Notes about Classical Chinese

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Introduction

1.1 The name of the language

This note is about Classical Chinese, the high variety of more than two millennia of diglossia in China. The language is known natively (in Mandarin Chinese) 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

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

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 mappears 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 (§ 2.2.1.1). The conjunction to he 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.

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 ** 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

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

²The 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 $Aṣt\bar{a}dhy\bar{a}y\bar{\imath}$, 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 $Aṣt\bar{a}dhy\bar{a}y\bar{\imath}$, 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 $Aṣt\bar{a}dhy\bar{a}y\bar{\imath}$ requires corpus data whose quality and quantity exceed the capacity of most field linguists.

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
- Higher tolerance of ad-hoc recategorization: 名作动, 使动意动, etc.

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. Therefore a noun is what appears at the center of a noun phrase (NP), and a verb is what appears at the center of a clause (e.g. the distinction between nominal predication and verbal predication in § 2.2.1.2), and they are not quite different from those of other natural languages.

Besides the syntactic constructions, however a language also has a *lexicon* that dictates the details of whether and how a root or derived stem or a larger construction appears in certain syntactic environments and be phonologically realized. In linguistic descriptions, therefore, part of speech tags like *noun* or *verb* are *lexical* labels representing the structure of the lexicon, 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

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.

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 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 note that *canis* can be further analyzed as a root plus an ending. 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 the fact that it is the head of some complete NP. On the other hand, the root *cane*-appearing as the main verb of a clause is impossible, 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.

least some part of speech distinctions can be maintained in Classical Chinese.

Nouns and verbs A noun-verb distinction is supported by carefully examining 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 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 (§ 2.2.5). A simple Classical Chinese clause can be divided into a nucleus clause (§ 2.2.1) plus possible sentence final particles (§ 2.2.1.4.1) and/or topicalization (§ 2.2.4.1). Topicalization can also happen for a complex clause (Mei 2015, Ch. 4 § 3.3). It appears that all embedded clauses in Classical Chinese cannot have discourse-related devices like topicalization and sentence final particles.

The nucleus clause may be either a nominal predicate clause (§ 2.2.1.1) or a verbal clause (§ 2.2.1.4). Tense, aspect, mood (TAM) modifications (TODO: ref) seem to be

only available for the latter. Both constructions seem to have a well-defined subject position (which is not the same as the topic), which however is often left blank (§ 2.2.3).

2.2.1 Classification of nucleus clauses

2.2.1.1 Real nominal predicates

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 (see § 2.2.3.2 for discussions on the meaning of the term) and the predicate, which is the case of (1). Some nominal clauses however express a possessive relation between the two (2).

- (1) [秦]_{subject}, [虎 狼 之 国]_{predicate} Qin tiger wolf GEN country 'Qin is a country of tigers and wolves (i.e. cruel and not reliable).'
- (2) [蟹]_{subject} [六跪而二 螯]_{predicate} crab six leg conj two claw 'A crab has six legs and two claws.'

Box 2.3: The possessive nominal predicate construction

It seems the possessive nominal predicate construction always takes the form of N-Num-N: 王六军,大国三军

(3) 凡群臣之言事秦者,皆奸人,非忠臣也

It seems besides the negation marker, no other constituents are allowed to appear in the nominal predicate construction.

Topicalization of nominal predicate construction (1) is much less frequent than the 者…也 construction, often known as 判断句 in Modern Chinese or the 'judgemental clause'. A judgemental clause usually contains a particle 也 (§ 2.2.1.4.1) at its end (4), or a particle 者 after the subject (5), or both. It seems that the judgemental clause is better analyzed as a topic-comment construction (§ 2.2.4.1).

- (4) [城 北 徐-公]_{topic: NP},[齐-国 之 美-丽 者]_{comment: § 2.3.1} city north NAME-GONG Qi-country GEN beautiful-beautiful REL 也 SFP
 - 'Mr. Xu from the north of the city is a handsome guy in the country Qi.'
- (5) [兵]_{topic: NP} 者, [不 祥 之 器]_{comment, predicate} weapon TOPIC NEG fortunate GEN instrument 'Weapons are not auspicious.'

