# Mandarin morphosyntax reading note

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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 form 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 中心语 'central speech (i.e. head)' is translated as *head* here, which 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. 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

<sup>&</sup>lt;sup>1</sup>Formally, 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 (§ 2.3.4), 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 'specch 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).

Here is a note of mine: (朱德熙, 2009, § 3.6) classifies certain categories like location words into the nominal category and hence the lexical one, while the location word category can definitely be enumerated (朱德熙, 2009, § 4.4).

# 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 Nominal categories, morphology, and the NP

# 2.2.1 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.

## 2.3 The verb and the clause

#### 2.3.1 The verb

## 2.3.2 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

## 2.3.3 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.

## 2.3.4 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.

## 2.3.5 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.

#### 2.3.6 Unattested constructions and categories

## 2.4 Negation

Chinese does not have a versatile negator. Negation in

# 2.5 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.

# 2.6 Subordination

Like all

# 2.7 Typological information and remarkable features

# 2.7.1 Alignment and the topic-comment construction

# 2.7.2 Morphological typology

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.

What is the proper definition of words in Chinese is a topic surrounded by lots of debate.

The conclusion is Chinese is basically an analytic language, but not among the most analytic ones.

# 2.7.3 Prosody and styles

The grammar of Chinese is especially remarkable in its heavy reliance on prosody and style. Violation of relevant conditions is not only not recommended, but sometimes causes grammatical error.

# 3 Overview of morphology, prosody, and the preferred writing system

Before starting discussion on more specific topics, a brief introduction to the morphology and prosody structure of Chinese is a good idea.

# 3.1 Morphemes and Chinese characters

Most Chinese morphemes are monosyllabic. There are exceptions, though, most of which are historically or contemporarily borrowed ones or ideophones. Examples include 葡萄 'grape', 巧克力 'chocolate', 摩登 'modern'. This fact means the preferred writing system – also the one used in this note – is Chinese characters, in which one character corresponds to one syllable and roughly one morpheme.

Putting some quirky cases aside, Chinese characters are often good indicators of morphemes. There are, for example, at least seven morphemes sounding  $xi\bar{a}n$ , and there happens to be seven Chinese characters corresponding to each of them: 仙, 先, 籼, 掀, 鳅, 鲜, and 纤.

Like all writing systems, Chinese characters do not completely faithfully represent the underlying linguistic structure. Some characters do not mean anything — they are simply the designated characters representing syllables in certain words. The character  $\vec{a}$  as in  $\vec{n}$   $\vec{a}$ , for example, means nothing more than the syllable  $t\acute{ao}$ , but it only appears in the morpheme  $\vec{n}$   $\vec{a}$  and  $\vec{n}$   $\vec{a}$   $\vec{n}$   $\vec{a}$   $\vec{n}$   $\vec{a}$   $\vec{$ 

Thus, Chinese characters provide clues on what is a morpheme, but they are not decisive (朱 德熙, 2009, 1.1.4).

# 3.2 What is a word?

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

# 3.3 The prosody structure

One particular benefit of the Chinese character system is it makes prosody analysis easier.

# 4 Parts of speech

## 4.1 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 ( $\S 5.1$ ), their behaviors in possession ( $\S 5.2$ ).

# 4.1.1 Duplication of nouns

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

## 4.2 Classifiers

There are roughly seven types of classifiers.

# 4.3 Verbs

# 4.4 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.

# 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 clause contains only one main verb – which, as mentioned before, is designated as the predicator – and 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~蔺相如使秦王视璧.

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

# 7.1 Subject and subjecthood

# 7.1.1 Distinction between subject and topic

The constituency tree of a subject-predicate construction and a topic-comment construction as in topicalization is exactly the same, if function labels are ignored. This is common among world languages. In the below two examples, (1) is obviously a subject-predicate construction, while (2) is obviously a topic-comment construction:

- (1) [我]<sub>subject:pronoun</sub> [喜欢看他写的小说]<sub>predicate:VP</sub>
- (2) [小说]topic:pronoun [我喜欢看他写的]comment

The second example obviously is dual to the first subject-predicate construction: the object of (1) is preposed and hence topicalized.

