

CAUSATION IN CLASSICAL CHINESE DURING THE WARRING STATES PERIOD AND IN THE HAN DYNASTY

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Abstract

In this paper, I explore causation in Classical Chinese during the Warring States period and in the Han Dynasty. Whether causation is realized via causative use of words with covert causative verbs, or via overt causative verbs, causation structures can always be divided into agentive and causative constructions, which can be further categorized into lexical causatives and productive causatives. I also account for causation in Classical Chinese by means of Feng's (1998, 2000, 2009) prosodic approach and show that both strategies to form causation structures are compatible with a prosodic theory. I discuss both VO and VV causation and state that agentive and causative constructions involving covert causative verbs are prosodic words, whereas those involving overt causative verbs exhibit properties of phrases.

Keywords: Classical Chinese; the Warring states period; the Han dynasty; causation; (c)overt causative verbs; prosodic approach

Povzetek

Članek obravnava vzročna razmerja v klasični kitajščini v obdobju vojskujočih se držav in v dinastiji Han. Ne glede na to, ali se vzročno razmerje uresničuje z uporabo glagolov s prikritim vzročnim pomenom ali pa z očitnimi vzročnimi glagoli, lahko vzročne strukture vedno razdelimo na predmetne ali vzročne, te pa nadalje razvrstimo v pomenske in tvorne vzročnike. Vzročnost v klasični kitajščini obenem pojasnujem s Fengovim (1998, 2000, 2009) prozodičnim pristopom in dokazujem, da sta obe strategiji za oblikovanje vzročnih struktur združljivi s prozodično teorijo. Razpravljam o vzročnosti odnosov glagol-predmet in predmet-predmet ter trdim, da so predmetne in vzročne strukture, ki vključujejo prikrite vzročne glagole, prozodične besede, medtem ko tiste konstrukcije, ki vključujejo očitne vzročne glagole, kažejo lastnosti fraz.

Ključne besede: klasična kitajščina; obdobje vojskujočih se držav; dinastija Han; vzročno razmerje; (ne)prikriti vzročni glagoli; prozodični pristop



1 Introduction

In this paper, I analyze Classical Chinese, namely the written form of Old Chinese ranging from the Warring States period (475–221 BC) to the end of the Han dynasty (206 BC–220 AD). I choose to investigate Classical Chinese during these two periods owing to three reasons. First, the grammatical and lexical structures of major and representative works during the Warring States period and Qin and Han dynasties, including philosophical texts *Analects* and *Mencius* and historical texts *Zuǒzhuan* and *Shǐjī*, are fundamentally similar, so Classical Chinese covering this period can be treated as a single language with its robust features. Additionally, it is considerably disparate from the language form at previous stages. Second, Pre-Classical Chinese before 5th BC is incompletely known, as it has been preserved almost only in divinatory formulae carved on the Shang and early Zhou oracle bones and short inscriptions on bronze vessels (Wilkinson, 2000, p. 22). Third, since the post-classical period, the real spoken language diverged from the written one as a result of natural linguistic change: Classical Chinese became a purely literary, written vehicle, and works at this stage and later adopted an archaic aspect and continued to model on Classical Chinese, hence being regarded as timeless imitation of the earlier language; the vernacular, however, began to develop independently and thus being historically more evolved than its related yet discrepant literary counterpart (Norman, 1988, p. 83). That is to say, the written form of Chinese from the Han dynasty onwards could not reflect the actual use of language, and such a divergence between the written and spoken language had been existing in China for over 1,500 years. Employment of Classical Chinese in the post-classical era is referred to as Literary Chinese that remains the standard written form until the early 20th century (Dong, 2014, pp. 80–81). For instance, Ming–Qing fiction, the fictional narratives produced in China during the Ming (1368–1644) and Qing (1644–1912) dynasties, can be divided into classical-language fiction and vernacular fiction, depending on the dominant medium adopted, yet vernacular stories and novels exhibit hybrid characteristics in language because they draw on both classical and oral traditions (Wu, 2013). Therefore, to ensure that the syntactic properties under discussion belong to and illuminate a consistent, unaffected language used in real-life situations, in this paper I only explore corpus data of Classical Chinese between 475 BC and 220 AD, excluding later-stage written works that are based on Classical models yet contaminated by vernacular intrusions and refined in numerous literary movements.

Classical Chinese morphemes are predominantly monosyllabic, and a vast majority of words are monomorphemic. Due to a lack of morphology and freedom of words to demonstrate atypical syntactic functions, most words in Classical Chinese can act as other parts of speech depending on their location in sentences (Wang, 1962, p. 343; Norman, 1988, pp. 84, 87; Dong, 2014, p. 81).

Classical Chinese, therefore, has morphological causatives. For instance, in addition to its denominative, directive, and intensive functions, the prefix *s- displays

a causative function (see Mei, 1989, 2012; Baxter & Sagart, 1998; Sagart, 1999; Xu, 2006; Schuessler, 2007; among many others).

- (1) 食 *N-ljək > *djək > džək ‘eat’
 飼 *s-ljəks > *ljəks > zī ‘food, give food to’
 (From Mei, 2012, p. 12)

2 Literature review

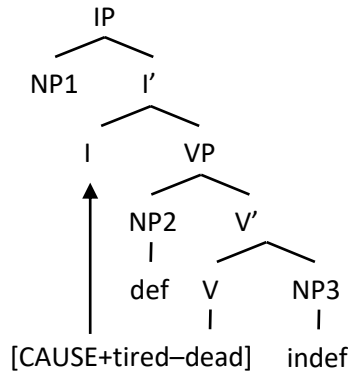
According to Cheng and Huang (1994) and Cheng et al. (1997), causative resultative verb compounds (RVCs) can be transitive or intransitive. Transitive causative RVCs can be divided into two types: agentive constructions and causative constructions. There are two discrepancies between agentive constructions and causative constructions: 1) the former takes an agent subject, whereas the latter takes a causer subject which is an inanimate NP; and 2) the former indicates that some actions of an agent result in a theme being in a certain state, whereas the latter indicates that a causer brings about a causee being in a certain state. Agentive and causative RVCs are exemplified by (2a) and (2b) respectively.

- (2) a. 他 打死 他们 了。
 Tā dǎ-sǐ tāmen le.
 he hit-dead them asp
 ‘He hit them dead.’
- (2) b. 这件 事 累死 他们 了。
 Zhè-jìan shì lèi-sǐ tāmen le.
 this-cl matter tired-dead them asp
 ‘This matter tired them to death.’
 (Adapted from Cheng et al., 1997, p. 201)

Causative RVCs are formed at different levels across Modern Chinese dialects, and there is a postverbal constraint on definiteness in causative RVCs. In causative RVCs in Cantonese and Mandarin, postverbal object NPs need to be definite (or more precisely, referential), yet in causative RVCs in Taiwanese, postverbal object NPs cannot be definite. A referential/definite object NP is base-generated in [Spec, VP] (sister to V’), so verb movement does not involve VP-shells (see the tree diagram in (3) below). As a consequence, the status of the NP position does not change, and the syntactic restriction of definite object NPs is always obeyed. However, a non-referential/indefinite object occurs within V’ as sister to V, hence the extension of VP domain in a VP-shell, which means postverbal definite NPs are not permitted. Therefore, it is reasonable to argue that causative RVCs in Cantonese and Mandarin are

derived lexically via lexical incorporation, but those in Taiwanese are derived syntactically via verb movement in a VP shell structure (Huang, 1991, 1994; Cheng et al., 1997).

