

The Unaccusative constructions in Archaic Chinese and their historical development

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ABSTRACT. *The Unaccusative Hypothesis Perlmutter [1] has been widely applied to Mandarin Chinese studies, whereas the studies from historical and formal syntax perspective under this framework are rare. Therefore, this paper first investigate whether the Unaccusative Hypothesis can be applied to Archaic Chinese and then conduct syntactic analysis on the “ $NP_{theme}+V_{unaccu}$ ” construction as well as the formation of “ $NP_{exp}+V_{unaccu}+NP_2$ ” construction. The results show that the Unaccusative Hypothesis can be applied to Archaic Chinese. The “ $NP_{theme}+V_{unaccu}$ ” construction may look like object-preposing constructions and topic constructions, but it is better analyze it as a construction in which the NP_{theme} standing in the subject position. What is more, I argue that the “ $NP_{exp}+V_{unaccu}+NP_2$ ” construction comes from a morphological or lexical causative construction and has a competitive relationship with the causative constructions in the process of the historical development of Chinese. The “ $V_{unaccu}+NP_{theme}$ ” constructions are actually two-place unaccusative sentences with omitted causer or experiencer. Only the “ $NP_{theme}+V_{unaccu}$ ” construction is the real one-place unaccusative construction in which the NP_{theme} generates in the object position in deep structure and moves to the subject position in surface structure for case requirement.*

Keywords: Unaccusative Hypothesis, Archaic Chinese, Syntax, Historical development

1. **Introduction.** Perlmutter [1] put forth the Unaccusative Hypothesis that one-place verbs are divided into unaccusative and unergative types. Based on that, a lot of studies have been carried out [2-4]. It has been claimed that the Unaccusative Hypothesis can be applied to Mandarin Chinese as well [5-7], as shown below.

- (1) a. 張三哭了。
 zhangsan ku le
 Zhangsan cry Asp
 “Zhangsan cried”
 b. *哭了張三
 ku le zhangsan
 cry Asp Zhangsan
 “Zhangsan cried”
- (2) a. [e]¹來了張三 (Deep structure)
 lai le zhangsan
 come Asp Zhangsan
 “Zhangsan came. / There comes Zhangsan.”
 b. 張三來了 t。 (Surface structure)
 zhangsan lai le
 Zhangsan come Asp
 “Zhangsan came.”

Since 哭 [ku] (cry) in (1) is an unergative verb and the subject *Zhangsan* is base generated in the subject position, it cannot stand in the post-verbal position, so (1b) is bad. While in (2), 來 [lai] (come) is an unaccusative verb. *Zhangsan* in (2) is base generated in the object position in the deep structure and it moves to the subject position for case requirement. (2a) is good because *Zhangsan* stands in situ for some reasons.

The essential difference lies in the property of the subject: the subject of an unergative verb behaves as the subject both in the surface structure and deep structure, while the subject of an unaccusative verb is only the subject in the surface structure. In deep structure, the unaccusative construction is actually subjectless. It is the object that moves to the subject position to get case and form the surface structure. [7]

In Mandarin Chinese, the studies on object in-situ constructions are very extensive [8-15]. Examples are shown below.

- (3) 李奶奶瞎了一隻眼
 linainai xia le yi zhi yan
 Linainai blind Prt one CL eye
 “One of Linainai’s eyes is blind.”
- (4) 那家公司沉過一條船。
 na jia gongsi chen guo yi tiao chuan
 that CL company sink Prt one CL boat
 “One of the company’s boats sank.”

As shown in (3) and (4), 瞎 [xia] (blind) and 沉 [chen] (sink) are unaccusative verbs and 一隻眼 [yizhi yan] (One of Linainai’s eyes) and 一條船 [yitiao chuan] (One of the company’s boats) are in-situ objects.

¹ Examples in (2) are cited from Huang (2007). [e] here stands for an empty position and t stands for a trace left by *Zhangsan* in the deep object position.

Xu [16] was one of the first linguists to put forward this construction in Mandarin Chinese. Since then, a number of linguists have conducted investigations and analyses on it.

As for Archaic Chinese, a few previous studies have been undertaken on the ergativity of verbs [17-23]. Their studies focus on the properties, distribution and causative use of the unaccusative verbs. There is a lack of studies on unaccusative verbs and the related constructions from historical and formal syntax perspective. Therefore, in this paper, I first investigate whether the Unaccusative Hypothesis can be applied to verbs in Archaic Chinese, and then conduct syntactic analysis on the “NP_{theme}+V” construction as well as the formation of the “NP_{1exp}+V+NP2” construction.

All data in Archaic Chinese are from the literature written in the period from [*Xianqin*] (The Pre-Qin Period) ~ [*Xihan*] (The Western Han Dynasty). Some data are cited from the previous studies and checked with the original work. Other Archaic Chinese data were found in the database of Beijing University, the database of Academia Sinica of Taiwan and the database Handa Wenku of Chinese University of Hong Kong.

2. The Unaccusative Hypothesis and Archaic Chinese. As shown in (1) and (2), it is not difficult to differentiate unaccusative verbs from unergative verbs in Mandarin Chinese. The reason is that in Mandarin, the object of unaccusative verbs can stay in situ, but the agent of unergative verbs cannot be in the object position. How about Archaic Chinese? Can Unaccusative Hypothesis be applied to Archaic Chinese and the verbs can also be divided into unaccusative and unergative? According to my observation, unaccusative verbs can be identified in Archaic Chinese just as in Mandarin Chinese.

Semantically, an unaccusative verb has the theme as the only argument and describes a non-volitional state, a change of state or movement, such as existing, appearing, or disappearing. Examples are shown as follows: (i) verbs whose surface subject are semantically theme or patient like 流 [*liu*] (flow), 漂 [*piao*] (drift), 落 [*luo*] (fall), 燒 [*shao*] (burn), 升 [*sheng*] (rise), etc.; (ii) verbs describing a change of state like 溶 [*rong*] (dissolve), 發 [*fa*] (come up), 敗 [*bai*] (fail), etc.; (iii) verbs describing existing, appearing or disappearing, like 出 [*chu*] (out), 存 [*cun*] (exist), 現 [*xian*] (appear), 生 [*sheng*] (live), 亡 [*wang*] (die), ect. and (iv) aspectual verbs like 始 [*shi*] (begin), 止 [*zhi*] (stop), ect.

Syntactically, as shown in Mandarin Chinese, the theme of an unaccusative verb may stay in the object position and has no need to move to the subject position, while the agent of an unergative verb cannot appear in the object position. In Archaic Chinese, we can differentiate unaccusative verb from unergative verb in the same way, as illustrated below.