The subject, if well-defined, is always topic-like, for it is at a high position compared to other arguments in the clause and is subject to multiple extractions. Indeed, typological studies often say the subject is something that is both an agentive position and a topic. Here the term topic means anything that is relatively "high" and is subject to A'-extractions. The absolutive argument in syntactically ergative languages, for example, is also the topic in this sense. The problem is whether topic in the narrow sense – as in (2) – and subject are in fact truly one grammatical relation.

In Chinese there is no finiteness category, or at least there is no strong evidence for a finitenonfinite distinction (Hu et al., 2001). Therefore, the definition of subject as what typically vanishes in nonfinite clauses is inviable in Chinese.

Another way to distinguish between subject and topic is transformational: if a clause can be seen as a transformed version of an uncontroversial subject-predicate clause, and the external topic-like position corresponds to a gap in what follows it, then the external topic-like position is a topic. Otherwise it is a subject. This criterion is exemplified by contrasting (1) and (2): in (2) 小说 seems to be moved from its base position after 写的, and hence (2) is a topic-comment clause, where the initial topic-like 小说 is indeed a topic. On the other hand, (1) cannot be obtained from transformation of another canonical clause, so the topic-like 小说 is a subject, not a topic.

The problems with this analysis are twofold. First, there are mechanisms other than topicalization that causes fronting of an inner argument, so if a clause can be seen as a transformed version of a canonical clause, it is possible that the transformation relevant is a valency changing device and not topicalization. There is no inflection marking on the verb about valency changing in Chinese. Therefore, whether preposing means topicalization or valency changing — or even the question whether valency changing exists outside the 被-construction or similar constructions — cannot be settled.

Another problem with the topic-as-moved-argument analysis is cross-linguistically, topic can be base-generated so it is possible for a clause without a canonical correspondence to be a topic-comment one. The lack of inflectional morphology – this times the case system – in Chinese again blocks our research. (Japanese, on the other hand, has NP-final case particles, and thus trivially it can be found that Japanese has both base-generated topics and preposed topics, the latter being identical to scrambling of an internal argument in constituent order, with the only difference being changing the case particle into the topic particle.) What we find here is the topic-subject contrast and the movement v.s. base generation contrast, though having certain correlation, have no categorical implicational relations.

The famous 王冕死了父亲 problem is a good demonstration of the problem. It means 'Wangmian's father died' with a seemingly inharmonic constituent order with the meaning. Some people, in surface-oriented terms, analyze it as a complex topic and focus, where 王冕 is a base-generated topic:

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	p	otential complement		-	-

Others, however, analyze the structure as an affected construction, which is psychologically passive but not syntactically so, with 王冕 being the "affected" argument and the main verb being fronted to merge with the "affect" light verb:

(4) [王冕]
$$_{\text{subject (affected):proper noun}}$$
 [[死了] $_{i,\text{affecting verb}}$  [父亲  $-_{i}$ ] $_{\text{VP}}$ ]

The two analyses all seem reasonable, but they are radically different.

What can be concluded here is there is no easy way to tell subjects from topics. More generally, there is no easy way to distinguish the nucleus clause (§ 3.1.5 in this note about how descriptive grammars work).

