FRONTING CONSTRUCTIONS IN CHINESE FROM SYNCHRONIC AND DIACHRONIC PERSPECTIVES

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Abstract

This study aims to provide a comprehensive picture of fronting constructions throughout the history of Chinese. This goal is achieved by utilising quantitative and qualitative data from two corpora, the Chinese Parsed Historical Corpus (ChiPaHC) and the Centre for Chinese Linguistics Corpus in Beijing university (CCL).

The study is mainly divided into two parts. The study in the first part is based on an exhaustive sample of the (S)OV and OSV surface orders from ChiPaHC, with supplementary data drawn from the CCL for their syntactic analyses and historical development. With a further categorisation of the preliminary data, the fronting constructions analysed in this thesis include demonstrative fronting, pronoun fronting in the context of negation, *wh*-phrase fronting in Late Archaic Chinese, object raising in equational constructions through history, nominal fronting in Early Modern Chinese, copula *shi* fronting, focus *shi* fronting, topicalisation and *ke* constructions. A unified analysis is argued for, aiming to accommodate the synchronic performance and diachronic development of these object fronting constructions. Three negations in Chinese are discovered as a novel diagnostic for the object fronting positions: Focus Negation (flexible), Middle Negation (sentential) and Low Negation (vP negation). They diagnose four fronting positions: the CP external Topic position, the canonical subject position, TP internal Topic Position and the Spec v below Low Negation. All the positions show significant changes on types of fronting constituents they accommodate in and after LAC. To be more detailed, the external Topic position (Spec C) only accommodates a small number of *wh*-predicates in LAC, but after LAC, it accommodates all kinds of topicalised objects, including the fronted objects in equational constructions. The canonical subject position (Spec T) accommodates raising subjects, such as objects in equational constructions, modal constructions in LAC and after LAC, objects in passives. TP internal topic position accounts for the fronting of demonstratives and *wh*-phrases fronting above Middle Negation in Late Archaic Chinese (LAC). After LAC, it accommodates fronted nominals without explicit markings. The Spec v position immediately below vP negator accommodates pronoun fronting in the context of negation and *shi* focus fronting. A new analysis is proposed, in which pronoun fronting is triggered by the interaction between Low Negation and modality. This analysis is well supported by the examination of the quantitative evidence of 15 of the most common verbs appearing in pronoun fronting and a negative correlation between double negation and v-to-Mod movement of modals. After LAC, this position is unable to accommodate fronted objects.

Several interesting historical changes are captured based on comparative studies of Late Archaic Chinese and the later time periods, which have never been previously reported. v-Mod head movement is observed and supported by a quantitative and qual-

itative study of the modals *ke*, *keyi* and *neng*. I also provide a hypothesis that the External Topic Position is activated after LAC, which causes grammar competition between raising and topicalisation for object fronting equational constructions.

In the second part of the thesis, I focus on Mandarin passives and provide a unified analysis for each types, including long distance passives with object control verbs, long distance passives with partial control verbs, local long passives, local short passives, possessive passives and adversative passives. I provide a unified A movement analysis of these passives, based on the syntactic analysis of these constructions. I argue that the performance of Chinese passives seems peculiar, as it sometimes displays A' movement features. I suggest that this is due to the historical change undergone by the passives, as they were topicalisation constructions in Early Modern Chinese, but they are in the process of changing to a raising type movement.

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Chapter 1. Introduction

In this chapter, I will first provide an overview of the thesis to show how this thesis is organised, the main research questions and my answers. I will then introduce the background of this study, which includes the time periods this thesis examines, the canonical order of Chinese from a quantitative perspective and the canonical position for subjects in Chinese. After the background briefing, I show the preliminary samples from the searching in the ChiPaHC, and also suggest that with a re-categorisation of the preliminary data and synchronic studies on each type of fronting, more constructions and changes are captured. I will also briefly discuss my analyses of each construction in this chapter.

1.1   An Overview of the Thesis

Fronting constructions have been a centre of discussion in the area of Chinese syntax. Despite the fact that many works have been done from a synchronic perspective, there is not a study that provides a diachronic view on this topic. What is more, quantitative studies are also rare in this area. This study aims to provide a comprehensive picture of Chinese fronting constructions, from both synchronic and diachronic perspectives, with both quantitative and qualitative methods.

The research questions of this thesis are:

1. What kinds of fronting constructions are there in the history of Chinese and what are they?

2. What are the appropriate syntactic analyses of these constructions?

3. How did they develop in the history?

In order to answer the above questions, data from two corpora is examined in this study: the Chinese Parsed Historical Corpus (ChiPaHC) (Li and Wallenberg, 2017) and the Chinese Linguistics Corpus in Beijing university (CCL) (Zhan et al., 2003). The fronting constructions discussed in this study are based on an exhaustive sample of fronting to pre-verbal positions from the ChiPaHC corpus and the supplementary data from the CCL corpus, after a re-categorisation and synchronic examinations of the preliminary data. The thesis covers more fronting constructions than previous studies, as this is the first that utilises large amount of corpora data to conduct quantitative and qualitative studies.

The syntactic analyses of these fronting constructions suggest that Chinese has four landing sites for fronted constituents: Topic position in spec C, Subject position in Spec T, Internal Topic Position above Middle Negation in TP and the Spec v below vP negation.

```
                    CP
              ┌──────┴──────┐
           Topic            C'
                       ┌─────┴─────┐
                       C           TP
                               ┌───┴────┐
                            DP_sbj      T'
                                    ┌────┴────┐
                                    T        Topic
                                         ┌────┴────────┐
                                       Topic       NegP-clausal
                                                ┌─────┴──────┐
                                           Neg-clausal      ModP
                                                        ┌────┴────┐
                                                       Mod      NegP-vP
                                                            ┌─────┴─────┐
                                                         Neg-vP         vP
                                                                    ┌────┴────┐
                                                     Pronoun/Focus Position   v'
                                                                          ┌───┴───┐
                                                                          v       VP
                                                                              ┌───┴───┐
                                                                           DP_sbj     V'
                                                                                   ┌──┴──┐
                                                                                   V   DP_obj
```

(1)
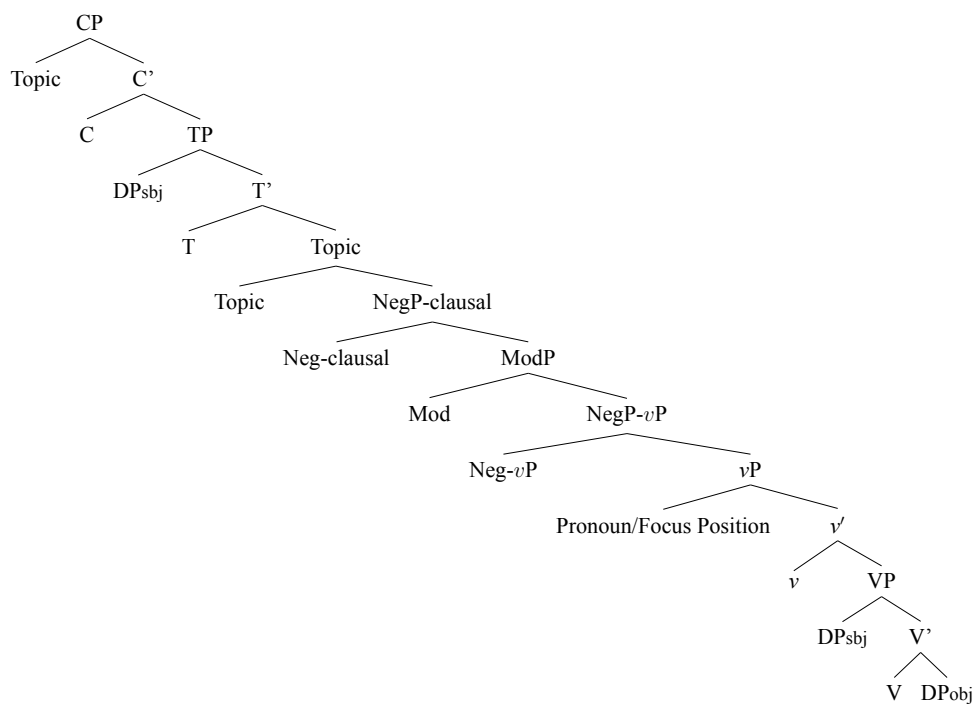
Because most fronting constructions to Spec C, Spec T and Spec v show discrepancies in terms of the nature of fronted objects, I discuss them in separate chapters with the categorisation of pronominal fronting, *wh*-phrase fronting and nominal fronting. Raising constructions are the fronting to Spec T, which is triggered by specific structures, such as equational constructions and modal constructions. As they do not differ in terms of the nature of objects, I discuss them in one chapter as Raising constructions. I also discuss Chinese passives, especially Mandarin passives in the thesis, as they are interesting fronting constructions which appear with a reasonably high frequency in Chinese.

As for the thesis organisation, I will first introduce the methodologies for this study, especially the quantitative parts. In chapter 3, I will show negation positions in Chinese as novel diagnostics for object fronting constructions. I compare the three Chinese negations with English negation, in line with Holmberg (2013), and show that two negations among the three in the two languages bear similarities in terms of their locations and scopes. I provide a novel analysis for one of the most popular topics in Chinese historical syntax, pronoun fronting in the negation contexts, which only happens in LAC period. I argue that this fronting construction is caused by the influence of negation and modality. Quantitative evidence of the most common verbs with respect to pronoun fronting are examined, and supports the hypothesis well. I will further suggest the reason for the loss of fronting is related to the rising of v-to-Mod movement of root modals, which is another new discovery in this thesis. To be more detailed, root modals (v) in LAC undergo movement to Mod, and as a result, the pronoun fronting is unable to interact with the root modals in the domain of

*v*P negation, as such, the fronting tends not to happen. I will also discuss the focus position and the pronoun fronting position and agree with Wang (2016) in that the focus position and pronoun fronting position are the same position.

In chapter 4, I will first review the previous approaches to *wh*-fronting, and then provide a unified account for the fronting *wh*-phrase. I suggest that *wh*-objects and *wh*-adverbials of reasons front to the Internal Topic Position, and *wh*-adverbials of instruments and other adjuncts front to the focus position beLow Negation. In chapter 5, I discuss nominal fronting constructions. The studies of object fronting with the focus marker *shi* and the copula *shi* show a consistent development of demonstrative-copula and demonstrative-focus marker cycles. I also suggest that DP lists and personal names tend to be subjected to fronting. The topicalisation constructions will be discussed as an instance of fronting to pre-subject position. I show that they appear after LAC, when the External Topic Position is activated. I show that the topicalised objects are DP lists, including genitive DP topicalisation. This is to some extent similar to Mandarin possessive passives.

In chapter 6 where the raising constructions will be discussed, the description and the syntactic analysis of the object raising in equational constructions are provided. I further suggest the hypothesis that the External Topic Position is activated in (or after) LAC, which leads to grammar competition in equational constructions. This hypothesis is supported by a study on the 'say'-class verb *wei*, as their internal structures compete between raising and topicalisation in and after LAC. I will also discuss another raising construction, modal constructions and provide a real modal analysis for *ke* by suggesting that *ke* has always been a real modal (in Mod) and it raises its nearest argument to the subject position. I also conduct a comparative study of the modals *ke*, *keyi* and *neng*, the quantitative results show that *ke*, *keyi* and *neng* have distinctive properties, in that *ke*, as a real modal, never happens in pronoun fronting constructions, which is in sharp contrast to *neng*, which never raises arguments to subject position, but has the second highest occurrence in pronoun fronting. I suggest that this is because *ke* and *neng* are in different positions, in that *neng* is a root modal verb, which is below real modal *ke*. After LAC, *ke* continues to raise to question marker and adverbial positions, while *neng* raises to real modal positions and replaces the raising function of *ke*.

Chapter 7 is a literature review of the previous approaches to Mandarin passives in an exhaustive manner. It covers all kinds of passives in Mandarin to provide an insight into these constructions. My analysis of Mandarin Passives are in chapter 8, where a unified A movement approach is provided. I will examine long distance passives with object control verbs, those with partial control verbs, local long and short passives, possessive and adversative passives. I argue that A movement is able to account for all kinds of passives in

Mandarin.

I then conclude the thesis in chapter 9.

1.2 Periodization

Following Aldridge (2013*b*), Peyraube (1988), Jiang (2008), Wang (1958*a*) Zhou (1963), Chinese in history can be roughly divided into 5 time periods, based on their distinctive linguistic characteristics: Pre-Archaic, Archaic, Middle Chinese, Early Modern Chinese and Modern Chinese (also Mandarin). It can be further divided into 8 parts, in which Archaic Chinese is further divided into Early and Late Archaic Chinese, and Middle Chinese is divided into Early Middle and Late Middle Chinese.

Pre-Archaic	14th BC – 11th BC (Shang)
Archaic Chinese (AC)	Early Archaic: 10th BC – 6th BC (Zhou) Late Archaic: 5th BC – 3rd BC (Warring States, Qin)
Middle Chinese (MidC)	Early Middle Chinese: 2nd BC – 2nd AD (Han) Middle Chinese: 3rd AD – 6th AD (Six Dynasties) Late Middle Chinese: 7th AD – 12th AD (Tang)
Early Modern Chinese (EMC)	Early Modern Chinese: 13th AD – 19th AD (Tang, Song, Yuan, Ming, Qing)
Modern Chinese (Mandarin)	19th AD – Now Mandarin Chinese (ManC)

Table 1: The Periodization

In this thesis, Ancient Chinese refers to the time period from Pre-Archaic to Modern Chinese. Among these periods, a significant distinction between the syntax of Archaic Chinese and Chinese in later historical periods has received considerable attention. It was reported that the syntax of Chinese exhibits acute changes after 2nd BC. Therefore, Late Archaic Chinese (LAC) is the time period which has mostly kept the distinctive features of Archaic Chinese (AC). What is more, it has enough data sources for us to examine. Therefore, the object fronting constructions will be examined with a special focus on LAC, and the constructions in this period will be used as a reference to conduct comparison with other periods, in order to trace the historical changes of object fronting constructions.

1.3 Chinese as a SVO Language

Wang (1958*b*), Feng (1996), Xu (2006) and many others have argued for a SOV order as the canonical word order for Chinese. Specifically, they claim that Proto-Chinese was an SOV language (right-headed structures), which slowly changed to the SVO order (left-headed structures) in Archaic Chinese. As such, the different types of object fronting in Archaic Chinese are suggested to be a remnant of a SOV order. On the other hand, many works argue that Chinese has always been a SVO language (Aldridge, 2012; Djamouri, 2005; Djamouri et al., 2007). In this section, I argue for the SVO order assumption by showing a stable and predominant SVO word order statistically in the history of Chinese. I show that the proportions of SVO word order in different time periods are stable and predominantly higher than those of both SOV and OSV orders. As the SOV and OSV orders have very small proportions in the overall sentences, I conclude that they are unlikely to ever be the canonical orders for Chinese. The SOV order has 24 occurrences and OSV order has 32 occurrences, while object fronting without overt subject (which I call 'OV order' below) has 128 occurrences.

Time period	S-O-V	Total	Percentages
390bc-338bc	2	643	0.3
233-279	4	586	0.7
284-363	1	550	0.2
628-683	3	186	0.2
670-749	3	491	0.6
766-820	0	179	0
1029-1093	1	294	0.3
1130-1200	1	155	0.6
1260-1320	6	334	0.2
1574-1645	2	220	0.9
1701-1754	1	182	0.5
total	24	3830	0.6

Table 2: SOV order in different periods

Time period	O-S-V	total	Percentages
390bc-338bc	7	643	0.1
233-279	3	586	0.5
284-363	2	550	0.4
628-683	3	186	0.2
670-749	2	491	0.4
766-820	0	179	0
1029-1093	9	294	3.1
1130-1200	1	155	0.6
1260-1320	1	334	0.3
1574-1645	2	220	1.0
1701-1754	2	182	1.0
total	32	3830	0.8

Table 3: the OSV order occurred in different periods

Time period	S-V-O	Total	Percentages
390bc-338bc	590	643	92.0
233-279	558	586	95.0
284-363	538	550	98.0
628-683	175	186	94.0
670-749	453	491	92.0
766-820	171	179	96.0
1029-1093	268	294	91.0
1130-1200	147	155	95.0
1260-1320	319	334	96.0
1574-1645	211	220	96.0

1701-1754	170	182	93.0
total	3614	3830	94.0

Table 4: SVO order in different periods

As can be seen from the above tables, the clauses with SOV order has a range of frequencies between 0-0.9%, those with OSV order has 0-3.1%. On the other hand, the clauses with SVO order is above 90% over the history of Chinese, which is greatly higher than the two orders. Considering the frequencies of the three orders has a big gap and the gap has been always stable over two thousand years, I conclude that Chinese has always been a SVO language.

1.4 The Position for Subjects

As the surface object fronting orders show, objects are the ones that undergo fronting either before or after subjects. However, to better understand their syntactic positions and movements, we need to locate the syntactic position of the subject in order to benchmark the position of the fronted objects. This is because the subject might undergo fronting as well, as observed in previous works of other languages such as Italian. Xu and Langendoen (1985) first proposed the 'Double Topic (DT) hypothesis' for the object fronting phenomena in Mandarin Chinese, assuming that the object fronts to a Topic position in CP, and that the subject fronts across the fronted object to an External Topic Position, which is higher than the landing site of the object. This hypothesis complies with the split-CP hypothesis (Rizzi, 1997; Benincà and Poletto, 2004), except in the split-CP structure in Italian, the object lands at a Focus position instead of a Topic position.

(2) TP(sbj) > vP(obj)

(3) Topic(sbj) > Focus/Topic (obj) > TP > vP

(4) Topic(obj) > Topic (sbj) > TP > vP

It is the fact that Chinese subjects sometimes conduct further topicalisation to outer TP domain. However, in most of the cases, the subjects stay in Spec TP. Examples 5a and 5b show that the subject 'I' and the object 'roses' move to Topic positions outside TP, which are marked by the discourse fillers and phonological pauses. However, most of the subjects in Chinese do not undergo topicalisation, as shown in 5c and 5d.

(5) Mandarin Chinese

a. Wo a,　　meiguihua ne,　zui　xihuan.
I　　Part, rose,　　　most like
'I like roses the most.'

b. Meiguihua a,　　wo ne,　zui　xihuan.
rose　　　　Part, I　Part, most like
'Roses, I like the most.'

c. Meiguihua, wo zui　xihuan.
Rose　　　　I　most like
'Rose, I like the most.'

d. Wo meiguihua zui　xihuan.
I　rose　　　　most like
'I like roses the most.'

DT hypothesis accounts for Chinese subject position in some topicalisation cases, but can not be generalised for Chinese subjects. Therefore, following Ernst and Wang (1995), Hu (1999) and Aldridge (2010), I argue that, in most of cases, the subject of Chinese throughout the history moves from Spec vP and lands at Spec TP, and does not undergo any further fronting such as fronting to an External Topic position in the CP domain[1].

(6)
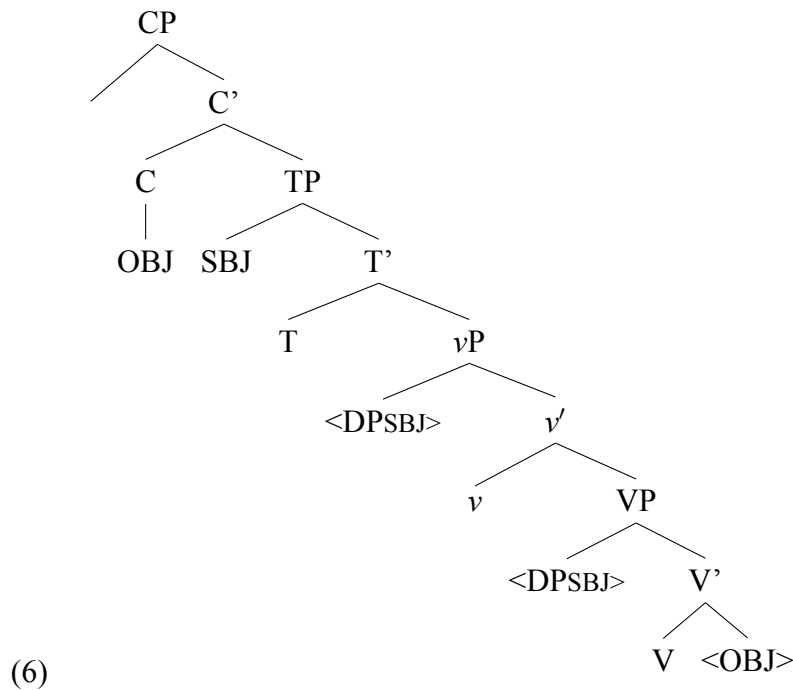
The first evidence of subjects in Spec TP comes from adverb positions. The DT hypothesis predicts that fronting objects will always precede vP or TP adverbials, because the objects front to Topic position. However, in Mandarin Chinese, the fronted objects can

[1]I agree that the subjects and the fronted objects immediately below them in Chinese both bear topic properties, as the fronted objects usually locate in an Internal Topic Position. However, the double topics are both in TP domain, instead of moving to CP.

not precede the adverbials 'only'. Ungrammaticality rises when the objects precedes 'only' adverbials.

(7) Wo zhi/dandan/jiu bu   chi huasheng.
    I   only   NEG eat peanut
    'I only do not eat peanuts.'

(8) Wo zhi/dandan/jiu huasheng bu   chi.
    I   only   peanut   NEG eat
    'I only do not eat peanuts.'

(9) *Wo huasheng zhi/dandan/jiu bu   chi.
    I   peanut   only   NEG eat
    *'I only do not eat peanuts.'

Similarly, some fronted *wh*-objects in LAC do not precede the key diagnostic elements in TP, such as modal *jiang* 'will' in Archaic Chinese, as suggested by Aldridge (2010). I argue that this is also the case for non-*wh*-objects. The fronted dative *wh*-object *an* 'where' in10 and the fronted non-*wh*-DP *Guo* 'the Family Guo' in 11 both are below the modal *jiang* 'will'. This indicates the fronted objects are not higher than TP, which makes the object topicalisation movement to CP domain impossible.

(10) 民   衣   食 之 財，   將   安   可 得?   Mozi
     min yi   shi zhi cai   jiang an   ke de?
     people clothing food Gen resource will where Pot obtain
     'Where could resources for people's clothes and food?' (Aldridge, 2010, p. 11)

(11) 將   虢   是 灭   Chunqiu
     Jiang Guo shi mie
     will   Guo SHI kill
     '(I) will kill the Familly Guo.'

OSV cases, in which the object fronts above the subject, also does not show further topicalisation of the subject. As in 12 and 13, the object *meiguihua* 'roses' can be extracted from the embedded clause, but the subject *wo* 'I' in the embedded clause cannot undergo further topicalisation across the main clause.

(12) Meiguihua, wo shuo, wo zui xihuan.
     Rose,   I   say, I   most like
     'Roses, I said, I like the most.'

(13) *Meiguihua, wo, wo shuo, zui xihuan.
     Rose,   wo, I   say, most like
     'Roses, I said, I like the most.'

Another convincing evidence that Chinese subjects does not undergo topicalisation is that in an object topicalisation construction, the subject can be indefinite (Aldridge, 2010),

such as the subject *ren* in 14 and the subject *jingcha* in 15. This means that the subject is lacking definiteness, which is a property of Topic positions. Therefore it is unlikely to be in a topic position.

(14) LAC

子路，人　告　知　以　有　過。　　　　　　　　　　　　Mencius
Zilu, ren　gao zhi　yi　you guo.
Zilu　person tell 3.Obj that have error
Zilu, someone told him he made a mistake.' (Aldridge, 2010, p. 13)

(15) MC

Jingcha　zhuazhu-le xiaotou.
policeman catch-ASP thief.
'A policeman catches a thief.''