(5) a. 西方之聲揚。(《晏子春秋·內篇雜下》)

xifang zhi sheng yang. [*Yanzi Chun Qiu.Nei Pian Za Xia*]

west Gen sound spread

“The sound in the west part (of the room) spread.”

b. 飄風起兮揚塵埃。(《楚辭》)

piao feng qi xi yang chen ai. [*Chu Ci*]

blow wind blow Prt spread dust dust
“The dust spreads when the wind blows.”

(6) a. 星隕如雨。 (《春秋·莊公 7 年》)

xing yun ru yu [Chun Qiu. Zhuang Gong 7 Nian]
star fall like rain

“The stars fell like rain.”

b. 隕石于宋五,隕星也。 (《左傳·僖公 16 年》)

yun shi yu song wu, yun xing ye. [Zuo Zhuan. Xigong 16 Nian]
fall stone Prep Song five fall star Prt

“Five stones fell in Song. Those are falling stars.”

(7) a. 國必亡。 (《尚書·伊訓》)

guo bi wang. [Shang Shu. Yi Xun]
country must perish

“The country will be perished.”

b. 亡國不可以複存。 (《孫子兵法》)

wang guo bu ke yi fu cun [Sunzi Bing Fa]
perish country not can Prt again exist

“A country that is perished cannot exist again.”

In (5a), (6a) and (7a), 揚 [yang] (spread), 隕 [yun] (fall) and 亡 [wang] (perish) take the theme as the surface subject, and in (5b), (6b) and (7b), verbs take the theme as the object. I consider these verbs as unaccusative verbs.

Different from unaccusative verbs, the agent argument of one-place unergative verbs cannot appear in the object position in Archaic Chinese. Hence two types of verbs can be differentiated as in Mandarin Chinese.

Although we can distinguish two types of verbs in Archaic Chinese, it should be noted that the meaning of an unaccusative sentence is usually ambiguous when the theme argument retains in the object position. This kind of ambiguity normally does not exist in Mandarin Chinese. Examples of Archaic Chinese are given below.

(8) a. 揚之水,不流束薪。 (《詩經·揚之水》)

yang zhi shui, bu liu shu xin. [Shi Jing. Yang Zhi Shui]
rapid Gen water not flow bunch wood

“The rapid water cannot make a bunch of wood flow.”

b. 天子之怒,伏屍百萬,流血千里。 (《戰國策·魏 4》)

tian zi zhi nu fu shi bai wan
God son Gen anger fall body hundred ten-thousand
liu xue qian li [Zhanguo Ce. Wei4]
flow blood thousand mile

“The king’s anger caused thousands of people to die and the blood to flow a thousand mile away.”

(9) a. 隕石于宋五,隕星也。 (《左傳·僖公 16 年》)

yun shi yu song wu, yun xing ye. [Zuo Zhuan. Xigong 16 Nian]
fall stone in Song five fall star Prt

“Five stones fell in Song. Those are falling stars.”

b. 紂克東夷, 而隕其身。 (《左傳·昭公 11 年》)

zhou ke Dongyi er yun qi shen [Zhuo Zhuan. Zhaogong 11 nian]

Zhou defeat Dongyi but die his life

“Zhou defeated Dongyi, but Zhou died.”

Sentences in (8) and (9) are ambiguous in meaning. According to the meaning shown in 十三經註疏 [Shi San Jing Zhu Shu] (the thirteen classics annotation), (8a) should be understood as a causative sentence. However, as no independent syntactic evidence is given, intuitively there are two other possible readings. First, 揚之水 [yang zhi shui] (rapid water) can be analyzed as a topic, and 不流束薪 [bu liu shu xin] (a bunch of wood doesn't flow) is an unaccusative construction, in which the object 束薪 [shu xin] (a bunch of wood) remains in situ. Second, [yang zhi shui] 揚之水 (rapid water) can be analyzed as a subject, which just expresses the environment, and the sentence has no causative meaning. In (8b), except the three kinds of reading like in (8a), another reading is that 流 [liu] (flow) can be understood as a verb in the modifier position. 流血千里 [Liuxue qianli] (the blood flew a thousand mile away) may have an omitted main verb 有 [you] (have). 流血(有)千里 [Liuxue (you) qianli] means “the flowing blood reached a thousand miles”. In (9a), 隕 [yun] (fall) in 隕石 [yunshi] (falling stone) is analyzed as a causative verb in Li [24]. It is possible in meaning, but independent syntactic evidence is needed. (9a) also has four possible readings, just like (8b). It can be understood as an causative sentence in which an unknown causer being omitted, or understood as a sentence in which an environment role like 天 [tian] (sky) being omitted. The third possibility is that no argument is omitted and 石 shi (stone) is the only argument in the sentence. The fourth possibility is that the sentence may mean “There were five falling stones in Song”, with 于 于 behaving as the main verb meaning “arrive”. In (9b), Zhou can be understood as a causer, meaning that his behaviour caused his death. Also Zhou can be understood as an experiencer who lost his life.

As we see, only unaccusative verbs have such kind of ambiguities. More analysis will be provided in the section on the “NP_{1exp}+V+NP2” construction.

3. The syntactic analysis of “NP_{theme}+V_{unaccu}” constructions. When an unaccusative verb has a preverbal theme argument, it forms a “NP_{theme}+V_{unaccu}” construction. Examples are shown in (5a) and (6a) which are repeated below.

(10) 西方之聲揚。 (《晏子春秋·內篇雜下》)

xi fang zhi sheng yang. [Yanzi Chun Qiu. Nei Pian Za Xia]

west direction Gen sound spread

“The sound in the west (of the room) is loudly spread.”

(11) 星隕如雨。 (《春秋·莊公 7 年》)

xing yun ru yu [Chun Qiu. Zhuangong 7 Nian]

star fall like rain

“The stars fell like rain.”

The syntactic property of the “NP_{theme}+V_{unaccu}” construction has not been considered before. Is NP_{theme} a subject, topic or preposed object? In this section, I discuss the “NP_{theme}+V_{unaccu}” unaccusative construction in detail by comparing it with the object-preposing (after subject) construction, the topic construction and the middle construction. The results show that the “NP_{theme}+V_{unaccu}” unaccusative construction may syntactically look like object-preposing constructions and topic constructions, but it is better analyze it as a construction in which the NP_{theme} standing in the subject position. The “NP_{theme}+V_{unaccu}” unaccusative construction is semantically different from middle constructions. However, syntactic ways of differentiating English unaccusative verbs from middle verbs cannot all be well applied to Archaic Chinese.

3.1. “NP_{theme}+V_{unaccu}” construction VS object-preposing (after subject) construction.

Since the theme argument is preverbal, it is theoretically possible for the “NP_{theme}+V_{unaccu}” construction to be a kind of object-preposing construction with an empty subject. I will describe the properties of object-preposing construction, based on which the difference between the “NP_{theme}+V_{unaccu}” construction and the object-preposing construction will be revealed.

As described in the previous studies, there are five types of object-preposing construction in Archaic Chinese [25-26].