(3)



(Adapted from Cheng et al., 1997, p. 209)

The other option to form causation is realized through overt causative verbs. There are two categories of such causativity in Classical Chinese, namely lexical causatives and productive causatives, both of which encode two situations, i.e. a causig situation and a caused situation. Nevertheless, there are discrepancies between lexical and productive causatives in terms of 1) thematic role of the causee, 2) (lack of) overlap of the causing and caused situations, and 3) directness/indirectness of causation. First, the causee of a lexical causative is patientive, and the execution of the caused situation entirely relies on the causer's activities, whereas the causee of a productive causative is characterized by a certain level of autonomy and volition. Second, the causing and caused situations of lexical causatives have spatio-temporal overlap and hence the conceptualization of them being one situation, yet the causing and caused situations of productive causatives do not have to coincide spatio-temporarily and hence cannot be treated as one single situation. Third, the causation of lexical causatives can be regarded as direct, whereas that of productive causatives can be deemed indirect (Shibatani, 1976; Meisterernst, 2006).

According to Feng (2005, 2014, 2016, 2019), the causative verb 'to cause, to make' can be analyzed as a light verb. There was a covert light verb used in Archaic Chinese, and around the East Han dynasty (200 AD), phonetically realized light verbs started to appear. Causation structures with covert causative verbs can be analyzed on a par with covert light verb constructions. Although there are three alternative theories involving preposition omission, applicative structure, and light verb structure, none of them can be adopted. First, the proposal concerning preposition omission is ruled out due to four facts: 1) not all VO constructions involve null prepositions; 2) there is no one-to-one match between prepositions and VO constructions; 3) some prepositions did not exist until later periods, and 4) some prepositions were used in different ways during

different historical periods. Second, the approach concerning applicative structure has three shortcomings: 1) applicatives are identical to inner light verbs; 2) applicatives are limited; and 3) in terms of syntactic positions, oblique VO constructions in Archaic Chinese are not formed by applicative structures. Third, the theory of light verb structure cannot explain certain oblique VO constructions and it lacks theoretical motivation (Jiang, 2014; Tsai, 2017; Su & Feng, 2020).

In terms of verb classification in Chinese, there has been a range of theories since the pioneering work of Chao (1968), whose classification is based on parameters of action vs. status and transitivity vs. intransitivity. Following Chao, Li (1971) adopts these two parameters, yet his classification is also based on theta roles. Later on, the Chinese Knowledge Information Group propounds a system based on subcategorization in the sense of Lexical-Functional Grammar and Fillmore's (1968) case theory; the specific classification factors are number and type of arguments, as well as action vs. state opposition. As for Her's (1990) classification framework, it is based on a modified version of Lexical-Functional Grammar, or to be more specific, the subcategorisation frame of this variant version, thereby avoiding the shortcoming of forcing all verbs into oppositions. Based on Her's approach, Tsao (1996) simplifies the system and reduces the number of major verb classes. Additionally, Tsao's proposal discusses topic-raising predicates, lack of arguments in the surface structure of certain verbs, as well as the disparity between finite and non-finite clauses.

3 Two types of causation

There are two types of causation structures in Classical Chinese: one is realized via causative use of words with covert causative (light) verbs, and the other one employs overt causative (light) verbs. The former appeared earlier than the latter in history: the former predominantly appeared during the Warring States period, whereas the latter during the Han dynasty. Both types of causation structures can be further divided into agentive constructions and causative constructions. When (c)over t causative verbs are employed to express causation, they can form lexical or productive causatives.

3.1 Causation with covert causative verbs

According to traditional reviews, since Classical Chinese during the Warring States period is a concise language, it is common to employ transitive and intransitive verbs, adjectives and nouns in a causative sense to convey causation without visible causative verbs, and intransitive verbs and adjectives are more commonly used in this way than nouns and transitive verbs (see Wang, 1962, pp. 344–348; Yang, 1984, p. 43; and Norman, 1988, p. 87, 129; among many others).

Examples in (4a/b/c/d) show causative use of a transitive verb, two intransitive verbs, an adjective and a noun respectively during the Warring States period. 所 *suǒ* in (4d) is a functional morpheme that can be employed to relativise on a VP-internal element by means of binding a gap inside VP as a verbal functional head, and to nominalise an embedded clause, generating a reduced relative clause with a genitive subject (Aldridge, 2013).

(4) a. 晉侯 飲 趙盾酒 (左傳•宣公二年; Choonharuangdej, 2008, p. 8)

Jìn hóu yìn zhào dùn jiǔ
Jin marquis drink Zhao Dun wine

‘Marquis of Jin made Zhao Dun drink wine.’

(4) b. 既 來 之, 則 安 之 (論語•季氏)¹

Jì lái zhī, zé ān zhī
already come 3.Obj then settle.down 3.Obj

‘(We) already made them come, then (we should) make them settle down.’

(4) c. 匠人 斲 而 小 之
Jiàng rén zhuó ér xiǎo zhī
workman carve and small It

‘The carpenter carved it and made it small.’

(孟子•梁惠王下; adapted from Choonharuangdej, 2008, p. 13)

(4) d. 所謂 生 死 而 肉 骨 也 (左傳•昭公二十二年)

Suǒ wèi shēng sǐ ér ròu gǔ yě

SUO call life the.dead Conj flesh bone Decl

‘This is the so-called ‘making the dead have life and bones have flesh’.’

The morphemes 來 *lái* and 安 *ān* in (4b) are intransitive verbs, because in the vast majority of data from Classical Chinese corpora, *lái* and *ān* display intransitivity, as in (5a-b). Following the same rationale, the canonical word classes of *xiǎo* (4c) and *shēng* and *ròu* (4d) are presumed to be adjective and noun respectively, as shown in (5c/d-e). The relativising 者 *zhe* in (5c) selects an adjective 遠 *yuǎn* and relativizes on the subject position.

¹ Apart from examples from literature, Classical Chinese data in this paper are from the Chinese Text Project (<https://ctext.org/>) which is an open-access digital corpus including more than 5 billion characters. Classical Chinese examples I have selected from this database cover a wide range of texts.

- (5) a. 醫 來 (孟子•公孫丑下)
 Yī lái
 doctor come
 'A doctor came.'
- (5) b. 吾 生 於 陵 而 安 於 陵 (莊子•達生)
 Wú sheng yú líng ér ān yú líng
 I be.born in mountain Conj settle.down in mountain
 'I was born in mountains and settled down in mountains.'
- (5) c. 此 不 為 遠 者 小 而 近 者 大 乎? (列子•湯問)
 Cǐ bù wéi yuǎn zhě xiǎo ér jìn zhě dà hū
 this not Cop faraway ZHE small Conj close ZHE big Q
 'Isn't this that the faraway are small yet the close are big?'
- (5) d. 物 有 生 死 (孟子•梁惠王上)
 Wù yǒu sheng sǐ
 Object have life death
 'Objects have life and death.'
- (5) e. 君 之 所 未 嘗 食 唯 人 肉 耳 (韓非子•十過)
 Jūn zhī suǒ wèi cháng shí wéi rén ròu ěr
 Your.Majesty ZHI SUO not.yet eat WEI human flesh Decl
 'It is only human flesh that Your Majesty has not eaten yet.'

Since there is not sufficient data concerning causative use of transitive verbs, hence the difficulty to form justifiable statements, in this paper I only investigate causative use of intransitive verbs, adjectives, and nouns in Classical Chinese.

Notably, predicate adjectives are regarded as verbs of quality/state in Chinese (see Ramsey, 1989, p. 72; Pulleyblank, 1995, p. 12; Fuller, 1999, p. 20; Wei, 2000; and Barnes et al., 2009, p. 4, among many others). Furthermore, in Classical Chinese adjectives are treated as intransitive verbs of quality and can take objects in a causative sense (Norman, 1988, p. 92). Therefore in this paper, I analyze predicative adjectives and intransitive verbs in a unified manner.

3.1.1 Agentive constructions

Causation structures with covert causative verbs can be divided into Agentive constructions and causative constructions. An Agentive construction takes an agent subject, indicating that certain activities of the agent results in a theme being in a certain state (Cheng & Huang, 1994; Cheng et al., 1997). In Classical Chinese,

intransitive verbs (predicative adjectives) can be used flexibly to form Agentive Constructions, indicating ‘to make V’ (Xu, 2006, p. 119), as shown in (6a) and (6b) (=4c).