After excluding the possibility of a C-domain subject position, we need to look at the possibility that subject remains in the specifier of *v*P. Evidence shows that subjects undergo movement to the specifier of TP. First of all, the subject is above the temporal verb *jiang* in Chinese, which shows that the subject is higher than T. Second, subject raising to Spec T is a regular movement for all raising constructions in Chinese. The constructions of unaccusatives, passives, object raising *ke* 'can' (Aldridge, 2010), and raising in equational construction all involve the raised object moving to the specifier of T.

(16)　a. MC

wo jiang bu zai　xihuan meiguihua.
I　will　not again like　rose
'I will not like roses anymore.'

　　b. AC

君子　　将　險哀　　　之 不　　暇　　　　　　　Guoyu
junzi　jiang xianai$_i$　zhi bu [VP xia　　t_i]
gentleman Fut　danger.sorrow ZHI not　spare.time.to
'gentlemen will not spare time to be in danger or sorrow.'

(17) Unaccusatives

　　a. MC

Wangmian si-le　fuqin.
Wangmian die-ASP father
'Wangmian's father died.'

　　b. AC

莊子　　妻　死　　　　　　　　　　　　　Zhanguo.Zhuangzi
Zhuangzi qi　si
Zhuangzi wife die
'Zhuangzi's wife died.'

(18) Passives

今　兄弟　被　侵... 知　友　　被　辱...　　　　　　　　　　Hanfeizi
jin　xiongdi bei qin⋯ zhi　you　bei　ru⋯
now brother　BEI attack know friend BEI insult
'Now (one's) brothers are charged⋯close friends are insulted⋯'

In the minimal pair of unaccusatives, MC unaccusatives sometimes have the cases that subject stays in its VP internal base position, as in 17a. In AC, the subject always moves to a preverbal position, as in 17b. It is worth noting that there might be two kinds of analyses for this construction: 1) 'Zhuangzi's wife' moves to the preverbal subject position as a whole DP, and 'Zhuangzi' is a genitive DP. This is also the analysis I adopt in this thesis. 2) 'Zhuangzi' is a hanging topic therefore it is base-generated above TP, the subject 'wife' moves to the specifier of TP. In both analyses, the double Topic hypothesis is impossible. Subject movement must occur, in order to be consistent with the empirical data. This is also the case with passives, where the subject always moves to the preverbal position.

In *ke*'can' constructions, *ke* is analysed as a real modal in 6.2, which raises the nearest argument to the subject position.

(19) 民　　可 使　　由　　之　　　　　　　　　　　　　　Anelects
Min*i*　ke shi　*t* you　zhi
people KE make　follow it
'People can be made to follow one...' (Aldridge, 2010, p. 14)

Raising in equational constructions has the same situation, where the object raises to the subject position due to its topic properties. The subject is suppressed to a nominal predicate below T.

(20) Raising in Equational Construction

夫　　農，　　民　　之　所　苦　　...　　　　　　　　　Shangjunshu
Fu　nong*i*,　min　zhi suo ku　*ti...*
DEM farming, citizen Gen SUO worry
'Farming is the thing that citizens are worried about.'

With the evidence of different kinds of object raising constructions, we can safely conclude that that the non-topicalised subject always undergoes movement to Spec T position.

1.5　Preliminary Search on ChiPaHC and Further Categorisation

A preliminary search of (S)OV and OSV structures was conducted using ChiPaHC. In this section, I will show samples of each kind of object fronting constructions, in order to provide a comprehensive picture of object fronting in the history of Chinese. I will also briefly discuss my analysis in this thesis for each construction. As Chinese is a pro-drop language,

null subject situations are relatively common. I will argue in this section, that most cases of the OV structures fall into the categories of SOV and OSV orders. My argument is based on the comparison of the samples of SOV, OSV and OV structures, and quantitative evidence of a similar historical development route of OV and SOV/OSV.

1.5.1 Object Fronting Appearing as SOV Order

A surface SOV order is formed by objects fronting to post-subject and pre-verbal positions. SOV object fronting found in the preliminary search has three types: Pronoun fronting in the context of negation, *wh*-phrases fronting and nominal fronting.

(21) Pronoun Fronting

寡人 不 之 疑 矣   390BC-338BC
guaren bu zhi$i$ yi ti yi
I NEG it suspect Perf
'I will not suspect it.'

(22) *wh*-phrases fronting

後嗣 何 觀 ！   670-749
housi he$i$ guan ti!
descendants what see
'What our descendants would see!'

(23) Nominal fronting

自家張千 的 便 是 。   1260-1320
Zijia [Zhangqian de]ti bian shi $ti.$
Self Zhangqian Gen ADV COP
'I am Zhangqian.'

After the synchronic and diachronic studies of the three types, more structures in SOV order are found. I categorise them into pronoun fronting, *wh*-phrases fronting and nominal fronting based on the nature of the fronted object. Among the three types, I further distinguishes them by the nature of the fronted objects and the landing sites of the movements.

In this thesis, I suggest that demonstratives and personal pronouns show distinctive distributions in object fronting constructions, as demonstratives usually bears Topic Feature, and it fronts to the Internal Topic Position above Middle Negation. On the other hand, personal pronouns tend to undergo a special fronting in vP domain, where the operators, the vP negation and root modals interact with each other, which triggers personal pronouns front to the specifier of vP. As for *wh-* phrases, following previous analysis of *wh-* fronting, I distinguish three fronting constructions. The first is that *wh-* predicates in equational constructions front to External Topic Position in very rare cases. The second is that *wh*-objects front to the Internal Topic position, which is the most common type of *wh*-fronting. The

Pronoun Fronting	Demonstrative fronting to The Internal Topic position
	Personal Pronoun Fronting in the context of negation
wh- phrase fronting	*wh-* predicate fronting to External Topic Position
	wh- object fronting to Internal Topic position
	wh- adverbials fronting to Focus Position
Nominal Fronting	nominal fronting to Internal Topic position (including fronting with copula *shi*)

Table 5: The Categorisation of The Object Fronting Appearing As SOV Order

third is that the *wh*-adverbials of instruments and other adjuncts front to the focus position in the specifier of v, which is the same position with pronoun fronting position. The nominal fronting only has one type, which is fronting to Internal Topic position. I single the nominal fronting with copula *shi* out from other verbs, as its occurrence is prominent in the preliminary search.

1.5.2 Object Fronting Appearing as OSV Order

The data of OSV in ChiPaHC falls into two preliminary categories: object fronting without a resumptive pronoun left in its base position, and that with a resumptive pronoun. The data also includes genitive DP (partial object) fronting to External Topic Position, as in 26. Therefore the categories should extend into three.

(24)   Without resumptive pronoun

夫　農，　　民　　之　所　苦　　…   Shangjunshu
[Fu　nong]i,　min　zhi　suo　ku　　$ti...$
DEM farming, citizen Gen SUO worry
'Farming is the thing that citizens are worried about.'

(25)   With resumptive pronoun

a. 天子　之　所　是，　　皆是　　　　　之。   Mozi
Tianzi$i$ zhi　suo　shi,　(pro) jie shi　　　　zhi$i$.
King　Gen SUO right pro　all give.recognition 3.Obj
'King's rightness, (you) all give them recognition.'

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b. 正　　　衙　　　　法座，香木　　為　　之
[Zheng ya　　　　fazuo]*i*, xiangmu wei　zhi*i*
main　government throne, xiangmu make 3SG
'The main government throne, xiangmu made it.'

(26)　Partial Object in Situ

李玄道、　　蓋文達、　于志寧、　許敬宗、　　劉孝孫、　蔡允恭，　　　《唐書》
[LiXuandao, GaiWenda, YuZhining, XuJingzong, LiuXiaosun, CaiYungong]*i*, <TangShu>
LiXuandao,　GaiWenda, YuZhining, XuJingzong, LiuXiaosun, CaiYungong,　<TangShu>
皆 不　　書　　　字。
Jie bu　　shu　*ti* zi.
all NEG write　courtesy.name
'LiXuandao, GaiWenda, YuZhining, XuJingzong, LiuXiaosun, CaiYungong, <Tang-

Shu> didn't write their courtesy names at all.'

Demonstrative DP fronting in equational constructions to External Topic Position (as in 255), which includes a nominal DP with demonstrative as its determiner, was originally under the fronting in OSV order. However, after an examination of its syntactic structure, I categorise this type into the fronting in OV order, as it is actually a raising construction which raises to the subject position. I further argue that this categorisation change is due to competing grammar, where two constructions compete for one semantic entry. Fronting to external topic position with a resumptive pronoun and genitive DP fronting are left-dislocation. This movement exhibit similarities with Early Modern Chinese (EMC) passives, as passives in EMC allow resumptive pronouns and genitive DP fronting. I argue that passives in EMC were left-dislocation, and then develop into object raising in Modern Chinese.

Without Resumptive Pronoun	Demonstrative fronting to External Topic Position
	Nominal fronting to External Topic Position
With Resumptive Pronoun	Nominal fronting to External Topic Position
Partial Object in Situ	Partial nominal fronting to External Topic Position

Table 6: The Categorisation of Object Fronting Appearing As OSV Order

1.5.3　Object Fronting with Null Subjects

There are a considerable number of cases of object fronting having a null subject. The 128 cases found in ChiPaHC are able to fall into the same categories of SOV and OSV orders,

except 16 cases of *ke* construction. I will list some samples based on the categorisation of SOV and OSV structures, and show quantitative evidence of OV structures being the same constructions with SOV and OSV structures.

(27) Pronoun Fronting

而 莫 之 見
er mo zhi*i* jian *ti*
ADV. NEG 3.Obj see
'and (pro) don't see it.'

(28) *wh-* fronting

何 古 之 法 ？
[he gu]*i* zhi fa *ti*?
what classics Gen follow ?
hfill 390bc-338bc

'What classics (we) follow?'

(29) Focus *shi* fronting

宮苑 是 飾
Gongyuan*i* shi shi *ti*
Palace FOC decorate
'Palace is decorated.'

(30) fronting with resumptive pronoun

前 驅 謂 之 隊
[qian qu]*i* wei zhi*i* dui
front body call 3SG dui
'The front part is called 'dui'.'

(31) fronting without resumptive pronoun

周濟 之 情， 不 死 當 以 厚 報 。
[Zhouji ZHI qing]*i*, NEG si dang yi hou bao *ti*
Help ZHI kindness, NEG die should with abundance repay
'The kindness of your help, if I will not die, I should repay with abundance.'

(32) fronting to Internal Topic

鏡臺兒 何曾 覽照 ，繡針兒 不 待 拈着 。
jingtaier*i* heceng lan.zhao *ti,* xiuzhener*i* bu dai nian.zhe *ti*
mirror never seize.look , embroidery.niddle NEG await twirl.PROG
'(I) never seive and look at the mirror, neither twirl the embroidery niddle.'

(33) *ke* construction

尚 兄弟 可 禽 也
Shang xiongdi*i* ke qin *ti* ye
Still brothers can capture SFP
'Still brothers can be captured.'

As can be seen from the examples, nearly all examples of fronting with null subjects can be categorised to those with overt subjects, except *ke* constructions. I suggest that *ke* was a modal always raising its nearest argument to the subject position in LAC. It develops into question marker and affirmative adverb after LAC. Another interesting thing should be noted is that the object raising in equational construction was originally categorised by myself under the fronting in OSV order, However, an investigation of their syntactic structures shows that they are actually raising appearing in OV order, as the movement lands in the subject position, which results in an surface OV order. I will put them in section 5.1 under the category of SOV order to be cohesive with the historical change of Internal Topic position, as it is closely related to the raising in equational constructions.

Pronoun Fronting	Demonstrative fronting to Internal Topic position
	Personal Pronoun Fronting in the context of negation
wh-phrase fronting	*wh-* object fronting to Internal Topic position
	wh- adverbials fronting to Focus Position
Nominal Fronting	Object Raising in Equational Constructions
	Nominal fronting to Internal Topic position (including parallel structure)
	Shi focus to focus position beLow Negation
Without Resumptive Pronoun	Nominal fronting to External Topic Position
With Resumptive Pronoun	Nominal fronting to External Topic Position
ke constructions	Object raising to the subject position

Table 7: The Categorisation of Object Fronting Appearing As OV Order

1.5.3.1 Quantitative Evidence for OV as the Same Fronting with SOV and OSV

A comparison of object fronting with overt subject and that with null subject is conducted using the data from ChiPaHC. I calculate the frequencies of object fronting with overt subjects and that with null subjects in different periods. The results are shown in the figure below.

Time	fronting in overt subject	total number of overt subjects	fronting in null subject	total number of null subject	total sentence number
390bc-338bc	10	364	39	523	1795
233-279	7	369	15	641	1758
284-363	3	332	3	697	1802
628-683	6	111	3	186	648
670-749	5	269	19	561	1321
766-820	0	109	8	316	837
1029-1093	10	207	13	295	782
1130-1200	2	96	8	184	568
1260-1320	8	193	10	267	931
1574-1645	5	155	2	203	747
1701-1754	3	110	9	245	643

Table 8: Numbers of Object Fronting with Overt Subjects and with Null Subjects
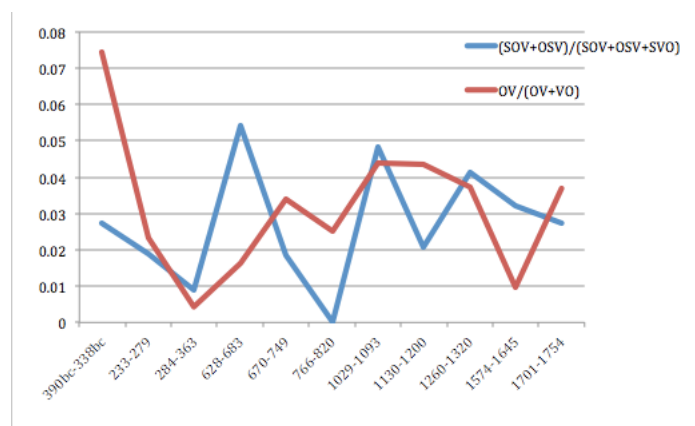
Figure 1: Comparison of Object Fronting with Overt Subjects and with Null Subjects

The red line is the frequencies of object fronting with null subjects, and the blue line is those with overt subjects. The two lines overlaps in many places, which indicates that

	(SOV+OSV)/(SOV+OSV+SVO)	OV/(OV+VO)
390bc-338bc	2.7%	7.0%
233-279	1.9 %	2.3%
284-363	0.9%	0.4%
628-683	5.4%	1.6%
670-749	1.9%	3.4%
766-820	0	2.5%
1029-1093	4.9%	4.4%
1130-1200	2.1%	4.3%
1260-1320	4.1%	3.7%
1574-1645	3.2%	1.0%
1701-1754	2.7%	3.7%

Table 9: Percentages of Object Fronting with Overt Subjects and with Null Subjects

	(SOV+OSV)/(SOV+OSV+SVO)	OV/(OV+VO)
284-363	2.6%	3.0%
628-683	2.0%	2.1%
670-749	2.6%	2.5%
766-820	2.8%	3.3%
1029-1093	2.6%	3.7%
1130-1200	2.9%	3.2%
1260-1320	3.4%	3.4%

Table 10: Smoothed version
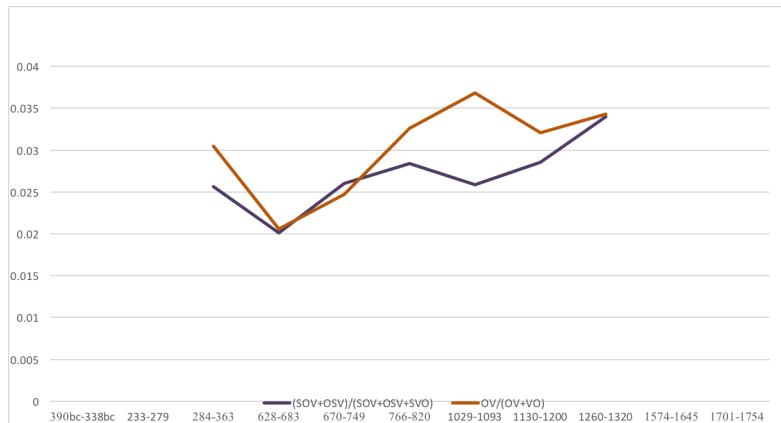
Figure 2: Smoothed version of Figure 1

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the object fronting with null subjects and those with overt subjects have the same development route. This is consistent with the fact that except *ke* constructions, the kinds of object fronting appearing as OV order are able to fall into the categories of those appearing as SOV and OSV orders.

Chapter 2. Methodology

This thesis uses both qualitative and quantitative methods to examine object fronting constructions. The data of Ancient Chinese used in this study are from two sources: the Chinese Parsed Historical Corpus and the Centre for Chinese Linguistics Corpus in Beijing university. Chinese Parsed Historical Corpus (ChiPaHC) is a small corpus that are syntactically parsed, based on the annotation of Penn Parsed Corpora of Historical English, with modifications based on Chinese syntactic features. This corpus allows searching for syntactic constructions and the quantitative investigation of the overall change of object fronting. The corpus includes 12 texts, 97,400 characters in total. The table below summaries the genres, the book and section names, the time periods and the character counts for individual texts. The texts in ChiPaHC cover the historical periods from Late Archaic Chinese, Middle Chinese to Early Modern Chinese, which provides a diachronic view for the studies of Chinese syntax. The text are reasonably balanced in terms of their genres.

Text Genres	Names	Time Periods	Character Counts
Legal works	Chapters 1-8 of <Book of Lord Shang> 商君書	390BC-338BC	10,380
Biography	Volume 1, Chapter 1 of <Chronicles of the Three Kingdoms Book of Wei> 三國志魏書	233-279	13,490
Fiction	Chapters 1-3<Extensive Records of the Taiping Era> 太平廣記	284-363	13,390
Fiction	<Biographical sketch of Li Yi> 李毅傳	628-683	5,000
Politics	Volume 1 (Chapters 1-2) and Volume 2 (Chapter 3) of <Administrative Principles of Zhenguan ReignAuthor> 貞觀政要	670-749	11,000
Fiction	<Biographical Sketch of Huo Xiaoyu> 霍小玉傳	766-820	3,890

Fiction	<Biographical sketch of Dongcheng Laofu> 東城老父傳	766-820	2,100
Handbook	Chapters 1-3 of <Notes Written at Mengxi> 夢溪筆談	1029-1093	10,320
Philosophy	Volume 12, Chapter 6 of <Classified Conversations of Master Zhu> 朱子語類	1130-1200	4,630
Fiction	<Qiannv Leaves Soul> 倩女離魂	1260-1320	9,740
Fiction	Chapter 7 of <Water Margin> 水滸傳	1574-1645	7,380
Fiction	Chapter 8 of <The Scholars> 儒林外史	1701-1754	6,080

The Centre for Chinese Linguistics Corpus in Beijing university (CCL) is a large corpus, with an overall 201,668,719 characters of Ancient Chinese. It also includes texts from Archaic Chinese to Modern Chinese, which is suitable for diachronic studies of object fronting. Though not syntactically parsed, it is possible to search specific words and simple patterns.

The two corpora are both used for qualitative and quantitative studies of object fronting, and they are complementary in that ChiPaHC is good for calculating the overall trends and the development of the major types of pronoun fronting, and CCL is good for specific phenomena.

The ChiPaHC is used for the preliminary search of the object fronting constructions, as it allows the searching for syntactic structures. Based on the traditional division of A/A' movement, the search of object fronting constructions is divided into pronoun fronting with (S)OV and OSV orders, in which the subject is a benchmark for the landing sites. The SOV order stands for the objects fronting to post-subject and pre-verbal positions, which are assumed as A movement. The OSV order is the object fronting to pre-subject positions, which are assumed as A' movement. As Chinese is a pro-drop language, pronoun fronting with overt subjects and with null subjects are both considered. Therefore, the searching queries are written based on their surface orders, that is, SOV, OSV and OV orders, among them SOV and OSV orders are the pronoun fronting with overt subjects, OV orders are the ones with null subjects. The searching results are categorised based on their syntactic difference. The results from ChiPaHC show that pronoun fronting with null subjects (OV order) shares similarities with those with overt subjects (SOV and OSV orders) in terms

of their categorisation. In order to prove their correlation, a quantitative study of the two situations are conducted. The searching results include the tokens of the target structures and the tokens of the overall clauses in each time periods. Therefore, the tokens of SOV and OSV, along with those of SVO in different time periods are taken out to calculate the proportions of object fronting with overt subjects. On the other hand, the corresponding data of OV, along with those of VO are calculated. The comparison of the two situations shows that they are overlapped in many places, which means that object fronting with overt subjects and that with null subjects are the same kind of fronting. Based on this evidence, the cases of object fronting with null subjects are included into the ones with overt subjects for further syntactic analysis.

The syntactic analysis for each categories is conducted, based on the synchronic data from different time periods in the CCL and the ChiPaHC. As the size of the ChiPaHC is relatively small, it is used as supplementary data source for synchronic studies. The CCL corpus is the main source for searching specific words and phrases, and testing hypotheses in analysing specific constructions. For example, the pronoun fronting in the negation contexts with respect to different modals/verbs are conducted in the CCL, by searching out the most frequent verbs of pronoun fronting. Their fronting and non-fronting cases of these verbs are compared. The results show that pronoun fronting is related to verb types, in that pronouns tend to front when there is root modals in the vP negation domain.

Chapter 3. Pronominal Fronting

In this section, I will discuss two pronominal fronting constructions, which are Personal Pronoun Fronting and Demonstrative Fronting. I first distinguish three negations in Chinese. By comparing them with three English negations, I suggest that the distinction of three negations is not only important diagnostics for pronoun fronting positions, but also important evidence for verb movements, which has never been discussed in Chinese linguistic works before. I then distinguish the nature of demonstratives and personal pronouns based on their distinctive distribution in fronting constructions. According to my observation from ChiPaHC and CCL corpora, the landing sites of the two kinds of pronouns are divided by Middle Negation. To be more specific, personal pronouns are exclusively for the Pronoun Fronting Position, which is below Middle Negation, while the demonstratives front above Middle Negation to TP Internal Topic Position. I further argue that this difference can be explained by their distinctive pragmatic properties. In line with Light (2012); Stevens and Light (2013), I suggest that Chinese demonstratives bear topic-like properties, which complies with those in Germanic languages. On the other hand, this property is unavailable to personal pronouns. The feature difference triggers different movements of the two kind of pronouns.

3.1 Three Negations in Chinese— New Diagnostics

Chinese often have more than one position for negation and the negations have different locations and scopes. As negations are used as an important diagnostic benchmark for various kinds of object fronting, it is worth examining the positions and scopes of the multiple negations. The distinction among negations has been more or less ignored by previous studies, especially the studies of Pronoun Fronting in negation contexts. I argue that the Chinese negations discussed in this section are examples of *wei* focus negation, Middle Negation (sentential) and Low Negation (vP). The position of *wei* focus negation varies depends on the position of the focused constituents. Middle Negation is in TP and negates the structure below ModP. Low Negation is in vP and negates vP. The two negations in Chinese share similarities with the middle and Low Negations in English. In this section, I will first discuss the three English negations following the outline of Holmberg (2013, 2016), and then demonstrate that Chinese also have three negations, in which their difference has not been noticed in previous studies. Their difference will not only be an important diagnostic element to distinguish object fronting constructions, but also a strong evidence for verb movement in Chinese.

3.1.1 Three Negations in Chinese

Holmberg (2013, 2016) distinguishes three negations in English: a highest negation that is similar to the outer negation, in line with Ladd (1981), a Middle Negation and a Low Negation. The details of the highest negation will be excluded from the discussion, as it is not related to the topic of this thesis. As for the rest two negations, the Middle Negation is in TP and above vP. The Low Negation is merged in vP.

(34) John can't not come.

As in example 34, the Middle Negation is the negator *n't*, which is followed by the Low Negation *not*.

The Low Negation is vP-internal, which is evident in its relative order with vP-adverbials. As shown in the comparison of 35 a and b, the Low Negation is below vP-adverbials.