First, when the pronominal object is in the negation context, the object is preposed between the negator and the verb. As shown in (12) and (13) below, pronominal objects 己 [ji] (oneself) and 之 [zhi] (it) are preposed in negation context.

(12) 不患人之不己知。(《論語·學而》)

bu huan ren zhi bu ji zhi [Lun Yu. Xue Er]

not worry others Prt not oneself understand

“Don’t worry that others do not understand you.”

(13) 諸侯之禮,吾未之學也。(《孟子·滕文公章句上》)

zhuhou zhi li, wu wei zhi xue ye

minister Gen etiquette I not it learn Prt

[Mencius. Tengwengong Zhangju Shang]

“I didn’t learn the etiquette of minister.”

Second, if the object is an interrogative pronoun, it is normally preposed, as illustrated below.

(14) 彼且奚適也?(《莊子·逍遙游》)

bi qie xi shi ye [Zhuangzi. Xiaoyao You]

it will where go Prt

“Where is it going?”

(15) 吾誰欺?(《論語·憲問》)

wu shui qi [Lun Yu. Xian Wen]

I who deceive

“Who do I deceive?”

In (14) and (15), the interrogative phrases 奚 [xi] (what) and 誰 [shui] (who) move to the

preverbal position.

Third, the complement of the preposition is usually preposed. Most preposed complements are *wh*-phrases or pronouns, as illustrated below.

(16) 予一以貫之。(《論語·衛靈公》)

yu yi yi guan zhi [*Lun Yu. Weilinggong*]

I one use implement Prt

“I use one fundamental principle to carry it through.”

(17) 彼姝者子, 何以畀之?(《詩經·干旄》)

bi shu zhe zi, he yi bi zhi [*Shi Jing. Gan Mao*]

that virtuous Prt person what Pre give Pro

“How virtuous he/she is? What should I give him/her as a present?”

(18) 夫子何以知其將見殺?(《孟子·盡心章句下》)

fu zi he yi zhi qi jiang jian sha [*Mencius. Jin Xin Zhang Ju Shang*]

Prt you how Pre know he will Prt kill

“How do you know that he would be killed?”

In (16)-(18), 一 [*yi*] (one), 何 [*he*] (what) and 奚 [*xi*] (what) are preposed complement of the preposition 以 [*yi*].

Fourth, in the declarative context, the object can be preposed if it is marked by a particle. There are three types of particles: (i) particles *wei* 惟/維/唯 used before the preposed object, as shown in (19) below; (ii) particles like *shi* 是, *zhi* 之, *si* 斯 and *yan* 焉, as shown in (20) below and (iii) particles like *shi* 實, *ji* 既, *yun* 雲, *lai* 來 and *you* 有, as shown in (21) below.

(19) 父母唯其疾之憂。(《論語·為政》)

fumu wei qi ji zhi you [*Lun Yu. Wei Zheng*]

parent Prt them disease Prt worry

“Parents always worry about the children’s health.”

(20) 此之謂寇仇。(《孟子·離婁章句上》)

ci zhi wei kouchou [*Mencius. Li Lou Zhang Ju Shang*]

this Prt say enemy

“This is what called enemy.”

(21) 有皇上帝,伊誰雲憎。(《詩經·正月》)

youhuang shangdi, yi shui yun zeng [*Shi Jing. Zheng Yue*]

great lord Prt who Prt hate

“Great lord, who do you hate?”

In (19), two particles *wei* 唯 and *zhi* 之 are used, the former one before the preposed object and the later one before the verb. It is fine if just one of them is used. It is fine if just one of them is used before the verb, as only *zhi* 之 is used before the verb in (20).

Fifth, common nouns may also be preposed, as shown in (22).

(22) 天明畏,弼我丕丕基!(《尚書·大誥》)

tian ming wei bi wo pi pi ji [*Shangshu. Da Gao*]

god clear respect assist I great great cause

“We respect God, and he will assist us with our great cause.”

The fifth type of object-preposing construction is the least common among the above five types in Archaic Chinese. Guan [27] points out that in the Oracle Bones from the Yin ruins, the preposed object is necessarily marked by 佳 or another preposition.

Comparing the “NP_{theme}+V” unaccusative construction with the typical object-preposing construction, I argue that they are different in at least two aspects: (i) in object-preposing constructions most of the preposed objects are marked by a certain particle or two particles; however, the theme argument in “NP_{theme}+V” construction is never found marked by any particle and (ii) in the negation context, the syntactic position of the negator is quite different. The negator is above the preposed object in the object-preposing construction, while in the “NP_{theme}+V” construction, the negator is below the theme argument. Examples are given below.

(23) 臣未之聞也。 (《孟子·梁惠王上》)

chen wei zhi wen ye [Mencius. Lianghuiwang Shang]
minister not Prt hear Prt

“I haven’t heard this before.”

(24) 淇水竭而洹水不流。 (《韓非子·初見秦》)

qi shui jie er huan shui bu liu [Hanfeizi. Chu Jian Qin]
Qi water dry Conj Huan water not flow

“The river Qi is dry and the water in Huan does not flow.”

As shown in (23), the preposed objects 之 [zhi] (it) is between the negator and the verb; while in (24), the theme argument 洹水 [huanshui] (water in Huan) is above the negator 不 [bu]. Since in Chinese, the negator is always below the subject and above the predicate, huanshui 洹水 “water in Huan” which stands above the negator is more reasonable to be analyzed as a subject or topic.

Based on the above comparison, I conclude that the “NP_{theme}+V” unaccusative construction is syntactically different from the typical object-preposing construction in Archaic Chinese. The “NP_{theme}+V” unaccusative construction does not involve an empty subject and the NP_{theme} should be analyzed as the subject or topic.

3.2. “NP_{theme}+V_{unaccu}” construction VS topic construction. As we see, theoretically, the theme argument may be analyzed as a topic and the sentence has an empty subject. Does the “NP_{theme}+V_{unaccu}” construction fit the properties of topic constructions in Archaic Chinese?

Let us first consider the properties of topic constructions in Archaic Chinese. Generally, a topic should have the following properties: (i) it should be in the clause-initial position and marked by pause or pause particles; (ii) it should be definite and known information and (iii) it normally cannot be relativized [28-30].

Based on my investigation, there are five types of topic constructions in Archaic Chinese.

Type (i): topic constructions with overt markers before or after the topic. In some cases the topic is marked by overt particles (like zhe 者, xi 兮), adverbs (like fan 凡) or prepositions (like zhiyu 至於). In other cases the topic is not overtly marked, but the

comment is overtly marked by the particle *ye* 也. Examples are given in (25) to (27).

(25) 枉己者,未有能直人者也。(《孟子·滕文公章句下》)

wang ji zhe, wei neng you neng zhi ren zhe ye.
dishonest oneself Prt not can have can upright others Prt Prt

[*Mencius. Tengwengong Zhang Ju Xia*]

“If a man himself is dishonest, he is not able to help others to become upright.”

