Mandarin Chinese notes

Jinyuan Wu

October 18, 2022

Introduction

1.1 The history and the classification

Mandarin Chinese is a predominant language in the world, belonging to the Sinitic branch

1.2 Previous studies

There are already sufficient works concerning the grammar of Mandarin Chinese. The tradition used in colleges (and occasionally high schools) is largely structuralist à la Bloomfield: A clause is divided into a topic and a comment, and the comment is divided into a subject and a predicate, and the predicate is divided into a predicator and an object, etc. Examples of works in this tradition usually have names like 现代汉语 'Modern Chinese' (王理嘉 et al. 2004). This tradition is still seen in many contemporary grammars, like Huddleston and Pullum (2002). This tradition is largely coherent with the generative tradition, and indeed there are books which are generative in essence but organized in the traditional and structuralist framework (邓思颖 2010).

Teaching materials of Mandarin Chinese are also largely influenced by the structuralist tradition.

Mandarin also gains much attention in the functional-typological tradition. Li and Thompson (1989) is a "functional" reference grammar of Mandarin, TODO

Box 1.1: The difference between the frameworks

The differences between the generative tradition, the traditional structuralist school and the so-called functionalist (or "Basic Linguistic Theory" (Dixon 2009)) are mainly notational.

Since modern generative syntax contains lots of hidden functional heads, the notion of, say, a DP which is the specifier of T, is to be replaced by an NP filling a subject position in a surface-oriented structuralist constituency analysis. Both "NP" and "subject" should be labeled on a sub-syntactic tree in the structuralist tradition, while in generative syntax, the label "subject" can be read directly from the (more complicated) tree structure.

The Basic Linguistic Theory approach, or the functional-typological grammar writing approach, is based on *dependency relations* on the other hand. It's also possible to formulate generative grammar in terms of dependency relations, so it can be expected that the BLT approach is still largely equivalent with the grammatical complexity of generative grammar. BLT only recognizes two types of constituents: NPs and clauses, which are called *domains* in generative syntax: The former is the DP domain while the latter is the *v*P-TP-CP domain. The complicated binary constituency tree is replaced by a flat tree with lots of dependency relations labeled inside, containing the same amount of information. (We may also say the Basic Linguistic Theory's standard of constituency is "being a relatively independent construction". Then the equivalence between this version of mild constructivism and minimalism is clear (Trotzke 2020).)

A further difference between the Basic Linguistic Theory and generativism (as well as the structuralist tradition) is the former is claimed to be semantic-based. But first, of course it's possible to have a meaning-first version of generative syntax, and second, it's often argued that the seemingly direct , which also agrees with Dixon's ideas in Dixon (2009) that the same semantic concept may be coded quite differently. So there is also no substantial disagreement here.

1.2.1 About this note

This note is an attempt to reconcile the several approaches in previous researches. I will use less structuralist constituency trees compared with structuralist grammars. That's to say, for example, the "serial verb construction" is not divided into two verb phrases following rigidly the structuralist tenets, but is analyzed with a flat-tree structure instead, following BLT. But I will also do lots of in-depth morphosyntactic tests, instead of just staring at the surface realization, as many typologists may do.

Grammatical overview

2.1 Prosody

One distinct feature of Mandarin is its morphosyntax relies strongly on prosody (冯胜利 2000).

The phonology, strikingly, doesn't have much influence on Chinese morphosyntax, and it will be largely skipped in this note.

2.2 Parts of speech

2.3 The noun phrase

No morphological case, number, and gender categories are attested in Mandarin. There is a word class system or in other words classifier system, however. In most cases when a numeral appears in an 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, belongs to the Dem-Num-A-N type, with the classifier residing between Num and A.

2.4 Clause structure

2.4.1 Alignment

Mandarin is an typical accusative language. Mandarin clauses have a rather rigid constituent order: It's usually classified as having a SVO clausal constituent order, and the subject and the object(s) can be told from the positions in the clause (1, 2). Certain "SOV" orders can be obtained by invoking the disposal construction (§ 9.1), as in (3).

- (1) 我生病 了 1 get.sick SFP 'I got sick.'
- (2) [我]_{subject} 今天 去看 [电影]_{object} 了 1 today to watch movie SFP

'I went to watch a movie today.'

(3) [我]_{subject} 今天 把 [一 个 碗]_{object} 摔 碎 了 1 today BA one cL bowl break crack SFP 'I broke one bowl today.'

The normal tests of syntactic accusative alignment can be run on Mandarin (4).