(6) a. 王 請 大 之! (孟子•梁惠王下; Xu, 2006, p. 119)

Wáng qǐng dà zhī!

King please enlarge it

‘You should make it something great.’

(6) b. 匠人 斲 而 小 之

Jiàng rén zhuó ér xiǎo zhī

Workman carve and small it

‘The carpenter carved it and made it small.’

(孟子•梁惠王下; adapted from Choonharuangdej, 2008, p. 13)

Before further exploring Agentive constructions, it is important to point out that although the surface SVO pattern in (6) might seem identical to that in (7a), 小 *xiǎo* ‘small’ in (6) and (7a) conveys disparate meanings in these two examples. In (7a), instead of indicating a causative sense, the verb (adjective), according to Norman (1988, p. 91) and Guo et al. (1999, p. 282), is used in a ‘putative’ sense, viz. ‘to consider X as Y’. Examples in (7b-c) show other verbs/adjectives used similarly. According to Wei (2019), this kind of ‘putative’ use should be treated as a subcategory of causative use, because both putative and causative constructions display [+Cause], and owing to similar word orders, their meanings are sometimes ambiguous. In this paper, I do not analyze verbs/adjectives employed in the putative sense.

(7) a. 孔子 登 東山 而 小 魯, 登 泰山 而 小 天下

Kǒngzǐ dēng dōngshān ér xiǎo lǔ, dēng tàishān ér xiǎo tiānxià

Confucius ascend Dongshan then small Lu, ascend Taishan then small world

‘Confucius ascended Dongshan and thought the country of Lu was small; he ascended Taishan and thought the world was small’

(孟子•盡心上; adapted from Choonharuangdej, 2008, p. 13)

(7) b. 左 丘明 恥 之 (論語•公冶長)

Zuǒ qiūmíng chǐ zhī

Zuo Qiuming shameful 3.Obj

‘Zuo Qiuming found them shameful.’

(7) c. 其 家 甚 智 其 子 (韓非子•說難)

Qí jiā shèn zhì qí zǐ

Gen family very intelligent Gen son

‘His family very much found their son intelligent.’

To further demonstrate Agentive constructions, I draw on examples concerning other intransitive verbs/adjectives. As shown in example (8a), the morpheme 勞 *láo* functions as an intransitive verb ‘to labor’; in a causative context (8b-c), it can mean ‘to make labor’. Similarly, (9a-b) involves an intransitive verb 苦 *kǔ* ‘to suffer’; in (9c), it is used causatively to express a meaning ‘to make suffer’. Note that in (9c), according to the context, the omitted subject ‘the Heaven’ is a personified agent of his autonomy and volition, and his deliberate action results in the suffering of the theme (Wei, 2019).

(8) a. 勞 而 不 怨 (論語•里仁)

Láo ér bú yuàn

Labour Conj not complain

‘(One should) labour and not complain.’

(8) b. 君子 信 而 後 勞 其 民 (論語•子張)

Jūnzǐ xìn ér hòu láo qí mín

gentleman upright Conj then labour Gen people

‘Gentlemen (should be) upright and then make their people labour.’

(8) c. 勞 心 者 治 人, 勞 力 者 治 於 人

Láo xīn zhě zhì rén, láo lì zhě zhì yú rén

labour mind ZHE govern others labour strength ZHE govern Pass others

‘Those who make their mind labour govern others; those who make their strength labour are governed by others.’

(孟子•滕文公上)

(9) a. 救 火 者 苦 而 無 賞 (韓非子•內儲說上)

Jiù huǒ zhě kǔ ér wú shǎng

fight fire Det suffer Conj not.have reward

‘Those who fight the fire suffer but do not have rewards.’

(9) b. 民 苦 則 權 勢 起 (韓非子•備內)

Mín kǔ zé quánshì

people suffer then power

‘(If) people suffer, then power arises’

(9) c. 必 先 苦 其 心 志 (孟子•告子下)

Bì xiān kǔ qí xīnzhì

must first suffer Gen mindset.aspiration

‘(The Heaven) must make his mindset and aspiration suffer first.’

As mentioned previously, since adjectives in Classical Chinese can be regarded as intransitive verbs of quality (Norman, 1988, p. 92), I treat predicative adjectives as

intransitive verbs in this paper. In canonical structures, adjectives function as intransitive verbs following subjects. In a non-causative context, the morphemes 善 *shàn*, 利 *lì*, 高 *gāo* and 亂 *luàn* appear in a predicate position following a subject (10a-d), which can be analyzed either as a predicative adjective or an intransitive verb. In a causative context, the subject functions as an agent, triggering a causative event (11). 善 *shàn*, 利 *lì*, 高 *gāo*, and 亂 *luàn* in (11a/b/c-d) adopt intransitive (predicative adjective) meanings, but they are used in a causative sense ‘to make good/sharp/high/turbulent’ respectively.

- (10) a. 人 之 將 死, 其 言 也 善 (論語•泰伯)
 Rén zhī jiàng sǐ, qí yán yě shàn
 person Part Fut die Gen word also good
 ‘(When) people are about to die, their words are good.’
- (10) b. 金 就 礪 則 利 (荀子•勸學)
 Jīn jiù lì zé lì
 weapon grind whetstone then sharp
 ‘Weapons become sharp after grinding on whetstones.’
- (10) c. 山 高 而 不 崩 (管子•形勢)
 Shān gāo ér bù bēng
 mountain tall Conj not collapse
 ‘A mountain is tall but does not collapse.’
- (10) d. 天 下 又 大 亂 (孟子•滕文公下)
 Tiānxià yòu dà luàn
 world then greatly turbulent
 ‘The world was then greatly turbulent.’
- (11) a. 工 欲 善 其 事, 必 先 利 其 器 (論語•衛靈公)
 Gōng yù shàn qí shì, bì xiān lì qí qì
 craftsman want good Gen work must first sharp Gen tool
 ‘(If) craftsmen want to make their work good, (they) must make their tools sharp first.’
- (11) b. 足 下 深 溝 高 壘, 堅 營 勿 與 戰
 Zú xià shēn gōu gāo lěi, jiān yíng wù yǔ zhàn
 foot below deep moat high rampart strong camp NEG participate battle
 ‘You should deepen the moats, make the ramparts higher, strengthen camps and not join them in a battle.’
 (史記•淮陰侯列傳; Meisterernst, 2006, p. 435)

- (11) c. 亂 國 之 君, 亂 家 之 人
 Luàn guó zhī jūn, luàn jiā zhī rén
 turbulent country Gen sovereign turbulent household Gen person
 ‘Sovereigns who make countries turbulent and people who make households turbulent.’
 (荀子•解蔽)

- (11) d. 是 亂 天 下 也 (孟子•滕文公上; Xu, 2006, p. 124)
 Shì luàn tiānxià yě
 this bring-confusion world PART
 ‘It will only bring confusion to the Empire.’

In addition to intransitive verbs/adjectives, nouns can be employed in a causative sense in agentive constructions, indicating ‘to make N’.

- (12) a. 越 國 以 鄙 遠 (左傳•僖公三十年)
 Yuè guó yǐ bǐ yuǎn
 bypass country to border remote
 ‘Bypassing a country to make a remote (one) the border.’
- (12) b. 先 破 秦 入 咸 陽 者, 王 之
 Xiān pò qín rù xiányáng zhě, wàng zhī
 first break Qin enter Xianyang REL king him
 ‘The person who defeats Qin and enters Xianyang first will be regarded as/named king’
 (史記•項羽本紀; Choonharuangdej, 2008, p. 15)
- (12) c. 桓 公 解 管 仲 之 束 縛 而 相 之
 Huán gōng jiě guǎn zhòng zhī shùfù ér xiàng zhī
 Huan Duke release Guan Zhong Gen manacles Conj minister 3.Obj
 ‘The Duke of Huan released Guan Zhong’s manacles and made him minister.’
 (韓非子•難一)

3.1.2 Causative constructions

Apart from agentive constructions, causation structures can be causative constructions, which, according to Cheng and Huang (1994) and Cheng et al. (1997), take inanimate causer subjects and indicate that causers bring about causees being in certain states. In Classical Chinese, causers of causative constructions do not have to be inanimate, but they do not have the autonomy or volition of an agent either. Since causative constructions in Classical Chinese do not entail overt causative verbs, the intransitive

verbs (adjectives) in causative constructions are used in a causative sense and convey the meaning of ‘to make V’.