2.2.1.2 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 in a dictionary (§ 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., as in (6). Here 水 'water' is used as a verb, meaning 'swim', which is also modified by the modality auxiliary 静 'can'.

(6) [假 舟 楫 者]_{subject}, [非 能 水 也]_{predicate: VP}·······
draw.help boat paddle REL NEG can swim SFP
'Those who draw help from boats and paddles cannot swim, ...'

There are cases where the meaning of the predicate is comparable to that of a real nominal predicate. We still classify them as verbal clauses, because of their similarity with prototypical verbal clauses with respect to negation, TAM modification, TODO

- (7) 大楚兴, 陈胜王
- (8) 然而不王者,未之有也

On the other hand, there is one thing a nominal predicate can do while a verbal predicate *cannot* do: a nominal predicate can be topicalized (§ 2.2.4.1, 47).

2.2.1.3 Copula constructions

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. Meanwhile, grammaticalization had added several copulas to Classical Chinese (Pulleyblank 1995, pp. 20-22).

2.2.1.4 Verbal clauses

The structure of clauses with verbal predicates is much more complicated, and the details can only be described in the following sections. In this section we overview grammatical systems within verbal clauses.

Constituent order In clauses with verbal predicates, the constituent order of core constituents of transitive clauses is almost always SVO (9, 10). Intransitive clauses have a SV constituent order (11). Prepositional complements are also placed after the verb (12). SOV is however attested in negative (13) or interrogative situations (14).

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

Alignment 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.

The structure of the verb 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 2.4: Classical Chinese complex predicate

Directional complement and resultative complement

Positions of modifiers Adverbial constituents in the nucleus can be divided into TAM ones and so-called peripheral arguments, including location, manner, instrument, etc. The peripheral arguments can be post-verbal (15, 16, 17) or pre-verbal (18, 19, 20), with the pre-verbal order gaining popularity as time went by. The linear order of peripheral arguments is similar to that in Mandarin (He 2005, pp. 286-287).

- (15) 侍饮于长者
- (16) 孟孙问孝于我
- (17) 祷尔于上下神祇
- (18) 韩生南向坐
- (19) 於人之罪无所忘
- (20) 为人谋而不忠乎

The TAM adverbials are almost always preverbal.

- (21) 文王既没,文不在兹乎
- (22) 孔子既得合葬于防
- (23) 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.

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

Box 2.5: Adverbials combination

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

Box 2.6: Position of adverbials in SOV case

Where to place adverbials in SOV case?

Box 2.7: Position of negator

Where is the position of the negator?

Box 2.8: The role of prepositional phrases

侍饮于长者: is 于长者 a peripheral argument, or an oblique argument?

2.2.1.4.1 Sentence final particles Classical sentence final particles have a variety of functions. It may mark the interrogative force (25), a judgemental meaning (26), and aspectual values (27).

- (25) 大车无輗,小车无軏,其何以行之哉
- (26) 人而无信,不知其可也
- (27) 温故而知新,可以为师矣
- (28) 虎者, 戾虫; 人者, 甘饵也

2.2.1.5 The gerundive construction

Classical Chinese has one gerundive construction with a structure comparable to the English gerundive non-finite clause *his playing national anthem*. This construction may appear as the object (29) or as a subordinated clause, like a conditional or temporal clause (30; § 2.2.5).

- (29) 王 如知 此,则 无 望 [民 之 多 于 邻 king if know this then NEG hope people GEN more than neighbor 国]_{object: gerundive} 也 country SFP 'If Your Majesty knows this, then don't expect your people to be more plentiful
 - than your neighboring countries' people.'
- (30) [父母之爱子]_{condition: gerundive},则为之计深远

2.2.2 Argument and event structures

A verbal clause can be about an intentionally initiated event (DO), a state (BE), or a change of the state (BECOME). Do type clauses can further be divided into transitive and intransitive ones. BE and BECOME clauses are intransitive by definition. Then various valency increasing constructions, for example causative constructions, can be applied to them, and create "transitive" constructions (e.g. CAUSE; § 2.2.2.2) that are similar to but subtly different from transitive DO ones. And then we have valency decreasing constructions, which *suppresses* certain arguments. These categories are also related to the lexical aspect of the clause, which in turn may have non-trivial interactions with TAM categories.

