Notes about Classical Chinese

Jinyuan Wu

June 8, 2024

Chapter 1

Introduction

This note is about Classical Chinese, the high variety of more than two millennia of diglossia in China.

1.1 The name of the language

The language is known natively as 文言 ('lit. cultured speech') or sometimes 古文 ('lit. ancient articles') or 古汉语 ('lit. ancient Chinese'). Note that there were several stages of the development of Chinese and Classical Chinese is mostly (but not completely) based on Old Chinese (§ 1.2).

The language is sometimes known as *Wen-li* by Western missionaries, especially in Bible translation. This seems to be a misunderstanding of the word 文理, which is a nominal compound and means rhetorics (i.e. 文) and meanings (i.e. 理) of literature works. An educated person therefore would be described as "通文理" ('fluent in rhetorics and meanings'). Such a person of course would have decent understanding of Classical Chinese, and hence 文理 was probably mistranslated as "Classical Chinese", although the word was not natively used to refer to the latter.

1.2 Historical background

Since there was no attempt at explicit and systematic grammatical standardization (§ 1.4), prescriptive authority of Classical Chinese was a collection of canonical literature works consensually regarded as classical (§ 1.3). The whole canon was finished before the collapse of Han and therefore falls under the term Old Chinese. Both temporal and regional variances can be observed in Old Chinese texts, though, and not all varieties contribute to Classical Chinese equally. In this section, we briefly overview the history of Sinitic language(s) and analyze how they shape Classical Chinese.

1.2.1 Pre-classical period

The earliest attested Sinitic texts were oracle bone inscriptions, a 20th century archeological re-discovery not known to Classical Chinese authors. For them, the earliest available texts are documents preserved in 《尚书》 (lit. 'venerated documents'), often known as *Book of Documents* in English. Since these texts are from ancient kings whose deeds were romanticized by Confucian scholars, these texts were highly venerated and yet deemed as 诘屈聱牙 ('twisted, hard to pronounce') by post-Classical

authors.¹ They were something that had to be read with commentaries, the latter written in easier Classical Chinese. These documents therefore should be regarded as pre-Classical, although they did contribute sporadic phrases and grammatical words (e.g. the copula 惟 or the pronoun 厥) that were occasionally used in Classical Chinese works as a way to polish an article.

One thing worth mentioning is that the language of the *Book of Documents* and the language of oracle bone inscriptions are not identical. The most notable fact on this aspect is that the aforementioned pronoun $mathbb{m}$ appears frequently in the *Documents*, but it appears neither in oracle bone inscriptions nor in Spring and Autumn works. Possibly, *Book of Documents* contains predominantly early Zhou dynasty texts, while oracle bones dates back to Shang, and the differences we are observing reflect dialectal differences between the ruling classes of the two dynasties.

Another fairly early source is 《诗经》 (lit. 'poem classics'), also known as *Book of Odes*, which contains poems dates back to as early as early Zhou.

1.2.2 Spring and Autumn and Warring States

The majority of texts that shaped Classical Chinese prose were written in a time when Zhou was already substantially weakened. This period that witnessed prolificacy of Old Chinese works can be divided into two periods: the Spring and Autumn period which was filled with chaotic (but not intense) wars between numerous dukedoms, and the Warring States period which observed intense wars between seven major states, resulting in a unified Qin empire, which soon broke down because of resistances to its barbaric policies and eventually was superseded by Han dynasty (§ 1.2.3). The language of this period diverges tremendously from the pre-Classical period. For example, the copula the had died out of use and the copula construction had been largely replaced by the nominal predication construction (§ 2.2.1). The conjunction in is never seen in pre-Sprint and Autumn texts but had already made its way into the *Analects*. The lexicon also underwent huge changes.

Box 1.1: Lexicon change

List some lexicon changes.

There are clues suggesting regional variances. Students of Confucius noticed that when he recited Classical texts and presided rituals, he used 雅言 or 'elegant speech' (Analects 7:18). This suggests a possible diglossia at as early as Confucius's own age, with the "elegant speech" conceivably being the language of intellectuals of Zhou Dynasty. Comparison between the language of Classical proses and the language(s) of poetry shows the relative homogeneity of the former, while the latter both demonstrate divergence from the language of the proses and regional differences.

Box 1.2: Peotry and prose

This is presumably due to how the texts were transmitted. It is likely that they were passed by recitation, and regularization happened to proses when there was a predominant dialect, while the prosody and rhyme structures of poems efficiently locked them to their original forms.