In Classical Chinese during the Warring States period, causative constructions without overt causative verbs display two opposite word orders, viz. CAUSER-V-CAUSEE and CAUSEE-V-CAUSER. Although the former format is identical to that in agentive constructions, a discrepancy between agentive and causative constructions lies in that causers in the former are agents of their own volition and autonomy, yet those in the latter are not.

In example (13), the subject acts as the causer and the object the causee, so example (13) seems to be analogous to those agentive constructions discussed in Section 3.1.1. in terms of their shared word order CAUSER-V-CAUSEE. However, the causer ‘blood and *qi*’ in (13) does have the same kind of volition as the agent causers in agentive constructions (such as *gōng* ‘craftsman’ in (11a)). Therefore, agentive constructions and causative constructions sharing the CAUSER-V-CAUSEE order do not coincide with each other. Example (14) is drawn here to show that the morpheme 走 *zǒu* is an intransitive verb ‘to run away’ in canonical sentences, so in (13) it is used in a causative sense ‘to make someone run away’ (Xu, 2006, pp. 119–120), and thus its transitivity.

- (13) a. 秦 戰 勝 魏, 走 孟 卯
 Qín zhàn sheng Wèi, zǒu Mèng Mǎo
 Qin attack win Wei (make-)run Meng Mao
 ‘The state of Qin attacked and beat Wei, making Meng Mao run away.’
 (戰國縱橫家書; Xu, 2006, p. 119)

- (13) b. 則 血 氣 走 之 (黃帝內經•五味論)
 Zé xuè qì zǒu zhī
 then blood *qi* run 3.Obj
 ‘Then blood and *qi* make it run.’

- (14) 兵 刃 既 接, 棄 甲 曳 兵 而 走
 Bīng rèn jì jiē, Qì jiǎ yè bīng ér zǒu
 weapon blade already cross abandon armour trail weapon and flee
 ‘After weapons were crossed to the rolling of drums, some soldiers fled, abandoning their armour and trailing their weapons.’
 (孟子•梁惠王上; Xu, 2006, p. 119)

Apart from the CAUSER-V-CAUSEE format, causative constructions in Classical Chinese can adopt the order CAUSEE-V-CAUSER, as in (15) where causers are postverbal and inanimate. In (15a), the causer 其負 *qí fù* ‘their defeat’ following an intransitive verb makes the causee (subject) 弱者 *ruò zhě* ‘the weak’ sorrow. The

intransitive verb 哀 *āi* is used causatively as a transitive verb expressing 'to make V'. Similarly, in (15b-c) the NP 藝 *yì* and the third person singular pronoun 之 *zhī* appear in a postverbal object position and they cause the null subjects to die/grieve.

(15) a. 弱 者 哀 其 負 (鬼谷子•中經)

Ruò zhě āi qí Fù
weak Det sorrow Gen defeat
'Their defeat makes the weak sorrow.'

(15) b. 死 藝 (左傳•成公十六年)

Sǐ yì
die skill
'The skill will make (you) die.'

(15) c. 偏 傷 之 也 (荀子•不苟)

Biàn shāng zhī yě
generally grieve 3.Obj Decl
'It generally makes (people) grieve.'

It is worth mentioning that the structure in (15) is not formed via omission of prepositions, though there are examples like (16) that indeed contain a preposition 於 *yú* 'because of'. I argue that examples including 苦 *kǔ* and the preposition 'because of' are not the canonical, complete form of (15), otherwise it cannot be explained why the preposition can be omitted in one context but not the other, and there is no motivation to leave the preposition out. In Classical Chinese, omission of prepositions normally happens to 以 *yǐ* 'with; for'. In line with Peyraube (1996, 1997), I treat 以 *yǐ* as a preposition and have found a range of examples that involve empty *yǐ*. Moreover, data containing null 於 *yú* is sparsely attested in Classical Chinese corpora, and whenever 於 *yú* is omitted in those examples, it always means 'at; in', rather than 'because of'.

(16) 苦 於 山林 之 勞 (莊子•徐無鬼)

Kǔ yú shānlín zhī láo
suffer because.of mountain.forest Gen labour
'(You) suffer because of labour in mountains and forests.'

Although both agentive and causative constructions display an SVO order, their formats are distinct: the former displays a CAUSER-V-CAUSEE pattern (17), yet the latter a CAUSEE-V-CAUSER one (15). Furthermore, although both agentive and causative constructions have animate (or personified) subjects, their causers display disparate features: in agentive constructions, causers are agents of autonomy and volition, occupying a subject position (17), yet in causative constructions, causers are inanimate, occupying an object position (15).

(17) a. 君子 信 而 後 勞 其 民 (論語•子張)
 Jūnzǐ xìn ér hòu láo qí mín
 gentleman upright Conj then labour Gen people
 'Gentlemen (should be) upright and then make their people labour'

(17) b. 必 先 苦 其 心 志 (孟子•告子下)
 Bì xiān kǔ qí xīnzhì
 must first suffer Gen mindset.aspiration
 '(The Heaven) must make his mindset and aspiration suffer first.'

As propounded by Shibatani (1976) and Meisterernst (2006), when overt causative verbs are used to express causativity, there are two categories to indicate a situation of the causing and a caused situation: lexical causatives and productive causatives. The former has a patient causee and entails direct causation, yet the causee of the latter has volition and the causation is indirect. Additionally, the causing and caused situations of lexical causatives have spatio-temporal overlap and thus can be analyzed as one single situation, whereas the causing and caused situations of productive causatives do not have to coincide spatio-temporarily, so they cannot be deemed one situation.

I state that in Classical Chinese during the Warring States period, even when there is no overt causative verb, causative constructions can still be categorized into lexical causatives and productive causatives. In (18) (=13)), for example, an intransitive verb 走 *zǒu* is used in a causative sense, intervening between a non-agent causer subject and a theme causee object, so (18) involves a causative construction with the CAUSER-V-CAUSEE order. Since the causation is direct and the causing and caused situations can be regarded as a unified situation, the causative construction in (18) is a lexical causative.

(18) a. 秦 戰 勝 魏, 走 孟 卯
 Qín zhàn sheng Wèi, zǒu Mèng Mǎo
 Qin attack win Wei (make-)run Meng Mao
 'The state of Qin attacked and beat Wei, making Meng Mao run away.'
 (戰國縱橫家書; Xu, 2006, p. 119)

(18) b. 則 血 氣 走 之 (黃帝內經•五味論)
 Zé xuè qì zǒu zhī
 then blood *qi* run 3.Obj
 'Then blood and *qi* make it run.'

As mentioned previously, another type of causative constructions in Classical Chinese adopts a CAUSEE-V-CAUSER pattern, so that means both lexical and productive causatives of this type demonstrate such an order.

Nonetheless, lexical and productive causatives in Classical Chinese display distinctions. The first distinction is that a lexical causative entails a causee without autonomy or volition, whereas a productive causative entails a causee of autonomy and volition. In example (19) (=15a)), although the causee subject is 'the weak', it cannot be analyzed as an agent, in that those people are trapped into the negative emotion passively, without showing intention to suffer from the defeat, so the execution of the caused situation entirely relies on the existence of the causer, viz. the defeat.

- (19) 弱 者 哀 其 負 (鬼谷子•中經)
 Ruò zhě āi qí fù
 weak Det sorrow Gen defeat
 'Their defeat makes the weak sorrow.'