(35) a. *I did not not purposely dress up for that occasion.

     b. I did not purposely not dress up for that occasion.(Holmberg, 2016, p. 156)

The structure can be illustrated as below (Holmberg, 2016, p. 156):

```
              TP
           /      \
      DPsbj         T'
                 /      \
                T        NegP
                       /      \
                     Neg       vP
                            /      \
                          Adv       vP
                                  /     \
                                DP       VP
                                       /    \
                                     Neg     VP
```
(36)
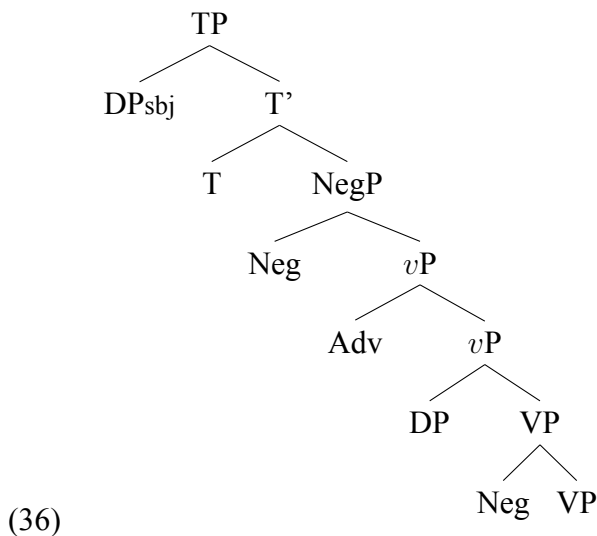
Chinese also has three negations: a Middle Negation, a Low Negation and the *wei* focus negation. The middle and Low Negations are clausal/phrasal negations which are parallel to English middle and Low Negations. The only difference is that the Middle Negation in Chinese appears before modals and auxiliary verbs. However, this does not influence their scopes– the Middle Negations in English and Chinese both has a TP scope.

(37) He can't not come.

(38) MC

Ta bu   neng bu   lai.
he NEG can   NEG come
'He can't not come.'

(39) AC

此　事　不　可　不　察
Ci   shi   bu   ke   bu   cha
This thing NEG can NEG investigate
'This thing has to be investigated.'

The Low Negations in English and Chinese both attach to vP and have a scope of vP. As shown in the example below, the Low Negation is lower than vP-adverbials.

(40) Ta bu   neng guyi   bu   lai.
he NEG can   purposely NEG come
'He can't purposely not come.'

(41) * Ta   bu neng bu   guyi lai.
he NEG can NEG purposely come
'He can't purposely not come.'

Among the three English negations discussed in last section, Middle Negation and Low Negation are able to co-occur in a single clause. This is similar to Chinese Double negation constructions, where the Middle Negation (Modal negation) and the vP negation also co-occur. As shown in example 43, both Mandarin and Archaic Chinese possess this kind of double negation.

(42) English

John can't not come to the party tonight.

(43) a. Mandarin Chinese

Wo mingtian bu   hui bu   lai.
I   tomorrow NEG will NEG come.
'I will (definitely) come tomorrow.'

b. Archaic Chinese

此　事　不　可　不　察
Ci   shi   bu   ke   bu   cha
This thing NEG can NEG investigate
'This thing has to be investigated.'

The difference of this double negation between English and Chinese is that, in English, Middle Negation negates modals and tense auxiliaries. However, its Chinese counterpart only works with modals[2]. I now examine the two negators in Late Archaic Chinese. The

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[2]Double negation with copula 是 *shi* 'be' is excluded from the discussion, as 'NEG shi NEG v' is a bi-clausal structure, which the two negations are both Low Negations in separate clauses.

Middle and Low Negations both appear when a modal and a verb both appear, as in 44, the modal can not be omitted in the double negation construction. On the other hand, as in example 45, when there is no modals, double negation is not available. This double negation construction delivers a stronger affirmative meaning as a result of the double negation cancellation effect. For instance, in example (a) of 51, the negated modal *ke* 'can' and the negated action verb 'cautious' 'cannot be not cautious' leads to a stronger affirmative meaning of 'has to be very cautious...'.

(44) 此　事　不　*(可)　不　察
Ci　shi　bu　*(ke)　bu　cha
This thing NEG MOD NEG investigate
'This thing has to be investigated.'

(45) 我　未　之　前　　聞　也　　　　　Liji.Tangong.shang (Feng, 1996, p. 330)
Wo wei　zhi qian　wen　ye
I　NEG it　before heard Nmlz
'I didn't hear of it before.'

As for the positions of the two negations, I argue that they are above vP, because the low negator is above the Pronoun Fronting domain, and Pronoun Fronting has a structure of vP. As in 46a, pronoun fronting involves the PP structure 'than him', which is an evidence of vP structure. Moreover, the double object construction in 46b also shows that the pronoun fronting domain is as big as a vP. What's more, adverbs in 47 also indicate a vP layer. Therefore, all the three evidence lead to the fact that pronoun fronting has a vP structure.

(46)　a. 八 世　　　之　後,　莫　　之　與　　京
Ba shi　　　zhi hou, mo　[PP zhi$i$　yu　ti] jing
8　generation Gen after none　3.Dat than　great
'After eight generations, there will be no one greater than him.'

　　b. 彼　　若 不 吾　　假　　道,　必　不 吾　　受　　也; 若
bi　　ruo bu wu$i$ [VP jia　ti dao], bi　bu wu$j$ [VP shou　tj] ye; ruo
3.Subj if　not us　　lend　way　must not us　　accept　Decl if
受　　我 而　　　假　我 道 …
shou　wo er　　　[VP jia　wo dao] …
accept us Conj　　lend us　way
'If he does not give way (for) us, he must not accept us; if (he) accepts us and give way (for) us …'

(Wang, 2016, p. 120)

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(1) 他不　是不　穿　漂亮衣服。
ta bu　shi bu　chuan piaoliang　yifu
he NEG be　NEG wear　beautiful　clothes
'It is not that he does not wear beautiful clothes.'

(47) 自 古　　 及 今，未 嘗 之 有　　也　　　　　Mozi.Jiezang.xia
Zi gu　　ji jin, wei chang zhi*i* you *ti* ye
from ancient till now NEG ever 3.Obj have SFP
'There have not ever been it, from ancient till now.' (Feng, 1996, p. 330-331)

Evidence of double negation and pronoun fronting demonstrates the relative order of the two negations. That is, the Low Negation has a scope of *v*P. The Middle Negation is above the modal, which has a sentential scope.

(48) 闻 免 父 之 命，不 可 以 莫 之 奔 也；亲戚 为
Wen mian fu zhi ming, [bu ke yi mo zhi*i* ben *ti* ye]; qinqi wei
hear exampt father Gen order, NEG MOD YI NEG 3.Obj run Nmzl; relative PSS
戮，不 可 以 莫 之 报　　也。　　　　　　Zuozhuan
lu, [bu ke yi mo zhi*i* bao *ti* ye].
kill, NEG MOD YI NEG 3.Obj revenge Nmlz
'Hearing the order of my father's impunity, I must run for it; relatives are killed, I must revenge.'

(49) 亡 君 夫人，不 可 以 莫 之 死 也。　　　Zuozhuan
Wang jun furen, [bu ke yi mo zhi*i* si *ti* ye].
lost King wife, NEG MOD YI NEG 3.Obj die Nmlz
'I lost the wife of the king, I have to die for this.'

The modals below Middle Negation should be distinguished from root modals, as the later are actually semi-modals baring some lexical properties. Root modals also show syntactic difference from epistemic modals, as they are structurally lower, locating in the *v*P below *v*P negation, while epistemic modals locate in ModP, which is higher than *v*P negation. For instance, *ke* and *gan* are both modal verbs, however, *ke* has alway been a modal since AC, but *gan* experienced a *v*-to-Mod movement from a root modal (*v*P) to an epistemic modal (ModP), as discussed in 6.2. As in 50, *ke* and *gan* looks similar in the single negation clauses, which both are below the single negation. However, their difference can be seen from 51. As in 51a, *ke* is actually in the position between middle and Low Negation. On the other hand, *gan* displays discrepant behaviours. As in 51b, *gan* is below the Low Negation in the pronoun fronting domain, but in 51c, it is similar to *ke*, which stays in the position between the two negations. I argue that *gan*'s discrepant behaviour is a result of *v*-to-Mod movement, where it raises from *v* to Mod. quantitative evidence of this movement will be shown in 6.2.

(50) a. 故　　 恶 积　　　 而 不 可 掩，罪 大 而 不
Gu e ji er bu ke yan, zui da er bu
therefore evilness accumulate CONJ NEG MOD cover, crime big CONJ NEG

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可　　解　　　　　　　　　　　　　　　　　　　　Zhouyi
ke　　jie
MOD solve
'Therefore evilness accumulates then it is not able to be covered, crime becomes

big and it is not able to be solved.'

b. 文　王　不　敢　盘　于 游田　　　　　　　Jinwenshangshu
Wen wang bu　gan　pan　yu youtian
Wen king　NEG MOD amuse at　hunting
'Wen King does not dare to amuse at hunting.'

(51)　a. 察　　仁义　　　　之 本，天　之 意，　不　可　不
Cha　renyi　　　　zhi ben, tian　zhi yi,　bu　ke　bu
observe kindness.fairness Gen root, heaven Gen thought, NEG MOD NEG
慎　　也。　　　　　　　　　　　　　　　　　　Mozi
shen　ye.
cautious
'Observing the root of kindness and fairness, this is the heaven's thought, (we)

cannot be not cautious about it.'

b. 莫　之　　敢　指　　　　　　　　　Shijing.Guofeng
Mo　zhi*i* gan zhi　*ti*
NEG it　　dare point
'No one dare to point at it.'

c. 上　好　义，　则　民　莫　敢　不　服　　　　Anelects
Shang hao yi,　ze　min　mo　gan bu　fu
King　like fairness, then citizen NEG dare NEG respect
'If King likes fairness, then no citizen dares not to respect the king.'

In a short summary, I suggest that the modal in double negation refers to epistemic modals, and it locates in the head of ModP. The middle negator negates ModP and the structure below it. The Low Negation locates in above vP and has a scope of vP.

TP
DPsbj   T'
T   MiddleNegP
Neg   ModP
DP   Mod'
Mod   LowNegP-*v*P
Neg   *v*P
DPsbj   *v*′
v   VP
DP   V'
V   DPobj
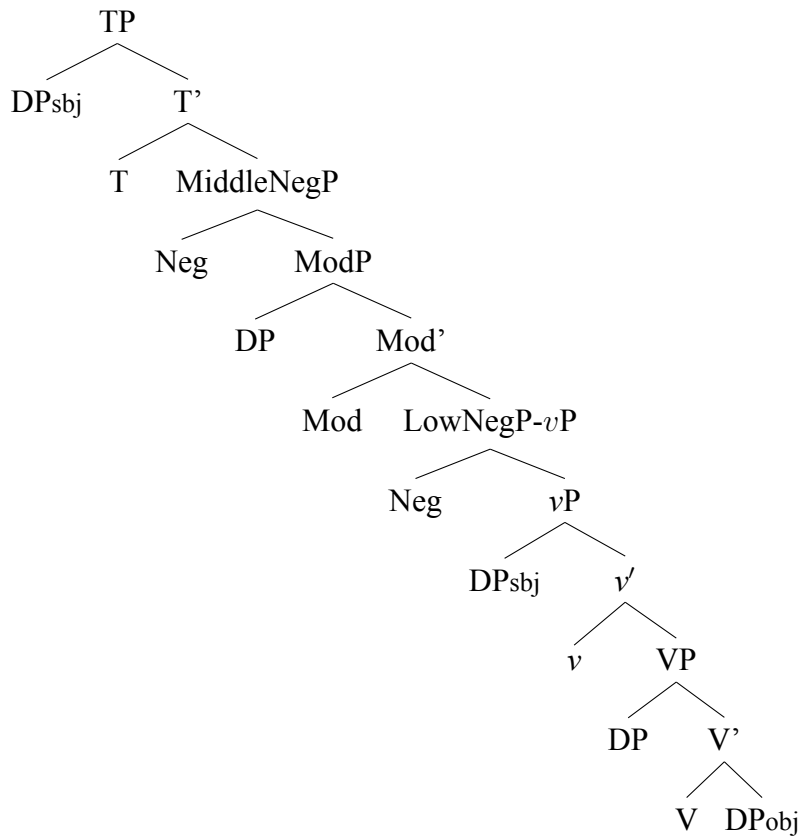
(52)

As for the third negation in Chinese– *wei* focus negation, it is a constituent negation that always happens with a focus sensitive operator 惟/唯 *wei* 'only'. The focus negation only negates the focus scope of *wei*, and imply a 'not only' meaning. For instance, in 53, *v*P 'not dare' is negated by the focus negation *bu* and focus operator *wei*, which emphases the reason of 'Yue citizens not addicted to wine' is that 'they don't dare to', and implies 'dareness' is not the only reason, another reason is that they 'do not have time'. Subject and object DPs also can be focused by *wei*. In 54, the subject *yue wang* is focused and negated by *bu wei*, and delivers a meaning that 'Yue wang does not know Di's idea, but he is not the only one who does not know'. Example 55 and 56 have focus negation precedes fronted objects *Wei guo* and *zi*, where the two DPs contrast with other unspoken similar kinds. In 57, the nominal predicate *gu* is negated by focus negation. Focused negation appears as early as the Archaic Chinese in Oracle bones inscription (14th-11th BC), as in 57. This negation remains in LAC, as in 53, 54, 55 and 56.

(53) 越 百姓 里居， 罔 敢 湎 于酒； 不 惟 不 敢，亦 不
      Yue baixing liju,   wang gan mian yu jiu; bu wei bu gan, yi bu
      Yue citizen residence, NEG dare addict to wine; NEG only NEG dare, also NEG
      暇。   Jinwenshangshu
      xia.
      have.time
      'Yue citizens do not dare to addict to wine. It is not only that they do not dare to,

29

but also they do not have time to.'

(54) 不 唯 越 王 不 知 翟 之 意...   Lvshichunqiu
Bu wei yue wang bu zhi di zhi yi...
Neg only Yue King NEG know Di Gen idea...
'Not only the King of Yue state does not know Di's idea...'

(55) 將 不 唯 衛國 之 敗   Zuozhuan, (Wang, 2016, p. 40)
jiang bu wei Weiguo$_i$ zhi bai *t_i*
Fut not WEI Wei.State ZHI perish
'(He) will not only make Wei State perish.'

(56) 敢 不 唯 子 是 從 ?   Zuozhuan, (Wang, 2016, p. 107)
gan bu wei zi shi$_i$ cong *t_i*?
Dare NEG WEI you SHI follow
'(Who) dare not to only follow you?'

(57) 有 疾齒， 唯 蠱? / 不 唯 蠱?   Heji 13658
You ji chi, wei gu? / bu wei gu?
Have ill tooth, only insanity? / NEG only insanity?
'(King) has ill teeth, is it a cursed insanity? Is it not a cursed insanity?'

The focus negation does not negate the truth value of its following constituent, but negates a scalar implicature and delivers a contrastive focus meaning. The condition is similar to that of negation in English 'not only...but also'. If we say 'not only P, but also Q', the truth value is 'P, Q', instead of 'not P, Q'. It is the same condition for Chinese focus negation. For example, in 53, the focus negation is the first negation in *bu wei bu gan* 'not only not dare', it appears before *wei* to object the scalar of the verb phrase 'only not dare to...' (assume the truth value is P). We also assume the value of verb phrase 'not have time' is Q. This focus negation *bu* does not negate the truth value of P, but objects the scalar of P. Therefore the truth value of this sentence is 'P, Q', and the meaning of the sentence is that Yue citizens do not only 'NOT DARE to be addicted to wine', but also DO NOT HAVE TIME to be addicted to wine.

The co-existence of this negation and other negations is supported by double negation constructions. In 53, *bu wei bu gan* is a double negation construction, in which the first negation is focus TP (*not dare* 'do not dare') and *v*P (*not have time* 'not have time') negation, and the second negation is Middle Negation. Also in 54, the first negation is focused subject DP, and the second negation is a Low Negation.

I will mainly focus on the most common focus negation constructions– *bu wei...zhi/shi*, where preposed object DPs are sandwiched in between *wei* and fronting markers *zhi/shi* (55 and 56). In these object fronting constructions, *zhi* and *shi* are both object fronting markers but have distinctive distributions[3].

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[3]The distinctive distribution of *zhi* and *shi* are discussed in details in section 5.1.2.1.

Previous studies did not distinguish *wei* focus negation from Middle and Low Negation (Djamouri, 2000; Wang, 2016). This causes two problems: the analysis of *wei* and the positions of fronted objects and fronting markers *zhi* and *shi*.

Under the assumption of single negation in a sentence, a bi-clausal cleft analysis for double negation constructions is raised by Wang (2016). She suggests that *wei* is an affirmative copula. Therefore, the constituent following *wei* is clefted. The *wei...shi/zhi* constructions are defined as cleft constructions, and are excluded from object fronting constructions. For example, in 58, the subject DP 'the world' is clefted from the original clause, and *zhi* is analysed a fixed marker in the cleft construction, instead of a fronting marker. Example 55 (repeat as 59) and 56 (repeat as 59), are not object fronting constructions, but cleft constructions.

(58) 不 唯 下 土 之 不 康靖。
Bu wei [xia tu] zhi bu kangjing.
not only under land ZHI not peaceful
'It is not only the world that is not peaceful.' (Wang, 2016, p. 50-51)

(59) 將 不 唯 衛國 之 敗   Zuozhuan, (Wang, 2016, p. 40)
jiang bu wei Weiguo*i* zhi bai   *ti*
Fut not WEI Wei.State ZHI perish
'(He) will not only make Wei State perish.'

(60) 敢 不 唯 子 是 從 ?   Zuozhuan, (Wang, 2016, p. 107)
gan bu wei zi shi*i* cong *ti*?
Dare NEG WEI you SHI follow
'(Who) dare not to only follow you?'

This analysis entails that, first, the *wei* and *shi/zhi* are components of a fix construction. Second, *wei...shi/zhi* constructions are bi-clausal cleft constructions. Third, *wei...shi/zhi* constructions do not involve object fronting, and they are different from other object fronting constructions. Forth, *shi* and *zhi* are in the same position and replaceable with each other.

However, I suggest that *wei* is a focus marker, and the *wei...shi/zhi* is not a specific constructions. *Shi* and *zhi* do not necessarily occur with *wei*. *Shi* and *zhi* are not identical in terms of their positions, and they do involve object fronting.

First evidence against the bi-clausal cleft analysis is that not every *wei* focus construction has *shi/zhi*. For instance, in 54 (repeated in 61), *zhi* does not appear.

(61) 不 唯 越 王 不 知 翟 之 意...   Lvshichunqiu
Bu wei yue wang bu zhi di zhi yi...
Neg only Yue King NEG know Di Gen idea...
'Not only the King of Yue state does not know Di's idea...'

Secondly, *wei...(zhi/shi)* constructions are not cleft constructions. No syntactic evidence was provided in Wang (2016) to support the cleft analysis. The only argument was from

a semantic perspective, that "copula" *wei* splits the clause into focus and presupposition (Wang, 2016, p. 45). However, a focus analysis has the same semantic effect, where *wei* plays the same role of splitting focus and presupposition as a focus sensitive operator. Moreover, the *wei* focus negation does not necessarily reflect clausal boundaries, as the negation is a constituent negation.

Wei does not make clauses bi-clausal either. Two instances of complex constructions were given in Wang (2016), which aim to show that the clauses with *wei* are cleft constructions. As in example 62, the verbal predicate *guan shan hai* 'exploit montains and seas' is considered a clefted constituent, and is followed by another predicate having a copula 為 *wei* and the affirmative adjective predicate 可 *ke* 'appropriate'. Another bi-clausal example 63 involves SUO relative clause marker, in which *wei jun suo bing zhi* 'the only thing that you are worrying about' is a headless object relative clause. The relative clause stays at the subject position to form an equational construction with the *wh-* predicate 'what'. Wang adopts the analysis of Ting (2008) and argues that SUO is an A' pronominal clitic and appears in A' configurations, which lead to a bi-clausal analysis of example 63.

(62) 唯　　觀　　山海　　　為　可　　　　爾。
Wei [guan shanhai]　wei ke　　　er.
WEI exploit mountain.sea Cop appropriate Decl
'It is only exploiting mountains and seas that is appropriate.' (Wang, 2016, p. 47)

(63) 唯　君　　所　病　之　何　也?　　　　　　　　　　　Zhuangzi
Wei jun　　suo bing zhi he　ye?
WEI you.Hon SUO worry what Nmlz
'What is the only thing that you are worrying about?'

However, *wei* is not the reason that makes the above clauses complex. As the examples below show that, 唯 *wei* is optional in the both constructions, this means that *wei* does not have the power to change mono-clausal structures to bi-clausal, as suggested by Wang.

(64) 王　　果　听　张子，　　而　　以　惠子　言　为　不　　可。
Wang guo　ting Zhangzi,　er　　yi huizi　yan　wei bu　ke.
King　really listen Zhang.Hon, CONJ YI Hui.Hon words Cop NEG appropriate
Hanfeizi

'The King really listened to Zhangzi, and taking Huizi's words as not appropriate.'

(65) 天　　之　所　欲　者　何　也。　　　　　　　　　　　　Mozi
Tian　zhi suo yu　zhe he　ye.
heaven Gen SUO want Nmlz what Nmlz
'What is the thing that the heaven want?'

To argue against the third entailment of cleft analysis, I suggest that *wei...shi/zhi* constructions are similar to object fronting constructions. Example 58 does not involve object fronting is simply because the focused (or clefted in Wang's sense) part is the subject. *Zhi*

in this sentence is neither a fronting marker, nor a fixed marker of cleft construction. It is, rather, a genitive marker of the embedded subject. Aldridge (2013*b*) finds that in LAC, subjects of embedded clauses usually have a genitive case. 之 *zhi* is a genitive case marker in noun phrases, which is the same character with the fronting marker 之 *zhi*. As in example 66, *zhi* marks the genitive case in the noun phrase. Third person pronoun is marked its genitive form by 其 *qi*, as shown in 67. *Zhi* and *qi* both appear in embedded clauses to mark the genitive case of subjects. Such as in 68, the subject 'the world' in the embedded clause 'the world has been without the proper way' is followed by *zhi*; in 69, the subject 'he' in the embedded clause 'he does not have a shape' uses the genitive form *qi*. It suggests that *zhi* is not exclusive to *wei* focus constructions, and it is not a fixed marker of cleft constructions.

(66) 翟 之 意
      Di zhi yi
      Di Gen idea
      'Di's idea'

(67) 其   父母
      Qi   fumu
      3.Gen parents
      'his/her parents'

(68) 天下 之 無   道 也 久 矣   Anelects, (Aldridge, 2013*b*, p. 12)
      Tianxia zhi wu   dao ye jiu yi
      world   Gen not.have way Nmlz long Perf
      'It is a long time since the world has been without the proper way.'

(69) 莫 知 其 無   形   Xunzi, (Aldridge, 2013*b*, p. 12)
      Mo zhi qi wu   xing
      none know 3.Gen not.have shape
      'No one knows that he does not have a shape.'

The context of this sentence is illustrated as below:

(70) 昔 周室   逢 天   之 降   禍，   遭   民   之 不
      Xi Zhoushi   feng tian zhi jiang   huo,   zao   min   zhi bu
      past Zhou.family meet heaven ZHI descend disaster, encounter citizen ZHI NEG
      祥，   余 心 豈 忘 憂恤，不 唯 下 土 之 不   康靖。
      xiang, yu xin qi wang youxu, bu wei xia tu zhi bu   kangjing.
      harmony, my heart how forget worry, NEG only under land ZHI NEG peaceful.
      Guoyu
      'In the past, the Zhou family has seen that the heaven give us disaster, has encountered that citizens are not harmonious (armed rebellion). How can I forget the worries in my heart, which are not only that the world is not peaceful?'