¹For example by Han Yu in 《进学解》 (Analysis of academic advancement).

The language of 楚辞 (*Verses of Chu*), for example, has the following differences with the language of the proses. The first is a Kra–Dai substrate.

Box 1.3: Chu dialect

Find references.

The language of the *Odes* also seems to slightly deviates from Dialectal differences have also been observed within the *Odes* (List et al. 2017).

1.2.3 Han dynasty

The last batch of uncontroversially classical works were composed during Han dynasty, among them the most important being *Records of the Grand Historian*. The language of *Records of the Grand Historian* shows notable but largely qualitative differences compared with earlier historical works, the most important one being 《左传》. Notable changes include more pre-verbal adverbials, reduction of prepositional verbs, regularization of constituent orders, and also proliferation of disyllable words It is therefore suggested that Han dynasty texts and pre-Qin texts reflect two stages of post-Zhou developments of Chinese, although the change was definitely not as radical as the change from the *Documents* to Spring and Autumn texts (He 2005, pp. 260-264).

1.2.4 Post-Classical periods

The end of Old Chinese – and hence the end of the classical period – is marked by the collapse of the personal pronoun system, the emergence of 是 as a copula (and not just a demonstrative), the appearance of the disposal construction (i.e. the 把 construction) and the so-called long passive construction.

Box 1.4: References for Middle Chinese and modern Mandarin

- James Huang
- etc.

Expectedly, despite purification attempts, vernacular elements made their ways into not only administrative documents but also pure literature and scholar works. Classical Chinese or $\dot{\chi} \equiv$, in the broadest sense, is a term that covers all genres whose grammars are roughly based on the Old Chinese canon but may have a varieties of innovations.

Box 1.5: Late regularization attempts

韩愈、因明学

1.3 Texts

The great historical work 《史记》 ('lit. historical records'), often known as *Records* of the Grand Historian in English (a translation of 太史公记, the earliest known title of the work), laid the paradigm of official historiography of all Chinese dynasties after

Han. The author 司马迁 *Sima Qian* is known as the *Lord Grand Historian* or 太史公. 太史 'grand historian' was the title of

1.4 Previous studies

Grammatical traditions Classical Chinese authors had conversations about grammaticality and uses of grammatical particles reminiscent of how English native speakers with some exposure to the study of English grammar but no formal training: "delete the the here and your sentence looks more concise". No attempts were made to establish intermediate concepts between words and utterances, like structural templates of phrases or grammatical relations, and to organize the grammar as a machine producing acceptable utterances: discussions on grammatical topics were either for education or for rhetorics.

The grammatical awareness of Classical Chinese authors was somehow comparable to what an ancient Roman grammarian or *grammaticus* did, who set his main role as a secondary educator, refrained from analyzing some sort of "underlying" or "internalized" system behind the surface forms and was satisfied by mostly surface-oriented patterns, and would not set up any intermediate concepts between the word and the utterance (Matthews 2019, pp. 7,35,47-48). On the other hand, this approach is contrary to the practice of the Paninian Sanskrit grammatical tradition, which, in today's terminology, starts with dependency relations and abstract features and uses a set of morphophonological rewriting rules to produce the corresponding surface forms (Kiparsky 2009).²

The Classical Chinese grammatical tradition appears even looser compared with the Roman tradition in that the former did not even attempt to recognize parts of speech; this however was deeply rooted in the structure of Classical Chinese in that

Box 1.6: Ancient Chinese grammatical tradition and Roman tradition

Is the situation somehow close to what a Roman grammarian (*grammaticus*) would do? It seems that Roman grammarians also didn't care about abstract structures. See:

- Use and Function of Grammatical Examples in Roman Grammarians
- Quintilian's 'Grammar' (Inst.1.4-8) and its Importance for the History of Roman Grammar
- · What Graeco-Roman Grammar was about

 $^{^2}$ The main difference between Pāṇini's treatment of Sanskrit and modern linguistic theories is that Pāṇini apparently treats all dependency relations equally and there is, for example, no concept of the pivot or the "external argument" of a clause. This is however modified in the commentaries of his $Aṣṭ\bar{a}dhy\bar{a}y\bar{\imath}$, which explicitly allows an argument being promoted to the agent position because of the intentions of the speaker (Keidan 2017). The Paninian tradition therefore is extremely close to modern linguistic description practice; the most important difference probably is that modern linguistic description, practically, may even be less rigorous than $Aṣṭ\bar{a}dhy\bar{a}y\bar{\imath}$, because of possible competing "mind grammars" among speakers with mutual intelligibility or even within the mind of one speaker, and also the fact that a description as detailed as $Aṣṭ\bar{a}dhy\bar{a}y\bar{\imath}$ requires corpus data whose quality and quantity exceed the capacity of most field linguists.