(4) 陈 经理 昨天 没有和 他的 客户 聊 过 。他 生病 了 。 Chen (surname) manager yesterday NEG with 3sg-Poss client talk SFP 3sg get.sick SFP 'Manager Chen didn't talk with his client yesterday. He (Chen, not his client) got sick.'

2.4.2 TAME categories

Mandarin lacks the category of tense – all tense information is expressed by time adverbs. Modality is marked similarly be adverbs or complement clause constructions. Yet there is a system marking the aspect (§ 7.4). (5) is an example.

```
(5) a. 我去过 上海 了
1 go GUO Shanghai SFP
'I have been in Shanghai.'
b. 我去了上海 了
1 go LE Shanghai SFP
'I have gone to Shanghai.'
```

2.4.3 Negation

Like the case in standard English, there is no negative concord in Mandarin Chinese. There is, however, no uniform negation operator like the English *not*. Several negation operators and strategies are used frequently (§ 10.3). Verbs can be negated by $\overline{\wedge}$ while nouns generally cannot, and this is a criterion to tell verbs from nouns. There is another negation operator $\overline{\partial}$, which has subtle differences in its meaning and syntactic properties compared with $\overline{\wedge}$ (6, 7). On the other hand, the negative potential complement construction, i.e. the $\overline{\nabla \wedge}$ construction, isn't obtained by inserting a negator in the clause (8).

```
(6) a. 我不 喜欢吃 芹菜
       1 NEG like eat celery
       'I don't like eating celery.'
    b. * 我没喜欢吃芹菜
    a. 我不 吃早饭
       1 NEG eat breakfast
       'I don't eat breakfast. (I usually don't, I don't want any today, etc.)'
    b. 我没 吃早饭
       1 NEG eat breakfast
       'I didn't eat breakfast. (I may usually do, but somehow I didn't today.)'
    a. 我做[不 了
                        ]potential complement, negative 这 件事
       1 do NEG finish
       'I'm not able to do this.'
        * 我 没有/并非/不 做 [ 得 了
                                      ]potential complement, positive 这 件事
          1 NEG
                          do DE finish
```

2.4.4 The topic-comment structure

2.5 Clause combining

Mandarin Chinese has usual clause linker devices (chap. 12), as well as complement clauses (§ 11) and relative clauses (TODO: ref). TODO: what else?

It's often said Mandarin is a serializing (i.e. with serial verb constructions) language. A closer look, however, reveals this is not the case: These constructions are either adverbial clause constructions or complement clause constructions, or maybe certain kind of light verb constructions (§ 10.2.1). The internal heterogeneity renders the term *serial verb construction* useless.

Prosody and the writing system

Parts of speech

4.1 Introduction

Lexical words in Chinese can be roughly divided into nominal ones and verbal ones, or in the Chinese terms, 体词 and 谓词. The prototypical role of nominal words is to fill predicate slots (or to be more precise, to head a phrase that fills an argument slot). Nominal words rarely appear in the verbal complex, though for stylistic purposes, they sometimes do. Verbal words prototypically appear in the verbal complex, 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: verbs being able to fill argument slots is not typologically rare, actually, and this shared feature itself does not bring nouns and verbs close enough for them to be merged together.

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 without any morphological marking (Li and Thompson 1989). Since verbs and most alleged adjectives show different morphological behaviors in reduplication, 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 reduplication 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 locative particle class, including 里 in 在房子里, which is sometimes said to be the postposition class because they sometimes have adposition-like properties (TODO: ref: topicalization, and what else?).

Box 4.1: The notion of lexical and function words

The lexical-functional distinction is sometimes subtle. (朱德熙 2009, § 3.6) classifies certain categories like locative particles into the nominal class and hence the lexical one, while the locative particle class can definitely be enumerated (朱德熙 2009, § 4.4). On the other hand, the author claims that lexical classes are always open and function classes are always closed 朱德熙 (2009, § 3.4). A conflict thus occurs.

The problem here is we have a gradient hierarchy from the prototypical lexical classes to the prototypical function classes. The most lexical class is open to new members, not a part of the grammar, and its members are able to be lexical heads^a of, say, an NP or a verbal complex. A less open class is not so open to new members (just like Japanese verbs and adjectives), but is

still not a part of the grammar and its members are able to be lexical heads. A even more closed class is not open to new members, and is a part of the grammar, but its members are still able to be lexical heads. Pronouns are in this type. A prototypical function class, then, is not open to new members, hardwired in the grammar, and its members are never lexical heads. Derivational suffixes are in this type.