Box 2.9: More topics on argument structure

- Experiencing
- Directional construction: 把什么给什么
- Morphology?

The only fundamental constraint to whether a stem appears in a transitive do or intransitive do or become construction is its semantics. In world languages, however, whether a root or a stem is compatible with a certain verb frame is dictated by the lexicon of the language, and a group of root-environment complexes with shared properties is known as a part of speech (§ 2.1). Thus we can say if a *verb* (and not the clause it heads) is transitive or intransitive, or whether it is an action verb (i.e. a do verb), a stative verb (i.e. a be verb), a internally caused change of state verb (i.e. a become verb) or an externally caused change of state verb (i.e. a cause verb, which may be cause-become or cause-be or even without an intransitive counterpart). Analysis of argument and event structures is closely related to verb classification.

2.2.2.1 Simple argument structures

2.2.2.1.1 Prototypical DO The subject of a DO clause usually has to be animate, because it voluntarily initiates the event described by the clause. The subject is an *agent*, as opposed to a *causer* or a *theme* (§ 2.2.2.1.2).

Mei (2015, p. 272) lists some criteria to distinguish a transitive DO verb from a transitive CAUSE verb (§ 2.2.2.2.1).

We note that certain CAUSE verbs may gradually develop a lexicalized meaning and eventually get reanalyzed as a DO verb (Mei 2015, pp. 269-271).

2.2.2.1.2 Prototypical Become and Be verbs A be verb describes a state; a become verb describes the change of a state. In both types of argument structures, the sole argument is a *theme*. In Classical Chinese, just like in other languages, Become/Be verbs often have established causative usages, forming Cause-Become/Be argument structures with the *causer* argument being the subject and the *theme* argument being internal (§ 2.2.2.2.1). When a causer is absent, the structure of the clause is comparable to what sometimes is known as the middle voice in English (e.g. *the door opened*; c.f. the transitive Cause-Become *I opened the door*). (31) is an instance: in its cause-be usage (39), the argument that is described as weak is an internal argument appears after the verb, but in (31), the argument that is described as weak is the *subject*.

(31) 秦强而赵弱

The "middle voice" construction exemplified in (31) (known as 内动 in Mei (2015)) has a subject, which corresponds to the argument that is the object in the CAUSE-BECOME/BE construction (i.e. the internal argument). It is however possible (although rare) for the subject position to be unfilled, and the internal argument remains in-situ. For instance, the verb 🗓 'chirp' appears in "middle voice" clauses (32), but its sole argument can also stay *after* the verb (33). The structure of (33) can only be reasonably conceived if we assume that 🗓 is a BE verb, denoting a state where bugs continue to make noise, and that the sole argument 🗐 remains in-situ and is not promoted to the subject position. No other analysis is available: for instance a DO verb can never have such a behavior (Mei 2015, p. 351).

- (32) 蝼蝈鸣? chirp '??? chirp.' (礼记·月令)
- (33) [五 月]_{temporal} [鸣]_{predicate} [蜩]_{internal argument} five month chirp cicada 'In the fifth (lunar) month, cicadas chirp.'

2.2.2.1.3 Non-conventional BE/BECOME clauses Some verbs license subjects that look like arguments of prototypical BECOME or BE verbs: the subject may be animate but it does not volitionally trigger the event. The situation "just happens to be the case", and the subject can be described as a *theme* and not an *agent*. What sets them apart from prototypical BECOME or BE verbs in § 2.2.2.1.2 is the fact that the subject seems quite unlike an internal argument. In (34), the subject 火 'fire' is definitely a theme and not an agent: the fire does not get to *decide* if it burns the flag (Mei 2015, p. 276). Still the clause is not a prototypical BECOME one as there is an internal argument 其旗 in it, and the theme 火 is an *external* theme (Mei 2015, p. 353). These verbs therefore have difficulties participating in synthetic causativization (§ 2.2.2.2.1).