On the other hand, phonology was an active topic in ancient China. This was probably due to the influence of

Perspectives of European missionaries Modern descriptions

1.5 Remarkable features

Classical Chinese has several notable typological features.

Box 1.7: Remarkable features

- Part of speech
- Topic-comment
- "Coverb", or is there real preposition
- Prosody (and hence a chapter on phonology and writing system)
- The chapter on phonology and writing system can be very hard: lots of historical facts
- Passivization and so on

Chapter 2

Grammatical overview

2.1 Parts of speech

Concepts like noun-hood and verb-hood are clearly definable in Classical Chinese if the two are understood as bundles of grammatical properties (e.g. § 2.2.1), and they are not quite different from those of other natural languages. In modern descriptive linguistics, however, part of speech tags like *noun* or *verb* however usually mean *lexical* properties that connect a root or derived stem with syntactic environments in which it appears and its phonological realization, and how parts of speech are demarcated often shows considerable cross-linguistic variance.¹

Classical Chinese has no inflectional morphology for content words so the morphophonological part is moot. The content words also show much more flexibility in their distributions in various syntactic environments, sometimes without any formal indications. These facts lead some to claim that Classical Chinese is a language without clear part of speech distinctions, so although we can talk about the nominal or verbal usage of a root or a compound, strictly speaking we cannot talk about nouns or verbs, as there are no inherent lexical properties attached to roots that dictate their nominal or verbal usages. A more careful analysis, though, seems to reveal that at least some part of speech distinctions can be maintained in Classical Chinese.

Nouns and verbs A noun-verb distinction is supported by evidence from the traditionally called noun-used-as-verb phenomena (§ 3.2.1). If the lexicon of Classical Chinese contains *only* non-categorized roots, the interpretation of verbal usages of a word that usually appears in nominal environments should vary rather freely. What is

¹For example, to say "the Latin word *canis* is a noun" means to say that the form *canis* usually appear as the head of an noun phrase (NP), that it carries an inherent gender feature and a number feature, and that its inflection pattern follows one of Latin nominal declensions. Modern English does not have rich inflectional morphology but does have nominal modification constructions (e.g. $a [dog]_{nominal (not NP)} tag)$, so saying that dog is a noun means something different with saying that *canis* is a noun.

We take a step further and stipulate that this is because the Latin lexeme *canis* is actually a bundle of the root *cane*-, the masculine gender, a case feature (here nominative), a number feature (here singular), and probably the fact that it is the head of some complete NP. The root *cane*- appearing as the main verb of a clause is impossible simply because a bundle of the root *cane*- plus some verbal features is not in the mental dictionary of a Roman. Nominal attributes are not possible in Latin, again because the mental dictionary of Romans does not contain anything like the root *cane*- without the head status of a NP. The Latin form class *noun*, then, means the bundle "a gender feature, a case feature, a number feature, and the head-of-NP status" plus how it is morphophonologically realized (i.e. the five declensions). The English concept of *noun* is much different. Indeed, if we accept the hypothesis that abstract principles of language structures are more or less the same cross-linguistically, then the lexicon *has to* be highly diverse across languages because it is exactly the locus of language variance, besides morphophonology.

actually attested however is not different from similar phenomena in other languages. In some cases, it seems a root is first categorized as a noun and then undergoes something similar to English -ize (albeit without any explicit marking), so only the nominal usage needs to be recorded as a lexical entry, but the lexicon controls whether a derivation step is viable. In other cases, both the nominal and verbal usages are to be recorded in the lexicon, as they cannot be inferred regularly from each other. In both cases, how a root is possibly categorized is stored in the lexicon, meaning that calling the nominal use of a root a *noun* and the verbal use of a root a *verb* is not problematic at all even in Classical Chinese. Sporadic ad hoc re-categorization of roots does exist, but this does not support the idea that part of speech division does not exist at all in the lexicon.