It's of course not easy to tell a newly discovered part of speech (or *form class*, which may be a word class or an affix class) What's the status of an orientation preverb, which may be found in Japhug (Jacques 2021)? It's a part of the grammar, but does it carry a real part-of-speech label (like "directional adverb")? And speaking of adverbs, what's the status of the English *allegedly*? An adverb filling a peripheral argument position, or an evidentiality marker? We really need to know a lot about language to fix the position of a form class. A common practice is just to shun the details and just say whether a class is lexical or functional, drawing a hard line between the two. So 朱德熙 (2009) mainly uses the criterion of whether there is a real part-of-speech label, and then directive particles are classified into the nominal class and they are in turn considered lexical. But he mistakenly confuses the notion of lexical classes with the notion of open classes, and then we get the asserts in 朱德熙 (2009, § 3.4).

"Not functional heads à la modern generative syntax: realizations of functional heads are function words or suffixes, not lexical items. We may also say a lexical head has a "real part-of-speech label" like "noun" or "verb", which, in the language of Distributed Morphology, means that such a lexical head appears at the core of a functional project as the root, and at somewhere a categorizer has to be merged into the derivation. A functional head in Distributed Morphology, on the other hand, doesn't bring any real part-of-speech label to its realization. We still classify functional items in the grammar into classes, but these classes are somehow less "real".

4.2 Coverbs

4.2.1 Prepositions

Though all Mandarin prepositions have verb origins and therefore may be classified as a subclass of verbs by some, it's necessary to distinguish a separate preposition class. Criteria of prepositions include TODO: ref

Nominal derivation

The structure of noun phrase

The verbal complex

7.1 Introduction

Mandarin is generally regarded as a prototypical analytic language, without traditionally acknowledged verb inflections. Indeed it will be weird to posit something like a paradigm in Mandarin, but it doesn't mean there is no such thing as verbal affixation that are active in the morphosyntax (instead of not fully productive and arguably historical derivations). Some items involved here however may have partial mobility. Consider (1): In the first sentence, Γ is an aspectual suffix (§ 7.4), while E is a verb which never appear without an argument in uncontroversial phrasal grammar. So we conclude Γ and E are suffixes, and by structural comparison, we conclude Σ in (1b) is also a suffix, with the same status as E. But there comes (1c), in which Σ moves to the end of the sentence.

- (1) a. 他 带 走 了 他的 文件 3sg carry go.away PERF 3sg-Poss file
 - 'He carried his files away.'
 - b. 他 带 [过来] 了 三 瓶 汽水 3sg carry come PERF three bottle.CL soda 'He carried here three bottles of soda.'
 - c. 他带了三瓶汽水[过来]

To avoid the useless quarrelling about what is a word and whether a grammar point is morphology (which isn't that important in non-lexicalist generative theories, anyway), I use the term *verbal complex* to cover the main verb and the "suffixes" in (1). There are roughly three systems in the verbal complex. The first is the uncontroversial derivation system, like & '-ize'. The second is the verbal complement system, which includes three subsystems: the resultative complements, the directional complements, and the potential complements (\S 7.3). The third is the aspectual system (\S 7.4).

Box 7.1: On the notion of complements

The Chinese term 补语 corresponding to my *verbal complement* is frequently translated into the English term *complement*. This creates some confusion, because the term *complement* can also denote clausal dependents that are arguments of the main verb, as in Huddleston and Pullum (2002). The term *non-argument complement* may be used to avoid this confusion. There are, however, further confusions: Should we regard a clausal dependent that records the quantity or amount of an action as a non-argument complement? This construction can also be seen in Latin, like the Latin accusative expression of time (Greenough and Allen 2013, § 423). Thus, I use the term *verbal complement* to refer to things like 完 as in 做完了.

(2) is an example in which all the three systems appear. In real world speeches, such combinations have relatively lower distributions, possibly because of the prosodic constraint that verb shouldn't be too heavy unless it appears at the end of a clause (TDOO: ref).

Besides the systems shown in (2), the separation of a verb further complicates the behavior of the verbal complex $(\S 7.5)$.

7.2 Verbal derivations

7.3 Verbal complements

7.4 The aspectual system

7.5 Separable verbs

It's sometimes possible to split a verb and inject some clausal dependents into it. The interaction between this separation operation and the structure of the verbal complex is of some interest.

Verb and arguments

Valency changing

There are two ways of valency changing in Mandarin. The first is via a coverb construction, as in the disposal constructions (§ 9.1), TODO The second is *doing nothing* to the verb and relying on the unusual semantic roles of clausal complements to inform the listener about the valency changing, as in TODO: ref. Since there is no morphological marking, constructions of this type are often recognized as topic-comment structures, in which the "topic" – which is the subject under closer investigation – is said to be freely occupied by any semantic (and not necessarily syntactic) argument in the clause, though this claim can be falsified by detailed syntactic tests (§ 10.5.3).