Productive causatives, however, entail causees that have their autonomy and volition. Consequently, the causees contribute to the causing and caused situations. I refer to examples with a CAUSEE-V-CAUSER in order to illustrate productive causatives (20). In (20a), 節 *jié* 'integrity' is a causer that triggers the caused event, viz. soldiers' death. As for the causee that occupies a subject position, i.e. soldiers, they have decided to sacrifice their lives for integrity, so the causee indeed plays a part in the causativity. Similarly, the subject in (20b) does not bring about causativity, because it is a causee, but the subject demonstrates autonomy and volition, and thus contributes to the causing and caused events. Note that the morpheme 死 *sǐ* in example (20) is an intransitive verb because it is used intransitively in canonical sentences, as in (21).

- (20) a. 故 軍士 死 節 (商君書•君臣)
 Gù jūnshì sǐ jié
 so soldier die integrity
 'So soldiers die (for) integrity.'

- (20) b. 召 忽 死 之 (論語•憲問)
 Shào hū sǐ zhī
 Shao Hu die 3.Obj
 'Shao Hu died (for) him.'

(21) a. 人 之 將 死, 其 言 也 善 (論語•泰伯)

Rén zhī jiāng sǐ, qí yán yě shàn

people ZHI Fut die Gen words also kind

‘(When) people are about to die, their words are also kind.’

(21) b. 曾 皙 死 (孟子•離婁上)

Zēng xī sǐ

Zeng Xi die

‘Zeng Xi died.’

According to traditional theories, the structure in (20) is called 為動用法 *wèi-dòng yòngfǎ* that means ‘for-action use’, and when an intransitive verb is used in a *wèi-dòng* way, it indicates that the subject takes an action *for* the object (see Xiang et al., 1988, p. 130, among many others). Nevertheless, I argue that the traditional concept 為動用法 *wèi-dòng yòngfǎ* ‘for-action use’ cannot be employed to represent productive causatives owing to two reasons. First, the *wèi-dòng yòngfǎ* contains more than one category, so an overgeneralization problem arises if this terminology is employed to represent productive causatives. The ‘for-action use’ is comprised of two distinct constructions. The first type is the above-mentioned CAUSEE-V-CAUSER productive causatives that entail causees of their autonomy and volition. The other type of *wèi-dòng yòngfǎ* refers to a situation where the subject initiates action for the benefit of the object, and they both have autonomy and volition (22). Sentences in (22) contain transitive verbs, yet their direct objects are omitted; pronominal and nominal phrases appearing in the object position receive a beneficiary theta role, rather than a theme role. Constructions of the second type are disparate from productive causatives. Therefore, it can be seen that the terminology ‘for-action use’ only covers the second category, and cannot represent productive causatives. Second, for the second type of *wèi-dòng* constructions, the assumed null preposition ‘for’ cannot be recovered. That is to say, there is a lack of a presumed complete form of such constructions in a *Subj-for-Obj-VP format. As a consequence, I suggest that productive causatives should not be treated as the traditional ‘for-action use’ of verbs.

(22) a. 夫 人 將 啟 之 (左傳•隱公元年)

Fūren jiāng qǐ zhī

madam Fut open 3.Obj

‘The madam will open (the gate) (for) him.’

(22) b. 邴 夏 御 齊 侯 (左傳•成公二年)

Bǐng xià yù qí hóu

Bing Xia drive Qi duke

‘Bing Xia drove (the chariot) (for) the Duke of Qi.’

Directness/indirectness of causation is another distinction between lexical and productive causatives: causation in the former is direct, yet that in the latter is indirect. In a lexical causative in (23a) (=19), the causer ‘their defeat’ directly brings about the suffering of people. In a productive causative in (23b) (=20b), the causer object is the master of the causee subject, and the causer did not directly kill the causee or order him to die/be killed; instead, the causee committed suicide to show his loyalty to the causer upon the causer’s death. It indicates that the causing event, i.e. the causer’s death, and the caused event, i.e. the causee’s suicide, are not directly linked.

(23) a. 弱者哀其 (鬼谷子•中經)

Ruò zhě āi qí fù
weak Det sorrow Gen defeat
‘Their defeat makes the weak sorrow.’

(23) b. 召忽死之 (論語•憲問)

Shào hū sǐ zhī
Shao Hu die 3.Obj
‘Shao Hu died (for) him.’

Additionally, the disparity between lexical and productive causatives also lies in whether there is any spatio-temporal overlap of the causing and caused situations, which, to some extent, is correlated with the directness/indirectness of causation. As mentioned earlier, the productive causative in (23b) involves a causing event (the causer’s death) and a caused event (the causee’s suicide) which are indirectly linked. Between the causing and caused events, there are time and space gaps, which means in productive causatives, the causing and caused situations do not coincide spatio-temporarily and thus cannot be regarded as a unified single situation. On the contrary, in a lexical causative in (23a), the causer ‘their defeat’ and the causee ‘the weak’ must coexist in the same time and space and denote the same cohort, otherwise it is impossible for the defeat to bring about sorrow to the weak people. That is to say, lexical causatives require the causing and the caused situations to have spatio-temporal overlap, so that the two situations can be conceptualized as one.

3.2 Causation with overt causative verbs

The other approach to express causation in Classical Chinese is by the use of causative (light) verbs. In Classical Chinese during the Han dynasty, productive causatives express causative situations analytically employing causative verbs indicating ‘to make; to order’, e.g. 使 *shǐ*, 令 *lìng* and 命 *mìng*. Such constructions remain stable throughout the history of the Chinese language, and *shǐ* can still be used in this way in Modern

Mandarin (Norman, 1988, pp. 129–130; Chappell & Peyraube, 2006, p. 977; Meisterernst, 2006; Xu, 2006, pp. 124–125; Basciano, 2013).

Similar to causation structures with covert causative verbs, subjects in structures with overt causative verbs can also be divided into those with their own volition and those without. In other words, causation structures with causative verbs can also be categorized into agentive constructions and causative constructions.

3.2.1 Agentive constructions

In Classical Chinese during the Han dynasty, agentive constructions with overt causative (light) verbs can be further divided into lexical causatives and productive causatives.

Lexical causatives involving agent subjects entail direct causation, as well as spatio-temporal overlap of the causing and caused situations. Moreover, due to the patientive nature of causees in lexical causatives, the execution of the caused situation entirely depends on causers' activities. Lexical causatives display a pattern of CAUSER-V1-Obj1-V2-(Obj2), in which V1 denotes causative verbs 'to make' and V2 denotes lexical verbs (or predicative adjectives).

Examples in (24) exemplify lexical causatives. In both examples, subjects function as agent causers of their autonomy and volition. It can be observed that there is an overlap between causing and caused situations regarding time and space, or rather, these two situations can be perceived as a unified event. For instance, in (24a), there is only one event, namely, gods making people deferential and respectful. Consequently, it is reasonable to claim that the causativity in (24) is direct. There is no denying the fact that examples in (24) seem to violate the criterion that causees in lexical causatives should be patientive because the object 人 *rén* should be regarded as having autonomy and volition. I argue that this object causee does not demonstrate volition to interfere with the causer's intentional behavior, and consequently fails to affect the causativity. Therefore, the causee in (24) is patientive by nature.

- (24) a. 天 神 何 不 使 人 尊敬?
 Tiān shén hé bù shǐ rén zūnjìng?
 heaven ghost why NEG cause man honour
 'The heavenly ghosts are supposed to human beings deferential and respectful.'
 (Lit. 'The heavenly ghosts, why do they not make human beings deferential and respectful?')
 (論衡•書虛; Meisterernst, 2006, p. 452)

(24) b. 使 人 怨 悲 (潛夫論•夢列)

Shǐ rén yuànbēi

make people wistful

‘(It) makes people wistful.’

(24) c. 使 君 盛 怒 (國語•魯語上; Xu, 2006, p. 122)

Shǐ jūn shèng nù

make Your-Majesty greatly rage

‘(Our ruler) makes Your Majesty boil with rage.’

Additionally, it can be seen from (24) that in lexical causatives, V2 (lexical verbs) can be either transitive or intransitive verbs (predicative adjectives). In (24a), 尊敬 *zūnjìng* ‘to honor’ is transitive,² but its direct object is left out because the omitted element can be recovered from the previous context. (24b), however, involves an adjective (intransitive verb) 怨悲 *yuànbēi* ‘wistful’.