This paragraph includes three clauses containing *zhi*: *tian zhi jiang guo* 'the heaven give us disaster', *min zhi bu xiang* 'citizens are not harmony (armed rebellion)' and *xiatu zhi bu*

kangjing 'the world is not peaceful'. They are all embedded clauses. The former two clauses are embedded under the verb 'meet' and 'encounter', while the third— the *wei* focused clause *xiatu zhi bu kangjing* 'the world is not peaceful' is a relative clause embedded under 'the worries'.

The fronting markers *zhi* and *shi* are suggested to be in an identical position, and are replaceable in *wei...zhi/shi* fronting constructions in Wang (2016). For instance, the fronted objects 'Wei state' in example 55 (repeat as 71) and 'zi' in 56 (repeat below as 72) are considered to be in the same position, caught in the middle between focus operator *wei* and fronting markers *zhi/shi*.

(71) 將　不　唯　衛國　　之　敗　　　　　　Zuozhuan, (Wang, 2016, p. 40)
jiang bu wei Weiguo$_i$ zhi bai　ti
Fut　not WEI Wei.State ZHI perish
'(He) will not only make Wei State perish.'

(72) 敢　不　唯　子　是　從　　　?　　　　　Zuozhuan, (Wang, 2016, p. 107)
gan bu　wei zi shi$_i$ cong　ti?
Dare NEG WEI you SHI follow
'(Who) dare not to only follow you?'

I argue that, based on the position of modal *gan* 'dare' and sentential negation, the positions of *zhi* and *shi* are distinguished in that *zhi* is above *gan* and sentential negation, and *shi* is below *gan* and sentential negation. This is evident in 73, the fronted object 'Which position' and *zhi* are above 'dare', while the fronted object 'order' and *shi* are below 'dare'. The relatively high position of *zhi* and the fronted object also can be seen from 75 and 74. *Zhi* is above sentential negation in 75, but *shi* is below sentential negation in 74.

(73) 子產　曰:　... 何　位　　之　敢　擇　　?　　(Wang, 2016, p. 51)
Zichan yue: ⋯[he　wei]$_i$　zhi gan ze　ti?
Zichan utter　which position ZHI dare choose
'Zichan uttered: ⋯which position does (he) dare to choose?'

(74) 敢　不　唯　命　是　聽　?　　　　　　　Zuozhuan
gan bu　wei ming shi$_i$ ting ti?
Dare NEG only order SHI hear
'(Who) dare not to only follow the order?'

(75) 君子　　將　險哀　　之　不　暇　　　　　Guoyu
junzi　jiang xianai$_i$　zhi bu [VP xia　ti]
gentleman Fut　danger.sorrow ZHI not　attend.to
'gentlemen will not (have time to) attend to danger or sorrow.'

In summary, I distinguished three kinds of negation in Chinese: Middle Negation, Low Negation and *wei* focus negation. Their co-existence can be seen from double negation constructions. I argued that previous studies of Chinese object fronting did not distinguish focus

negation, which prohibited a consistent analysis for object fronting with *wei...zhi/shi* constructions and that a focalisation analysis of *wei* should be adopted. I have argued against the cleft analysis for *wei...shi/zhi*, and propose a focalisation analysis for *wei* constructions. By adopting multi-negation hypothesis, my analysis of *wei* suggests that *wei* is a focus marker, it allows a constituent negation to negate the constituents in its focus scope. I argued from four perspective: the first is that *wei* does not necessarily appear with *shi/zhi*. Moreover, clauses with *wei* is not bi-clausal. Thirdly, the distribution of fronting markers *zhi* and *shi* is not identical. Forth, *wei* and *zhi/shi* involves object fronting. For the two clausal negations, I examined their positions, based on their relative orders with pronoun fronting. The three negations are important diagnostics for various movements, such as object fronting and the *v*-to-Mod movement of real modals.

3.2 The Distinctive Distributions— Demonstratives and Personal Pronouns

A very interesting finding in Wang (2016) is that the fronting phenomenon discriminates between demonstrative pronouns and personal pronouns. She summaries this property in that demonstratives are able to stay at three positions, the External Topic Positions, Focus Position and the Pronoun Position, while personal pronouns only stay in the Pronoun Position.

Type of Pronoun	External topic position	Focus position	Pronoun position
Demonstrative	Yes	Yes	Yes
Personal	No	No	Yes

Table 12: Distribution of Pronoun Fronting (Wang, 2016, p. 98)

(76) a. External Topic Position

是 之 不　務　　　　　　　　　　Zuozhuan, (Wang, 2016, p. 90)
shi*i* zhi bu [VP wu　*ti*]
this ZHI not　　conduct
'(if you) do not conduct this'.

b. Focus Position

吾 是 之　　依　　　兮。　　　　Guoyu.Jinyu, (Wang, 2016, p. 91)
Wu shi*i* zhi [VP yi　*ti*] xi.
I　this ZHI　　rely.on Fin
'I rely on this.'

c. Pronoun Position

晉國　　之　命，　未　　是　　　有　　　　也。　Zuozhuan, (Wang, 2016,
Jinguo　zhi　ming, wei　　shi*i* [VP you　*ti*]　　ye.
Jin.State Gen order　not.yet this　　　have Decl
p. 96)

'Speaking of the orders of the State of Jin, there have not been any (as) this.'

It is a fact that demonstrative fronting lands above the sentential negator with a fronting marker *zhi*. However, there is only one position for fronted demonstratives above sentential negation– Internal Topic Position. The diagnostic element *du* fails to distinguish the 'internal topic' and 'high focus' positions, as argued in Section 4.3. Therefore I suggest that there is only one position for demonstratives fronting above Middle Negation, that is the Internal Topic Position.

On the other hand, only one instance of demonstrative pronoun *shi* fronting to the post-Middle Negation is found in the CCL and the ChiPaHC Corpora.

(77) 晉國　　之　命，　未　　是　　　有　　　　也。　　Zuozhuan, (Wang, 2016,
Jinguo　zhi　ming, wei　　shi*i* [VP you　*ti*]　　ye.
Jin.State Gen order　not.yet this　　　have Decl
p. 96)

'Speaking of the orders of the State of Jin, there have not been any (as) this.'

As there are no modals or overt focus markers, it is hard to identify the position of the demonstrative. However, the possibility of this position being a Low Focus Position is not excluded.

The demonstrative fronting below Middle Negation is extremely rare. Only 1 case of the demonstrative fronting to Pronoun Position is found in the whole CCL corpus, this is in contrast with 251 cases of personal pronouns among only 15 verbs, see 3.3.5. I suggest that the evidence for demonstratives in Pronoun Position is not strong enough. Thus there should be a clear distinction, instead of asymmetry in the distribution of demonstratives and personal pronouns.

Type of Pronoun	Internal Topic Position	Pronoun position
Demonstrative	Yes	No
Personal	No	Yes

Table 13: Distribution of Pronoun Fronting

This contrast can be explained by the different nature of demonstratives and personal pronouns. (Light, 2012, p. 171) discovers that demonstratives cross-linguistically bear con-

trastive topic features, which is not discovered in personal pronouns. Following this argument, I suggest that the Chinese demonstratives also have contrastivity, as it is in the Internal Topic position which is also occupied by the subjects in embedded clauses. As argued in 6.1, the activation of the external topic position leads to the change of the argument structure. As in 78 and 79, they are both equational constructions, but the object fronting in 78 does not have a resumptive pronoun, however, the fronted object DP in 79 leaves a resumptive pronoun. This means that the original subject moves to the topic position (C), and the embedded subject (Spec n) stays in the real subject position (Spec T). Compare the positions before genitive marker *zhi* in 78 and 80, it can be seen that the Internal Topic position might be the same position with the Internal Topic position. Therefore, I argue that the demonstrative *shi* in Internal Topic position bears topic-like properties.

(78) 夫　農，　民　之　所　苦　...　　　　　　Shangjunshu, 380-339BC
Fu　nong*i*,　min　zhi　suo　ku　*ti...*
DEM farming, citizen Gen SUO worry
'Farming is the thing that citizens are worried about.'

(79) 正　衙　　　法座，香木　為　之　　　　　1029-1093
[Zheng ya　　fazuo]*i*, xiangmu wei　zhi*i*
main　government throne,　xiangmu make 3SG
'The main government throne, xiangmu made it.'

(80) 吾　是　之　　依　　　兮。　　　Guoyu.Jinyu, (Wang, 2016, p. 91)
Wu shi*i* zhi　[VP yi　　*ti*] xi.
I　this Gen　　rely.on Fin

3.3 Pronoun Fronting

It is observed that pronoun objects in a negative clause tend to front before the main verb and follows the negator in Archaic Chinese, which can not be found in other historical periods. This phenomenon of pronouns fronting to the vP internal position is called 'Pronoun Fronting'. In this thesis, Pronoun Fronting exclusively refers to personal pronouns and reflexives, as I will argue in later section that the fronting of demonstratives is a different movement. Example below shows that the object *zhi* 'it' is fronted before the verb 'suspect' and follows the negation marker *bu*.

(81) 寡人　不　[之　疑　　] 矣
guaren bu　[zhi*i*　yi　　*ti*] yi
I　NEG 3.Obj suspect　Perf
'I do not suspect it any more.'

The most common negators in Archaic Chinese include 不 *bu*, 弗 *fu*, 未 *wei*, 莫 *mo*. Aldridge (2015) further distinguishes the negators as Middle negator *bu* 'not', quantifica-

tional negator *mo* 'none' and the aspectual negator *wei* 'not yet'. I argue that their difference is only on the morphological level, not on the syntactic level. On the syntactic level, they are all Low Negation and attaches to *v*P. Pronouns that tend to undergo this kind of fronting are personal pronouns such as 之 *zhi* 'he/she/it', 我/吾 *wo/wu* 'I', 汝/女 *ru* 'you' and reflexive pronoun 己 *ji* 'self'.

Pronominal *zhi* 之 fronting in negation contexts has been discussed in the Chinese linguistics literature (Feng, 1996; Meisterernst, 2010; Aldridge, 2010; Djamouri, 1991; Djamouri, 2000; Wang, 2016 among others). There are three approaches to this kind of fronting, the cliticisation approach (Feng, 1996), the Case-driven approach (Aldridge, 2015) and the Focus-driven approach (Djamouri, 1991, 2000; Wang, 2016). In this section, I will first review the previous approaches to pronoun fronting and their critics. I will analyse this kind of pronoun fronting from a new perspective— quantitative perspective, and argue that the three previous approaches all need further consideration.

3.3.1 The Cliticisation Approach

The cliticisation approach is first introduced by Feng (1996), who examines the pronoun fronting with a focus on the third person pronoun *zhi*. The main idea of this analysis is that fronted pronouns are clitics attaching to negation, and this movement is triggered by prosodical reasons. The background of this approach is an assumption that Proto-Chinese originally was an SOV language (right-headed language), before changing to SVO (left-headed language) in Archaic Chinese. This word order change leads to a potential prosody clash.

(82)   a. Proto-Chinese

               S
             /\
           O   V
           | |
           w   s

   b. Archaic Chinese

               S
             /\
           V   O
           | |
           w   s

In the OV structure of Proto-Chinese, verbs have strong syllables and object pronouns have weak syllables. Although the word order changed to VO in Archaic Chinese, the prosody did not totally change. Therefore it lead to prosody clash. To be more specific, in the context of

pronominal fronting, the strong syllable falls on the pronominal, but the pronominal should be naturally unstressed. Therefore it has to undergo cliticisation to a pre-verbal position to adjust the prosody.

Feng's analysis can be retrieved in the below structure. In order to avoiding a prosody clash, object pronouns always cliticise to Neg head in a negative *v*P.

(83)

```
                        vP
                   ┌────┴────┐
                NegP         vP
              ┌───┴───┐    ┌──┴──┐
            Neg  Pronounᵢ DP    v′
                              ┌──┴──┐
                              v     VP
                                  ┌──┴──┐
                                 DP    V'
                                     ┌──┴──┐
                                     V    tᵢ
```
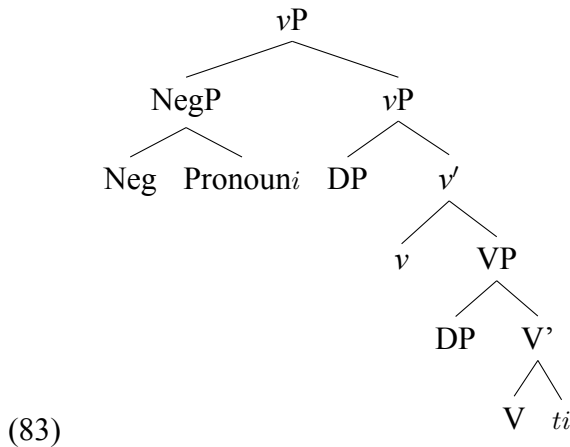
This approach correctly predicts that this kind of movement exclusively happens to pronouns, as the pronouns possess weak prosody. However, the movement might not be cliticisation. As Wang (2016) pointed out, pronoun fronting a focus constituent *wei* intervenes in between of negation and the fronted pronoun (as in 84), it thus blocks the cliticisation. In fact, adverbs also can intervene the cliticisation. As shown in 85 and 86, adverbs *shi* and *chang* also intervene between the negation and the pronoun. Therefore the pronoun fronting should be normal phrasal movement instead of cliticisation, as various kinds of constituents potentially intervene the cliticisation.

(84) 敢　不　唯　子　是　從　　？　　　　　Zuozhuan, (Wang, 2016, p. 107)
gan bu wei zi shiᵢ cong tᵢ?
Dare NEG WEI you SHI follow
'(Who) dare not to only follow you?'

(85) ...而　未　始　吾　非　　　　也　　　　Zhuangzi.Xuwugui
... er wei shi wuᵢ fei tᵢ ye.
... but not ever 3.Obj prove.wrong Nmlz
'. . . but (they) never prove me wrong.' (Feng, 1996, p. 331)

(86) 自　古　　及 今，未　嘗　之　有　　也　　Mozi.Jiezang.xia
Zi gu ji jin, wei chang zhiᵢ you tᵢ ye
from ancient till now NEG ever 3.Obj have Nmlz
'There have not ever been it, from ancient till now.'

The cliticisation approach correctly accounts for the situations that only pronouns front beLow Negation, not nouns or *wh*-words. However, it does not provide a full picture of

pronoun fronting. The first problem of this approach is that it fails to account for the correlation between negation and pronoun fronting. If the movement is prosodically driven, the pronoun is expected to front regardless of syntactic contexts. However, the fronting does not tend to happen in affirmative contexts, as shown in the below examples.

(87) 师　　也　者，[教　之]　以　事　而　喻　　诸　　德　　者也　Liji.Wenwangshizi
Shi　ye　zhe, [jiao zhi]　yi　shi er　yu　　zhu　de　　zhe ye
master Nmlz D,　teach 3.Obj use fact CONJ inform 3.Obj virtue D　Nmlz
'Master is the person who teach people in the means of occurring things and make them understand what is virtuous.'

(88) 知　子　之　好　之，　杂佩　　　以 [报　之]。　　　　　　Anelects
Zhi　zi　zhi hao zhi,　zapei　　yi [bao zhi].
know you Gen like 3.Obj, jade.pendant use give 3.Obj
'(I) know that you like her, give your jade pendant to her as a present.'

Even in the context of negation, the cliticisation approach cannot explain why some pronouns do not front. The examples in below are the minimal pairs of identical pronouns, including third person pronoun *zhi*, first person pronoun *wo* and reflexive *ji*. Again, if the movement is prosodically driven, these pronouns are expected to have identical behaviours, as they bear identical prosodic weight. However, this is not the case. Identical pronouns still have fronted (as in a) and non-fronted (as in b) cases.

(89) a. 未　　之　有　　也　　　　　　　　　　　Zuozhuan
wei　　zhiti　you　ti ye.
not.yet 3.Obj have　Nmlz
'There has not been anyone who is arrogant but does not perish.'

b. 吾 不　知　之　矣　　　　　　　　　　　Analects
Wu bu　zhi　zhi　yi
I　NEG know 3.Obj Perf
'I don't know it.'

(90) a. 谓 他人　　父，　亦　莫　我　顾　　　　Shijing.Guofeng
wei taren　　fu,　yi　mo　wo$i$ gu　ti
call other.people father, CONJ NEG I　look
'(I) call a stranger father, but he does not look at me.'

b. 制　不 在　我　　　　　　Guoyu, (Aldridge, 2015, p. 5)
Zhi　bu zai　wo
control not be.in 1.Obj
'The control is not within me.'

(91) a. 莫　己　知　也　　　　　　　　　　Analects 14
mo$i$　ji$j$ zhi　ji ye
NEG self know SFP
'(No one) understands me.'

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b.

士者	诎	乎	不	知	己...	Yanzichunqiu
Shizhe*i*	qu	hu	[bu	zhi	ji*i*]*j*...	
gentleman	crook	in.front.of	NEG	understand	self...	

'Gentlemen crook (feel uncomfortable) in front of people who does not understand them...'

To sum, the cliticisation approach unifies pronoun fronting under a prosodic property to differentiate the pronouns from other DPs. As a weak form in prosody, pronouns are forced to front upwards and attach to the negation as a clitic. However, categorising pronoun fronting as a cliticisation movement seems invalid, because various constituents might block this movement. Moreover, this approach cannot provide a full picture of pronoun fronting, as it could not account for the non-fronted pronouns in the same context.

3.3.2 The Case-driven approach

The Case-driven approach (Aldridge, 2015) proposes that Pronoun Fronting is triggered by Case requirement. It suggests that the negation selects a nP complement (as small as VP), as the complement of the negation in Pronoun Fronting shows nominal phrasal properties. One of the nominal property of the nP complement is the deficiency in accusative Case assigning activities. Therefore pronouns undergo fronting to the edge of nP, in order to get an accusative Case from the negation. The movement also applies to nominals, as Case requirement does not distinguish the nature of DPs. Aldridge (2015) argues that the pronouns in LAC display morphological Case features which nominals do not have, this distinguishes the pronouns and the nominals fronting behaviours. Nominals front to negation to get their Case, but still spell out in the base position. On the contrary, the pronouns are spelled out in their landing position, as the case morphology is introduced during vocabulary insertion.

(92)

```
          NegP[ACC]
         /        \
       Neg         nP
                 /    \
           DP[ACC]     n′
                      /  \
              <DPsbj>     n′
                         /  \
                        n    NP
                            /  \
                           N   <DP>[Case:]
```
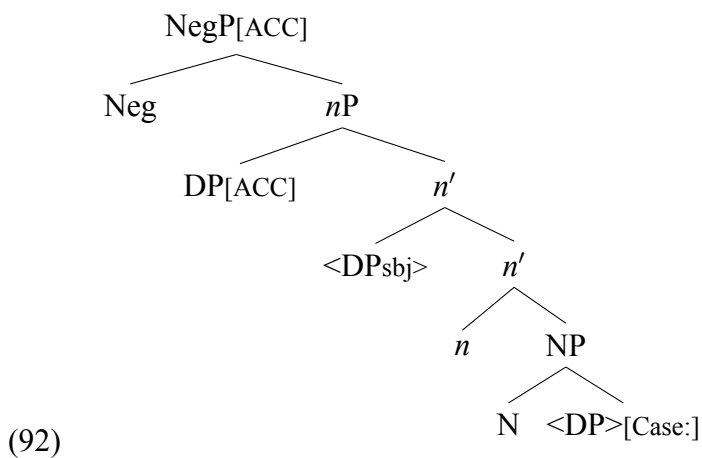
The analysis is retrieved in the above structure. NegP selects a nP (nominalised VP). As the nP is unable to assign accusative Case, the pronoun has to move upward to the edge of nP to receive accusative Case from Neg.

The Case-driven approach makes three important predictions. First, as the head of NegP is responsible to assign accusative Case, pronoun fronting should always occur in negation contexts and beLow Negation. Second, the fronted pronouns are assigned structural Accusative Case, this should not influence the arguments with Genitive Case and Dative Case. Therefore they do not undergo Pronoun Fronting. Third, when more structures than a VP are in the complement of Neg, i.e. v layer, the pronoun fronting is obviated. This is because the pronoun is able to get the accusative Case from the v head at its base position. I argue that only the first prediction accounts for the characteristics of Pronoun Fronting, the rest two both failed in front of Pronoun Fronting data.

Wang (2016) has argued against the first prediction by providing counterexamples in situations of demonstratives moving above negation (as in 93a) and without negation (as in 93b and 93c). However, the three cases she provides are not Pronoun Fronting. As specified earlier, Pronoun Fronting is exclusive to personal pronouns and reflexives, as demonstratives usually have another kind of movement, i.e. movement to Internal Topic Position. The demonstrative *si* in example 93a and the demonstrative *shi* in 93c are this kind. The movement of demonstrative in 93b is due to the raising verb *ke*, which belongs to a different movement mechanism.

(93) a. 吾 斯 之 未 能 信   Analects
      Wu si$i$ zhi wei neng [VP xin ti]
      I   this ZHI not.yet can   be.confident.in
      'I have not been able to be confident in this.'

    b. 是 可 忍 也   Analects
      shi$i$ ke [VP ren ti] ye
      this can   endure   Nmlz
      '(he) can endure this'

    c. 若 狄 公子, 吾 是 之 依 兮   Guoyu
      [Ruo di gongzi]i, wu shi$i$ zhi [VP yi ti] xi.
      this Di master, I   this ZHI   rely.on Decl
      'This Master Di, on this I rely.'

    (Wang, 2016, p. 113-114)

In my opinion, all the cases of Pronoun Fronting I encounter in both ChiPaHC and CCL corpora show the correlation to negation contexts, as predicted in the case-driven approach. There is indeed one exception that Pronoun Fronting happens outside of the negation context. However, I argue that it is not a counterexample of the correlation, because the fronting is exactly triggered by Pronoun Fronting in negation context. As in 94, the reflexive *ji* fronts not only in a negative clause but also in an affirmative clause. I suggest that 94 is an example of parallel structures, because the two embedded clauses of the matrix verb 'hear' have similar surface structures and each constituent has either opposite or

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identical semantic meanings. As argued in 5.1.1, parallel structure itself does not bear any traditional linguistic features. However, it has a metalinguistic rhetorical force, which requires the parallel components to form their syntactic structure by reduplicating that of the initial component, including syntactic movements. Following the reasoning, *ji* fronting in the affirmative clause is actually caused by reduplicating the negative clause. The parallel structure reduplicating can be further proved in 95, in which when the negative clause does not trigger *ji* fronting, the affirmative clause does not either. Therefore, this "exception" does not invalidate the negation and fronting correlation.

(94) 吾 闻 君子 屈 乎 不 己 知 者， 而 伸
Wu wen junzi*i* qu hu [bu ji*i* zhi zhe]*j*, er shen
I hear gentleman crook in.front.of NEG self understand Nmlz, CONJ stretch
乎 己 知 者。 Lvshichunqiu
hu [ji*i* zhi zhe]*k*.
in.front.of self understand Nmlz
'I hear that gentlemen crook (feel uncomfortable) in front of people who does not understand them, and stretch (feel comfortable) in front of people who understands them.'

(95) 士者 诎 乎 不 知 己，而 申 乎 知
Shizhe*i* qu hu [bu zhi ji*i*]*j*,er shen hu [zhi
gentleman crook in.front.of NEG understand self, CONJ stretch in.front.of understand
己。 Yanzichunqiu
ji*i*]*j*.
self
'Gentlemen crook (feel uncomfortable) in front of people who does not understand them, and stretch (feel comfortable) in front of people who understands them.'

The second prediction narrows down the Case assigning ability of NegP to accusative case. Aldridge (2015) provides evidence to show that pronouns do not front when they are assigned Dative Case. In 96, the verb is locative 在 *zai* 'at', the object DP 我 *wo* 'I' is assigned a Dative Case. in 97, 焉 *yan* 'than him' is a dative pronoun, which does not undergo fronting.