- 9.1 The disposal constructions
- 9.2 The passive constructions
 - (1) 我被他打了一拳
- 9.3 The causative
- 9.4 The affected construction
- 9.5 Instrumental object
 - (2) 我们今天准备吃食堂

Simple clauses

10.1 Introduction

A sentence can be divided into several clauses linked by clause linking constructions (chap. 12). A clause can be divided into one or more topics (if any) and a comment, the latter being the nucleus clause, and possibly sentence-final particles. The comment – the nucleus clause – may further be divided into a subject (if any), a series of adverbials, the verbal complex, and post-verbal constituents, the most important types including object(s), the second part of a separable verb, certain directional complements, and purpose clauses. This chapter is denoted to everything on the clause level, postponing details in subordination and clause linking to the next several chapters.

Box 10.1: The term clause

Some people, like 邓思颖 (2010, pp. 140) as well as Dixon (2009), use the term *clause* for subject-predict constructions that don't receive complete marking of speech forces. (In generative terms, *clause* is for lower level CPs or even TPs.) So in this way, sentence-final particles shouldn't be discussed in this chapter because they are of course dependents in the sentence level. They may be discussed together with other sentence-level constructions like chap. 12. But this notion of clause certainly goes against the tradition in descriptive grammars. So the approach of this note is to acknowledge everything larger than TP as a clause, which may or may not be a sentence, and discuss its structure in this chapter, while "adjunctions" – or in other words, optional dependents – are discussed in, say, chap. 12, for the sake of convenience. The narrative order of this note is not the ideal "small unit – large unit" scheme, but the "simple large unit – complicated large unit" scheme. Needless to say, when it comes to clause combining, the problem of what the clause really is – with or without SFPs, for example – is still relevant, but it is not answered by saying "the construction takes a clause, not a sentence".

10.2 Types of nucleus clauses

Box 10.2: About the subject-predicate binary division

Dixon (2009) argues against the definition of *predicate* as the main verb (or adjective) plus somehow "internal" arguments. He uses the term *predicate* to refer to the verbal complex instead. However, since I will need to compare the topic-comment construction with the inner structure of the nucleus clause, the term *predicate* will still be used in the way Dixon (2009) dislikes, because it's the counterpart of the comment in the topic-comment construction.

10.2.1 There is no serial-verb construction or complex predicate

10.3 Negation

10.4 Sentence final particles

10.5 The topic-comment structure

I follow Shi (2000)'s approach and define a topic as an unmarked NP that has certain relations with a position in the clause after it and is indeed the topic in the information structure (i.e. some (probably already known) object to which new information is added). Constructions like 连...都...are not discussed in this section – they are to be found in TODO: ref.

10.5.1 Topicalization of possessor

(1a) and (1a) are a pair of sentences with and without topicalization of the possessor in the subject.

```
(1) a. [他]<sub>topic</sub> [[个子]<sub>subject</sub> 高高 的]<sub>comment</sub>
3sg stature tall TODO DE

'As for him, the stature is tall.'
b. [他的个子]<sub>subject</sub> 高高 的
3sg POSS stature tall TODO DE

'His stature is tall.'
```

10.5.2 Topicalization of preposition objects

- (2) 这件事你不能就麻烦他一个人
- (3) 你不能[为了这件事]adverbial:PP 就麻烦他一个人

This is also a demonstration of the preposition status of 在 in this sentence (§ 4.2.1), because if it's a verb or an auxiliary verb, it will be hard to have its object topicalized and have it deleted at the same time, but deletion of the preposition in topicalization is well-attested cross-linguistically.

10.5.3 Rejecting the notion of dangling topics

Some people, like 朱德熙 (2009, § 7.1), equate *subject* with *topic* in Mandarin grammar. Some (especially those from the functional-typological tradition) go further and assert that "the notion of the subject (as the position of the most agentive argument) isn't grammaticalized in Mandarin Chinese", and therefore the topic is just an NP which the comment is "about", and this base-generated and syntactically unconstrained topic is called a "dangling topic". This view is rejected in this note, because such accounts usually end up in severe overgeneration. Here I briefly summarize Shi (2000)'s argumentation.