Example (25) shows that in addition to the causative verb 使 *shǐ*, 令 *lìng* is also attested in lexical causatives in Classical Chinese corpora.

(25) a. 有 謀 人 之 心 而 令 人 知 之

Yǒu móu rén zhī xīn ér lìng rén zhī zhī

have plot people Gen intention Conj make people know 3.Obj

‘(If one) has intention to plot against people and make them know it.’

(戰國策•燕一)

(25) b. 必 令 王 先 知 之 (戰縱; Xu, 2006, p. 126)

Bì lìng wáng xiān zhī zhī

surely order king first know it

‘I will certainly let Your Majesty know first.’

In terms of productive causatives, they also involve agent subjects as causers, but disparate from lexical causatives, causees in productive causatives have some level of volition. Moreover, productive causatives demonstrate indirect causation, and the causing and caused situations are separate. A productive causative contains a causative verb and a lexical verb. When the lexical verb is transitive, the productive causative adopts a format of CAUSER-V1-(Obj1)-V2-Obj2; when the lexical verb is intransitive, the

² The transitivity of 尊敬 *zūnjìng* ‘to honour’ can be illustrated by example (i).

(i) 不 尊敬 社稷 (說苑•至公)

Bù zūnjìng shèjì

not honour state

‘Not honouring the state’

structure is CAUSER-V1-Obj-V2. In both patterns, V1 denotes causative verbs ‘to order’ and V2 denotes lexical verbs (or predicative adjectives).

Examples in (26) are productive causatives with the CAUSER-V1-(Obj1)-V2-Obj2 order. In (26a), there are two situations: a causing situation *shǐ rén* ‘(he) ordered someone’ and a caused situation *rén fǎng yú kǒngzǐ* ‘someone visited Confucius’. Since it is very likely that the causing event and the caused event would not happen at the same time or in the same place, or at least not simultaneously or in the same room, it can be assumed that these two events are indirectly linked. In terms of Obj1 *rén* intervening between the causative verb and the lexical verb, it acts as both the causee of the preceding causing situation and the agent of the following caused situation. As the causee, the argument *rén* has some level of volition, so it meets the criterion that causees of productive causatives entail a certain level of volition. This interpretation applies to (26b) as well.

(26) a. 使 人 訪 於 孔 子 (孔子家語•公西赤問)
 Shǐ rén fǎng yú kǒngzǐ
 order someone visit Prep Confucius
 ‘(He) ordered someone to visit Confucius.’

(26) b. 使 人 辱 之 (史記•項羽本紀; Xu, 2006, p. 125)
 Shǐ rén rǔ zhī
 send someone dishonour him
 ‘Make someone dishonour him.’

It is notable that the object following a causative verb, which acts as the causee and agent of the causing and caused situations simultaneously, can be omitted, as in (27a-b), the complete counterpart of which is (27c-d). That is to say, the *shǐ*-Obj1-V/Adj-Obj2 constructions in (27c-d) are the complete form of *shǐ*-V/Adj-Obj in (27a-b).

(27) a. 乃 私 使 殺 之 (漢書•匈奴傳上)
 Nǎi sī shǐ shā zhī
 so secretly order kill 3.Obj
 ‘So (she) secretly ordered him to be killed.’

(27) b. 欲 下 令 使 高 之
 Yù xià lìng shǐ gāo zhī
 wish below command cause high OBJ
 ‘(The king) wanted to give the order to have them made higher.’
 (史記•循吏列傳; adapted from Meisterernst, 2006, p. 438)

(27) c. 太后 使 人 殺 之 (史記•呂太后本紀)
 Tàihòu shǐ rén shā zhī
 Queen.mother order someone kill 3.Obj
 'The queen mother ordered him to be killed.'

(27) d. 使 人 高 之 而 勿 罪 也
 Shǐ rén gāo zhī ér wù zuì yě
 order someone high 3.Obj Conj do.not blame Decl
 'You have ordered it to be made higher, then do not blame others.'
 (晏子春秋•景公登路寢臺不終不悅晏子諫)

For Obj1 that intervenes between the causative verb V1 and lexical verb V2, apart from being indefinite and simplex (e.g. 人 *rén* 'people; someone' in (24–25/26–27)) as well as pronominal (e.g. see 之 *zhī* in (28)), Obj1 can be definite, complex and non-pronominal, as in example (29).

(28) 使 之 相 保 (中論•譴交)
 Shǐ zhī xiāng bǎo
 order 3.Obj reciprocally protect
 'Order them to reciprocally protect (each other).'

(29) a. 上 嘗 使 諸 數 家 射覆 (漢書•東方朔傳)
 Shàng cháng shǐ zhū shù jiā shèfù
 monarch Asp order many several Cl divine
 'The monarch once ordered many people to divine.'

(29) b. 天子 已 嘗 使 浞野 侯 攻 樓蘭
 Tiānzǐ yǐ cháng shǐ zhuóyě hóu gōng lóulán
 emperor already Asp order Zhuoye Marquis attack Loulan
 'The emperor once already ordered the Marquis of Zhuoye to attack Loulan.'
 (史記•齊悼惠王世家)

The other form of productive causatives adopts a CAUSER-V1-Obj-V2 order, in which the lexical verb V2 is intransitive, as in (30). Parallel to those with the CAUSER-V1-(Obj1)-V2-Obj2 pattern, a productive causative with an intransitive lexical verb also contains an object intervening between the causative verb and the lexical verb, and this object has volition, acting as both the causee of the causing situation and the agent of the caused situation.

(30) a. 齊王 初 使 之 去 者 (論衡•刺孟)

Qí wáng chū shǐ zhī qù zhě

Qì king initially order 3.Obj go Det

'The reason why King Qi initially ordered him to go.'

(30) b. 王 使 人 來 曰 (孟子•公孫丑下; Xu, 2006, p. 121)

Wáng shǐ rén lái yuē

king send someone come say

'The king sent someone who said...'

Similarly, (31a/32a) and (31b/32b) also involve a transitive and intransitive verb respectively, yet different from (26–30) that contain the causative verb 使 *shǐ* 'to order', (31a-c) and (32a-b) contain the causative verbs 令 *lìng* and 命 *mìng* 'to order' respectively.

(31) a. 令 吏 葬 之 (說苑•辨物)

Lìng lì zàng zhī

order official bury 3.Obj

'(He) ordered officials to bury them.'

(31) b. 必 誨 莫 令 人 往 (新書•退讓)

Bì huì mò lìng rén wǎng

definitely tell do.not order people go

'(I would) definitely tell (you) not to order anyone to go.'

(31) c. 而 不 能 令 狗 無 吠 己 (戰國策•韓策; Xu, 2006, p. 121)

ér bù néng lìng gǒu wú fèi jǐ

and NEG can order dog NEG bark oneself

'You cannot order a dog not to bark at you.'

(32) a. 宜 命 人 毋 持 兵 (史記•朝鮮列傳)

Yí mìng rén wú chí bīng

had.better order people do.not hold weapon

'(He) had better order people not to hold weapons.'

(32) b. 命 之 侑 (禮記•檀弓上)

Mìng zhī yòu

order 3.Obj entertain

'(He) ordered him to entertain.'

3.2.2 Causative constructions

Causative constructions with overt causative verbs, parallel to their counterparts with covert causative verbs, also contain non-agent inanimate subjects that function as causers and bring about causees being in certain states.

Nevertheless, different from causative constructions with covert causative verbs that allow causers to either precede or follow causees, causative constructions with overt causative verbs never permit causers to follow causees, and to be more specific, causers in these structures always occupy the subject position. Furthermore, causative constructions with covert causative verbs can be categorized into lexical and productive causatives, yet causative constructions with overt causative verbs always exhibit properties of lexical causatives.