A terminological caveat is what appears as an argument is not necessarily a NP: it can be a complement clause. The main verb of a complement clause is not in a nominal position. Some may call complement clauses "nominal clauses", but this is misleading as the internal structure of a complement clause is not the same as that of a NP.

The adjective class An adjective class can also be established in Classical Chinese, although its behavior is strongly verbal.

A caveat, similar to the caveat that an argument is not necessarily a NP, is that an attributive phrase is not always an adjective phrase. In existing modern studies, statements like "a verb used as an adjective" is usually avoided: wordings like "something is used as an attributive" are adopted instead.

Box 2.1: Traditional grammars

List some Classical Chinese grammars in which 动词作形容词 etc. never appear.

Box 2.2: A comprehensive list of Classical Chinese parts of speech

Noun, verb, adjective: any other content words?

2.2 The overall clausal structure

Like all other languages, a Classical Chinese clause can be a simple clause or a complex one constructed from subordination and coordination (Mei 2018, Chs. 3-5). A simple Classical Chinese clause is a nucleus, which may be either a verbal clause (§ 2.2.2) with possible tense, aspect, mood (TAM) modifications or a nominal predicate clause (§ 2.2.1), plus possible sentence final particles and/or topicalization. Topicalization can also happen for a complex clause (Mei 2018, Ch. 4 § 3.3). It appears that all embedded clauses in Classical Chinese cannot have discourse-related devices like topicalization and sentence final particles.

2.2.1 Nominal predication

The top-level structure of a Classical Chinese clause may contain a (optional) subject and a NP acting as the predicate (1, 2). A nominal predicate may express an "is-a" relation between the subject and the subject complement, which is the case of (1). Some nominal clauses however express a possessive relation between the two (2).

- (1) [良人者]_{subject} [所仰望而终身]_{predicate} 也
- (2) 蟹六跪而二螯

The pre-Classical copula construction All the constructions mentioned above are without a copula. In the pre-Classical copula age there is a copula 惟, which however had largely died out of use in Classical texts.

Distinction between a nominal clause and a verbal clause Note that the term *nominal* in *nominal predication* or *nominal clause* refers to the fact that the predicate is structurally a NP, not whether the head of the predicate usually appears like a noun or a verb (§ 2.1). In some sentences although the predicate of a clause mostly appears as the head of a NP and therefore may be referred to as a noun in dictionaries, the clause is clearly a verbal clause because it expresses a dynamic event and not just a state, the possibility of TAM markers, etc.

(3) 大楚兴, 陈胜王

2.2.2 Verbal nucleus clauses

Structural template In the case of verbal predication, the constituent order of core constituents of transitive clauses is almost always SVO (4, 5). Intransitive clauses have a SV constituent order (6). Prepositional complements are also placed after the verb (7). SOV is however attested in negative (8) or interrogative situations (9).

- (4) [子张]_{subject} [学]_{verb} [干禄]_{object}
- (5) [子]_{subject} [奚]_{reason} 不 [为]_{verb} [政]_{object}
- (6) 君子不器
- (7) 君子博学于文
- (8) 恐 [年岁之 [不吾与]_{VP: Neg-OV}]_{complement clause}
- (9) 以五十步笑百步,则[何如]SOV clause

Classical Chinese shows nominative-accusative alignment. The contents of a verbal clause besides the subject is often defined as the verb phrase (VP). Discussions about subjecthood can be found in § 2.2.3.

Box 2.3: Nominative alignment

List some evidence for clear subjecthood. List some reasons to define VP.

Adverbial constituents in the nucleus can be divided into TAM ones and so-called peripheral arguments, including location, manner, instrument, etc. The peripheral arguments are usually post-verbal (10, 11, 12). Pre-verbal peripheral arguments are however still possible (13, 14, 15).

- (10) 侍饮于长者
- (11) 孟孙问孝于我
- (12) 祷尔于上下神祇
- (13) 韩生南向坐
- (14) 於人之罪无所忘

(15) 为人谋而不忠乎

The TAM adverbials are almost always preverbal.

- (16) 文王既没,文不在兹乎
- (17) 孔子既得合葬于防
- (18) 我未之能易也

When TAM adverbs and peripheral arguments both appear before the verb, the order is always TAM > peripheral argument. The reverse order is never attested. The whole VP therefore can be analyzed as a core VP plus peripheral arguments surrounding it, plus TAM adverbs preceding the pre-verbal peripheral arguments. The clause then is the complete VP plus the subject.