(96) 制 不 在 我 Guoyu, (Aldridge, 2015, p. 5)
Zhi bu zai wo
control not be.in 1.Obj
'The control is not within me.'

(97) 天下 莫 強 焉 Mengzi, (Aldridge, 2015, p. 26)
Tianxia mo qiang yan
world none strong 3.Dat
'No one in this world is stronger than him.'

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However, as argued by Wang (2016), some dative pronouns do undergo fronting. Evidence shows that the pronoun valued with dative Case (as in 98) also undergo fronting. This contradicts the second prediction that only pronouns in need of accusative case undergo fronting.

(98) 彼　若不吾　假　　道, 必不　吾　受　　也; 若
bi　ruo bu wu$i$ [VP jia　ti　dao], bi bu　wu$j$ [VP shou　tj] ye; ruo
3.Subj if　not us　lend way must not　us accept Decl if　accept us Conj lend
受　我　而　　假我道 ...
shou wo　er [VP jia wo dao] ⋯
us　way
'If he does not give way (for) us, he must not accept us; if (he) accepts us and give way (for) us ⋯' (Wang, 2016, p. 120)

The example 98 is a double object construction, in which the indirect object pronoun *wo* is assigned a Dative Case but still fronts to negation. Wang's argument of Dative pronoun fronting poses a serious challenge to the case-driven approach, because if the pronoun already receives a Case and still undergoes fronting, then the fronting should not be Case driven.

Recall the third prediction, Aldridge (2015) assumes that the complement of negation in Pronoun Fronting is a nominalised VP. Therefore, If there is evidence of a vP layer, the pronoun fronting should be obviated, as the v head will assign accusative Case to the object at its base position. She has two evidence for this. The first evidence is that *wh*-words movement (Focus movement) in LAC requires at least a structure of vP, but Pronoun fronting is blocked when there is a *wh*-word. The second reason comes from the occurrence of the perfective aspect marker 矣 *yi* (selecting vP) blocking Pronoun Fronting.

(99) 君　何　不　舉　　之?　　　　　　　　　Hanfeizi, (Aldridge, 2015, p. 16)
Jun he　bu ju　　zhi?
you why not promote 3.Obj
'Why don'␣t you promote him?'

(100) 吾 弗　为 之　矣。　　　　　　　　　　　　　　　　　Liji
Wu fu　wei zhi　yi
I　NEG do　3.Obj Perf
'I don't do it.'

However, I argue that Pronoun Fronting actually happens in vP structure, not in a small VP. For instance, in **??**, 98, 101 and 102, the complements of the negation all contain vP structures, but the pronouns still front to the pronoun position. A PP above VP in **??** indicates a vP layer, but the complement of the preposition still fronts beLow Negation. The double object construction in 98 also has a full vP structure, but the indirect object pronoun still fronts to the edge of the vP. Serial verb construction composed of a root modal and a

verb in 101 does not prevent the pronoun from fronting. The adverb in 102 also indicates a vP layer, but the pronoun object still fronts. This also challenges the structure and the motivation of Pronoun Fronting under the case-drive approach. As when the case assigner is always available to the object pronouns, they do not need to move for a Case.

(101) 则　　虽　有　疾　风，亦　弗　之　能　惮　　矣。　Zhouli
Ze　　sui　you　ji　feng, yi　fu　zhi*i*　neng dan　*ti* yi
Therefore though have strong wind, also NEG 3.Obj can　threaten　Perf
'Therefore although there is a strong wind, it still cannot threaten it.'

(102) 自　古　　及 今，未　尝　之　有　　也　　　　Mozi.Jiezang.xia
Zi　gu　　ji jin, wei　chang zhi*i*　you　*ti* ye
from ancient till now NEG ever　3.Obj have　Nmlz
'There have not ever been it, from ancient till now.'

3.3.3 The Focus-Driven approach

Another approach to pronoun fronting in LAC, the focus approach (Djamouri, 1991, 2000; Wang, 2016), suggests that pronoun fronting is triggered by focus movement. Djamouri (2000) proposed that the Middle negator *bu* was a negative copula in pre-Archaic Chinese, its function parallels to the affirmative copula 唯 *wei*, which focalises the following constituent. In the Oracle bone scripts of the early Archaic period (14-11BC), one example of this parallelism is claimed.

(103) a. 唯 父　乙咎　　婦　好　　Heji 6032 recto, from Djamouri 2000
Wei fu　yi jiu　　fu　hao
only father Yi overwhelm Lady Hao
It is (the ancestral) father Yi who overwhelms Lady Hao.'

b. 不 父　乙咎　　婦　好　　Heji 6032 recto, from Djamouri 2000
Bu fu　yi jiu　　fu　hao.
not father Yi overwhelm Lady Hao
'It is not (the ancestral) father Yi who overwhelms Lady Hao.'

(Aldridge, 2015, p. 7)

Djamouri (2000) suggests that 唯 *wei* is an affirmative copula and it focalises the constituent following it in 104. Similarly, as a parallel structure, the negative copula *bu* should also focalise the following DP. In his suggestion, pronoun fronting originates from constructions such as this. However, despite a lack of direct evidence for the origination of pronoun fronting, some Oracle bone script studies suggest that the above pair of examples are an exception. They are a question-and-answer pair, of which the answer is missing the focus *wei*. More pairs of this kind suggest that there should be *wei* after negator *bu* in this construction. Moreover, this construction is not the same with Pronoun Fronting. I will argue from a syntactic perspective in 3.1 that 唯 *wei* is not a copula, but a focus sensitive particle

'only' in LAC. From my observation, 唯 *wei* focalises various kinds of constituents, such as Subject, Internal Topic, High Focus position or *v*P predicate, but only not the pronouns in Pronoun Fronting. There is even one case of Pronoun Fronting occurring with 唯 *wei* in ChiPaHC or CCL corpus. Therefore, the focus approach in line with Djamouri (2000) is not valid for Pronoun Fronting.

(104)   a.   不   唯   祖丁 害   王?   / 唯   祖丁   害   王?   Heji 1901
            bu   wei Zuding hai   Wang? / Wei Zuding hai   Wang?
            NEG only Zuding harm King? / only Zuding harm Wang?
            'Is it not Zuding who does harm to the King?/ Is it Zuding who does harm to
            the King?'

        b.   王   梦,   唯   祸?   / 王   梦,   不   唯   祸?   Heji 272
            Wang meng, wei huo?   / Wang meng, bu   wei huo?
            King dream, only disaster? / King dream, NEG only disaster?
            'King had a dream, is it a disaster that going to come? King had a dream, is it
            not a disaster that going to come?'

        c.   有   疾齿,   唯   蛊?   / 不   唯   蛊?   Heji 13658
            You ji chi, wei gu?   / bu   wei gu?
            Have ill tooth, only insanity? / NEG only insanity?
            '(King) has ill teeth, is it a cursed insanity? Is it not a cursed insanity?'

Wang (2016) also supports the focus approach to Pronoun fronting, but different from Djamouri (2000), her work is based on distribution asymmetry of two kinds of pronouns, namely, demonstratives and personal pronouns. Three landing sites are distinguished for demonstrative and personal pronoun fronting: external topic, focus and pronoun position (the position for pronoun fronting). Demonstrative objects are able to move to all three positions in object fronting constructions. On the other hand, personal pronouns can only move to Pronoun position beLow Negation. The movements of demonstratives and personal pronouns are shown in the examples below. Example 105a shows that the demonstrative pronoun *shi* along with a "fronting marker" *zhi* fronts to external topic position, which is outside of TP. The same demonstrative *shi* also moves along with the fronting marker *zhi* to the TP internal focus position below the subject *wu*. In 105c, the demonstrative *shi* fronts to the pronoun position beLow Negation. At the same time, the personal pronoun *wo* fronts to the pronoun position beLow Negation in 106. The distribution asymmetry of demonstratives and personal pronouns is summarised in table 14.

(105)   a.   是 之 不   務   Zuozhuan, (Wang, 2016, p. 90)
            shi*i* zhi bu [VP   wu *ti*]
            this ZHI not conduct
            '(if you) do not conduct this'.

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b. 吾 是 之　　依 兮。　　　　　　Guoyu.Jinyu, (Wang, 2016, p. 91)
Wu shi*i* zhi [VP　yi　*ti*] xi.
I　　this ZHI rely.on Fin
'I rely on this.'

c. 晉國　　之 命，未　　是　　有　　也。　　Zuozhuan, (Wang, 2016,
Jinguo　zhi　ming, wei　　shi*i* [VP　you　*ti*] ye.
Jin.State Gen order　not.yet this have Decl　　　　　　　p. 96)
'Speaking of the orders of the State of Jin, there have not been any (as) this.'

(106)　谓 他人　　　父，亦　　莫　　我　顾　　　　　　Shijing.Guofeng
wei taren　　　fu,　　yi　　mo　wo*i* gu　*ti*
call other.people father, CONJ NEG I　　look
'(I) call a stranger father, but he does not look at me.'

Type of Pronoun	External topic position	Focus position	Pronoun position
Demonstrative	Yes	Yes	Yes
Personal	No	No	Yes

Table 14: Distribution of Pronoun Fronting (Wang, 2016, p. 98)

Wang (2016) argues that the cliticisation approach and Case-driven approach are unable to account for this distribution, as both prosody and Case mechanisms do not distinguish the fronting behaviours of the two kinds of pronouns. Information structure, on the other hand, is able to explain the movements of the two kinds of pronouns. To be more specific, demonstratives fronting to the positions above negation, External topic or Focus position, are driven by topic or focus features, whilst pronouns fronting to the Pronoun position is driven by focus features. However, the previous two approaches only focus on explaining Pronoun fronting, which is specifically the fronting to pre-verbal and post-negation position (example 105c) and (106). This is also the definition of pronoun fronting in this thesis, as stated earlier in the introduction. But it seems that the information structure approach intend to explain all kinds of pronoun fronting, including the fronting outside of TP, internal TP above negation and Pronoun Fronting. Therefore, it is not fair to compare them when they are on different levels. When we put them on the same level and look specifically at Pronoun Fronting distribution, however, the pronoun position allows both demonstratives (105c) and personal pronouns (106). Therefore, it does not really distinguish the nature of demonstratives and personal pronouns on this level, which contradicts what it has claimed.

Another problem of this approach is that it does not have a mechanism to distinguish nouns and pronouns, and thus fails to explain why nouns do not have similar fronting behaviour as the pronouns. Wang (2016) has argued for a Low Focus Position to accommo-

date focalised nominal object DPs, and this position is the same with Pronoun Position. Unlike Pronoun fronting, nominal DP fronting to Low Focus Position is independent from the negation contexts. The independence is shown in the examples below. In 107, the nominal DP *ming* 'order' moves from the object position to a post-negation position, however the nominal DP *shiyan* 'promise' in 108 stays in situ, despite the same negation context. This movement also happens in affirmative contexts, as shown in 109, 110 and 111, which is impossible for pronoun fronting. If Pronoun fronting and nominal DP fronting are both triggered by focalisation and land in the same position, why they show different behaviours in negation context restriction? Wang (2016) does not provide an explanation.

(107) 敢　不　唯　命　是　聽　？   Zuozhuan
       gan bu   wei ming shi$_i$ ting t_i?
       Dare NEG only order SHI hear
       '(Who) dare not to only follow the order?'

(108) 尔　不　从　　誓言   Shangshu
       Er   bu   cong shiyan
       you NEG follow promise
       'You do not follow the promise.'

(109) 君人　　者，将　禍　　是　　務　　去   Zuozhuan, (Wang,
       Junren zhe, jiang huo$_i$ shi [$_vP$ wu   qu t_i]
       monarch ZHE Fut misfortune SHI endeavor dispel
       2016, p. 40)

       'monarchs, will endeavor to dispel misfortune.'

(110) 余　唯　利　　是　視　。   Zuozhuan
       Yu wei li$_i$ shi shi t_i.
       I   only benefit SHI see
       'I only see benefit.'

(111) 今　　周　　与　四　国　　　服事　　君王，　将　唯　命　是　从
       Jin zhou yu si guo   fushi   junwang, jiang wei ming$_i$ shi cong t_i
       now Zhou and four country work.for king,   will only order SHI follow
       Zuozhuan

       'Now Zhou and other four countries work for the king, and they will only follow the king's order.'

What is more, Wang's approach does not explain the correlation between negation and pronoun fronting, which is one of the most prominent characteristics of pronoun fronting. If the Pronoun Fronting is triggered by focus features and the negation has nothing to do with licensing those features, pronoun fronting is expected to happen in affirmative contexts too. As mentioned earlier, this contradicts the fact that all the pronoun fronting cases in ChiPaHC and CCL corpora are related to negation contexts. On the other hand, if it is the negation

that license focus features, the fronting to pronoun position should be exclusive to negation contexts. However, again, as just shown in the above examples, the nominal DP fronting is independent from negation.

3.3.4 Pronoun Fronting— The Descriptive Facts

Feng (1996) distinguishes four types of pronoun fronting in LAC: [Neg PN V], [Neg Pro Adv V], [Fu V] and [Neg ADV PN V].

(112) [Neg PN V]

無	我	怨		Shu.Duoshi
Wu	wo*i*	yuan	*ti*	
NEG	1.Obj	complain		

'Don't complain about me.'

(113) [Neg PN Adv V]

a.
莫	之	能	禦	也。		Mengzi
Mo	zhi*i*	neng	yu	*ti*	ye.	
not	3.Obj	can	resist		prt	

'(You) cannot resist it.'

b.
福	輕	乎	羽，	莫	之	知	載		Zhuangzi.Renjianshi
Fu	qing	hu	yu,	mo	zhi*i*	zhi	zai	*ti.*	
luck	light	than	feather	NEG	3.Obj	know	carry		

'Even though good fortune is lighter than a feather, they don't know how to take it,'

(114) [Fu V]

雖		有	佳餚，	弗	食	不	知	其味	也	Liji.Xueji
Sui		you	jiayao,	[fu*i*	shi *ti*]	bu	zhi	qi wei	ye	
although		have	delicacy,	NEG-it	eat	NEG	know	its taste	SFP	

'Even though there are delicacies, you will not know their tastes if you don't eat them.'

(115) [Neg adv PN V]

自	古		及	今，	未	嘗	之	有		也	Mozi.Jiezang.xia
Zi	gu		ji	jin,	wei	chang	zhi*i*	you	*ti*	ye	
from	ancient	till now			NEG	ever	3.Obj	have		SFP	

'There have not ever been it, from ancient till now.' (Feng, 1996, p. 330-331)

The first type is the most basic type, as shown in 112, the pronoun *wo* 'I' moves from the post-verbal position to the position between the negation *wu* and the verb *yuan* 'complain about'. The second type in 113 shows that the pronoun can move above 'adverbs'. However, as noticed by Aldridge (2015) and Wang (2016), the adverbs in this type are actually verbs.

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neng 'can' in 113a is a root modal verb[4], and *zhi* 'know, understand' in 113b is a verb of perception, which takes a VP complement *zai zhi* 'carry it'. The two verbs should be treated as a serial-verb construction in a vP, instead of two clauses, because the pronoun fronting does not happen in bi-clausal constructions[5]. The pronoun *zhi* fronts across the two verbs and stop at the post-negation position. Therefore, the second type [Neg Pro Adv V] demonstrates that pronoun fronting involves a vP structure, because it moves across root modal verbs and serial verb constructions.

The third type of fronting shows a so-called fusion *fu*, which is claimed to be a combination of the negator *bu* and the third person pronoun *zhi*. The main evidence of the fusion hypothesis comes from the reconstruction of Old Chinese phonology (Norman, 1988, p. 85).

(116) a. *fu* Mandarin Chinese [*pjuət*] Old Chinese *[*pjət*][6]

b. *bu* Mandarin Chinese [*pjəu*] Old Chinese *[*pjəg*]

c. *zhi* Mandarin Chinese [*tsi*] Old Chinese *[*tjəg*]

The fusion happens to two syllables, "the second of which is usually an unstressed pronominal or demonstrative" (Norman, 1988). If this hypothesis works, the pronoun should be a clitic-like constituent, as it is unstressed and can be syncretised. However, I argue that the fusion hypothesis of *fu* is not valid from a syntactic perspective. The distributions of *fu* and *zhi* found in CCL corpus show that 1) *fu* is purely a negator, not a combination of negator and pronoun, as *fu* appears as a negator when a fusion is unable to happen, as the pronoun *zhi* does not front to *fu* (as in 117); 2) *fu* is able to co-occur with the fronted pronoun *zhi*, which suggests that a fusion actually did not happen (as in 118). If *fu* is a fusion of *bu* and *zhi*, the co-occurrence of *fu* and *zhi* is unexpected.

(117) 吾 弗 为 之 矣   Zhongyong
       Wu fu   wei zhi   yi
       I   NEG do   3.Obj Perf
       'I will not do it anymore.'

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[4]I argue for a v-to-Mod movement for modals. Therefore, I adopt the term 'root modal' from Wang (2016) to refer the ones in vP, and I use 'modals' to refer the ones in ModP. The modals in pronoun fronting are all 'root modals'.

[5] Verb 知 *zhi* has bi-clausal constructions. However, pronoun fronting does not happen in this construction, as exemplified in the below example.

(1) 知   [子 之 好 之]，杂佩   以 报 之。   Anelects
     Zhi   [zi zhi hao zhi], zapei   yi bao zhi.
     know you Gen like 3.Obj, jade.pendant use give 3.Obj
     '(I) know that you like her, give your jade pendant to her as a present.'

[6]The asterisk marks reconstructed phonological alphabets.

(118) 出　言　　不　以　礼,　　弗　之　信　　矣　　　　　　　Liji
Chu yan　 bu　yi　li,　　fu　zhi*i*　xin　*ti ti* yi
speak utterance NEG use courtesy, NEG 3.Obj believe　 Perf
'(If someone) speak without courtesy, (people) will not believe him.'

The fourth type is the type which involves real adverbs. Feng (1996) shows that the pronoun *zhi* fronts to a position lower than the aspectual adverb *chang* 'ever, once'. But in fact, the fronted pronouns are able to stay either above or below some particular adverbs, as shown in the below examples. I list the most common adverbs occurring in pronoun fronting, such as aspectual adverbs *shi* 'ever', *ceng* 'once, have already' and adverb of possibility *huo* 'maybe'. The fronted pronoun *wu* 'me' in 119 follow the aspectual adverbs *shi* 'ever'. The pronoun *zhi* precedes the adverb of possibility *huo* in 120. For the same adverb *chang* 'once', the fronted pronoun *zhi* is able to either stay above it (as in 121) or below it (as in 122).

(119) ...而　未　始　吾　非　　　　　也　　　　　　Zhuangzi.Xuwugui
... er　wei shi　wu*i*　fei　　 *ti* ye.
... but not　ever 3.Obj prove.wrong　 Nmlz
'. . . but (they) never prove me wrong.' (Feng, 1996, p. 331)

(120) 自　古　　以来,　未　之　或　　失　也。　　　　Zuozhuan
Zi　gu　　yilai, wei　zhi*i* huo　　shi *ti* ye
from ancient since, NEG 3.Obj perhaps lose　 Nmlz
'Since ancient times, (we) perhaps never lost it.'

(121) 自　古　　及　今,　未　嘗　之　有　　也　　　　Mozi.Jiezang.xia
Zi　gu　　ji　jin, wei　chang zhi*i*　you *ti* ye
from ancient till now NEG ever　 3.Obj have　 Nmlz
'There have not ever been it, from ancient till now.'

(122) 孔子　　谢　　之　矣,　而　其　　未　之　嘗　言 Zhuangzi
Kongzi　xie　　zhi yi,　er　qi　　　wei　zhi*i*　chang yan *ti*
Confucius diminish 3.Obj Perf, CONJ 3.Sbj.Gen NEG 3.Obj once　say
'Confucius's vigour is reducing, therefore you don't have to say those words.'

Summarising the above descriptive facts, the structure of pronoun fronting is illustrated as below:

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```
                              NegP
                    ┌───────────┴───────────┐
                   Neg                       vP
                 chang/shi        ┌───────────┴───────────┐
                               Pronoun                     v′
                              chang/huo          ┌──────────┴──────────┐
                              Root Modal/Verb of Perception            VP
                                                              ┌─────────┴─────────┐
                                                          <DPsbj>               V'
                                                                        ┌────────┴────────┐
                                                                        V           <Pronoun>
```
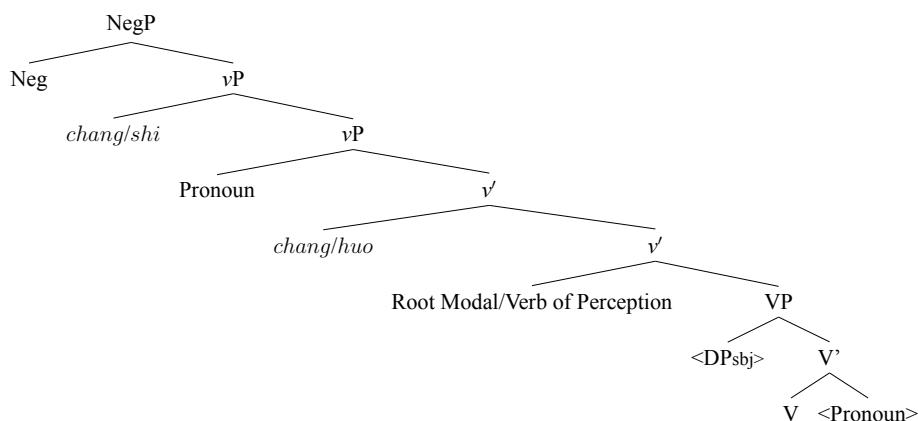
(123)

The structure of pronoun fronting is a vP, as the fronted pronouns are able to move across a root modal and a verb. The existence of adverbs also suggests a vP layer, where the pronoun either fronts to the edge of vP above the adverbs or below them. More evidence of the vP layer comes from the existence of PP (124a) and double object construction (124b) in the pronoun fronting domain, as suggested by Wang (2016).

(124) a. 八 世　　　　之　後，莫　　之　　與　　　京
　　　　　　Ba shi　　　zhi hou,　mo [PP zhi_i yu t_i] jing
　　　　　　8　generation Gen after　none 3.Dat than great
　　　　　　'After eight generations, there will be no one greater than him.'

　　　b. 彼　　若 不 吾　　假　　　道, 必不　　吾　　受　　　也; 若
　　　　　　bi　　ruo bu wu_i [vP jia t_i　dao], bi bu　　wu_j [vP shou t_j] ye; ruo
　　　　　　3.Subj if　not us lend way must not　us accept Decl if　accept us Conj lend
　　　　　　受　　我　而　　假我道　...
　　　　　　shou wo　er [vP jia wo dao] ⋯
　　　　　　us　　way
　　　　　　'If he does not give way (for) us, he must not accept us; if (he) accepts us and give way (for) us ⋯'

　　　(Wang, 2016, p. 120)

The vP structure contradicts the Case-driven approach in that it actually has enough structures to assign case to the internal argument (the object).

I further examine the possible connections of pronoun fronting with aspect, nominalisation and binding conditions, as suggested by Aldridge (2015). However, I argue that these connections are not valid, according to the relevant data in CCL corpus.

Aldridge (2015) claims that object pronouns stays in a non-fronted position with a perfective aspect marker *yi*, as in the example below, the third person pronoun *zhi* does not front in the presence of *yi*.

(125) 吾　不　知　之　矣　　　　　　　　　　　　　　　　(Analects)
　　　　Wu bu　zhi　zhi　yi
　　　　I　NEG know 3.Obj Perf

'I don't know it.'

Yi in LAC is equivalent to Mandarin 'Change of State' *le* (CoS in the example) to some extent, indicating that a new condition starts from the moment the utterance is spoken.

(126) xia yu le.
drop rain CoS
'it rains.'

(127) Dui zhege shiqing wo jiu bu   zhidao le.
As-to this   thing   I   adv NEG know CoS
'As to this thing, I don't know.'

(128) Wo bu   zai huaiyi ta le.
I   NEG again suspect him CoS
'I will no longer suspect him anymore.'

In the light of the cross-linguistic relation between aspect and the availability of structural objective Case, Aldridge (2015) claims that the reason why pronouns do not front in the context of negation and aspectual *yi* is because the perfective aspect marker *yi* makes *v*P available. Therefore the pronoun can receive accusative case within the *v*P, and lost the motivation for fronting. However, I argue that the relation between pronoun fronting and aspect *yi* does not exist, as a mixed condition of pronoun fronting performance is shown with the occurrence of *yi*.

(129) a. 寡人 不 之 疑 矣
guaren bu [zhi*i* yi   *ti*] yi
I   NEG 3.Obj suspect   Perf
'I do not suspect it any more.'

b. 吾 不 知 之 矣   Analects
Wu bu zhi zhi yi
I   NEG know 3.Obj Perf
'I don't know it.'

(130) a. 则   虽 有 疾 风，亦 弗 之 能 惮   矣。
Ze   sui you ji feng, yi fu zhi*i* neng dan   *ti* yi
Therefore though have strong wind, also NEG 3.Obj can threaten   Perf
Zhouli

'Therefore although there is a strong wind, it still cannot threaten it.'

b. 吾 弗 为 之 矣。   Liji
Wu fu   wei zhi yi
I   NEG do 3.Obj Perf
'I don't do it.'

(131) a. 福 轻 乎 羽， 莫 之 知 载   Zhuangzi.Renjianshi
Fu qing hu yu,   mo zhi*i* zhi zai *ti.*
luck light than feather NEG 3.Obj know carry

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'Even though good fortune is lighter than a feather, they don't know how to take it,'

b. 谓 他人　　 父，亦 莫 我 顾　　　　　 Shijing.Guofeng
wei taren　　 fu, yi　 mo　 wo*i* gu　 *ti*
call other.people father, CONJ NEG I　 look
'(I) call a stranger father, but he does not look at me.'

As shown in the minimal pairs, the pronoun fronts to the pre-verbal position in the presence of *yi*, following the negator *bu* in 129a, but does not front in 129b under the same condition. Similarly, the pronoun's behaviour is changeable with the negator *fu* in the presence of *yi*. On the other hand, pronouns still undergo fronting even without the presence of *yi*, as shown in 131. Therefore, the non-occurrence of pronoun fronting can not be explained by the presence of *yi*. This means that the aspect and fronting correlation assumed by Aldridge (2015) might not work.

For the connection between nominalisation and pronoun fronting, I argue that there is no evidence to show that they are related. Aldridge (2015) claims that Pronoun Fronting usually happens in the presence of the nominaliser or copula 也 *ye*. 也 *ye* is a nominaliser, because it usually occurs with nominal predicates. For example, 132 is an 'equational construction'. *Ye* forms a nominal predicate with the DP 'ruthless appliance'. The complement of the determiner *zhe* is usually nominalised, and the occurrence in the complement supports *ye*'s status of a nominaliser, as in 133. The perception verb 知 *zhi* 'know' selects nominal embedded clause as its complement. *Ye* in 134 is in the nominalised clause.

(132)　 兵　　　 者，凶　　 器　　 也　　　　　　　　　 Hanfeizi.Cunhan
　　　 Bing　 zhe, xiong　 qi　　 ye
　　　 weapon ZHE, ruthless appliance Nmlz
　　　 'Weapon is ruthless appliances.'

(133)　 孝 弟　　　 也 者，其　 為 仁　　　 之 本　 與!　 Analects 1,
　　　 Xiao ti　　　 ye zhe, qi　 wei ren　　　 zhi ben　 yu!
　　　 pious respectful Nmlz Det 3.Gen be benevolence 3.Gen origin Excl
　　　 (Aldridge, 2015, p. 30)
　　　 'Filial piety and brotherly respect, these are the foundation of benevolence!'

(134)　 今 日 不 知　 其　 亡　 也。　　　 Mengzi 2, (Aldridge, 2015, p. 31)
　　　 Jin ri bu zhi　 qi　　 wang ye.
　　　 now day not know 3.Gen gone　 Nmlz
　　　 'Now, you do not know that they have gone.'

There is no correlation between Pronoun Fronting and the nominalizer *ye*, because they occur independently from each other. Pronoun fronting actually can happen without *ye* and sentence with *ye* might not have pronoun fronting.

(135)　谓　他人　　父，亦　莫　我　顾　　　　　Shijing.Guofeng
　　　　wei taren　　fu,　yi　mo　wo*i*　gu　*ti*
　　　　call other.people father, CONJ NEG 1.Obj look
　　　　'(I) call a stranger father, but he does not look at me.'

(136)　夫子　惽，　　莫　之　止 ...　　　　　Chunqiu.Zuozhuan
　　　　Fuzi　bi,　　mo　zhi*i*　zhi　*ti*
　　　　father obstinate, NEG 3.Obj stop
　　　　'My father is obstinate, (if no one) stop him...'

(137)　夫唯　无　知，　　是以　不　我　知　　　Laozi.Daodejing
　　　　Fuwei　wu　zhi,　　shiyi　bu　wo*i*　zhi　　　*ti*
　　　　FOCUS NEG understand, therefore NEG 1.Obj understand
　　　　'It is because (they) don't understand (these), that they don't understand me.'

The above examples all have pronoun fronting, but *ye* does not occur. Therefore, *ye* is not a necessary condition for pronoun fronting. Wang (2016) shows that sentence with presence of *ye* does not necessarily involve pronoun fronting.

(138)　a.　未　　有　此　也。　　　　　　　Guoyu.Jinyu
　　　　　　Wei　　you　ci　ye.
　　　　　　not.yet have this Nmlz
　　　　　　'There has not been this.'

　　　　b.　猶　未　　知　之　也。　　　　　Guoyu.Jinyu
　　　　　　you wei　　zhi　zhi　ye.
　　　　　　still not.yet know 3.Obj Nmlz
　　　　　　'(you) still have not known it.'

　　　　c.　歸　　之，未　絕　　　之　也。　Zuozhuan.Xigong sannian
　　　　　　Gui　　zhi, wei　jue　　　zhi　ye.
　　　　　　send.back 3.Obj not.yet break.up.with 3.Obj Nmlz
　　　　　　'(The emperor) sent her home, (but) has not broken up with her.' (Wang, 2016, p. 114)

As shown above, the presence of *ye* does not trigger pronoun fronting. Therefore, *ye* is neither a sufficient nor a necessary condition for pronoun fronting.

As to the binding condition in pronoun fronting, again, I suggest that the changeable behaviour of reflexive pronoun fronting cannot be explained by a case-based approach. The reflexive pronoun *ji* 'self' sometimes fronts to a pre-verbal position. However, this is not always the case. As in 139a, reflexive *ji* is not bound by 'no one' in the same clause, thus *ji* undergoes fronting. On the contrary, in 139b, *ji* is bound by the local antecedent 'saint' and stays in situ. Aldridge (2015) explains that this flexible characteristic comes from the binding conditions of reflexives. Reflexives can only front to the left periphery of *v*P (or *n*P in the hypothesis of Aldridge (2015)) if a reflexive is not locally bound by its antecedent. The reason is that the landing position of the reflexive at the Spec, *v*P (or *n*P) precedes the

base position of its antecedent (Spec, VP), thus a violation of the Binding Principle C occurs. Therefore fronting of reflexives is impossible when the reflexives are locally bound, while it is possible when they are bound by a long distance antecedent.

(139) a. 莫　己　知　　也   Analects 14
               mo_i　ji_j　zhi　ye
               NEG self know Nmlz
               '(No one) understands me.'

          b. 聖人　　　不　愛　　己   Xunzi 22
                $Shengren_i$ bu ai　　ji_i
                saint　　　　not love self
                'A saint does not love himself.'

          (Aldridge, 2015, p. 6)

I argue that this local/long binding discrepancy of reflexive *ji* does not seem to be valid. The searching results of fronting of reflexive *ji* in CCL corpus shows that the reflexive fronting does not always happen, even there is a long distance binding condition. In relative clauses, reflexives are always bound by long distance antecedents, and they are expected to front to the position following the negator. However, this is not borne out, as reflexive *ji* fronting is changeable in relative clauses. The minimal pair 140 of reflexives in relative clauses shows that *ji* preposes to the position between the negator and the verb in 140a, but it fails to raise in 140b, regardless of the both examples having the similar verbs and relative clause constructions. Same situation for the pair in 141, *ji* raises to negation in 141a, but does not do so in 141b[7].

(140) a. 隰朋...　哀　不　己　若　　　者。   Lvshichunqiu
               $Xipeng_{i...}$ ai [bu ji_i zuo　　　$zhe]_j$.
               Xipeng... pity NEG self comparable.to Nmlz
               'Xipeng... pity people who is not comparable to himself.'

          b. 莫　如　　　　己　者　亡   Lvshichunqiu
               [Mo ru　　　　ji_i　$zhe]_j$ wang
               NEG comparable.to self Nmlz die
               'People who is not comparable to himself dies.'

(141) a. 吾　闻　君子　　屈　乎　　不　己　知　　者，　而　伸
               Wu wen $junzi_i$　　qu　hu　　[bu ji_i zhi　　$zhe]_j$, er　　shen
               I　hear gentleman crook in.front.of NEG self understand Nmlz, CONJ stretch
               乎　　　己　知　　　者。   Lvshichunqiu
               hu　　　[ji_i zhi　　$zhe]_k$.
               in.front.of self understand Nmlz
               'I hear that gentlemen crook (feel uncomfortable) in front of people who does

---

[7]It is interesting to note that the reflexive *ji* in 141 also fronts in the affirmative clause. I have argued that this is because of the rhetorical effect in parallel structures, which is not a common case for pronoun fronting.

not understand them, and stretch (feel comfortable) in front of people who understands them.'

b. 士者　　谄　乎　　不　知　己，　　而　申　乎　　知
Shizhe*i* qu hu [bu zhi ji*i*]*j*, er shen hu [zhi
gentleman crook in.front.of NEG self understand, CONJ stretch in.front.of self
己。　　　　　　　　　　　　　　　　　　Yanzichunqiu
ji*i*]*j*.
understand
'Gentlemen crook (feel uncomfortable) in front of people who does not understand them, and stretch (feel comfortable) in front of people who understands them.'

(The searching results in CCL corpus)

3.3.5 A New Analysis: Interaction Between Negations and Modals

In this section, I will explore the nature of the fronted pronoun position. I provide a new analysis for pronoun fronting, that this kind of fronting is caused by the interaction of the Middle and Low Negation and modals. I examine the cases of the most frequent verbs appearing in pronoun fronting, and suggest that the fronting condition is related to verb types, in which pronouns tend to front with root modal verbs, based on statistical evidence.

Pronoun fronting can only be found in negative context. However, even in the negation context, non-fronting cases also happen. As in the example below, the two clauses both have negative conditions, however the pronoun *zhi* behaves differently: it fronts to the pre-verbal position in the first clause, and fails to front in the second clause. This is hard to be accounted for under a pure qualitative approach.

(142) 人　莫　之　为，吾弗　为　之　矣。　　　　Huainanzi
Ren mo zhi*i* wei *ti*, wu fu wei zhi yi.
People NEG 3.Obj do , I NEG do 3.Obj SFP
'people do not do it, I do not do it.'

I investigate the personal pronoun fronting using quantitative method in this study. An investigation of the most frequent verbs selected from previous literature is done by using CCL corpus. The fronting and non-fronting cases are calculated for each verb. Two kinds of pronoun fronting are distinguished based on the occurrence of modals. As in 143, the pronoun fronts without a modal, and in 144 the pronoun fronts with a modal. Modals always precede verbs. This is shown in example 144, where the modal *neng* 'can' precedes verb *yu* 'resist'.

(143) 未　之　有　也　　　　　　　　　　　　　Zuozhuan
wei zhi*i* you *ti* ye.
not.yet 3.Obj have Nmlz

'There has not been anyone who is arrogant but does not perish.'

(144) 莫　之　能　禦　也
　　　 Mo　zhi*ti*　neng　yu　*ti* ye
　　　 None 3.Obj MOD resist　Nmlz
　　　 'No one can resist it.'

In this search, the categories of root modals and verbs are distinguished. The 'root modals' here are not only defined in the traditional semantic sense, where modals are auxiliary verbs expressing epistemic or deontic modality. They are defined in the syntactic sense, referring to the verbs preceding another activity verb. This includes traditional modals and perception verbs. The former are those semantically defined auxiliaries, such as *neng* 'can', *de* 'able to get', *gan* 'dare to', *ren* 'bear to'[8] The perception verb is *zhi* 'understand, realise'.

(145) 莫　之　能　禦　也
　　　 Mo　zhi*ti*　neng　yu　*ti* ye
　　　 None 3.Obj MOD resist　Nmlz
　　　 'No one can resist it.'

(146) 知　　得而　不　知　　喪　　　　　　　　　　　　　　Zhouyi
　　　 Zhi　de er　bu　zhi　sang
　　　 realise get CONJ NEG realise lose
　　　 '(Someone) realises getting but does not realises losing.'

15 root modals/verbs are investigated in this search. In CCL corpus, the fronting pattern 'negators + personal pronoun/reflexive + modal/verb' and the non-fronting pattern 'negators + modal/verb + personal pronoun/reflexive' are searched for each modal/verb[9].

The table shows that the root modals have a higher total numbers and bigger proportions of pronoun fronting than those of the verbs, and the verbs with relatively higher proportions of pronoun fronting (compared with other verbs at the bottom part) are those usually occurring with root modals. Both the occurrence of the total numbers of pronoun fronting and the frequencies are higher than the verbs do not occur with root modals. One exception is the modal *you*, which has the highest proportion of the pronoun fronting, but is in verb category. I argue that *you* has an existential verb status, as in 147, *you* is even higher than the root modal *neng*.

---

[8]These verbs were action verbs in Archaic Chinese and later develop auxiliary uses to express epistemic modality.

[9]Based on the searching patterns in CCL corpus, the searching string of the fronting pattern is 不 | 未 | 莫 | 弗 *$1* 之 | 我 | 己 | 吾 | 他 | 其 | 汝 | 女 *$1V*, while *V* is a root modal/verb. The searching string of the non-fronting pattern is 不 | 未 | 莫 | 弗 *$1V$1* 之 | 我 | 己 | 吾 | 他 | 其 | 汝 | 女, while *V* is a root modal/verb. The time periods are Zhou, Chunqiu and Zhanguo. The reason why I leave one character between the negators and the personal pronouns is that some cases have adverbs or the personal pronouns might prepose to a position in between the root modal and the verb. All the entries in the search result are twice-checked and calculated by myself.

Verbs	Categories	Fronting	Non-fronting	Proportions
能 *neng* 'can'	Modal	85	8	0.91
敢 *gan* 'dare'	Modal	31	4	0.89
得 *de* 'able to get'	Modal	8	4	0.67
忍 *ren* 'bear'	Modal/verb	1 (Modal)	1 (Verb)	0.5
知 *zhi* 'understand'	Modal	4	9	0.3
知 *zhi* 'understand'	verb	33	25	0.6
有 *you* 'have'	verb	45	3	0.94
闻 *wen* 'hear'	Verb	28	7	0.8
为 *wei* 'do'	Verb	6	3	0.67
信 *xin* 'believe'	Verb	3	1	0.75
非 *fei* 'slander'	Verb	2	1	0.67
察 *cha* 'observe/examine'	Verb	1	0	1
食 *si* 'feed'	Verb	1	0	1
食 *shi* 'eat'	Verb	0	1	0
如 *ru* 'compare as'	Verb	1	7	0.14
失 *shi* 'lost'	Verb	2	4	0.3

Table 15: The Fronting Conditions for The most Frequent Root Modals/Verbs

(147)　矧　曰　其　有　能　格　　知　　天　　命?　　　　　Jinwenshangshu
Shen yue qi　you neng ge　　zhi　　tian　ming?
also　say　3.Sbj have can　observe understand heaven fate
'(You) also say that he can observe and understand the fate given by the heaven?'

The second highest proportion of the pronoun fronting is the modal *neng*, the total number of it cooccurring with pronoun fronting as big as 85 cases, compare with the less than 5 occurrences of some verbs, such as *xin* 'believe', *fei* 'slander', *cha* 'observe/examine', *si* 'feed', *shi* 'eat', *ru* 'compare as', *ru* 'compare as', *shi* 'lost'. This contrast is more clear in the case of *ren* 'bear'. When *ren* is a modal, the pronoun fronts; when it is a verb, the pronoun stays in situ.

(148)　余　不　女　忍　杀　　　　　　　　　　　　　　　　Zuozhuan
Yu　bu　ru*i*　ren sha *ti*
1.Sbj NEG 2.Obj bear kill
'I can not bear to kill you.'

(149)　公　　　不　忍　之，　彼　将　忍　公　　　　　Hanfeizi
Gong　　bu　ren zhi,　bi　jiang ren　gong
2.Sbj.Hon NEG bear 3.Obj, 2.Sbj will　bear 2.Obj
'You cannot bear (to kil) them, they will bear (to kill) you.'

In order to determine whether pronoun fronting is related to modality statistically, I further conduct a chi-square test to see if the fronting/non-fronting condition is independent from root modal/verb categories. The total numbers of fronting and non-fronting cases of root modals and verbs are shown in the table below. A null hypothesis is that pronoun fronting is independent from the Modal/Verb categories. The Chi-square test is conducted in R studio (version 0.98.1074). The result is that P-value = 0.005 < 0.05. Therefore the null hypothesis is rejected and it is proved that pronoun fronting is not independent from the verb categories. This means that pronoun fronting is related to modality.

	Fronting	Non-fronting
Root Modals	129	25
Verbs	122	52

Table 16: Chi-square Test for Pronoun Fronting and Verb Categories

Based on the distinctive nature of person pronouns and the quantitative evidence of its relation with negation and modality, I conclude that the pronoun fronting in Late Archaic Chinese is a result of the interaction between negation and modality. Only this can explain the below conditions of the pronoun fronting:

1. Exclusively for personal pronouns

2. The fronting works when there is a NegP

3. The fronting is related to modality in vP

The structure of this fronting is shown below:

```
                         TP
                    ╱         ╲
              DPsbj            T'
                          ╱        ╲
                        T          NegP-Clausal
                                ╱          ╲
                          Neg-Clausal       ModP
                                        ╱        ╲
                                      Mod         NegP
                                             ╱          ╲
                                        Neg-vP           vP
                                                      ╱       ╲
                                          Pronoun Position      v'
                                                            ╱        ╲
                                                      Root Modal      vP
                                                                   ╱      ╲
                                                                 DP        v'
                                                                        ╱      ╲
                                                                      v         VP
                                                                            ╱       ╲
                                                                          DP         V'
                                                                                  ╱     ╲
                                                                                 V       DPobj
```
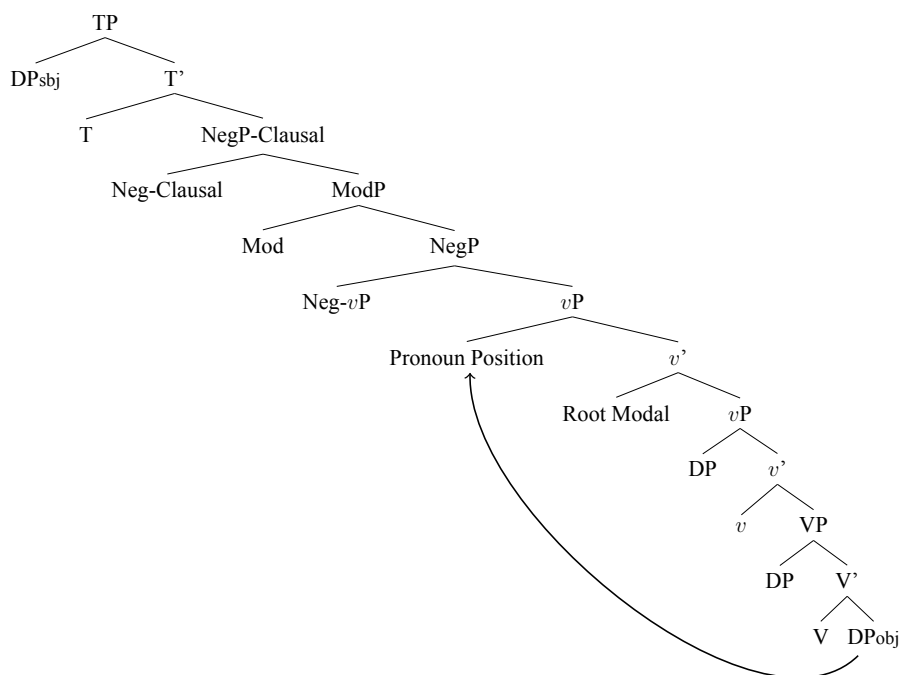
(150)

In summary, a novel analysis of pronoun fronting is provided in this section, where negation and modality are shown to have effect on the fronting of a specific type of pronoun.

3.3.6 The v-to-Mod Modal Movement and Pronoun Fronting

In this section, I will show that the loss of pronoun fronting after LAC is due to the rising of the v-to-Mod movement of root modals, which is an important syntactic change that has never been discovered before in Chinese. This movement is that root modals raise to the real modal position, which is in between Middle Negation and Low Negation. The reason why the v-to-Mod movement leads to the loss of pronoun fronting is due to the correlation between pronoun fronting and modality. As argued in last section, pronoun fronting is highly related to modality. However, if the root modal moves out Low Negation domain via raising, it can not have the effect on the fronting, and the frequency of the fronting goes down. I will compare two modals with significant statistical difference, i.e. *ke* and *neng*, as an example and use double negation construction as a diagnostic test for the v-to-Mod movement. Quantitative evidence of the negative correlation between pronoun fronting and double negation will be shown to prove that the loss of pronoun fronting is caused by activation of the v-to-Mod movement.

Section 6.2.1 discusses the difference among three modals, *ke*, *keyi* and *neng*, in which *ke* is a real modal in the Mod position, which is able to occur with double negation. Although *neng* also can occur in double negation, they have outstanding quantitative difference. This contrast can be seen from the proportion comparison of *ke* and *neng* in double negation, as

Modals	Double Negation	Total	Proportion
可 *ke* 'can'	269	2155	0.125
能 *neng* 'can'	5	2324	0.002

Table 17: The Comparison of KE, KEYI and NENG in Double Negation in the CCL

in 6.2.1 (repeated in 3.3.6). The table suggests that the proportion of *ke* in double negation is significantly bigger than that of *neng*.

Recall the structure of double negations in Chinese, we know that only modals can occupy Mod, which is the complement position of Middle Negation. Therefore, if there is no modals, there is no double negation. The big proportion of *ke* in double negation shows that *ke* tends to stay in Mod, as the occurrence of *ke* leads to the generation of double negation. On the contrary, *neng* has very small proportion in double negation compared with *ke* (and *keyi*), this means that *neng* should stay in the root modal position, which is the v head immediately below vP negation, which is not high enough in the structure to cause the double negation generation. Their relative orders are shown in 151.

(151)