(26) 凡兵,天下之兇器也。(《呂氏春秋·論威》)

fan bing, tianxia zhi xiong qi ye [*Lüshi Chun Qiu. Lun Wei*]
all weapon world Gen evil weapon Prt

“Weapons in the world are all lethal.”

(27) 君子之德,風也 (《孟子·滕文公章句上》)

junzi zhi de, feng ye [*Mencius. Tengwengong Zhang Ju Shang*]
gentleman Gen morality wind Prt

“The morality of a man with a noble heart is like the wind.”

Type (ii): topic constructions with overt resumptive pronoun in the comment. The resumptive pronoun may be in the object position, modifier position or subject position. The topic may be generated through movement or may be base-generated but with co-referential pronoun in the comment. What’s more, the topic can be a single noun, a nominal phrase or a clause. Examples are given below.

(28) 愛人者,人恒愛之。(《孟子·離婁章句下》)

ai ren zhe, ren heng ai zhi; [*Mencius. Li Lou Zhang Ju Xia*]
love others Prt others always love him

“The one who loves others is always loved by others.”

(29) 樂民之樂者,民亦樂其樂 (《孟子·梁惠王章句上》)

le min zhi le zhe, min yi le qi le;
happy people Gen happiness Prt people also happy his happiness

[*Mencius. Lianghuiwang Zhang Ju Shang*]

“As for the one who is happy for people’s happiness, people are also happy for his happiness.”

(30) 鯤之大,不知其幾千里也。(《莊子·逍遙游》)

kun zhi da, bu zhi qi ji qian li ye [*Zhuangzi. Xiaoyao You*]
Kun Prt big not know it how thousand mile Prt

“So enormous is the Kun fish that no one knows how many thousand miles it stretches.”

In (28), the topic 愛人者 [*ai ren zhe*] (the one who loves others) originates from the object position. In (29), 樂民之樂者 [*le min zhi le zhe*] (the one who is happy for people’s happiness) originates from the prenominal modifier position. In (30), the topic 鯤之大 [*kun zhi da*] (the Kun fish is big) originates from the subject position of the small clause.

Type (iii): topic constructions with a trace or empty element in the comment. As shown in (31), there exists a trace or empty element in the position after the preposition *yu* 與. The trace or empty element refers to the topic.

(31) 自暴者,不可與有言也;自棄者,不可與有為也。(《孟子·離婁章句上》)

zi bao zhe, bu ke yu you yan ye;
oneself hurt Prt not can with have words Prt
zi qi zhe, bu ke yu you wei ye.
oneself abandon Prt not can with have do Prt

[*Mencius. Li Lou Zhang Ju Shang*]

“You cannot have meaningful talks with those who hurt themselves, nor cooperate with those who abandon themselves.”

Type (iv): topic constructions with particle/pronoun after the topic and also with trace in the comment. As shown below, in (32), a trace *t* after 仰望 [*yangwang*] (expect) refers to the topic [*liang ren zhe*] 良人者 (husband). In (33) and (34), both the trace *t* after the verb and *zhi* 之 before the verb refer to the topic.

(32) 良人者,所仰望而終身也。(《孟子·離婁章句下》)

liangren zhe, suo yang wang er zhongshen ye
husband Prt Prt rise look Prt lifetime Prt

[*Mencius. Li Lou Zhang Ju Xia*]

“A husband is someone we look up and expect to depend on for the rest of my life.”

(33) 至誠而不動者,未之有也;不誠,未有能動者也。(《孟子·離婁章句上》)

zhi cheng er bu dong zhe, wei zhi you ye;
extreme honest but not move Prt not it have Prt

bu cheng, wei you neng dong zhe ye. [*Mencius. Li Lou Zhang Ju Shang*]
not honest not have can move Prt Prt

“No one can remain unmoved by the utmost sincerity. On the contrary, no one is moved by insincerity.”

(34) 諸侯之禮,吾未之學也。(《孟子·滕文公章句上》)

zhuhou zhi li, wu wei zhi xue ye
minister Gen etiquette I not it learn Prt

[*Mencius. Tengwengong Zhang Ju Shang*]

“I didn’t learn the etiquette of minister.”

Type (v): topic constructions with no overt pause marker after the topic, no trace or empty element in the comment. They may form from two nominal phrases, or a nominal phrase followed by a clause in the comment. As shown in (35) to (37).

(35) 赳赳武夫,公侯腹心。(《詩經·兔置》)

jiujiu wufu, gong hou fu xin [*Shi Jing. Tu Ju*]
brave warrior duke duke belly heart

“How brave and robust are the warriors. They are the confidants of the dukes.”

(36) 揚之水,白石鑿鑿。(《詩經·揚之水》)

yang zhi shui, bai shi zaozao [*Shi Jing. Yang Zhi Shui*]
flowing Prt water white stone shiny

“At the bottom of the flowing river lie the white bright stones.”

(37) 禮,朝廷不曆位而相與言,不逾階而相揖。(《孟子·離婁下》)

li, chao ting bu li wei er xiang yu yan,
 courtesy royal court not cross position and each to talk
 bu yu jie er xiang yi [*Mencius.Li Lou Xia*]
 not step stone and Prt greet

“It is courtesy in the royal court that no one should cross over their positions to talk, nor should they cross over the stepping stones to greet each other.”

As described above, most of the topic constructions in Archaic Chinese are marked by particles or resumptive pronouns. It seems in Archaic Chinese there is a tendency to form marked topic constructions rather than unmarked ones, which is quite different from Mandarin Chinese.

I argue that although the “NP_{theme}+V” unaccusative construction may look like a kind of unmarked topic construction just as in Mandarin Chinese and it is also theoretically possible, it does not fit the properties of typical topic constructions in Archaic Chinese. There are two main reasons: (i) in typical topic constructions an overt pause particle can normally be found, but in the “NP_{theme}+V_{unaccu}” construction such a pause particle does not exist and (ii) in typical topic constructions, resumptive pronouns are commonly found in the comment clause, yet such resumptive pronouns do not exist in the “NP_{theme}+V_{unaccu}” construction.

3.3. The “NP_{theme}+V_{unaccu}” construction VS middle construction. Since in the middle construction, the sentence initial argument is also a theme and also stands in the subject position, it is necessary for us to discuss to what extent the “NP_{theme}+V_{unaccu}” construction is different from middle construction. Keyser and Roeper [31] have done a comparative study on the differences of the ergative (ie., unaccusative) construction and the middle construction in English, which enlightens us on how to do such a study about Archaic Chinese.

Then how middle construction are represented in Archaic Chinese? According to my observation, the unmarked passives are most similar middles in Archaic Chinese², as shown below.