(34) 火焚其旗

- **2.2.2.1.4 Experience verbs** Some experience verbs, mostly verbs about emotions, behave like BECOME verbs (Mei 2015, p. 273): when used as transitive verbs, the subject do not look quite agentative and the clause is likely causative (36), and when used as intransitive verbs, there is a clear internal change-of-state meaning (35).
- (35) 孔子成春秋,而乱臣贼子惧(孟子·滕文公章句下)
- (36) 惧之以怒 (左传·昭公十三年)

On the other hand, perception verbs (e.g. 见 'look') and cognition verbs (e.g. 知 'know') are often transitive, and therefore are not compatible with the synthetic causative construction (§ 2.2.2.2.1; Mei 2015, p. 274). Intuitively, these verbs are polike according to the criteria listed in § 2.2.2.1.1. For instance, they can appear in 所 construction (37).

(37) 異乎吾所聞

Certain perception verbs have developed a figurative, fossilized meaning, and when intransitivized, can participate in synthetic causativization (§ 2.2.2.2.1, 40). This possibility indicates that these fossilized usages are BECOME- or BE-like: $\mathbb R$ therefore means 'in the state of regularly meeting an important figure'.

2.2.2.2 Various causative constructions

Box 2.10: Causer definition

Define causer.

We can divide causative constructions in Classical Chinese into synthetic and analytic ones. In the synthetic causative construction, there is only one verb in the surface form: the causative valency alternation is supposedly marked by a prefix *s-, which is invisible in the written texts but is reflected by tonal changes of the verb. If a root develops a lexicalized usage in the synthetic causative construction, then CAUSE verb is formed.

2.2.2.2.1 Synthetic causative The synthetic causative construction applies to existing argument structures, or sometimes bare roots. The synthetic causative construction cannot be applied to a DO construction: the reason is probably because a DO construction is too "big", already having a full-fledged wannabe subject (Mei 2015, p. 363-364). On the other hand, the syntactic causative construction can be applied

to "passive" (38) and BECOME or BE (39) argument structures. Certain intransitivized experience verbs, possibly having an argument structure comparable to a BECOME/DO verb (§ 2.2.2.1.4) with a wannabe subject also have causative usages (40), but their transitive counterparts are never compatible with the synthetic causative construction (Mei 2015, p. 274). Finally, the synthetic causative construction can be directly applied to a root (41): the word 妻 'wife' is sometimes used as a verb, meaning 'to marry daughter to ...', inconsistent with the meaning of (41). Therefore, in (41), 妻 is ad hoc categorized into a CAUSE verb, its usual verbal usage being irrelevant here.

- (38) 是 夭 子蛮,杀 御叔······
 this die.young NAME kill NAME

 'This woman made Ziman die at a young age, and got Yushu killed...'
- (39) 以 弱 天下之民
 PURPOSE weak world GEN people
 '...to weaken the people.'
- (40) 子尾 见 疆
 NAME formally.visit NAME

 'Ziwei let Jiang formally visit (with Xuanzi).' (左传·昭公二年)
- (41) 妻帝之二女

The labile S/O alternation between the BE/BECOME usage and the CAUSE-BE/BECOME usage is quite regular in Classical Chinese; verbs allowing this alternation are sometimes known as *ergative verbs* (Mei 2015, p. 378), although the phenomenon is about the core argument structure and has nothing to do with ergativity in alignment. It should be noted that not all BECOME/BE verbs are compatible with the synthetic causative construction. For instance, 'chirp' in (33) does not have a transitive CAUSE-BE usage. More examples are given in Mei (2015, p. 276). On the other hand, some clauses that look like CAUSE-BE/BECOME clauses actually do not have BE or BECOME counterparts (§ 2.2.2.2.2).

2.2.2.2.2 Fossilization of synthetic causative construction Some Cause verbs are fossilized, and do not have clear intransitive counterparts. For instance, 伤 'hurt' typically is a state transition verb meaning body, etc. being hurt, and it also has a causative (i.e. Cause-become) meaning ('make ...hurt'). The cause-become verb frame of 伤 however has gained a separate lexicalized specific that can't be transparently inferred from the meaning of the become usage: it can mean 'let ... be demaged', in which the object is not necessarily body or a person. This usage of 伤 has no become or other intransitive counterpart. The absence of a become counterpart can be proven by the ability for this fossilized figurative usage of 伤 to undergo "passivization" (42), which is otherwise not possible (§ 2.2.2.3.1).