The simplest position is to identify subject with topic. That is, to assume there is no syntactic divergence between the initial NP position in (1) and (2). This is indeed the position taken in (朱德熙, 2009, 7.1.3), arguably strongly influenced by the constituency-only structuralist stance, where syntactic functions are labeled by looking at the surface-oriented constituency tree only and the notion of subject is defined purely in terms of being somehow higher than the rest of the clause. There are still discrepancies among this approach: some hold that the relation between the subject and the predicate – regardless of their kinds – is always about argument structures, and hence the term *subject* is appropriate and there is no need to mention *topic*. Others hold an opposite view, arguing that in Chinese the argument structure is not coded and what is coded ins the information structure, and hence we have *topic* only and no need for the term *subject*. The rest of the works, e.g. Huang and Shi (2016), disagree with the subject-only or topic-only analysis. In Huang and Shi (2016, § 2.6) [79] and [81a], for example, the clausal initial temporal expressions and the NP 李家 in 李家人最多 are recognized as information packaging devices and not subjects, while they are subjects according to 朱德熙 (2009, § 7.2, 7.9.1)

The position taken in this note is similar to Huang and Shi (2016). This is obviously a risky position, since if there is indeed distinction between subject and topic, the approach in 朱德熙 (2009) may be inaccurate, but it is still true if we replace the term *subject* with *topic in the broad sense*. If, however, there is no such distinction, then the approach here is wrong. Even in the case when the subject-topic distinction is real, there will still possibly be errors about whether a specific construction is analyzed as a subject or topic. 朱德熙 (2009) is useful in all cases above, though. The risk is however worth taking, because it helps us to dig deeper into the subtle details of the language, and also because the complete lack of subject-topic distinction seems to be not well-justified (Shi, 2000).

The content of 朱德熙 (2009, chap. 7), therefore, will be scattered to § 7.1, § 8, and § 12.3. To keep this note still relevant to Zhu's original book, here is a list of subtypes of "subject-predicate constructions" given by him:

# 7.1.2 Non-agentive subjects

# 7.2 An overview of internal complements

Classification of internal complements is a topic full of chaos. There are roughly two classes of internal complements: those prototypically filled by nominal constituents are given the label *object*, while those prototypically filled by verbal constituents are non-argument complements. The classification is obviously form-oriented and not function-oriented. Whether the concept of *object* has any syntactic significance requires argumentation.

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)

Due to the highly complicated interaction between all those complement types, I have to introduce

• Compounding-like non-argument complements: There are three types of non-argument complements, some (though not all) products of which look like compound words.

# 7.3 Direction complements

# 7.4 Degree complements

The degree complement is a "miscellaneous" type, which includes grammaticalized non-argument complements with various analyzable origins (朱德熙, 2009, § 9.9).

## 7.4.1 Degree complements similar to result complements

A verbal adjective predicator may be complemented by 极, 多, and 透.

In modern usages, all the above mentioned degree complements have to be followed by the aspectual  $\vec{j}$ :

- (5) a. 这本书[好极了]<sub>pred: degree comp. const.</sub>
  - b. \*这本书好极
- (6) a. 这本书[糟糕透了]pred: degree comp. const.
  - b. \*这本书糟糕透

More SFPs are possible:

(7) 这本书好极了呢!

## 7.4.2 好得很

(8) 这次演出好得很

# 7.5 Monotransitive indirect object

There is conflict between the post-verbal object and the state complement. Consider:

- (9) a. \*他写文章得读者云里雾里
  - b. \*他写得文章读者云里雾里

The most natural alternative to the two unsuccessful attempts above is the verb-copying construction:

(10) 他写文章写得读者云里雾里

There is also another alternative, where the object is preposed before the verb:

# (11) 他这话说得我们云里雾里

In this construction, the agentive subject This construction, however, is not available for all verbs. For example, a similar construction with the verb \( \beta \) seems to be ungrammatical:

(12) \*他这文章写得读者云里雾里

The distinction between 给 and 写 is not shown in object preposing constructions like the follows:

## 7.6 The verb 是

The verb 是 is sometimes referred to as the copula in Chinese. This captures some of its properties, though not all.