(38) 昔者龍逢斬,比干剖。 (《莊子·胠篋》)
 xi zhe longfeng zhan, bigan pou [*Zhuangzi. Qu Qie*]
 past Prt longfeng chop Bigan split

“In the past, Longfeng and Bigan were killed.”

(39) 自卑者不聽,卑師者不聽。 (《呂氏春秋·勸學》)
 zibei zhe bu ting, bei shi zhe bu ting
 self-abasing Prt not listen despise teacher Prt not listen
 [*Liushi ChunQiu. Quan Xue*]

“Teachers who are self-abasing cannot be trusted by students, and students who look down upon teachers don’t listen to their teachers.”

² In the summer of 2013, I discussed the unmarked passives in Archaic Chinese with C. T. James Huang and he considered them as middle constructions. The discussion with him enlightened and supported my analysis in this section. Many thanks to him and I will be responsible for any mistakes in this section.

Since I cannot provide the syntactic evidence for the middles in Archaic Chinese right now and middles are definitely formed from transitive verbs, I mainly discuss how the unaccusative verbs distinguish from the transitive verbs in this section.

In English, the two constructions look almost the same on the surface. As shown in (40) and (41), (40a, b) are referred to as unaccusative pairs, and (41a, b) are referred to as middle pairs.

- (40) a. The sun melted the ice.
b. The ice melted.

- (41) a. Someone bribed the bureaucrats.
b. Bureaucrats bribe easily.

According to Keyser and Roeper [31], there are at least four differences between the unaccusative and middle constructions.

First, although in both constructions the theme argument stands in the subject positions, in unaccusative constructions this is formed through movement in the lexicon, whereas in middles, it is formed through syntactic movement.

Second, the middles involve an implicit agent, whereas the unaccusatives do not. The reflexives are used in Keyser and Roeper [31] to test the difference. As shown below, (42a) is fine because *all by itself* means totally without external aid and it is compatible with the unaccusative verb, and (42b) is bad because *all by themselves* is semantically not compatible with the middle verb.

- (42) a. The boat sank all by itself.
b. *Bureaucrats bribe easily all by themselves.

Third, unaccusatives can be used in imperative/vocative context, but middles cannot, as illustrated in (43).

- (43) a. *Unaccusatives*
Sink, boat!
Close, door!
Bounce, ball!
b. *Middles*
*Wax, floor!
*Translate, Greek!
*Kill, chicken!

Unaccusatives can be used in progressive form, but middles cannot, as illustrated in (44).

- (44) a. *unaccusatives*
The boat is sinking.
The ball is bouncing.
The door is closing.
b. *Middle Verbs*
*Chickens are killing.
*Bureaucrats are bribing.
*The walls are painting.

Unaccusative verbs can be used in the complement of perception verbs, but middles

cannot, as illustrated in (45) and (46).

- (45) a. I saw Mary leave.
b. I saw Bill arrive.
c. I saw Mary naked.
- (46) a.*I saw bureaucrats bribe easily.
b.*I saw the floor wax easily.
c.*I saw chickens kill quickly.

Fourth, middles do not form prenominal modifiers while unaccusative do, as illustrated in (47) and (48).

- (47) *Unaccusative verbs*
a. the rolling ball
b. the bouncing ball
c. the roasting chicken
- (48) *Middle Verbs*
a. *the bribing men
b. *the killing chicken
c. *the painting wall

Now I consider whether the ways of differentiating English unaccusative verbs from middle verbs can be applied to Archaic Chinese. I consider three ways in which the “NP_{theme}+V_{unaccu}” construction syntactically distinguishes from middle constructions³.

Firstly, I use 自 [zi] (oneself), which is similar to English reflexive *–self*, to test whether an implicit agent exists in the “NP_{theme}+V_{unaccu}” construction. I assume that if 自 [zi] (oneself) can be used in this construction, then an implicit agent does not exist and it is not a middle construction. As shown in (49) and (50), *zi* 自 “oneself” is used before the unaccusative verbs *zhi* 止 “stop” and *jue* 絕 “break” and the sentences are good.

- (49) 人不能自止于足。 (《韓非子·說林下》)
ren bu neng zi zhi yu zu [Hanfeizi. Shuo Lin Xia]
one not can oneself stop Prt satisfaction
“One cannot stop because of satisfaction.”

- (50) 自絕于天。 (《周書·泰誓下》)
zi jue yu tian. [Zhou Shu. Tai Shi Xia]
oneself break with god
“One shouldn’t break his relationship with God.”

However, it is also fine for 自 [zi] (oneself) to occur in the transitive sentences, as illustrated below.

- (51) 心者……自禁也…自奪也,自取也 (《荀子·解蔽》)
xin zhe …zi jin ye… zi duo ye,
heart Prt itself forbid Prt… itself determine Prt
zi qu ye [Xunzi. Jie Bi]
itself get Prt

³ The derivation is not considered in this section, and whether unaccusatives were used in imperative/vocative context is also not investigated at present.

“The heart controls itself, makes decisions by itself and gets ideas from itself.”

As shown in (51), 禁 [jin] (forbid), 奪 [duo] (determine) and 取 [qu] (get) are obviously transitive verbs. The fact that it is both fine for 自 [zi] (oneself) to be used before unaccusative and unergative verbs shows that 自 [zi] (oneself) is not like English *-self*. 自 [zi] (oneself) in Archaic Chinese cannot distinguish the difference between unaccusative constructions and middle constructions.

Second, unaccusative verbs form pronominal modifiers. Examples are repeated in (52) and (53).

(52) 胡瞻爾庭有縣貍兮? (《詩經·伐檀》)

hu zhan er ting you xuan huan xi [Shi Jing. Fa Tan]

why look your court have hang porcupine Prt

“Why there are porcupines hanging in your court?”

(53) 心如湧泉, 意如飄風。(《莊子·盜跖》)

xin ru yong quan, yi ru piao feng [Zhuangzi. Dao Zhi]

heart like flow spring mind like blow wind

“The heart is like the flowing spring, and the mind is like the blowing wind.”

However, in Archaic Chinese, transitive verbs can also be used in the pronominal position, as shown in (54) and (55).

(54) 皋陶之狀, 色如削瓜。(《荀子·非相篇》)

gaotao zhi zhuang, se ru xiao gua [Xunzi. Fei Xiang Pian]

Gaotao Gen appearance face like peel melon

“Gaotao’s appearance looks like a peeled melon”

(55) 曷為久居此圍城之中而不去也? (《戰國策·趙3》)

hewei jiu ju ci wei cheng zhi zhong er bu qu ye

why long live this besiege town Gen middle and not leave Prt

[Zhanguo Ce. Zhao3]

“Why you live in this besieged town and don’t leave?”

As we know, middles are formed from transitive verbs. The fact that both unaccusative verb and transitive verb can be used in the pronominal position shows that the two constructions in Archaic Chinese cannot be differentiated by considering their pronominal usage.