(19) 三王 [既]_{TAM} [以]_{instrument} [定法度]_{VO}

Box 2.4: Adverbials combination

Is it possible to use multiple pre-verbal peripheral adverbials? What's the relevant order constraint?

Box 2.5: Position of adverbials in SOV case

Where to place adverbials in SOV case?

Box 2.6: Position of negator

Where is the position of the negator?

Complex predicates It is possible that the main verb of a verbal clause contains more than one root. Such a verb is known as a complex predicate.

Box 2.7: Classical Chinese complex predicate

Directional complement and resultative complement

2.2.3 Discussions on subjecthood

Since both the topic and the subject appear at the beginning of a clause, the distinction between the two seems unclear. We can even go as far as claiming that Classical Chinese has only information structure and no argument structure. The matter is further complicated by the fact that Classical Chinese has no native speakers now and detailed grammaticality tests are not available, and that Classical Chinese is a pro-drop language so obligatoriness is not a viable criterion. Here we present some discussions on subjecthood.

The existence of a subject position The semantic relation between some clause-initial NPs and the verb is fixed by properties of the verb, while the semantic relation between some clause-initial NPs and the verb is more flexible. We therefore rightfully call the first type of clause-initial NP subjects.

In (20), for example, the verb \otimes is a derivation from the noun \otimes , and this can only be a causative or tropative or benefactive construction, and by being at the initial of the

clause, the NP 孟尝君 has to be understood as what initiates the event. By considering the context we will know the clause is a tropative one and the right translation is 'Lord Mengchang considers me as a guest.' Specifically, 孟尝君 can be neither the patient nor peripheral roles in the event (e.g. an instrument). The obligatory relation between the verb and the NP 孟尝君 clearly shows the latter is a subject, and not a topic.

(20) 孟尝君客我

It should be noted that the subject can be the patient, as in (21). This however again is an *obligatory* semantic relation between the verb $\mathbb E$ and the NPs $\mathbb E$ and $\mathcal F$. By virtue of being the only argument of $\mathbb E$ and appearing before the verb, $\mathbb E$ and 天下 are obligatorily understood as the patients. They cannot be understood as, say, the location of the event ('*Someone causes peace (i.e. $\mathbb E$) to something else in the state ($\mathbb E$) and the universe ($\mathcal F$)'). Clauses like (21) are therefore better analyzed as valency alternation constructions.

(21) 国定而天下定

More subtle distinctions Although we have already shown that Classical Chinese does have a subject position as opposed to the topic, this does not completely answer the question of the distinction between the two because the subject can also be topicalized. In reading traditions, a pause is needed after some clause-initial NPs but not others. We tentatively assume that the former are topics. It seems subjects of ordinary verbal clauses cannot be topicalized (22), but if the VP is emphasized, topicalization is possible (23). On the other hand, the subject of a nominal clause can be topicalized whenever desirable. This might be because in nominal clauses the nominal predicate is by default focused.

- (22) a. 三王既以定法度 b. *三王,既以定法度
- (23) 此二人者,实弑寡君

Box 2.8: Topical pause

Check whether all NPs with a following pause are topics.

2.2.4 Sentence final particles

Classical sentence final particles have a variety of functions. It may mark the interrogative force (24), a judgemental meaning (25), and aspectual values (26).

- (24) 大车无輗,小车无軏,其何以行之哉
- (25) 人而无信,不知其可也
- (26) 温故而知新,可以为师矣

2.2.5 Topicalization

Box 2.9: Topic and subject

What's the relation between the topic and the subject?

2.3 The noun phrase

The Classical Chinese NP can be roughly divided into the determiner region and the determined region, the latter known in Huddleston and Pullum (2002) as the *nominal*.² The latter is just the head noun plus possible complements and modifications, and the first can be left empty or be a demonstrative, or a "possessor", the role of the latter being not confined to a semantic possessor (Pulleyblank 1995, p. 61). When the "possessor" is present, the particle \angle appears between the possessor and the nominal region (27, 28). When only the demonstrative is present, no marking is present (29).

Box 2.10: Determiner region

Give a comprehensive list of determiners.

- (27) 王之诸臣
- (28) 马之死者
- (29) [此心] 之所以合于王者

2.3.1 The nominal region

Pre-head attributives

Box 2.11: Pre-head attributive

Is the following paragraph right?