朱德熙 (2009, 7.8)

# 8 Valency changing devices

- (13) 我泡好茶了
- (14) 茶泡好了

## 8.1 Causative

The causative is frequent in Old Chinese, but its usage has been largely limited in modern Mandarin. An example of the causative is shown below:

- (15) Syntactic causative 我们的政策 [繁荣了市场]<sub>predicate:causative VP</sub>
- (16) Periphrastic causative 我们的政策 [使市场繁荣了]<sub>predicate:VP</sub>

# 9 Serial verb constructions

## 9.1 Overview

## 9.1.1 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):

- (17) 我们合唱团一般 [[站着]<sub>V1</sub> [唱歌]<sub>predicate:VP</sub>]<sub>SVC</sub>
- (18) 我 [[没有]<sub>V1</sub> [工夫]<sub>argument</sub> [[跟着]<sub>V1</sub> [你]<sub>argument</sub> [到处乱跑]<sub>predicate:VP</sub>]<sub>predicate:SVC</sub>]<sub>SVC</sub>

Here I use the notation adopted in 朱德熙 (2009) and name the first verbal word as  $V_1$ . The head of the predicate following  $V_1$  is named  $V_2$ , if it can be well-defined. If the predicate following  $V_1$  is not itself a serial verb construction,  $V_2$  is just its head. Therefore, the inner most serial verb construction always has a clear and uncontroversial  $V_2$  position.  $V_1$  can be a verb or a coverb, and  $V_2$  can be a verb, a coverb or a verbal adjective. Adjectives filling the  $V_1$  position are not attested (朱德熙, 2009, 12.1.1, 12.1.2).

If, however, the predicate following  $V_1$  is a serial verb construction, we are faced with the problem to identify a similar position for serial verb constructions. This is done in § 9.1.4, after simple serial verb constructions are discussed.

There are several other constructions having the same linear order with serial verb constructions, including predicate coordination, predicator-object constructions which take complement clauses as objects, and non-argument complement constructions (朱德熙, 2009, § 12.1.3). In the following sections, they are singled out.

#### 9.1.2 What is the relation between the two verbal words?

I start the discussion on serial verb constructions from the relation between  $V_1$  and  $V_2$  when there is no intervening argument. Consider the following examples (the first is a copy of (17)):

- (19) 我们合唱团一般 [[站着] $V_1$  [唱歌] $_{predicate:VP}$  $_{SVC}$
- (20) 我 [[想]<sub>V1</sub> [吃点东西]<sub>predicate:VP</sub>]<sub>VP</sub>

The two have exactly the same label-free constituency tree structures. Their semantic structures, however, are radically different. In the first example,  $V_1$  describes the manner of  $V_2$ . In this case, the aspectual marker 着 obligatorily appear. In (20), however,  $V_2$  – together with its dependents – is a complement of  $V_1$ . That is why (20) is not considered as a serial verb construction: it is already covered by the scheme of verb phrases.

There are more

# 9.1.3 The intervening argument

Now I discuss the  $V_1$ -intervening argument- $V_2$  constructions. The intervening argument may simply be a complement of  $V_1$ . 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  $V_2$  – its strict definition and properties – is irrelevant to the intervening argument. The  $V_1$  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 semantic counterparts of the English preposition phrase adjunct constructions:

(21) 合唱团团员 [[在<sub>V<sub>1</sub>:coverb</sub> [室外]<sub>object</sub>]<sub>pred1:VP</sub> [一起唱歌]<sub>pred2:VP</sub>]<sub>SVC</sub>

It is also possible to have VP<sub>1</sub> denoting an action, rather than a state:

(22) 合唱团团员刚才在 [[[拿]<sub>V1</sub> [着]<sub>aspect</sub> [谱子]<sub>object:NP</sub>]<sub>pred1:VP</sub> [唱歌]<sub>pred2:VP</sub>]<sub>SVC</sub>

This construction has nothing different from (19). Their differences can be all attributed to the subcategorization properties of  $V_1$  introduced in § 7.