Third, I look into whether the “NP_{theme}+V_{unaccu}” construction can be used in tense and aspectual form. Since Chinese does not have inflections like English, I can only consider how time and aspectual words are used in this construction. The word 已 [yi] (already) is found in the “NP_{theme}+V_{unaccu}” construction and it is not found in the middle constructions, which shows the difference between two kinds of constructions. Examples for 已 [yi] (already) being used in “NP_{theme}+V_{unaccu}” constructions are shown in (56) and (57).

(56) 事已敗矣。(《荀子·法行》)

shi yi bai yi [Xunzi. Fa Xing]

thing already fail Prt

“It failed.”

- (57) 心已亡矣。(《左傳·定公 15 年》)
 xin yi wang yi [Zuo Zhuan. Dinggong 15 Nian]
 heart already die Prt
 “It is a desperate heart.”

As seen from above, only the third way of differentiating unaccusatives verbs and middle verbs can be applied to Archaic Chinese. I conclude that although semantically the “NP_{theme}+V_{unaccu}” construction is different from middle constructions, syntactic ways of differentiating English unaccusative verbs from middle verbs cannot all be well applied to Archaic Chinese.

4. The formation of “NP_{exp}+V_{unaccu}+NP_{theme}” constructions. In this section, I discuss the formation of the “NP_{exp}+V_{unaccu}+NP_{theme}” constructions. Examples are given in the beginning of this paper, which are repeated below.

- (58) 李奶奶瞎了一隻眼
 linainai xia le yi zhi yan
 Linainai blind Prt one CL eye
 “One of Linainai’s eyes is blind.”

- (59) 那家公司沉過一條船。
 na jia gongsi chen guo yi tiao chuan
 that CL company sink Prt one CL boat
 “One of the company’s boats sank.”

4.1. Previous studies. Most studies on this construction have been done from a generative perspective. Only a few of them are from the cognitive and historical perspectives. For those studies from generative grammar, linguists focus on the derivation of the structure. Almost all of their analyses are based on the Unaccusative Hypothesis, and there are three different ways in terms of derivation. Details are shown below.

First, based on the systematic description of Guo [32] and Xu [8], Han [9] and Wen and Chen [10] argue that the structure of “NP_{1exp}+V+NP_{2theme}” is derived from the movement of the possessor in the object position to the subject position. What is debated most is the motivation of movement. As criticized in previous studies, these analyses are problematic because of the existence of sentences with definite NP as object and sentences with indefinite NP as subject [11], [14].

I argue that these analyses lack independent syntactic evidence. The biggest problem is that a sentence as shown in (60a) below itself is ungrammatical. There is a lack of independent syntactic evidence for it to be the deep structure of (60b).

- (60) a. *掉了張三的兩顆門牙
 diao le zhangsan de liang ke menya
 drop Asp Zhangsan Gen two CL front-tooth
 “Two front teeth of Zhangsan dropped out.”
 b. 張三掉了兩顆門牙
 zhangsan diao le liang ke menya

Zhangsan drop Asp two CL front-tooth
 “Two front teeth of Zhangsan dropped out.”

Second, Pan and Han [11], [12] propose that NP1_{exp} should be analyzed as the topic rather than the subject. As shown in (61) below, *Zhangsan* stands in the topic position. The object 父親 [*fuqin*] (father) first moves to the subject position for case requirement, as shown in (61b), and then is extraposed to the end of the sentence because of new information requirement, as shown in (61c).

- (61) a. 張三死了父親。
 zhangsan si le fuqin
 Zhangsan die Asp father
 “Zhangsan’s father died.”
 b. [_{CP} Zhangsan, [_{TP} fuqin_i [_{VP} si le t_i]]]
 c. [_{CP} Zhangsan, [_{TP} t_i [_{VP} si le t_i [_{fuqin}_i]]]

I argue that if the object is generated by extraposition, we have to explain why in the unergative sentences, the subject cannot be extraposed. As shown below, (62b) is bad after extraposing the subject 父親 [*fuqin*] (father) of an unergative verb 跳舞 [*tiaowu*] (dance).

- (62) a. 張三, 父親跳舞。
 zhangsan, fuqin tiaowu
 Zhangsan, father dance
 “Zhangsan, his father dances.”
 b. * [_{CP} Zhangsan, [_{TP} t_i [_{VP} tiaowu] fuqin_i]]

What is more, the topic normally cannot be relativized. However, NP1_{exp} in this construction can be relativized. For example, 掉了兩顆門牙的張三很傷心 [*diaole liangke menya de zhangsan hen shangxin*] (Zhangsan who lost two front teeth is very sad.) It is true that in some sentences like 他們, 你看我我看你 [*tamen, ni kan wo, wo kan ni*] (They looked at each other), the topic can be relativized. However, these sentences may satisfy some particular condition.

Third, Zhu [13], Huang [7] and Zhang [33] argue that NP1_{exp} is a base-generated subject. In Zhang’s [33] analysis, a light verb EXP is involved in the causative constructions. Their analyses noticed the relationship between the causative construction and the experience construction, which enlightens my study. However, the case problem is still not solved, because the inherent case proposed in Huang [7] requires the object to be indefinite, but in Chinese there can be definite objects, such as 我丟了那本書 [*wo diu le na ben shu*] (I lost that book). Zhang [33] argues that the object gets case from the light verb EXP, but no independent evidence is given.

As for the studies from cognitive and historical perspectives, although most of the analyses lack independent syntactic evidence, their description and analyses are enlightening and also abundant data are provided [14-15], [34-36].

It is necessary to mention that both Shi [35] and Liu [37] have noticed the close relationship between the causative constructions and “NP1_{exp}+V+NP2_{theme}” construction. As I discuss in the next section, a close relationship between causatives and experience construction does exist.

4.2. **My analysis.** In this section, I will focus on the relationship between the causative construction and the “NP1_{exp}+V_{unaccu}+NP2” construction. Enlightened by Zhu [13], Huang [7] and Zhang [33]’s analyses, I investigate the relationship between the causative construction and “NP_{exp}+V_{unaccu}+NP2” from historical perspective. I argue that the “NP1_{exp}+V_{unaccu}+NP2” construction comes from a morphological or lexical causative construction and has a competitive relationship with the causative constructions in the process of historical development of Chinese.

Pieces of evidence are given below to support our argument.

(i) The existence of middle argument experiencer. Huang⁴ [7] argues that in three-place unaccusative constructions, a middle argument experiencer exists. I find that in Archaic Chinese when verbs are used in three-place causative constructions, the middle argument experiencer definitely exists, as illustrated below.

(63) (敬仲)飲桓公酒。(《左傳·莊公 22 年》)

jingzhong yin huangong jiu [*Zuo Zhuan. Zhuangong 22 Nian*]

Jingzhong drink Huangong wine

“Jingzhong made Huangong drink wine.”