10.5.3.1 Type 1: Idiomatic phrasal predicate looking like a comment

In the first type of "dangling topic", it's impossible for any NP in the comment to be syntactically related to the topic. Such cases are however rather unproductive. In (4) and (5), the orders of the constituents can never be changed. Nor is it possible to change a word or two in the bracketed "comments". A reasonable assumption is these bracketed "comments" are actually idioms, which are to be regarded as a single verbal element that can't be further analyzed. Thus, in (4) and (5), the so-called topic is an ordinary subject, and the so-called comment is a predicate.

- (4) 他们[大鱼吃小鱼](, 厮杀成一片)
- (5) 他们[你看看我我看看你]

10.5.3.2 Type 2: Quantificational adverbial looking like the inner subject

The second type of "dangling topic" is like (6). A topic-comment analysis of (6)

(6) 他们谁 都 不 怕 3pl who even NEG fear 'They don't fear anyone.'

10.5.3.3 Type 3: Ellipsis leaving a subject and one predicate

Some people accept (7). Here the NP 那所房子 definitely doesn't come from the words following it, and is therefore recognized as a topic by some (TODO: ref). Note, however, that 幸亏 serves as a clause linker outside (7): (8) is a demonstration of the 幸亏……不然…… linking construction, and we also have its topicalized version (9). (TODO: whether this is parenthesis) We also know in a clause linking construction, often one clause can be omitted in the utterance because it's content can be easily inferred (TODO: ref). So now the origin of (7) is clear: We can get it by omitting the second clause in the comment part of (9). Indeed, if we replace 幸亏 by anything that is adverbial but not a clause linker, the resulting sentence – which now contains a real dangling topic – is not grammatical.

- (7) % 那 所房子 幸亏 没 下雪 that CL house fortunate NEG snow (For that house, fortunately it didn't snow (or otherwise something bad would happen).
- (8) [幸亏] 去年 没 下雪 , [不然] 那 所 房子 早就 塌 了 fortunate last.year NEG snow otherwise that CL house already collapse SFP 'Fortunately it didn't snow last year, or otherwise that house has already collapsed.'
- (9) [那 所房子]_{topic}[幸亏 去年 没 下雪 , 不然 早就 塌 了]_{comment} that CL house fortunate last.year NEG snow otherwise already collapse SFP

10.5.3.4 Type 4: Extraction from prepositional adverbials

(2) in § 10.5.2 is sometimes regarded as an instance of the dangling topic construction. However, as is shown in § 10.5.2, it may just be from topicalization of an NP in an adverbial, with the preposition (and/or the locative particle) removed.

10.5.3.5 Type 5: Nominal predicate

(10) 这种青菜一斤三十块钱

10.5.3.6 Type 6: Locational adverbial mistaken for the subject

(11) % 物价 纽约 最 贵 price New.York most expensive 'The price in New York is the most expensive.'

10.5.3.7 Tentative conclusion

The conclusion is all topics in Chinese are closely linked to a position in the comment, be it a core argument position or a peripheral one. So the notion of dangling topics is to be rejected in Mandarin grammar, and we can always recover the "canonical" i.e. non-topic-comment clause from a topic-comment structure. After this, if the canonical clause can be divided into an NP or a complement clause and a verbal constituent following it, we can uncontroversially say the first is the subject while the second is the predicate. (TODO: predicate def) So equating the subject with the topic is also wrong.

It's possible to find the semantic role of the subject isn't agentive; in this case I assert there is a valency changing mechanism here.

Box 10.3: What to expect when people talk about the subject or the topic

Unfortunately, despite the syntactic tests presented above, there are still many people – even many native speakers – promoting the idea that the Mandarin topic has nothing different with the subject. Here is a list of TODO: ref

Complement clause constructions

Box 11.1: Non-existence of finite-nonfinite distinction in Mandarin

Cross-linguistically, we find a finite-nonfinite distinction in subordination. This distinction is arguably absent in Mandarin, even after detailed syntactic tests (Hu et al. 2001).

Clause linking

References

Robert MW Dixon. Basic linguistic theory volume 1: Methodology, volume 1. OUP Oxford, 2009.

James B Greenough and Joseph H Allen. *Allen and Greenough's new Latin grammar*. Courier Corporation, 2013.

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.

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.

Waltraud Paul. The serial verb construction in chinese: A tenacious myth and a gordian knot. *The Linguistic Review*, 2008.

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

Andreas Trotzke. Constructions in minimalism: A functional perspective on cyclicity. Frontiers in Psychology, 11, 2020. ISSN 1664-1078. doi: 10.3389/fpsyg.2020.02152. URL https://www.frontiersin.org/article/10.3389/fpsyg.2020.02152.

冯胜利. 汉语韵律句法学. 汉语韵律句法学, 2000.

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, 符准青, 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.