In other cases, the intervening argument has dependency relations with  $V_2$ . Here is an example:

(23) 我 [[请]<sub>V</sub>, [你]<sub>argument</sub> [转告他一声]<sub>pred2:VP</sub>]<sub>SVC</sub>

What is exactly the *structural* relation between the intervening argument with  $V_1$  and  $V_2$  is debated. 朱德熙 (2009) says the relation between the intervening argument and  $V_2$  is purely semantic: there is no constituency relation between it and  $V_2$ , and instead, the intervening argument forms a constituent with  $V_1$ . The argumentation provided for this claim is in topolects that have case marking for pronouns, the intervening argument is always accusative (§ 12.2.2), and thus it receives the case from  $V_1$  and is in a constituent with  $V_1$ . This is not convincing, since the accusative case is a structural case, not an inherent one, and it can be more strongly influenced by the large scale syntactic environment: in English, for example, the subject of an infinitive is accusative, though it has nothing different semantically or structurally from the subject of a finite clause.

The position of this note is the syntax of (23) is not clearly demonstrated by surface-oriented constituency analysis: to catch all aspects of the serial verb construction with an intervening argument, complicated movements and span-spellout in the underlying Minimalist derivation are necessary for a constituency-based analysis, and in the surface-oriented version, the binary branching constituency relations are largely blurred. For example, the analysis of 本思颖 (2010, § 9.5) of the intervening argument involves multiple head movement (see (82) in § 9.5) and this is by no means acceptable surface-oriented constituency analysis. Therefore, for a general-purpose analysis of surface-oriented constituency relations, a simple flat tree is enough: I will stop at (23) and do not attempt a "deeper" analysis. The rest of the grammar should be described in terms of dependency relations. The final analysis in a descriptive grammar is therefore more BLT-style (see Fig. 5 in this note about how descriptive grammars work), though the phenomenon embodies a huge success of the light verb theory in generative syntax. (The approach in this note is still not fully BLT as Dixon may like, because  $V_2$  in (23) is not bracketed together with %, but in the BLT-style predicate-as-verbal-span approach, it should be.)

It should be noted that there is not strict restriction on what argument becomes the intervening argument: it can be the subject of  $V_2$  as in (23), but it is also possible for the intervening argument to be the object, or an object:

# 9.1.4 When the second predicate is also a serial verb construction

Now it is time to discuss what is  $V_2$  when the second predicate is also a serial verb construction. It can be observed from § 9.1.2 and § 9.1.3 that  $V_2$  is important only when there is an intervening argument and the intervening argument has non-trivial relations with  $V_2$ . So consider the following example:

(25) 他 [[让]<sub>V1</sub> [我]<sub>argument:pronoun</sub> [[在未经他人允许的情况下]<sub>pred1:SVC</sub> [[交了]<sub>V1</sub> [这份报告]<sub>argument:NP</sub> [给陈经理]<sub>pred2:VP</sub>]<sub>pred2:SVC</sub>]<sub>predicate:SVC</sub>

Here we have four serial verb constructions in total. The outmost one, [[让] [我] [在未经他人允许的情况下交了这份报告给陈经理]], serves as the predicate of the whole clause. Now 我 is the intervening argument, and in a serial verb construction headed with 让 as  $V_1$ , the intervening argument is likely to be the agent of  $V_2$ . So what is  $V_2$ ? Semantics hints it is  $\mathfrak{D}$ : (25) entails

(26) 我交了这份报告给陈经理

So we find in the serial verb construction [[在未经他人允许的情况下] [交了这份报告给陈经理]], which is the last constituent of the outmost serial verb construction and is without an intervening argument with non-trivial relation with a  $V_2$ , the first constituent – 在未经他人允许的情况下 – is irrelevant to the search for  $V_2$ . Thus, it can be concluded that in two-constituent serial verb constructions, if the first constituent is for modifying purposes, then it is also syntactically so: the second constituent is the head.