(64) 及食大夫龜(《左傳·宣公 4 年》)

ji si dafu bie [*Zuo Zhuan. Xuangong 4 Nian*]

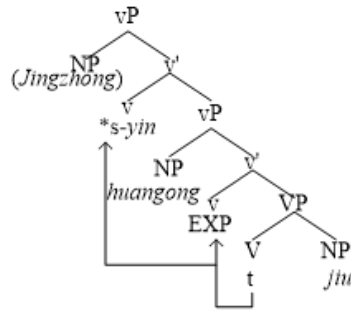
wait eat official turtle

“When treating the official with cooked turtle, he called Zigong to come but didn’t give him any.”

In (63)-(64), the two nouns after the verb are obviously not possessive NPs. They are causative constructions. Verbs 飲 [*yin*] (drink) and 食 [*si*] (feed) are all pronounced in the fourth tone. It is claimed that the fourth tone in Archaic Chinese comes from the *s- prefix which morphologically marks the causative verb [38-39]. I argue that in this kind of causative construction, a light verb EXP also exists. The reason is that when the transitive verb is used here, the transitivity is decreased. The external argument of the verb is no longer the volitional agent but the experiencer whose behaviour is forced or caused by something else. Therefore, *Huangong* and 大夫 [*dafu*] (the official) in (64) and (65) are middle arguments. The deep structure of (64) should be as follows:

⁴ Huang claims that all verbs in Mandarin Chinese can be divided into unergative type and unaccusative type. Transitive verbs (such as *da* 打 “beat”, *ma* 罵 “scold” and *xie* 寫 “write”) are two-place unergative verbs and three-place rob-type verbs (such as *bo* 剝 “peel”, *ti* 踢 “kick” and *qiang* 搶 “rob”) are three-place unergative verbs. Causative verbs (such as *kai* 開 “open”, *guan* 關 “close”, *chen* 沉 “sink” and *xia* 嚇 “frighten”) are two-place unaccusative verbs and three-place give-type verbs (such as *song* 送 “send” and *gei* 給 “give”) are three-place causative and unaccusative verbs.

(65)



As seen from (65), the existence of three-place causative construction and middle argument provides the foundation for forming the “NP1_{exp}+V+NP2” construction.

(ii) Since a causative construction involves three arguments: the cause, the experiencer and the theme, it is possible to form a two-place construction with experiencer and patient if the causer does not appear. As for the transitive verb, because of its strong transitivity and agentivity, it involves two arguments, the agent and the patient. As for an intransitive unaccusative verb like 來 [*lai*] (come), it normally involves only one argument: theme. In some cases, an experiencer or causer or both arguments can be introduced. I argue that a competitive relationship exists between the experiencer and the causer. The reason is that the causer and experiencer are not inherent arguments of the intransitive unaccusative verb argument structure. They are introduced by adding argument at the syntactic level, and the argument is not randomly introduced. Jackendoff [40] proposes the Thematic Hierarchy in which the agent is the most prominent to stand in the subject position and the experiencer is next, as shown in (66) below.

(66) Thematic Hierarchy:

(Agent (Experiencer (Goal/Source/Location (Theme))))

However, as claimed in Grimshaw [41], Aspectual Hierarchy can override Thematic Hierarchy. The Aspectual Hierarchy is given in (67).

(67) Aspectual Hierarchy: (Cause (other (...)))

Therefore, as for an intransitive unaccusative verb, if a causer is introduced and stands in the subject position, the experiencer argument is then suppressed. For example, in (68a) below, because the causer 颱風 [*taifeng*] (typhoon) stands in the subject position, the experiencer 我 [*wo*] (I) is suppressed and appears after the verb. The sentence is then structurally ambiguous. 我 [*wo*] (I) may be analyzed as the Experiencer or the possessor. To avoid ambiguity, a light verb 使 [*shi*] (cause) may be used, as illustrated in (68b) below.

(68) a. 颱風沉了我一條船

taifeng chen le wo yi tiao chuan

typhoon sink Asp I a CL boat

“The typhoon caused one of my boat to sink”

(69) 颱風使我沉了一條船。

taifeng shi wo chen le yi tiao chuan

typhoon cause me sink Asp a CL boat
“The typhoon caused me to lose a boat.”

As predicted, in the “NP1_{exp}+V+NP2” construction, if the experiencer stands in the subject position; the causer or the causing event can be in a higher topic position or in another clause, as illustrated below.

(70) 魯亡叔孫必亡邾,邾君亡國,將焉歸?(《左傳·昭公 22 年》)

lu wang shusun bi wang zhu, [Zuo Zhuan. Zhaogong 22 Nian]

Lu lose Shusun must perish Zhu

zhu jun wang guo, jiang yan gui?

Zhu king perish country will where back

“Lu will perish Zhu if they don't have Shusun. Where would the king of Zhu go if he lost his country?”

In (70), *Zhujun* stands in the subject position, and the causing event is in the preceding clause.

Therefore, I conclude that the competitive relationship between the causer and the experiencer determines which construction is the prominent one in a language. Since the Aspect Hierarchy can override the Thematic Hierarchy, it is natural that the causative construction should be the prominent one if a language has abundant causative morphology.

(iii) The ambiguities of “V_{unaccu}+NP_{theme}” construction.

As discussed above, the “V_{unaccu}+NP_{theme}” construction may be ambiguous between the causative meaning and experience meaning⁵, as shown below.

(71) 剛柔相推而生變化。(《易經·繫辭上傳》)

gang rou xiang tui er sheng bianhua [Yi Jing. Xi Ci 16 Nian]

strong soft each push and arise change

“The strong and the soft push each other and the changes arise.”

(72) 隕石于宋五,隕星也。(《左傳·僖公 16 年》)

yun shi yu song wu, yun xing ye [Zuo Zhuan. Xigong 16 Nian]

fall stone in Song five fall star Prt

“In the spring of 16, five stones fell in Song. Those are falling stars.”

Since the subject position is empty, (71) and (72) can be understood as either omitting a causer or omitting an environment role. In (71), 剛柔相推 [*gang rou xiang tui*] (The strong and the soft push each other) should be the causer and the environment role may be 天地 [*tiandi*] (the world). In (72), there may exist some force which caused the falling of star and the environment role may be 天 [*tian*] (the sky).

Such ambiguities show the competitive relationship between the causer and the experiencer. If the causer does not take the subject position, the experiencer should be free to stand there.

Such ambiguity also exists in Mandarin Chinese. As shown in (73) below, the omitted subject may be the causer *dafeng* 大風 “wind” or the experiencer *wo* 我 “I”.

⁵ The environment is referred to as personified experiencer in this paper.

(73) 沉了一條船。
 chen le yi tiao chuan
 sink Prt one CL ship
 “A ship sank.”