In examples in (33), the subject causers assume a theme thematic role, so they contain causative constructions. These causative constructions adopt an order of CAUSER-V1-Obj1-V2-(Obj2), where V1 denotes the causative verb 使 *shǐ* 'to make' and V2 denotes a lexical verb (or a predicative adjective). Similarly, examples in (34) involve another causative verb 令 *lìng* that also means 'to make'. Although this format seems to be identical to that in agentive constructions (lexical causatives), a discrepancy between agentive and causative constructions with overt causatives lies in that causers in the former are agents of their own volition and autonomy, yet those in the latter are not.

(33) a. 登 高 使 人 欲 望 (說苑•談叢)
 Dēng gāo shǐ rén yù wàng
 ascend height make people want look.far
 'Ascending a height makes people want to look far.'

(33) b. 登 高 望 下 使 人 心 悲 (說苑•指武)
 Dēng gāo wàng xià shǐ rén xīnbēi
 ascend height look down make people sorrowful
 'Ascending a height and looking down makes people sorrowful.'

(33) c. 使 蕃 臣 不 自 安
 Shǐ fān chén bù zì ān
 cause all subject NEG self pacify
 'Caused all foreign vassals not (to be able) to keep peace for themselves.'
 (史記•酷吏列傳; adapted from Meisterernst, 2006, p. 449)

- (34) a. 誤 食 之, 令 人 狂亂 (金匱要略)
 Wù shí zhī, lìng rén kuángluàn
 accidentally eat 3.Obj make people manic
 '(If people) eat it accidentally, (it will) make people manic.'
- (34) b. 令 人 墮怠 (焦氏易林•泰之)
 lìng rén duòdài
 make people lazy
 '(It) makes people lazy.'

As can be summarised from section 3.2, causation with overt causative (light) verbs in Classical Chinese demonstrates robust features. When overt causative verbs are employed, causation structures can be categorized into agentive constructions and causative constructions. Agentive constructions can be either lexical or productive causatives, whereas causative constructions are always lexical causatives. One of the key distinctions between lexical and productive causatives is that the causee of the former is patientive, yet the causee of the latter has a certain level of volition. Consequently, causative verbs in lexical causatives indicate 'to make', because the causation does not have to rely on the patientive causee anyway; causative verbs in productive causatives, on the contrary, must indicate 'to order', because the causee needs to contribute to the causation. In Classical Chinese, the three causative verbs are inconsistent regarding their meanings: polysemous 使 *shǐ* and 令 *lìng* can mean 'to make' or 'to order', while 命 *mìng* always means 'to order'. Such inconsistency accounts for the fact that productive causatives permit all three causative verbs, whereas lexical causatives allow 使 *shǐ* and 令 *lìng* only. Since causative constructions coincide with lexical causatives, it can also be said that agentive constructions allow all causative verbs, but 命 *mìng* is excluded from causative constructions.

4 A prosodic approach to causation

In this section, I take a prosodic approach to account for causation in Classical Chinese during the Warring States period and in the Han dynasty. Feng (1998, 2000, 2009) defines a minimal word as a single prosodic word in the prosodic-morphological system and a prosodically circumscribed domain. He formulates a templatic constraint for compounding that the VO-compound is a prosodic word, as well as a templatic constraint on categorical change that an auxiliary+verb form undergoes a process of category changing if it is a prosodic word. In Mandarin, only disyllabic V-O and Aux-V forms exhibit lexical properties and meet minimal word requirements, hence can be compounds, yet tri-/polysyllabic V-O and Aux-V forms are not qualified to be compounds, because they fail to meet the definition of a prosodic word. To be more specific, disyllabic VO compounds can take postverbal objects and aspect markers, and

they cannot be separated; tri-polysyllabic VO phrases, however, cannot take objects or aspect markers (in a way that VO verbs do), but they can be separated. As for Aux+V (*kě* +V) forms, only disyllabic or shorter ones can be modified by degree modifiers and undergo the process of changing into adjectives. This prosodic approach not only applies to active constructions but also to the compound passive (*bèi*-V) and phrasal passives (*bèi*-VP and *bèi*-NP-VP), both of which are constrained by prosody (Feng 1998, 2000, 2009).

In Classical Chinese during the Warring States period and the Han dynasty, both strategies to form causation structures, i.e. causative use of words and use of causative verbs, are compatible with a prosodic approach. In causation structures involving flexible use of nouns and intransitive verbs/adjectives, covert causative verbs and their sister nodes are binary, so causation structures with covert causative verbs exhibit properties of compounds (minimal words). In respect of causation structures with overt causative verbs, they are constituted of more than two syllables and hence are on a par with phrases.

Following Feng (2005, 2014, 2016, 2019), I treat causative verbs as light verbs; during the Warring States period, light verbs were covert, while in the Han dynasty, they became phonetically realized. Consequently, causation structures with covert causative verbs can be analyzed on a par with covert light verb constructions, instead of being accounted for by an approach of preposition omission, applicative structure or light verb structure (Su & Feng, 2020).

In this section, I discuss VO and VV causation in Classical Chinese, both of which can be accounted for by a prosodic theory.

I analyze VO causation first. To justify the compound nature of causation structures with covert causative verbs, as well as the phrasal nature of those with overt causative verbs, I refer to their (different) ability to take an ‘outer’ object and separability.

When a causation structure consists of a noun and a covert causative verb selecting it, the structure is disyllabic and it can take an ‘outer’ object. In (35), the causation structure contains two syllables, namely, (V)-O, with the causative verb being empty, which indicates that (V)-O forms construct minimal prosodic units. In (35c/d), the nouns 友 *yǒu* ‘friend’, 牛羊 *niú yáng* ‘cattle and sheep’ and 倉廩 *cāng lǐn* ‘granary’ are used transitively to indicate ‘to make friends’ and ‘to make (the parents possess) cattle/sheep/granaries’ respectively (Xu, 2006, p. 118). Nonetheless, when causative verbs are overt, such a phenomenon is never attested.

- (35) a. 桓 公 解 管 仲 之 束 縛 而 相 之
 Huán gōng jiě guǎn zhòng zhī shùfù ér xiàng zhī
 Huan Duke release Guan Zhong Gen manacles Conj minister 3.Obj
 'The Duke of Huan released Guan Zhong's manacles and made him minister.'
 (韓非子•難一)
- (35) b. 匿 怨 而 友 其 人 (論語•公冶長)
 Nì yuàn ér yǒu qí rén
 conceal resentment Conj friend Gen person
 'Concealing resentment and making this person a friend.'
- (35) c. 友 也 者, 友 其 德 也 (孟子•萬章下; Xu, 2006, p. 118)
 Yǒu yě zhě, yǒu qí dé yě
 befriend PART ZHE befriend his virtue PART
 'In making friends with someone you do so because of his virtue.'
- (35) d. 牛 羊 父 母, 倉 廩 父 母
 Niú yáng fù mǔ, cāng lǐn fù mǔ
 cattle sheep father mother granary cereal father mother
 'The cattle and sheep go to you, father and mother, and the granaries as well.'
 (孟子•萬章上; Xu, 2006, p. 118)

In terms of VV forms, causation structures with covert causative verbs are also prosodic words, parallel to their VO counterparts, and causation structures with overt causative verbs are also phrases, similar to their VO counterparts. To demonstrate the phrasal nature of VV causation structures, I refer to the possibility to insert an NP between two verbs (generating V1-NP1-V2-(NP2)), as well as their ability to take an adverbial modifier.

First, V-V forms involving overt causative verbs can be separated by NPs. When a causative verb is combined with a lexical verb to generate V-V causation, an NP can intervene between the two verbs and form V1-NP1-V2-(NP2). In example (36a) (=27a), the causative verb 使 *shǐ* 'to order' precedes a lexical verb 殺 *shā* 'to kill', generating a V-V form. (36a) displays the canonical V-V form, whereas in (36b) (=27b), an NP 人 *rén* occurs between the causative verb and the lexical verb. Similarly, a full DP can intervene between a causative verb and a lexical verb in (37). If the two verbs formed a minimal word, it would be impossible for any nominal element to separate them. That is to say, such a separability test justifies the phrasal nature of the V-V form.