On the other hand, it can also be demonstrated that the search for  $V_2$  stops when something – labeled as C – like (20) or (23) occurs, and  $V_2$  of the larger construction is designated as the  $V_1$  of C. Consider the following examples:

(27) 他 [[让]<sub>V1</sub> [我]<sub>argument:NP</sub> [[想]<sub>V1</sub> [换个工作]<sub>pred2:VP</sub>]<sub>pred2:SVC</sub>]<sub>predicate:SVC</sub> 了 Here 我想换个工作

# 9.1.5 Summary: the structure of serial verb constructions

After the above discussions, we find the Chinese serial verb constructions can be constructed by any of the following ways:

•

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:

(28) \*我 [[把]<sub>V1</sub> [他]<sub>argument</sub> [打了张三一顿]<sub>predicate:VP</sub>]<sub>SVC</sub>

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

(29) 我 [[让]<sub>V1</sub> [他]<sub>argument</sub> [打了张三一顿]<sub>predicate:VP</sub>]<sub>SVC</sub>

The difference can only be explained by the idiosyncratic properties of  $V_1$ . This raises a question: for lexical verbs, do their subcategorization information revealed by § 7 completely decide their behaviors in serial verb constructions?

# 9.2 Distinguishing serial verb constructions from others

Unfortunately, there are occasionally grammar books saying certain utterances that can be explained perfectly well with other constructions are made of serial verb constructions. The authors of these books do not really know what we need a new term *serial verb construction*. Below are some constructions that are frequently confused with serial verb constructions.

## 9.2.1 Verb-complement constructions

The distinction between the complement clause construction and serial verb construction is somehow subtle yet robust. Compare (20) with the following clause:

## (30) 我想有食欲不是坏事

The two have the same main verb 想 and similar constituency trees. This raises the question whether (20) contains a serial verb construction at all, or even whether serial verb constructions exist at all. It is, of course possible, to have verbs with complementation patterns like the

- 9.3 The disposal construction: 把, 让, 使
- 9.4 The passive construction: 被
- 10 Sentence final particles
- 11 Negation

# 12 The clause structure

Now it is time to assemble components introduced in the above sections into clauses. A clause is prototypically made up by a subject-predicate construction, but certain information packaging processes are applicable (§ 12.3). As for the subject-predicate construction i.e. the nucleus clause, the most frequent filler of the predicate slot is either a verb phrase or a "verb phrase" headed by a verbal adjective (§ 12.1), but nominal predicate is also possible under certain circumstances (§ 12.2).

- 12.1 Verbal predicate
- 12.2 Nominal predicate

朱德熙 (2009, § 7.6)

- 12.3 Information packaging
- 12.3.1 The default information structure
- 13 Subordination
- 14 Translation guides

## References

Jianhua Hu, Hai hua Pan, and Liejiong Xu. Is there a finite-non-finite distinction in chinese? *Linguistics*, 39:1117–1148, 01 2001. doi: 10.1515/ling.2001.043.

Chu-Ren Huang and Dingxu Shi. A reference grammar of Chinese. Cambridge University Press, 2016.

Rodney Huddleston and Geoffrey K. Pullum. *The Cambridge Grammar of the English Language*. Cambridge University Press, 2002. doi: 10.1017/9781316423530.

Guillaume Jacques. A grammar of Japhug, volume 1. Language Science Press, 2021.

Charles N Li and Sandra A Thompson. *Mandarin Chinese: A functional reference grammar*, volume 3. Univ of California Press, 1989.

Yip Po-Ching and Don Rimmington. Chinese: A comprehensive grammar. Routledge, 2015.

Dingxu Shi. Topic and topic-comment constructions in mandarin chinese. Language, 76, 06 2000. doi: 10.2307/417661.

朱庆明. 现代汉语:实用语法分析, volume 1. 清华大学出版社有限公司, 2005.

朱德熙. 语法讲义. In 朱德熙文集, 第一卷. 商务印书馆, 2009.

王理嘉, 陆俭明, 符淮青, 马真, and 苏培成. 现代汉语(重排本). 商务印书馆, 2004.

邓思颖. 形式汉语句法学. 形式汉语句法学, 2010.