(42) 女红伤则寒之原也

Verbs like 伤 in like (42) can easily be reanalyzed as do verbs. This is likely a diachronic path of the creation of do verbs. The verb 败 for example seems to be originally a become verb ('to get corrupted') and have later gained a specific meaning of 'to defeat' in its cause-become usage, which had eventually evolved into a do usage (Mei 2015, p. 285).

2.2.2.3 The "passive"

What is often known as the passive in Classical Chinese is not really a passive construction comparable to the English or Latin passive. The main problem is the lack of a grammaticalized way to say the agent: in a "true" passive construction, the original subject is somehow demoted (represented by the appearance of *by* in English or the ablative case in Latin) and sometimes omitted, and an internal argument is promoted to the subject position, while the so-called "passive" constructions in Classical Chinese are *obligatorily removed* (Mei 2015, p. 287-289).

2.2.2.3.1 The agent-less "passive" It is rare to apply the "passive" construction to a causative construction (Mei 2015, p. 283). Suppose we have a bivalence causative construction, and we want to suppress the external argument and let the internal argument to be the subject. But such a bivalence causative construction usually has a CAUSE-BECOME structure, and removing the causer leaves us a clause that looks just like a BECOME clause. So there are two competing analyses, and since usually if a verb root is lexically licensed to head a CAUSE-BECOME clause, then its usage in a BECOME clause is also in the lexicon, the simpler BECOME analysis is preferred. However, where this preference is eliminated, "passivization" of a causative construction is possible (Mei 2015, pp. 284,370-372; § 2.2.2.2.2).

2.2.3 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 in its syntax (Mei 2015, p. 122). 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. Still, we believe that the existing evidence is sufficient to justify postulating a subject grammatical function in Classical Chinese.

2.2.3.1 Subjecthood in argument structure

We observe that 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, and these NPs are related to some internal positions of the nucleus clause. We therefore rightfully call the first type of clause-initial NPs subjects, and the second type of clause-initial NPs topics.

(43), for example, contains three constituents, and therefore can only be a verbal clause, with the last constituent being the object. The verb 客 is a derivation from the noun 客. Such a derivation, according to our experiences with other Classical Chinese texts, can only be causative or tropative or benefactive. 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.' Therefore, by virtue of being at the initial of the clause, the NP 孟尝君 has to be understood as what initiates the event, 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.

(43) 孟尝君客我

It should be noted that the subject can be the patient, as in (44). This however again is an *obligatory* semantic relation between the verb \mathbb{R} and the NPs \mathbb{R} and \mathbb{R} . By virtue of being the only argument of \mathbb{R} and appearing before the verb, \mathbb{R} and \mathbb{R} are obligatorily understood as the patients. They cannot be understood as, say, the location of the event ('*Someone causes peace (i.e. \mathbb{R}) to something else in the state (\mathbb{R}) and the universe (\mathbb{R})'). Clauses like (44) are therefore better analyzed as valency alternation constructions.

(44) 国定而天下定

2.2.3.2 Subject as clausal pivot

In § 2.2.3.1, we see that subjecthood can be defined in the argument structure in verbal clauses. Yet properties commonly attributed to subjecthood are not just about the argument structure. For instance, in the nominal predicate construction (§ 2.2.1.1), we call the first NP the subject, and there is no such thing as the argument structure there. What we want to know is whether both verbal and nominal clauses in Classical Chinese have a pivotal position in it which everything else "revolves around" which could be called the *subject*.

The most clear criterion that defines clausal pivotal subjecthood is probably coordination: if when clauses are coordinated, one constituent seems to be shared by all of them, then this constituent is probably the clausal pivot. It turns out that what is defined as the subject according to its behaviors in the argument structure indeed is also the pivot in coordination (§ 2.2.6, 54). Note that two coordinated clauses can also share a topic, but there are signs which tell us that what is shared is the topic and not the subject (e.g. § 2.2.6, 55, where the topic is the object of the first clause and the subject of the second clause).

Box 2.11: Definition of VP

List some reasons to define VP: coordination?

Can a verbal and a nominal predicate be coordinated?

Another problem is Classical Chinese has topic chains, in which clauses share a single topic.

