjuncts in English or Latin, with the only difference being that in Chinese, the preposition phrase is replaced by a phrase headed by a verb or a coverb. Thus V₂ – its strict definition and properties – is irrelevant to the intervening argument. The V₁ and the intervening argument therefore forms a constituent, and we may name it as predicate 1 and the following predicate is named predicate 2. Examples of this type include most semantic counterparts of the English preposition phrase adjunct constructions:

- (3) 合唱团团员 [[在_{V₁:coverb} [室外]_{object}]_{pred1:VP} [一起唱歌]_{pred2:VP}]_{SVC}

Another case may be that the intervening argument has dependency relations with V₂.

8.1.3 Summary: the structure of serial verb constructions

It should be noted the scheme shown in this section does cover all possible serial verb constructions, it does not exclude ungrammatical ones. The following example is fine in constituency structure but is nonetheless not grammatical:

- (4) *我 [[把]_{V₁} [他]_{argument} [打了张三一顿]_{predicate:VP}]_{SVC}

However, by just changing a word, the example becomes grammatical:

- (5) 我 [[让]_{V₁} [他]_{argument} [打了张三一顿]_{predicate:VP}]_{SVC}

The difference can only be explained by the idiosyncratic properties of V₁. This raises a question: for lexical verbs, do their subcategorization information revealed by § 7 completely decide their behaviors in serial verb constructions?

8.1.4 Distinguishing serial verb constructions from others

There are several other constructions having the same linear order with serial verb constructions, including predicate coordination, predicator-object constructions where the object position is filled by another predicator-object construction, and non-argument complement constructions with similar objects (朱德熙, 2009, § 12.1.3).

8.2 The disposal construction: 把, 让, 使

8.3 The passive construction: 被

9 Sentence final particles

10 Clauses

Now it is time to assemble components introduced in the above sections into clauses.

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