In some cases of Mandarin Chinese, no ambiguity exists, as illustrated below.

(74) a. 委屈你了。
 weiqu ni le
 wrong you Prt
 “Let you feel wronged.”
 b. 這件事情委屈你了。
 zhe jian shiqing weiqu ni le
 this CL thing wronged you Prt
 “This made you feel wronged”

(75) a. 來了一個客人。
 lai le yi ge keren
 come Asp one CL guest
 “A guest came.”
 b. 我來了一個客人。
 wo lai Asp yi ge keren
 I come Prt one CL guest
 “One of my guests came.”

In (74a), obviously the omitted argument is the causer, as shown in (74b). In (75a), the omitted argument is the experiencer, as shown in (75b).

As seen above, although the surface structure is the same, the deep structure may be different. It can be verified that in Archaic Chinese, all the “V_{unaccu}+NP_{theme}” constructions can be understood as omitting an experiencer or a causer. This is also true in Mandarin Chinese.

Therefore, the problem of why in Mandarin Chinese “V+NP_{theme}” construction (like 來了一個人 [*laile yige ren*] (There comes a man) the NP_{theme} does not need to move to the subject position can now be solved. The reason lies in the fact that an implicit experiencer or causer is always involved. That is to say, in Chinese, no matter whether Archaic Chinese or Mandarin, only the “NP_{theme}+V” construction (like *yige ren laile* 一個人來了 “A man Came”) is the true one-place unaccusative construction, in which the NP is the only argument and moves from the deep object position to the subject position for case requirement. The essential similarity between the “V_{unaccu}+NP_{theme}” construction and the “NP_{theme}+V_{unaccu}” construction lies in that in both constructions the NP_{theme} occupies the object position in the deep structure. Their difference lies in that the former one involves an omitted experiencer or causer but the later one does not. What is more, the NP_{theme} should satisfy different requirements for it to stand in the subject position or object position in surface structure.

(iv) The historical development of causative constructions and experience constructions in Chinese. In Archaic Chinese, the synthetic causative construction is

prominent. As a result, the experience construction was ignored in almost all the studies before. As discussed in Yang and Wu [15], some sentences are much better analyzed as experience constructions, as shown below.

(76) 宋師敗績，公傷股。《《左傳·僖公 22 年》》

song shi baiji, gong shang gu [Zuo Zhuan. Xigong 22 Nian]

Song troop fail Gong hurt leg

“Song is defeated and Gong got his leg hurt.”

(77) 仲尼聞之，出涕曰 《《左傳·昭公 20 年》》

zhongni wen zhi, chu ti yue [Zuo Zhuan. Zhaogong 20 Nian]

Zhongni hear it out tear say

“Zhongni heard it. Tears came down and he said...”

In the traditional literature [24], sentences like (76) and (77) are defined as special kind of causative constructions. Such sentences also exist in Mandarin Chinese. Yang [43] points out that sentences like 他紅了臉 [*ta hongle lian*] (He blushed) look like causative constructions but actually are experience constructions.

It turns out that experience constructions are rare in Archaic Chinese. I argue that one of the most important reasons for this is that the causative construction in Archaic Chinese is very prominent. In Archaic Chinese, the causative morphology is abundant. Nouns, intransitive verbs and transitive verbs can all be causativized. A causer rather than an experiencer is frequently introduced to the subject position. Therefore, the experiencer is frequently suppressed and the experience constructions are rare.

However, as Chinese developed, the amount of synthetic causative sentences gradually decreased while on the other hand, experience sentences increased. In Mandarin Chinese, there are many more experience sentences than synthetic causative sentences. I argue that there are at least two reasons for this. The most important is the decline of causative morphology. The second is the historical development of the “Num+CL+Noun” phrase in Chinese. As we know, if the object is definite, then the sentence tends to express causative meaning, and if the object is indefinite, then the sentence tends to express experience meaning. In Mandarin Chinese, the indefinite “Num+CL+Noun” phrases are abundant and they are frequently used in the object position, which may greatly increase the possibility of forming experience constructions.

(v) Cross-linguistic evidence. The situation in English is consistent with my argument. Zhang [33] argues that in English the corresponding expressions of the experience sentences in Chinese cannot be found. Zhang argues that this is because in English the light verb EXP does not exist. However, I find the light verb EXP does exist in English, as illustrated below.

(78) a. I lost my car.

b. 我丟了我的車。

wo diu le wo de che

I lose Prt my Prt car

“I lost my car.”

In (78), both *lost* in English and 丟 [*diu*] (lost) in Chinese express weak volitional sense

and the subjects should be experiencers. This shows that in English the light verb EXP also exists. The question then is that if the light verb EXP does exist in English, why the sentence *Wangmian died his father* is bad. I consider that the lack of experience construction in English is due to the existence of a great deal of synthetic causative constructions. Causative morphemes such as *-en* and *-ize* are abundant. That is to say, for an intransitive unaccusative verb in English, a causer rather than an experiencer is frequently introduced in subject position. Therefore, the experience construction is seldom used.

5. Conclusion. I conclude that the unaccusative verbs in Archaic Chinese can be identified and be differentiated from unergative verbs in the same way as in Mandarin Chinese. Hence the Unaccusative Hypothesis can be applied to Archaic Chinese. The syntactic properties of the “NP_{theme}+V_{unaccu}” construction has been discussed and results show that this construction may syntactically look like object-preposing constructions or topic constructions, but it is better analyze it as a construction in which the NP_{theme} standing in the subject position. The “NP_{theme}+V_{unaccu}” construction is semantically different from middle constructions and syntactic ways of differentiating English unaccusative verbs from middle verbs cannot all be well applied to Archaic Chinese.

The “NP_{1exp}+V_{unaccu}+NP₂” construction comes from the synthetic causative construction and has a competitive relationship with the causative constructions in the process of the historical development of Chinese. The “V_{unaccu}+NP_{theme}” construction is a two-place unaccusative construction with omitted causer or experiencer. Only “NP_{theme}+V_{unaccu}” construction is a true one-place unaccusative construction in which the NP_{theme} generates in the object position in deep structure and moves to the subject position in surface structure because of case requirement. The essential similarity between the “V_{unaccu}+NP_{theme}” construction and the “NP_{theme}+V_{unaccu}” construction lies in that the NP_{theme} occupies the object position in the deep structure in both constructions. Their difference lies in that the former one involves an omitted experiencer or causer but the later one does not. What is more, the NP_{theme} should satisfy different requirements for it to stand in the subject position or object position in surface structure. This analysis is consistent with the Unaccusative Hypothesis proposed by Perlmutter [1].

As for the case problem of the in-situ object of unaccusative verbs, I consider that since this problem also exists in English and it is not much relevant to the main topic of this paper, so I leave it open for further discussions in the future.

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