```
                    TP
                  /    \
              DPsbj     T'
                       /   \
                      T    NegP-clausal
                            /      \
                          Neg      ModP
                                  /     \
                                DP      Mod'
                                       /     \
                                    可 ke    NegP-vP
                                            /      \
                                          Neg      vP
                                                  /    \
                                              DPsbj    v'
                                                      /    \
                                                  能 neng   VP
                                                          /    \
                                                        DP     V'
                                                              /   \
                                                             V    DPobj
```
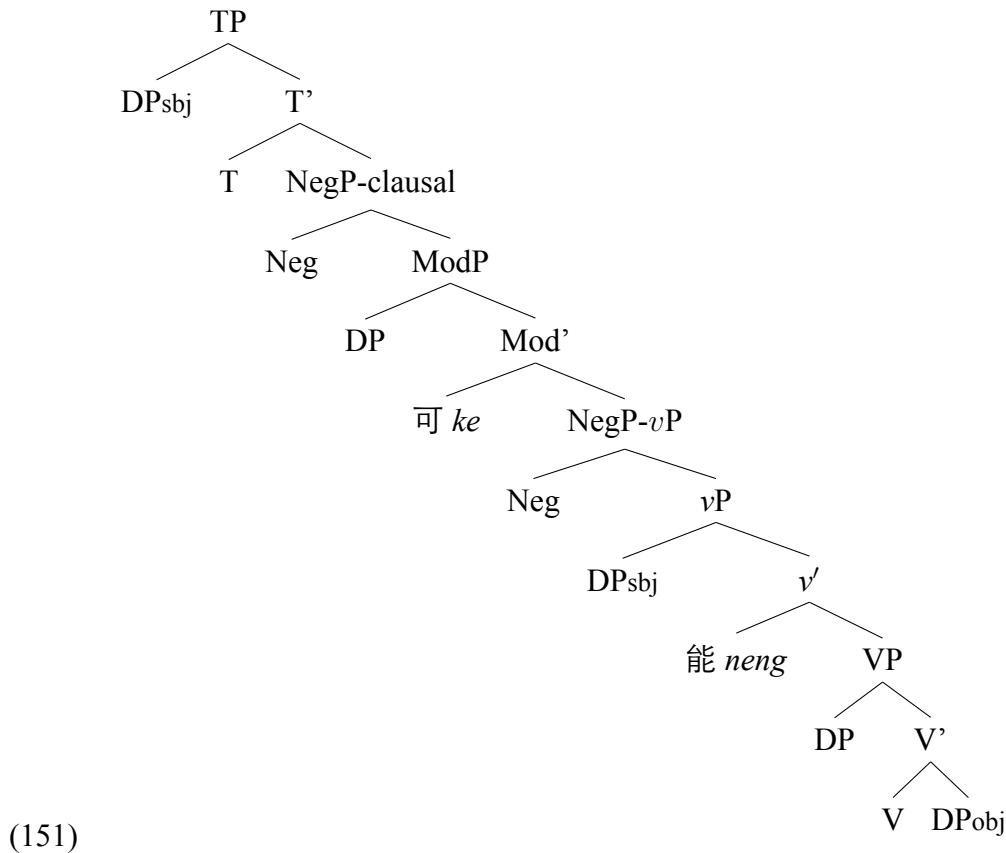
Now let us consider the performance of *ke* and *neng* in pronoun fronting. As identified in 3.3.5, *neng* has the second highest proportion (0.91) in pronoun fronting. On the other hand, it is interesting that *ke* has zero occurrence in pronoun fronting. What is more, *ke*

even rarely occurs with pronouns[10]. The main focus here is that, *ke*, which stays in Mod, does not undergo pronoun fronting, but *neng*, which stays in v, shows a high relation with pronoun fronting.

Modals	Total Number with Pronouns in Negation	Pronoun Fronting	Proportion
可 *ke* 'can'	6	0	0
能 *neng* 'can'	93	85	0.91

Table 18: the comparison of pronouns fronting with KE, KEYI and NENG in negation in the CCL

Based on the performance of *ke* and *neng* in pronoun fronting and double negation (the v-to-Mod movement), I propose a negative correlation between pronoun fronting and the v-to-Mod modal movement. I further show the estimated proportion of the occurrence of the two phenomena, and argue that the result further supports this correlation. The estimated proportion of pronoun fronting comes from the 15 root modals and verbs in 3.3.5 from 3.3.5. As for that of the double negation, I use the data in 6.2.1 in 6.2.1 which covers four modals, i.e. *ke*, *keyi*, *neng* and *gan*.

The estimated proportion of pronoun fronting = 0.634

The estimated proportion of double negation = 0.0715

The estimated proportion of pronoun fronting and double negation = 0.0715 x 0.634 = 0.045331

This proportion is smaller than those of pronoun fronting and double negation, which expects a less occurrence of double negation and pronoun fronting in one sentence than the occurrences of those two phenomena separately. This prediction is borne out in CCL corpus. The examples in 152 are the only cases of double negation and pronoun fronting co-occurrence. Keyi is also a modal which potentially undergo the v-to-Mod movement. Compared with *ke* and *neng*, *keyi* has a middle status in that its proportion in double negation is bigger than *neng*, but smaller than *ke*. Its proportion in pronoun fronting is smaller than *neng*, but bigger than *ke*. What is more, its proportion is the closest to the estimated proportion of double negation, compared with *ke*, *neng* and *gan*. Therefore, these statistical evidence perfectly fits the hypothesis of the negative correlation between the v-to-Mod movement and pronoun fronting.

---

[10]I argue that the low occurrence of *ke* with pronouns is due to the raising nature of *ke*. As discussed in 6.2.1, *ke* involves another kind of object fronting, in which it always raises the nearest argument to the subject position in LAC, therefore, when there is a pronoun in the object position, it is usually raised to the subject position instead of being fronted to Pronoun Fronting Position.

(152) a. 闻　免　父　之　命，不　可　以莫　之　奔　也；亲戚
Wen mian fu zhi ming, bu ke yi mo zhi ben ye; qinqi
hear exampt father Gen order, NEG MOD YI NEG 3.Obj run Nmzl; relative
为　戮，不　可　以莫　之　报　　也。　　　Zuozhuan
wei lu, bu ke yi mo zhi bao ye.
PSS kill, NEG MOD YI NEG 3.Obj revenge Nmlz
'Hearing the order of my father's impunity, I must run for it; relatives are killed,

I must revenge.'

b. 亡　君　夫人，不　可　以莫　之　死 也。　　Zuozhuan
Wang jun furen, bu ke yi mo zhi si ye.
lost King wife, NEG MOD YI NEG 3.Obj die Nmlz
'I lost the wife of the king, I have to die for this.'

The above evidence shows that the relation between modals and pronoun fronting is negatively related to the v-to-Mod movement, based on a comparison of modal *ke* and root modal *neng*. This conclusion predicts that if the v-to-Mod movement is active, the pronoun fronting tends to be less likely to happen. The prediction is also supported by the historical development of Chinese modals. As discussed in 6.2.1, root modals undergo v-to-Mod movement after LAC and finally replace the old modals and become real modals, which raise the nearest argument to the subject position. As exemplified in the examples below, in LAC, *ke* was a real modal which raises the object 'fish' to the subject position, as in 153a. Neng did not have this function (153b), but only raises personal pronoun below the Low Negation (153c). By Modern periods, Mandarin *ke* further raises to the TP adverbial position and is grammaticalised to an affirmative adverb (154a). On the other hand, *neng* raises to the Mod position and replaces *ke* to be a real modal, which raises the object, *zhe yu* 'this fish' to the subject position.

(153) LAC

a. 鱼　可　食。
Yu ke shi
fish MOD eat
'fish is eatable.'

b. 此　鱼　能　食　乎?
Ci yu neng shi hu?
this fish MOD eat Q.par
'Can this fish eat?'

c. 莫　之　能　禦　也
Mo zhi neng yu ye
NEG it MOD resist Nmlz
'No one can resist it.'

(154) MC

a. Ni ke jizhu: Ni ke hai shi ge xiaohai!
   you KE remember: you KE still COP CL child
   'Remember that you indeed are still a child.'

b. Zhe yu hai neng/keyi chi ma?
   DEM fish still can   eat Q.Part
   'Is this fish still eatable?'
   'Can this fish still eat?'

With all the above evidence in mind, the novel hypothesis that the loss of pronoun fronting is due to the v-to-Mod movement is credible. Therefore, I add another condition to pronoun fronting, in addition to the three conditions listed in last section:

Movement of object to Spec vP happens, when

1. the object is a personal pronouns
2. vP is a complement of Neg
3. v is a root modal

In a period, 3 is violated when the root modal moves to Mod, then the movement disappear.

I conclude this section by suggesting that the pronoun fronting is triggered by the Low Negation. When the Low Negation is filled with a negator, it blocks the ability of root modals raising from inside vP to Mod, and it attracts the pronoun to the edge of vP. When the Low Negation is empty, root modals are able to raise to Mod through the Low Negation, and the pronoun is unable to raise due to the inactiveness of the Low Negation. The operation of pronoun fronting is illustrated below. The two operation indicated by the active line and the dotted line means that if one operation is active, the other is inactive. This analysis is, to some extent, comply with the Case-driven approach. However, I will leave the feature of the Low Negation for further research.

TP
DP_{sbj} T'
T   NegP-Clausal
Neg-Clausal   ModP
Mod   NegP-*v*P
Neg-*v*P   *v*P
Pronoun Position   *v*'
Root Modal   *v*P
DP   *v*'
v   VP
DP   V'
V   DP_{obj}
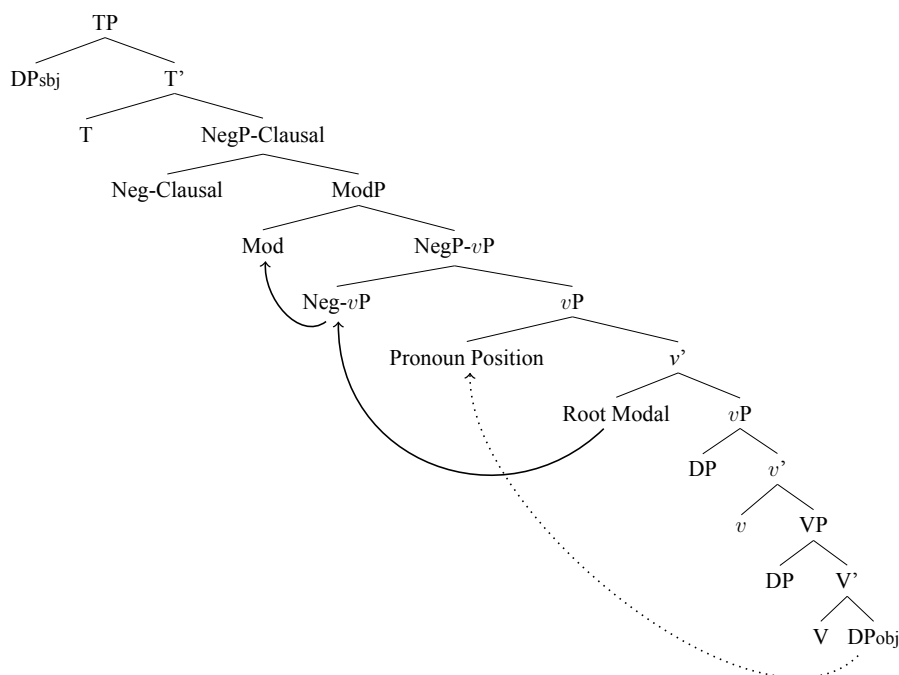
(155)

3.3.7 One Position, Two Natures: The Low Focus and The Pronoun Fronting Position

A Focus Position in *v*P area, termed as Low Focus Position in correspondence to a High Focus Position in the Clause Internal TP area, is suggested to be in the same position with the Pronoun Fronting Position (Wang, 2016). I agree with Wang (2016) in that the Low Focus Position might be the same position with the Pronoun Position. I will provide evidence in this section to further identify the two fronted DP positions. However, I argue that though the two positions might be the same, they are generated by different movements.

I show the nature of the DPs in this focus position is different from the nature of the pronoun fronting position.

Negation was used as a key diagnostic to distinguish the High and Low Focus Positions (Wang, 2016). The Low Focus Position is beLow Negation and the High Focus Position is above negation.

(156)   High Focus Position

何   事   之   不   胜?   Lvshichunqiu
He   shi   zhi   bu   sheng?
What thing ZHI NEG master
'What do (I) not master?'

(157)   Low Focus Poition

66

敢	不	唯	子	是	從	？	Zuozhuan, (Wang, 2016, p. 107)
gan	bu	wei	zi_i	shi	cong	t_i?	

Dare NEG WEI you SHI follow

'Do (I) dare not to follow you only?'

The example 156 is a High Focus position, which is above the negation *bu*. 157 shows that the Low Focus position is below the negation *bu*. It is also below the modal *gan* 'dare', which is an important diagnostic element in order to examine the relative order of the Low Focus and the Pronoun Position in this section.

Wang (2016, p. 171,192) argues that this Low Focus Position might be the same position with the Pronoun Position. In her analysis, pronoun fronting is focus fronting beLow Negation, therefore it might be the same position with the Low Focus Position.

(158) The Pronoun Position

未	之	有	也	Zuozhuan
wei	zhi	you	ye.	

NEG 3.Obj have Nmlz

'There has not been anyone who is arrogant but does not perish.'

I agree that the Pronoun Position might be the same position with the Low Focus Position. I further argue that they are both inside the vP domain below the Low Negation. Evidence of the Pronoun Position in VP is found in the ModP-vP double negation. The examples 159 and 160 have both the Middle negator *bu* and Low negator *mo*. The Pronoun Position is lower than Low negator, which means that pronoun fronting happens in the vP domain.

(159)

闻	免	父	之	命，	不	可	以	莫	之	奔	也；	亲戚	为
Wen	mian	fu	zhi	ming,	bu	ke	yi	mo	zhi	ben	ye;	qinqi	wei

hear exampt father Gen order, NEG MOD YI NEG 3.Obj run Nmzl; relative PSS

戮，	不	可	以	莫	之	报	也。	Zuozhuan
lu,	bu	ke	yi	mo	zhi	bao	ye.	

kill, NEG MOD YI NEG 3.Obj revenge Nmlz

'Hearing the order of my father's impunity, I must run for it; relatives are killed, I must revenge.'

(160)

亡	君	夫人，	不	可	以	莫	之	死	也。	Zuozhuan
Wang	jun	furen,	bu	ke	yi	mo	zhi	si	ye.	

lost King wife, NEG MOD YI NEG 3.Obj die Nmlz

'I lost the wife of the king, I have to die for this.'

Now we look at the situation of Low Focus Position with negation. I argue that this Position is also below Low Negation. The first evidence is that the scope of the Low Focus DP negation in within the scope of the VP negation, which is contrary to the High Focus DP negation. Example 157 (repeat as 162) shows that the Low Focus Position is below the

negator *bu* (and a modal *gan,* which is a *v* head). The focused DP *zi* is surrounded by the focus marker *wei* and the fronting marker *shi*. The negator here is expected to be a focused DP negator, as it is independent from the Middle negator, in contrast with the VP negator. However, the scope of the Low Focus DP negation covers the whole VP, which is distinctive from the High Focus DP negation. The scope of the *wei* focus negation in the High Focus Position is only the DP, as shown in example 161, 'only Wei state' is negated, and the verb 'perish' is not negated. Therefore, the proposition of this negating part is "Wei state is perished" (V is not negated). However, when the focused DP is at the Low Focus Position, the scope of the DP negation covers both the DP and the verb. Example 162 shows that the DP negator negates the whole VP 'follow you only'. The preposition of this negating part is that "you are not followed" (V is negated). Since the negation preceding the Low Focus Position covers the whole VP, this negator is semantically a VP negator. The fact that the modal is not included in the scope of the negation means that it is not sentential negation. Therefore the Low Focus Position should be below the VP negator.

(161)　將　　不　　唯　衛國　　之　敗　　　　　　　Zuozhuan, (Wang, 2016, p. 40)
　　　　jiang bu　　wei Weiguo$_i$ zhi bai　 ti
　　　　Fut　NEG only Wei.State ZHI perish
　　　　'(He) will not only make Wei state perish.'

(162)　敢　　不　　唯　子　是　　　　從？　　　　　　　　　　Zuozhuan
　　　　Gan bu　　wei zi$_i$ shi cong　 ti?
　　　　Dare NEG WEI you SHI follow
　　　　'Do (I) dare not to follow you only?'

From a distribution perspective, an observation that only one negator is allowed preceding the Low Focus Position in CCL and ChiPaHC suggests that the focus DP negator in the Low Focus Position overlaps with the VP negator[11]. If the focused DP is above VP, it should allow a VP negator following it. However this distribution is not found in either of the corpus.

(163)　敢　　不　　唯　子　是　(* 不) 從　　　？
　　　　Gan bu　　wei zi$_i$ shi (*bu) cong　 ti?
　　　　Dare NEG only you SHI NEG　follow
　　　　'Do (I) dare not to follow you only?'

The third piece of evidence is that the structure below the Low Focus Position is as minimal as a VP. No structures allowed in *v*P such as PP, causatives in the Low Focus structure. Therefore the Low Focus Position should be within *v*P and below the *v*P negator.

---

[11]The negator is below *v* head *gan*, therefore it should not be the Middle negator.

(164)　余　唯　利　　是　视。　　　　　　　　　　　　　　Zuozhuan
　　　　Yu wei li　　shi shi.
　　　　I　only benefit SHI see
　　　　'I only see benefit.'

(165)　今　周　与 四　国　　服事　君王，　将　唯 命 是 从　Zuozhuan
　　　　Jin zhou yu si guo　fushi　junwang, jiang wei ming shi cong
　　　　now Zhou and four country work.for king,　　will　only order SHI follow
　　　　'Now Zhou and other four countries work for the king, and they will only follow the king's order.'

The above three pieces of evidence suggests that the Low Focus Position is below the VP negator, which is similar to the Pronoun Position. This means that the two positions might be one. I now discuss their different natures. From the distribution perspective, this focus fronting only happens exclusively with negator *bu*, not other negators.

Nouns and second person pronouns (*zi, ru*) tend to appear in the Low Focus Position, while other personal pronouns (First person pronouns, third person pronouns and reflexives) tends to appear in the Pronoun Position in the CCL corpus and the ChiPaHC corpus.

Fronting to the Pronoun Position is constrained to negative context, and this kind of fronting has high correlation with the modals, as shown in 3.3.5. However, fronting to the Low Focus Position is not dependent on negative context, nor on modals.

(166)