The observation that the argument structure subject in verbal clause turns out to be the clausal pivot and that the TODO: nominal clause justify the usage of the term *subject* outlined in the beginning of this section.

2.2.3.3 Comparison with topic

We have already argued that in every Classical Chinese clause, there is a (possibly empty) subject position, which is largely *independent* to information structure factors and therefore is not a topic. On the other hand, authentic, information structure-related topics are marked by devices not always available for subjects (like the particle or a pause; § 2.2.4.1). So indeed subject and topic are two distinct concepts in Classical Chinese.

This does not mean that there are no blurry cases.

2.2.4 Information packaging

2.2.4.1 Topicalization

Topicalization in Classical Chinese is usually marked by adding the particle 者 after the topic. In the reading tradition, a pause is often inserted after 者, which crosslinguistically suggests topicalization (45, 46). In these examples, the subject is topicalized. We note that the structure of these two examples is comparable to that of the "judgemental clause" (§ 2.2.1.1), which obliges us to analyze the judgemental clause as topicalization of the nominal predicate construction.

- (45) 此二人者,实弑寡君
- (46) 单父人吕公……吕公者,好相人,……

What is topicalized is of course not restricted to the subject. This fact is a piece of evidence supporting the distinction between subject and topic in Classical Chinese. In (47), the comment clearly has a nominal predicate. What is promoted to the topic position however is not the subject of the nominal predicate construction, but the predicate. The subject is likely the *focus* and not the topic (Mei 2015, p. 138). Topicalization of other clausal constituents is also possible (e.g. § 2.2.6, 55).

Box 2.12: Dangling topic

Are there dangling topics in Classical Chinese? If not, it's a another piece of evidence supporting the distinction between subject and topic.

2.2.4.2 Focalization

Topicalization is marked by fronting and a pause, but what is fronted and before a pause is not necessarily a topic. In (48), for instance, the verbal predicate is fronted, which likely is not topical. Note that the sentence final particle is fronted as well.

Box 2.13: Fronted SFP

The phenomenon can be analyzed in multiple ways. We may assume that (48) is essentially some sort of cleft construction, in which the subject is first separated from the rest of the clause and then the rest of the clause is focalized. Or we can analyze $\not\equiv$ as a TAM marker, and not a marker from the CP layer. Or maybe we can argue that markers from CP layers are morphologically verbal and have to be attached to either the main verb or the verb phrase. Which analysis works best depends on whether they are consistent with other phenomena.

- Can we prove that the SFPs are very "high-level" and are above the topic layer? For example, can two clauses with different subjects share a SFP?
- Semantically do 矣 carry TAM meanings?
- (48) [[甚]_{VPi} 矣]_{focus}, [汝之 不 惠]_{subject: gerundive (§ 2.2.1.5)} —_{predicatei} extreme SFP 2 GEN NEG smart

 'You are so stupid! (lit. So extreme is your being unintelligent!)'

2.2.5 Subordination

The term *subordination* sometimes means all kinds of clause embedding. In this section we primarily focus on bipartite clauses with the structure and meaning of 'if ... then ...' or 'when ...', and leave relative clauses and complement clauses to TODO: ref

An overview of subordination constructions in Classical Chinese can be found in Mei (2015, Ch. 3). In all Classical Chinese conditional constructions, the condition usually appears before the consequence (49, 50, 51). The consequence can be marked by \mathbb{M} (49). Sometimes the marker \mathbb{M} is dropped (50) but putting it back should never render a sentence ungrammatical (Mei 2015, p. 86). The marker \mathbb{M} is also available as a marker of the consequence clause (Mei 2015, p. 87).

The condition clause can also be marked. Classical Chinese distinguishes between realis and irrealis conditional constructions: the former are marked by e.g. 既 (49), while the latter are marked by e.g. 若 (51). This distinction is relevant to the licensing of TAM markers (Mei 2015, p. 81). Other markers for the condition clause are also available (Mei 2015, Ch. 3). We note that the marker 若 is able to appear *after* the subject of the condition clause (Mei 2015, p. 94).

- (49) [既来之]_{condition}, [则安之]_{consequence}
- (50) [杀女]_{condition}, [我伐之]_{consequence}
- (51) [若已食] 则退

Box 2.14: Position of condition marker

When the subjects of the two clauses are shared, it seems 若 obligatorily appears after the subject of the first clause. A possible analysis is to assume that the subordination construction is working at the level of VPs.