An interesting feature of Classical Chinese is that adjectives before the head noun seem strongly discouraged. The meaning of, say, 'an ugly big old bear', is canonically expressed by several strategies. One is the 者 construction introduced below, which can be described as a relative clause construction (but with caveats) and seems to have no complexity constraints (31). Semantically non-restrictive attributives can always replaced by clausal coordination.

Multiple adjectives are indeed possible.

The marker 者 and the relative clause construction The marker 者 looks like a relativizer. It is different from relativizers in many other languages in that further structural add-ons can be applied to the fused relative clause formed by it, while the fused relative clause constructions in many other languages are unable to undergo further modification. This seems to be the only productive way to form complex nominals (31).

(30) 马之千里者

²In this note, when the term *nominal* is used as a noun, it refers to the determined region in NPs, while when it is used as an adjective, it refers to the status of being the head of a NP.

(31) 若[至力农畜,工虞商贾,为权利以成富,大者倾郡,中者倾县,下者倾 乡里者],不可胜数

Box 2.12: Relative clause complexity

Can a relative clause contain a NP that in turn contains a relative clause?

Box 2.13: zhi-zhe construction

The structure of the 之-者 construction may cause some debates. It can be analyzed as a possessive construction on top of a fused relative clause construction and translated word-to-word into English as '[those who go one thousand miles] of horses'. An interesting question then is whether we have any other appearances of the N \geq V $\stackrel{*}{=}$ construction where the relation between N and [V $\stackrel{*}{=}$] is prototypically possessive. It seems this is indeed possible: 城北徐公,齐国之美丽者也.

Under this analysis, 楚人有吹箫于市者 is composed by applying the external possessive construction to 楚人之吹箫于市者

One fact (or is it really a fact?) supporting the determinative analysis of 之者 is the construction seems to be unable to receive a further determiner: *此马之千里者. The sequence 此马之千里者 does appear but it is almost always a nominal predication construction.

Chapter 3

Parts of speech

The part of speech distinctions in Classical Chinese has been discussed in § 2.1, and in this chapter we discuss their behaviors in detail. In principle, function words can be introduced together with their grammatical functions, but since the correct analyses of some constructions are still controversial and it may well be possible that the controversies reflect real historical linguistic divergence among speakers, function words are also included in this section for easier reference.

Box 3.1: Parts of speech, a chapter

This chapter depends on a list of POS (Box 2.2). The content:

- Noun;
- Verbs; the details about noun-used-as-verb can be placed here, as a source of verbs.
- Look-up tables for particles

3.1 Nouns

The verbs \boxplus ('go out'), \bigwedge ('enter'), \sqsubset ('die, decay') are regularly derived to \boxplus ('what goes out'), \bigwedge ('what comes in') and \sqsubset ('what dies'). This derivation pattern however is not

Box 3.2: Deverbalization derivation

Summarize deverbal derivations.

3.2 Verbs

3.2.1 "Nouns used as verbs"

The conventional term in Mandarin Chinese 名词作动词 'nouns used as verbs' covers two phenomena, corresponding to multiple functions and zero derivation (Dixon 2010, § 11.3), and also the rare case of ad hoc re-categorization of a root.

Multiple functions Some roots have both nominal and verbal uses, and there is usually some semantic connection between the interpretations of the two uses, but this is not regularly inferrable. Here we consider some examples in Yang, Kong, and Zhou (1991):

- 楚 may mean 'the Chu state' or 'do what Chu people do'.
- 床 may mean 'bed' or 'settle down your bed or sleep on a bed'.
- 城 may mean 'city, castle' or 'build a city'.

The interpretation of the verbal usage is usually *not* decided from the meaning of the root and that the root is used in a verbal environment; rather, it is instructed by the lexicon. Therefore, the verbal usage of 城市 only means 'build a city' although the 'do city-related things' reading in principle could make sense.

Therefore, roots like 城, 楚 and 床 have double functions: nominal and verbal, but the two functions are likely not related to each other by regular grammatical rules. This corresponds to the "multiple function" case in Dixon (2010, § 11.3). Moreover, what is stored in the lexicon is not the bare, non-categorized root 城, but one noun lexeme 城 'city' that specifies its nominal usage and one verb lexeme 'build a city' that specifies its verbal usage, and other seemingly possible ways to categorize the root, although attested elsewhere, are ruled out by their absence in the lexicon.