- (36) a. 乃 私 使 殺 之 (漢書•匈奴傳上)
 Nǎi sī shǐ shā zhī
 so secretly order kill 3.Obj
 'So (she) secretly ordered him to be killed.'
- (36) b. 太后 使 人 殺 之 (史記•呂太后本紀)
 Tàihòu shǐ rén shā zhī
 Queen.mother order someone kill 3.Obj
 'The queen mother ordered him to be killed.'
- (37) a. 數 使 使 趣 齊 兵 (史記•項羽本紀)
 Shuò shǐ shǐ cù qí bīng
 several.times order messenger urge Qi soldier
 '(He) ordered messengers to urge Qi soldiers several times.'
- (37) b. 復 使 一 人 趣 之! (史記•滑稽列傳)
 Fù shǐ yī rén cù zhī!
 again order 1 person urge 3.Obj
 'Order someone to urge him again!'

Second, V-V causation with overt causative verbs can be separated by adverbials. When causation structures contain overt causative verbs, they can take modifying adverbials, which is a typical property of phrases. In (38), a causative construction has a CAUSER-V1-Obj-V2 format, where V1 is the causative verb 令 *lìng* 'to make' and V2 is a lexical verb 'to die'. An adverb can intervene between the object and lexical verb to modify this verb, which means structures in (38) are on a par with phrases because adverbs cannot be inserted into prosodic words as modifiers. Therefore, due to this separability test, it is safe to state that such VV causation in Classical Chinese is phrasal.

- (38) a. 令 人 暴 亡 (黃帝內經•刺法論)
 Lìng rén bào wáng
 make person suddenly die
 '(It) makes people suddenly die.'
- (38) b. 令 人 卒 亡 (黃帝內經•本病論)
 Lìng rén cù wáng
 make person suddenly die
 '(It) makes people suddenly die.'

It is worth mentioning that for causation structures that are analyzed as prosodic words, since their causative verbs are covert, it is impossible to apply the separability test to them.

To summarise, both VO and VV causation in Classical Chinese can be accounted for by a prosodic approach. Causation structures with covert causative verbs are prosodic words, whereas those with overt causative verbs are phrases.

The hypothesis that causation structures without overt causative verbs are prosodic words explains their transitivity: during the Warring States period, morphemes 使 *shǐ*, 令 *lìng* and 命 *mìng* were still predominantly employed as full verbs, before evolving into causative verbs. The vast majority of words that are used in a flexible manner (or rather, in combination with covert causative verbs) to indicate causation are nouns and intransitive verbs/adjectives because transitivity is the purpose of the causative process. This also accounts for the fact that using transitive verbs in a causative sense is very rare in Classical Chinese, though there are indeed a few examples attested in corpora, such as (39) (=4a).

- (39) 晉侯 飲 趙盾酒 (左傳•宣公二年; Choonharuangdej, 2008, p. 8)
 Jìn hóu yìn zhào dùn jiǔ
 Jin marquis drink Zhao Dun wine
 'Marquis of Jin made Zhao Dun drink wine.'

To reinforce the prosodic approach, I refer to an additional causation structure that did not appear until towards the end of Classical Chinese, namely, during the Han dynasty. This new causation structure consists of a transitive verb and an intransitive complement (a verb or an adjective) and it functions as a causative verb (Norman, 1988, p. 129). Such structures remain stable throughout the history of Chinese and still exist in Modern Mandarin (Wei, 2000). (40a-b) and (40c-d) demonstrate transitive and intransitive structures respectively. Note that the same structure 擊殺 *jī-shā* functions as a transitive verb in (40b) while an intransitive verb in (40c). (41a) and (41b) illustrate transitive and intransitive examples in Modern Mandarin.

- (40) a. 吳 攻破 楚 (論衡•順鼓)
 Wú gōng-pò chǔ
 Wu attack-crush Chu
 'Wu attacked and demolished Chu.'
- (40) b. 則 項梁 已 擊殺 之 (史記•李斯列傳)
 Zé xiàng liáng yǐ jī-shā zhī
 then Xiang Liang already strike-kill 3.Obj
 'Then Xiang Liang already struck and killed him.'

- (40) c. 以 勝 擊殺 (淮南子•天文訓)
 Yǐ shèng jī-shā
 use victory strike-kill
 'Using victory to strike and kill.'
- (40) d. 漢 擊破 (史記•齊悼惠王世家)
 Hàn jī-pò
 Han attack-crush
 'Han attached and crushed.'
- (41) a. 他 打死 他們 了。 (Cheng et al., 1997, p. 201)
 Tā dǎ-sǐ tāmen le.
 he hit-dead them asp
 'He hit them dead.'
- (41) b. 他 累死 了。 (Cheng et al., 1997, p. 201)
 Tā lèi-sǐ le.
 He tired-dead asp
 'He is extremely tired.'

I argue that such VV structures construct minimal prosodic units, as no modifier can occur inside the VV forms. To be more specific, there is no attested example in Classical Chinese corpora with an adverb intervening between the two verbs in a VV structure as a modifier. Since this additional type of causation structure can also be explained by the prosodic approach, they reinforce the rationality of the prosodic theory for Classical Chinese.

5 Conclusion

In this paper, I have investigated causation in Classical Chinese. There are two strategies to form causation: causative use of intransitive verbs/adjectives and nouns with covert causative (light) verbs, as well as employment of overt causative (light) verbs. Causation structures with and without causative verbs can be divided into agentive constructions and causative constructions: the former entails agent causers whereas causers of the latter do not have volition. Agentive constructions and causative constructions can be further categorized into lexical causatives and productive causatives, based on three discrepancies: 1) the thematic role of the causee, 2) (lack of) overlap of the causing and caused situations, and 3) directness/indirectness of causation (Shibatani, 1976; Meisterernst, 2006).

Within causation structures with covert causative verbs, agentive constructions involve intransitive verbs/adjectives as well as nouns, though the latter is less

frequently attested than the former in corpora. As for causative constructions with covert causative verbs, they display two opposite word orders, i.e. CAUSER-V-CAUSEE and CAUSEE-V-CAUSER. Although causative constructions adopting the former format seem identical to agentive constructions, causers of causative constructions are themes without volition, rather than agents.

Causation structures with overt causative verbs can also be categorized into agentive constructions and causative constructions; the former can be either lexical or productive causatives, yet the latter can only be lexical causatives. Causative verbs in lexical causatives mean ‘to make’, while those in productive causatives mean ‘to order’. Given the fact that 使 *shǐ* and 令 *lìng* can mean ‘to make’ or ‘to order’, whereas 命 *mìng* always means ‘to order’, productive causatives permit all three causative verbs, whereas lexical causatives allow 使 *shǐ* and 令 *lìng* only. Consequently, all causative verbs are attested in agentive constructions, but 命 *mìng* is excluded from causative constructions.

In the last section, I follow Feng’s (1998, 2000, 2009) prosodic approach and argue that both causation structures with overt causative verbs and those without can be explained by a prosodic theory. Having analyzed both VO and VV causation forms, I argue that causation structures involving covert causative verbs are prosodic words, whereas those involving overt causative verbs exhibit properties of phrases. To be more specific, VO forms with covert causative verbs can take ‘outer’ objects, but their counterparts with overt causative verbs cannot; a VV form with an overt causative verb can take an adverbial modifier, and an object can be inserted between two verbs, yet their counterpart with a covert causative verb does not display such phrasal properties. Additionally, I reinforce the prosodic approach by referring to a newly emerged V-V causation structure that does not allow any modifier between its two verbs and hence a minimal prosodic unit.

Of course, there are remaining issues concerning causation in Classical Chinese, such as the presence of opposite word orders in causative constructions with covert causative verbs, motivation for the appearance of new V-V causation structures during the Han dynasty, the disappearance of causation structures with covert causative verbs in Modern Mandarin, etc. These issues could be addressed in future research.

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