An interesting phenomenon is that the condition (52) or temporal clause (52) can be a gerundive one (§ 2.2.1.5). This is not surprising cross-linguistically, as the condition clause or the temporal clause is usually the "subordinate" clause, while the consequence clause is the "main" clause, and it is not uncommon for the subordinate clause in a clause subordination construction to have a non-finite structure. This is observed in for example Japanese and Turkish. Note that the marker 若 can be attached to the gerundive condition clause as well (Mei 2015, p. 98). In some condition clauses, the marker 両, instead of the otherwise genitive marker 之, appears between the subject and the predicate, forming a clause type that is not gerundive and only appears as an irrealis condition clause (Mei 2015, pp. 100-102).

- (52) 我之不德,民将弃我
- (53) 臣之壮也,犹不如人

2.2.6 Coordination

Explicit marking of coordination is primarily done by the marker $\overline{\mathbb{m}}$. When used as a conjunction marker, $\overline{\mathbb{m}}$ can be used to link two clauses or two verb phrases with a shared subject (54), but not two nominal constituents. Note that the functionalities of $\overline{\mathbb{m}}$ is not restricted to conjunction (Mei 2015, p. 183).

(54) 声伯四日不食以待之,食使者,而后食

An interesting question is the interaction between topicalization and coordination. Mei (2015, p. 217) contends that "topic chains", i.e. several clauses with a shared topic, are discourse structures and not syntactic structures. Therefore topicalization happens first, and coordination happens then: after that no further topicalization is possible. He further argues that clauses in a topic chain cannot be linked together by \overline{m} . (55) however seems to be a counterexample. This example clearly contains two coordinated clauses. In the first clause 取之于蓝,之, appearing after the verb, can only be a pronoun, and the only sensible reading of the clause is that 之 (the object) is coreferential with $\overline{\dagger}$ at the initial of the sentence, and 取之于蓝 then means '(people) extract it (i.e. indigo dye) from Indigofera.' Therefore, $\overline{\dagger}$ at the initial of the sentence is the object of the first clause and the subject of the second clause, meaning it cannot be the shared subject. This, together with the traditional pause after the first $\overline{\dagger}$, means the first $\overline{\dagger}$ likely is a topic, which means here topicalization happens after coordination.

(55) [青] $_{\text{topic: NP}_i}$, $-_i$ 取 [之] $_{\text{object: Pronoun}_i}$ 于 蓝 而 $-_i$ 青 于 indigo.dye pick it from Indigo fera CONJ blue than 蓝 Indigo fera

'Indigo dye, people extract it from Indigofera, but it's bluer than Indigofera.'

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*. 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 \geq appears between the possessor and the nominal region (56, 57). When only the demonstrative is present, no marking is present (58).

Box 2.15: Determiner region

Give a comprehensive list of determiners.

- (56) 王之诸臣
- (57) 马之死者
- (58) [此心] 之所以合于王者

2.3.1 The nominal region

Pre-head attributives

Box 2.16: 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',

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.

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 (60). 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 (60).

- (59) 马之千里者
- (60) 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 2.17: Relative clause complexity

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

Box 2.18: 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.

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'), $\dot{\Box}$ ('die, decay') are regularly derived to \boxplus ('what goes out'), \bigwedge ('what comes in') and $\dot{\Box}$ ('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, \S 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 (as in *I might [guinea pig] it for you.*) 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

Verb frames

- 4.1 Causative constructions
- 4.2 "Passive" constructions

4.2.1 Passive of causative constructions

"Passivization" of causative constructions is rare but not completely impossible, provided that the causative construction does not have a preferred BECOME reading (§ 2.2.2.3).

Causative verb with lexicalized meaning

Negation

Discussions on quirky examples

(1) [良人者]_{subject} [所仰望而终身]_{predicate} 也

It seems subjects of ordinary verbal clauses cannot be topicalized (2), but if the VP is emphasized, topicalization is possible.

- (2) a. 三王既以定法度
 - b. *三王, 既以定法度
- (3) 秦,虎狼之国,不可信,不如毋行

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