The boundary between roots with double functions and roots undergoing zero derivation (see below) is somehow blurry, as the nominal and verbal uses of 域 and 床 still seem to show a common pattern and may be understood as a rare derivation. This blurriness leads many grammatical works on Classical Chinese to simply refer to the two phenomena uniformly as "nouns used as verbs".

Zero derivation In other cases the meaning of the verbal use of a root usually appearing in a nominal context is regularly derived from the nominal meaning. This is because although tropative or causative derivations in Classical Chinese are mainly verb-to-verb, they can also be applied to nouns. In this way from Ξ 'servant, official, minister' we have the causative verbal usage 'make sb. dependent to', and from Ξ 'guest' we have the tropative usage 'consider sb. as a guest'. These verbal usages are nothing different from noun-to-verb derivation observed in other languages, so we regard the relevant phenomena as zero derivation as in Dixon (2010, \S 11.3).

In zero derivation, the meaning of the nominal usage has to be recorded in the lexicon, the meaning of the verbal usage can be automatically decided from the derivation rule. These derivations are however not completely regular and not for every word: the lexicon also controls whether a derivational rule applies.

Ad hoc re-categorization There are sporadic verbal usages of nouns that are almost never attested elsewhere, like 军 in 沛公军霸上. This means that ad hoc recategorization of roots is possible in Classical Chinese, and the meaning is to be decided from the context. This is also possible in English but usually not accepted in formal texts. Alleged ad hoc categorized Classical Chinese roots are indeed a possibility, after all, although their frequency is quite low and cannot be exaggerated to be the norm rather than the exception.

3.3 Pronouns

Box 3.3: Third person pronouns

 \not seems to be the accusative pronoun in Old Chinese. \not seems to be the genitive pronoun, and may be a phonological fusion of \not and a possessive marker. See Mei, Guang.

3.4 Particles

Grammatical particles are not content words and in principle can be introduced together with the grammatical categories and relations they express. The long and complicated history evolution of Classical Chinese however means a particle may have multiple quite different uses possibly due to grammaticalization, so a surface form-to-function discussion on particles is of great descriptive value.

Box 3.4: Classification of particles

Do I need to classify particles?

者 The particle 者 most frequently appears as a relativizer, a complementizer, or in the *zhe-ye* construction. The three functions can be uniformly analyzed as the function of a low-level determiner (Aldridge 2009).

之 This

References

Aldridge, Edith. "Old Chinese determiner zhe". In: *Historical syntax and linguistic the-ory* 18 (2009), pp. 233–250.

Dixon, Robert MW. *Basic linguistic theory volume 2: Grammatical topics*. Vol. 2. Oxford University Press on Demand, 2010.

He, Leshi 何乐士. Shǐjì yǔfǎ tèdiǎn yánjiū 史记语法特点研究 (A study on grammatical features of Historical Records). Shāngwù Yìnshūguǎn, 2005.

Huddleston, Rodney and Pullum, Geoffrey K. *The Cambridge Grammar of the English Language*. Cambridge University Press, 2002.

Keidan, Artemij. "Subjecthood in Pāṇini's grammatical tradition". In: *Studi in onore di Giuliano Boccali* (2017), p. 107.

Kiparsky, Paul. "On the architecture of Pāṇini's grammar". In: Sanskrit Computational Linguistics: First and Second International Symposia Rocquencourt, France, October 29-31, 2007 Providence, RI, USA, May 15-17, 2008 Revised Selected and Invited Papers. Springer. 2009, pp. 33-94.

List, Johann-Mattis et al. "Vowel purity and rhyme evidence in Old Chinese reconstruction". In: *Lingua Sinica* 3 (2017), pp. 1–17.

Matthews, Peter Hugoe. *What Graeco-Roman grammar was about.* Oxford University Press, 2019.

Mei, Guang 梅广. Shànggǔ hànyǔ yǔfǎ gāngyào 上古汉语语法纲要 (A sketch of Old Chinese grammar). Shànghǎi Jiàoyù Chūbǎnshè 上海教育出版社, 2018.

Pulleyblank, Edwin George. Outline of classical Chinese grammar. Ubc Press, 1995.

Yang, Zhaowei 杨昭蔚, Kong, Lingda 孔令达, and Zhou, Guoguang 周国光. Gǔhànyǔ cílèi huóyòng cídiǎn 古汉语词类活用词典 (A dictionary of word class changes of Classical Chinese). 三环出版社, 1991.