```
TP
├── DPsbj
└── T'
    ├── T
    └── NegP-Clausal
        ├── Neg-Clausal
        └── ModP
            ├── Mod
            └── NegP-vP
                ├── Neg-vP
                └── vP
                    ├── Focused DP/Pronoun Position
                    └── Focus'
                        ├── Focus
                        │   └── 是 shi
                        └── v'
                            ├── Root Modal
                            └── vP
                                ├── DP
                                └── v'
                                    ├── v
                                    └── VP
                                        ├── DP
                                        └── V'
                                            ├── V
                                            └── DPobj
```
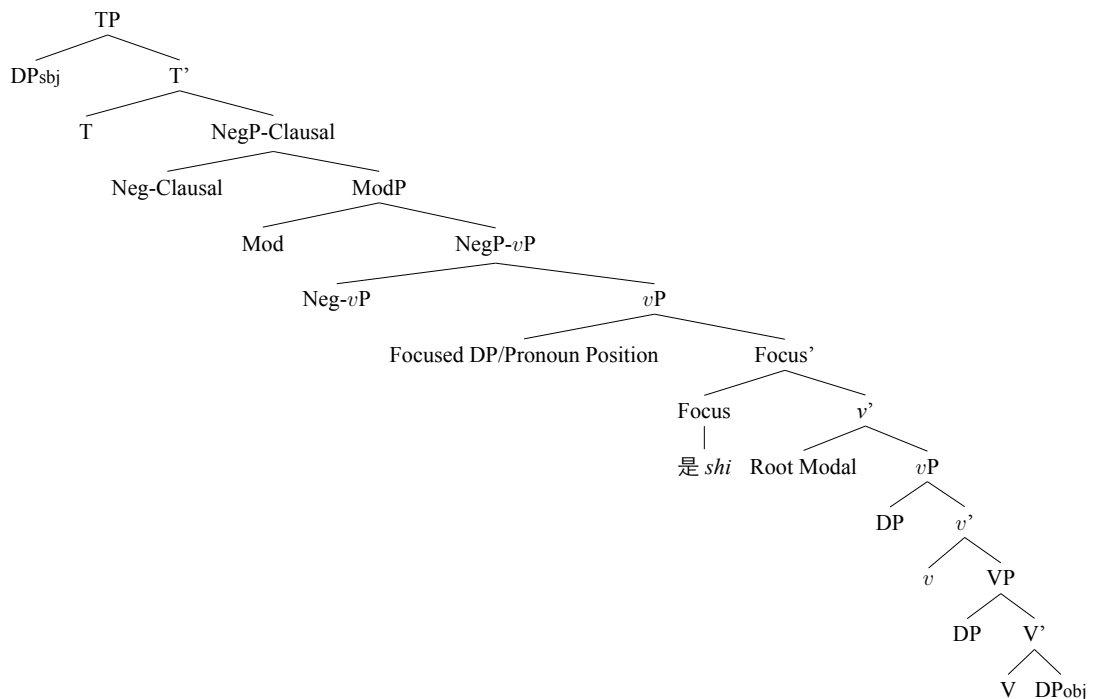
Chapter 4. *Wh*-phrases Fronting

Wh-phrases tend to precede verbs in LAC and in MidC (only limited cases). However, this movement is lost in Early Modern Chinese. As exemplified in the pairs below, *wh*-objects and *wh*-adverbials in LAC and MidC are able to front before the verbs, but the similar fronting is lost in EMC. I will first review the previous works on various kinds of *wh*-phrases fronting, and then provide a unified account that is able to fit in their syntactic analyses and historical development. I suggest that *wh*-phrases have three landing sites, which are the External Topic Position, the Internal Topic Position and the focus position below the Low Negation. Based on the previous approaches by Feng (1996), Aldridge (2010) and Wang (2016), I argue that *wh*-phrase fronting in LAC (and MidC) is triggered by both Topic and Focus features. To be more detailed, *wh*-predicates front to the external topic position and *wh*-objects and *wh*-adverbials front to Internal Topic position for Topic reasons, and the *wh*-adverbials of instruments and adjuncts prepose to the Spec *v* below Low Negation for focus reasons.

(167)   LAC

吾 獨 何 好　　焉?   Zuozhuan, (Feng, 1996, p. 335)
Wu du　he*i* hao *ti*　yan?
ust　what like　Q.prt
What do I especially like?'

(168)   MidC

無　情　郎　安　　在　?   628-683
wu　qing lang an*i*　zai *ti* ?
NEG love man where at
'Where is the man without love in his heart?'

(169)   EMC

a. 你 有 何　罪　?   1260-1320
ni　you [he　zui]?
you have what crime
'What crime do you commit?'

b. 林冲　　連忙　　問道: ” 在 那裏? ”   1574-1645
LinChong lianmang wendao:"zai nali?"
LinChong quickily　ask:"at　　　where?"
'LinChong quickily asks:"where is (she)?"'

Aldridge (2010) suggests that the landing site of *wh*- objects is in the clause medial domain, in contrast to a C domain in some other languages.

4.1 Focus Approach

Feng (1996) is the first to propose that *wh-* movement in Archaic Chinese is a focus movement. However, he treats *wh-* fronting in Archaic Chinese as cliticisation, which is similar to his treatment of pronoun fronting. The same assumption with his treatment of pronoun fronting is adopted. Just as pronouns, *wh-* words are also prosodical weak forms, which needs to undergo fronting to the left of the strong forms, i.e. verbs, in order to avoid prosody clash.

He distinguishes *wh-* words based on their prosodic performance. For example, the mono-syllabic *wh-* words undergo fronting without the fronting marker *zhi*[12], as itself is a weak form, and needs to front to the left of V. On the other hand, the disyllabic fronted *wh-* word require a heavier V to undergo fronting, such as fronting markers, modal verbs or negators, which are claimed to increase the weight of V and as a result, the fronted disyllabic *wh-* words and disyllabic VP achieve a balance on phonology. As in 170, the monosyllabic *wh-* words undergo fronting without any phonological requirements on VP. However, for the disyllabic *wh-* words in 171, the VP are required to be disyllabic to allow fronting. The disyllabic requirement leads to a combination of VP with fronting marker *zhi* (171), with modal verbs (171), and with negators (171).

(170) a. 惡   在？   Mengzi, (Feng, 1996, p. 352)
wu$_i$ zai t_i?
where at
'at where?'

         b. 何   欲   置？   Zhanguoce, (Feng, 1996, p. 352)
he$_i$ yu zhi t_i?
what want put
'What (do you) want to put?'

(171) a. 宋 何罪   之 有 ？   Mozi, (Feng, 1996, p. 352)
Song [hezui]$_i$ zhi you t_i?
Song what.crime ZHI have ?
'What crime does Song state have?'

         b. 何事   能 治   ？   Guoyu, (Feng, 1996, p. 352)
[heshi]$_i$ neng zhi t_i?
what.thing can control
'What thing can (you) control?'

         c. 何城   不 克   ？   Zuozhuan, (Feng, 1996, p. 352)
[hecheng]$_i$ bu ke t_i?
which.city NEG invade

---

[12]Feng (1996) treats *zhi* as a pronoun. However, it poses severe problems to the theta-role and the Case systems, therefore I follow Wang (2016) to treat it as a fronting marker.

'Which city do you not invade?'

Based on these observations, a two-step cliticisation analysis for the *wh-* movement in Archaic Chinese are proposed as below:
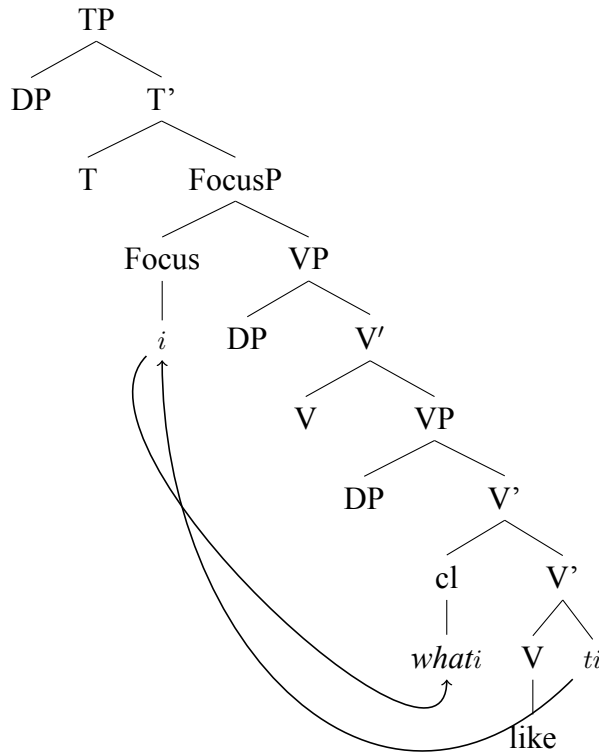
(172)

As shown in the structure, the *wh-* objects firstly moves to the Focus position above VP, and secondly conduct cliticisation, where the *wh-* objects cliticize to the specifier of V'. Feng also points out that in the cases involving modal verbs and negators, the second step is not required. Feng captures the focus feature of *wh-* movement, and also the property that monosyllabic *wh-* word always attaches to VP. However, cliticisation in the second step seems implausible. After a focus movement, *wh-* objects should not undergo further movement, as focused position is a phonologically strong position. A pure focus approach is also provided by Aldridge (2010).

4.2 Position Based approach

Wang (2016) provides a detailed framework of *wh-* movement based on an exhaustive examination in LAC, where four fronting positions are distinguished: External Topic Position, Internal Topic Position, High Focus Position and Low Focus Position. The four positions accommodate *wh-* phrases in various categories. To be more specific, the External Topic

Position is for topicalised *wh-* predicates, while the Internal Topic Position is for D-linked *wh-* phrases, as they exhibit topic features. The High Focus Position is for non-D-linked *wh-* phrases and *wh-* adverbials of reasons, because they locate above Middle Negation, and in general, non-D-linked *wh-* movements display focus features. The Low Focus Position is for *wh-* Ps of instruments and other adjuncts, as they locate below Middle Negation.

The External Topic Position is in C domain, and the fronting to this position is triggered by topicalisation. This means that if *wh-* predicates undergo movement to this position, they should be above the subjects. *wh-* predicates in equational constructions are usually this kind. As in the minimal pair, the original position of the nominal predicate in equational constructions is after the subject, as in 173, the predicate *xiongqi* 'appliances' is after the subject *bing zhe* 'weapon'. When the predicate is a *wh-* phrase, it optionally undergoes topicalisation, as in 174.

(173) 兵　　者，凶　　器　　也　　　　　　　　　　　　　Hanfeizi.Cunhan
Bing　zhe, xiong　qi　　ye
weapon ZHE, ruthless appliance Nmlz
'Weapon is ruthless appliances.'

(174) a. 何　哉，爾　所　謂　達　　者　？　　　　　　　　　Anelects
He$_i$ zai, er suo wei [da　　zhe] t_i?
what Q　you SUO call eminent ZHE
'What is the eminency that you meant?' (Wang, 2016, p. 184)

　　　　b. 吳　之　所　以　亡　者　何　也?　　　　　　　Lvshichunqiu
Wu zhi suo yi wang zhe he　　ye?
Wu Gen SUO for die　D　what SFP?
'What is the reason that Wu State perished?'

The Internal Topic position is suggested based on pragmatic reasons. This position is exclusively for D-linked *which*-phrases, as they project information from a set of options known to the conversation speakers, and are, as such, old information. Topic Position usually accommodates old information. This position differentiates itself from the External Topic Position in that it locates below the subject. Subjects are at spec T, as discussed in 1.4, and this internal topic position is lower than spec T.

(175) 齊宣　王　　問　　　卿。　孟子　曰：'王　　　　何　　卿
Qi Xuan emperor wen　　qing.　Mengzi yue: 'Wang　　[he　qing]$_i$
Qi Xuan emperor ask.about minister. Mencius say　Your.Majesty [which minister]$_i$
之　　問　　　也?　'　　　　　　　　　　　　　Mencius
zhi　[VP wen　　t_i] ye?'
ZHI　　ask.about t_i Decl
'Emperor Xuan of Qi asked about ministers. Mencius said: "Which (kind of) ministers is Your Majesty asking about?"' (Wang, 2016, p. 186)

The non-D-linked *wh-* phrases in LAC are in two Focus Positions, complying with the multiple focus positions assumed in Benincà and Poletto (2004). This position displays foci features, as the position of foci in answers usually 'correlates to the questioned position in *wh-* questions' (Rooth, 1996). Evidence of the foci feature is displayed in a pair of LAC question and answer.

(176) 恒　公　曰: 然則　吾　何　以　　　　　　　為　　國? 管　子
Heng gong yue: 'Ranze wu he*i*　yi*j*　[PP *t'i ti tj*] [VP wei　　guo]?' Guan zi
Heng Duke utter then　I　what with　　　　　　manage state　Guan Hon
對　曰: 唯　觀　　山海　　為　可　　　爾。
dui　yue:　'Wei [guan　shanhai]　wei ke　　er.'
reply utter WEI　exploit mountain.sea Cop appropriate Decl
'Duke Heng uttered: "Then with what do I manage the state?" Mr Guan replied: "It is only exploiting mountains and seas that is appropriate."' (Wang, 2016, p. 157)

Wei is considered as a focus marker, the answer position is clearly a focus position, corresponding to the position of the questioned *wh-* PP *he yi*. In addition, the property for the non-D-linked *wh-* phrases are focus property, as they express new and non-presupposed information.

The High Focus Position and Low Focus Position, are distinguished by the adverb *du* and Middle Negation Wang (2016). As in 177 and 178, the high focus position is above these elements, while the low focus position is below them.

(177) a. 吾 何 為　　　　　獨 不 然?　　　　　　　　Mencius
Wu [hei　wei]*j* [PP *t'i ti tj*] du　bu　ran?
I　what for　　　　alone NEG correct
'For what am I alone not correct? (Wang, 2016, p. 168)

　　b. 聖人　何　以　　　不　可　欺?　　　　　　　Xunzi
Shengren [hei　yi]*j* [PP *t'i ti tj*] bu　ke　qi?
sage　　what for　　　NEG can deceive
'For what are sages not deceivable?' (Wang, 2016, p. 167)

(178) a. 子 獨 惡 乎　　聞 之　　　? 曰: 聞 諸　　副墨
Zi du　wu*i*　hu*j* [VP wen zhi]　[PP *t'i tj ti*]? Yue: Wen zhu　Fumo
you alone whom from　　hear 3.Obj　　　say　hear 3.Obj.from Fumo
之 子。　　　　　　　　　　　　　　　　　　　Zhuangzi
zhi　zi…
Gen son
'From whom did you alone hear it?' (Nanbo) says: '(I) heard it from Fumo's son…' (Wang, 2016, p. 182)

　　b. 先生　獨　何　以　　　　説 吾君 乎?
Xiansheng du　he*i*　yi*j*　[PP *t'i tj ti*] [VP yue　wu jun] hu?
sir(you)　alone what with　　　　please my lord Q
'How did you alone please my lord?' (Wang, 2016, p. 179)

The examples in 177 are the *wh-* adverbials in High Focus Position. Both PP adverbials *he wei* 'what for' and *he yi* 'why' are reason adverbials, they stay above the adverb *du* 'alone' and the clausal negator. The examples in 178 are the *wh-* adverbials in Low Focus Position, they are semantically location and instrumental adverbials, such as *wu hu* 'whom from' in 178a and *he yi* 'what with'. They stay below the adverb *du*. There is no direct evidence to show these adverbials are below Middle negator, but there is indirect evidence to support the relative order between Middle negator and Low Focus position. In a non-interrogative sentence, the instrumental adverbials are below the Middle negator.

(179) 君王　　　不　　以　鞭答　　使　　之。　　　　　　　　Guoyu
Junwang　　bu　[PP yi　bianchi] [VP shi　zhi]
Your.Majesty NEG　　with whip　　　enslave 3.Obj
'Your Majesty did not enslave them with a whip.' (Wang, 2016, p. 180)

The above examples are PP *wh-* adverbials in High Focus Position below NEG. *wh-* objects are also in High Focus Position, because they are above Middle Negation, as in 180.

(180) 然則 我　何　為　乎? 何　不　　為　乎?　　　　　Zhuangzi
Ranze wo he*i* [VP　wei *ti*] hu? He*j*　bu　　[VP wei *tj*] hu?
then　I　　what do　Q　　what NEG　　do　Q
'Then what do I do? What (do I) not do?' (Wang, 2016, p. 162)

The summary of Wang's account is illustrated below:

(181)
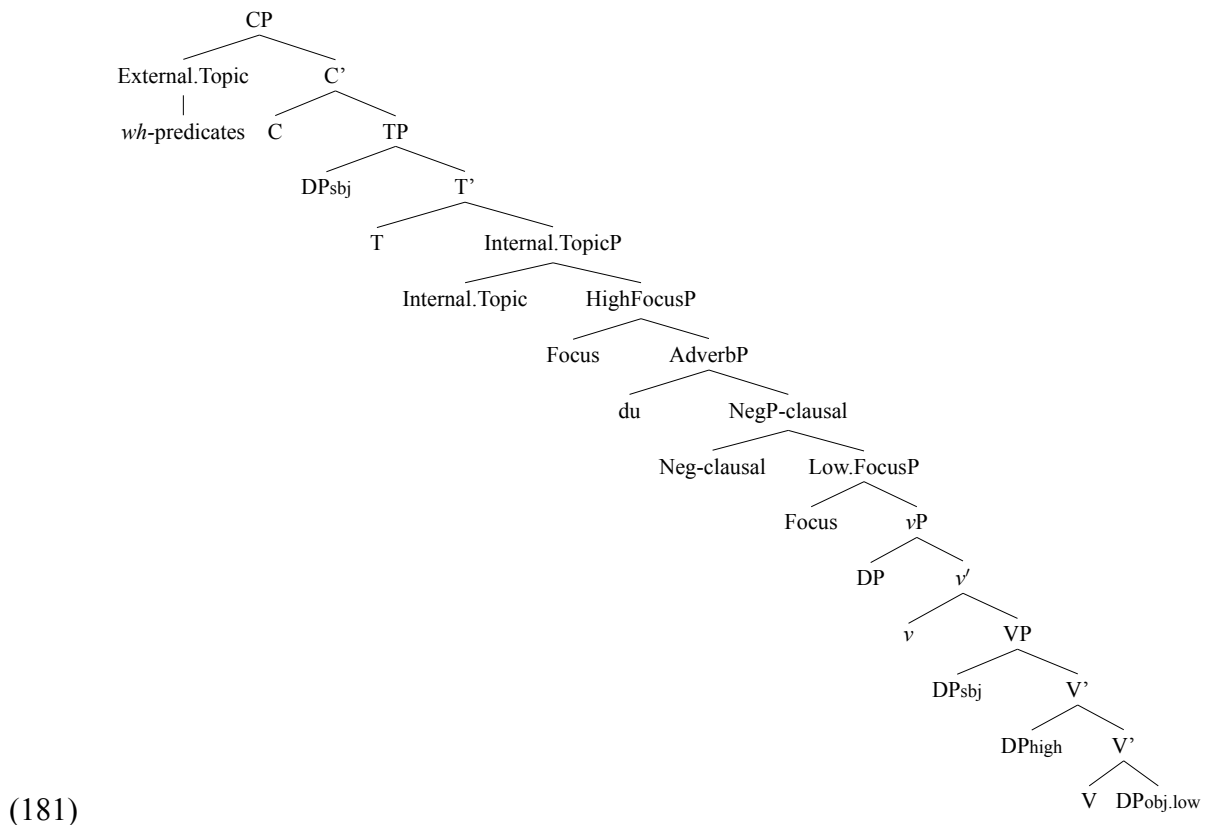
4.3 A Unified Account

Following Feng (1996), Aldridge (2010) and Wang (2016), I provide a unified account for *wh-* fronting, in order to connect its analysis with those of nominal and pronominal fronting. I suggest that the high focus position and the internal Topic position can be incorporated into one argument position, the Internal Topic Position due to several reasons.

First, I argue that it is not necessary to distinguish the internal topic and high focus position, because the diagnostics of the two positions provided by Wang (2016) are not convincing. Adverb *du* is taken as a key diagnostic element to distinguish the two TP internal positions, in that the *wh-* phrases always precede *du*. However, I argue that this is not always the case, as many examples show that *du* is able to precede *wh-* phrases. As in 182 and 183, *du* precedes the *wh-* adverbial *yan* 'how' and the *wh-* object *he* 'who'.

(182) 余　獨　焉　　　　　闕　之?　　　　Zuozhuan, (Wang, 2016, p. 180)
Yu　du　yan$_i$ [PP *t'i ti*] [VP pi　zhi]?
lone how　　　　　　avoid 3.Obj
'How do I avoid them alone?'

(183) 民　　莫　不　穀，　我　獨　何　害?　　　Anelects, Aldridge (2010)
min　mo　bu　gu,　wo du　he　hai?
People NEG NEG lucky, I　 alone what harm
'No one is not lucky, what harm have I, of all the people, done?'

According to the changeable behaviour of the adverb *du*, I argue that it can not be taken as a trust-worthy diagnostic for differentiating internal topic and high focus.

Second, *wh-* phrases, nominals and demonstratives that bear topic properties all appear in this position. This position marks the fronted objects with the fronting marker *zhi*. As suggested by Wang (2016), In addition to *wh-* objects, non-*wh-* objects, such as nominals and demonstratives, also appear in this position, as exemplied in the examples below.

(184) 其 父母　之　　不　親　　 也，又　能　親　君　乎?　　　Hanfeizi
Qi fumu$_i$　zhi　bu [VP　qin　 *ti*] ye,　you neng qin　jun hu?
he parents ZHI　　NEG adore　　Decl then can　adore lord Q
'He does not adore his parents, then how can (he) adore the lord?' (Wang, 2016, p. 184)

(185) 是　之　不　　務　　　　　　　　　　　　　　　　Zuozhuan
shi$_i$ zhi　bu [VP wu　　*ti*]
this ZHI not　　conduct
'(if you) do not conduct this.'

(186) 宋　何罪　　之　有 ?　　　　　　Mozi, (Feng, 1996, p. 352)
Song [hezui]$_i$　zhi　you *ti*?
Song what.crime ZHI have ?
'What crime does Song state have?'

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Third, this unified position for fronted objects has potential subject properties instead of focus properties, according to the distribution of the fronting marker *zhi*. In LAC, subjects of embedded clauses usually are marked by 之 *zhi* Aldridge (2013*b*). It is also a genitive case marker appearing in noun phrases, which marks the possessive relation between two nouns. As in example 187, *zhi* marks the genitive case in the noun phrase. Another way of possessive marking is exclusive to third person pronouns, as they are marked by their genitive form 其 *qi*, as shown in 188. *Zhi* and *qi*, as two ways of marking genitive cases, both are able to appear in embedded clauses and mark the subjects. Such as in 189, the subject 'you' in the embedded clause 'you like it' is followed by *zhi*; in 190, the subject 'he' in the embedded clause 'he does not have a shape' uses the genitive form *qi*. It can be seen that the fronted objects and subjects in the embedded clauses are both marked by genitive *zhi*, this to some extent means that the fronted objects share similarities with the subjects in embedded clauses.

(187)   翟 之　意
        Di zhi yi
        Di Gen idea
        'Di's idea'

(188)   其　　父母
        Qi   fumu
        3.Gen parents
        'his/her parents'

(189)   知　[子 之 好 之]，杂佩　　　以 报 之。   Anelects
        Zhi [zi zhi hao zhi], zapei   yi bao zhi.
        know you Gen like 3.Obj, jade.pendant use give 3.Obj
        '(I) know that you like her, give your jade pendant to her as a present.'

(190)   莫　知　其　無　　形   Xunzi, (Aldridge, 2013*b*, p. 12)
        Mo zhi qi wu   xing
        none know 3.Gen not.have shape
        'No one knows that he does not have a shape.'

In summary, following Feng (1996), Aldridge (2010) and Wang (2016), I argue that there are three positions for *wh-* phrases: External Topic Position, Internal Subject Position and the Focus Position below Middle Negation. I argue that the TP Internal positions above Middle Negation can be unified into one position, which bears topic properties. Four kinds of movement are distinguished: topicalisation of nominal *wh-* predicates to the specifier of C. *wh-* objects fronting from the complement of V to Internal Topic, *wh-* adverbials of reasons fronting from the adjunct of V (PP) to Internal Topic and *wh-* adverbials of instruments and other *wh-* adjuncts fronting from the adjunct of V to the specifier of *v*P below Low Negation.

(191)

```
                        CP
                   ┌────┴─────┐
                Topic         C'
                         ┌────┴────┐
                         C         TP
                              ┌────┴──────┐
                           DPsbj          T'
                                   ┌───────┴────────┐
                                   T          Internal Topic
                                        ┌──────────┴──────────┐
                                  Internal Topic         NegP-clausal
                                        │            ┌─────────┴─────────┐
                            wh-objects/wh-adverbials  Neg-clausal       ModP
                                                              ┌──────────┴──────────┐
                                                             Mod              NegP-vP
                                                                        ┌─────────┴─────────┐
                                                                     Neg-vP              FocusP
                                                                              ┌────────────┴────────┐
                                                                           Focus                    vP
                                                                             │                 ┌─────┴─────┐
                                                              wh-adverbials/wh-adjuncts        DP          v'
                                                                                                      ┌────┴────┐
                                                                                                      v         VP
                                                                                                          ┌─────┴─────┐
                                                                                                       DPsbj          V'
                                                                                                               ┌──────┴──────┐
                                                                                                            DPhigh          V'
                                                                                                                      ┌──────┴──────┐
                                                                                                                      V        DPobj.low
```
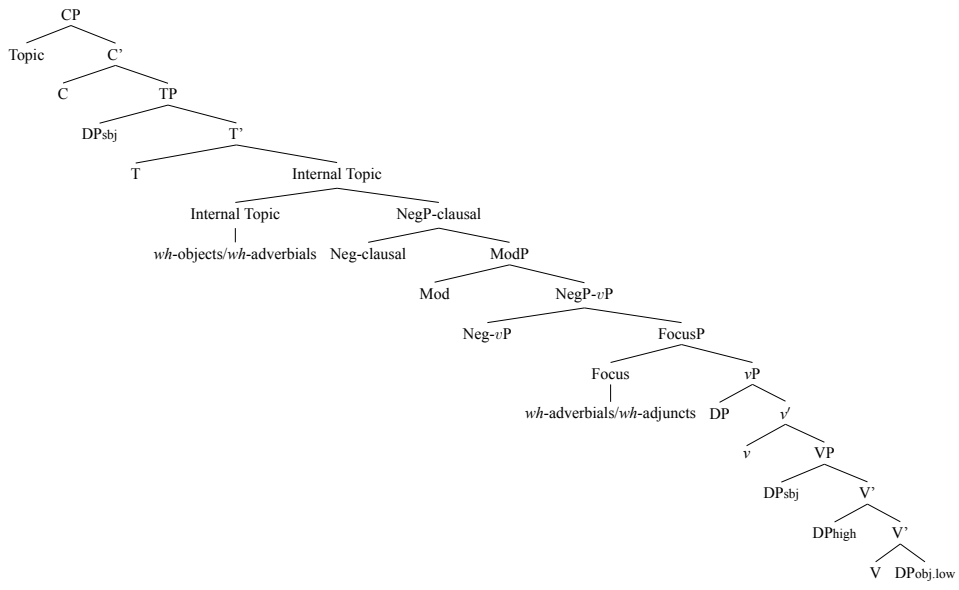
Chapter 5. Nominal Fronting

5.1 Nominal Fronting to Post-Subject Positions

In this section, I look at the nominals fronting to sentence internal TP area (surface SOV order). Two landing sites will be discussed: Internal Topic and Focus Position beLow Negation. In AC, the prominent nominal fronting is related to equational constructions. I argue that equational constructions involve object raising to subject positions. I will also show the clausal structure change in equational constructions through Chinese history, and argue that this change is consistent with my argument that Internal Topic bears subject properties. I also discuss nominal fronting in the periods after LAC, and argue that they locate to Internal Topic. I especially explore the effect of parallel structures in object fronting constructions, and argue that parallel structures do not cause focus or topicalisation reading, however, it has a reduplication system that the syntactic structure of the initial component is copied by the following components, which is triggered by a metalinguistic property [rhetorical]. At last, I discuss two kinds of nominal fronting with *shi* and their historical development, as their occurrences are prominent in ChiPaHC. I show that *shi* is a focus marker in focus fronting below Low Negation, and it is a copula in nominal predicate fronting. These two analyses of *shi* are consistent with its historical development route.

5.1.1 Internal Topic Position After LAC periods

In this section, I argue that nominal DPs locate at Internal Topic Position after LAC periods, especially evident in in Early Modern Chinese.

Examples of object fronting to a pre-negation position are found in EMC texts from the preliminary search of the ChiPaHC.

(192) 蓬 公孫 道: 老先生 既 邊疆 不 守 ... 1701-1754
peng gongsun dao: laoxiansheng ji bianjiang$_i$ bu shou $t_{i...}$
Peng Mr. say: Mr then frontier NEG guard ...
'Mr. Peng said: Mr then didn't guard the frontier...'

(193) 我 這裏 翠簾車 先 控 着 ，他 那裏 黃金鐙 懶 去
Wo zheli cuilianche$_i$ xian kong zhe t_i , ta nali huangjindeng$_i$ lan qu
I here green.curtain.car first control ZHE , he there golden.Stirrup lazy go
挑 。 1260-1320
tiao t_i .
kick
'In my side, the green curtain car is left empty; in his side, (someone) doesn't want to wear the folden stirrup.'

Parallel structure (also known as parallel construction or parallelism) is the repetition of a grammatical form for phrases or clauses. Parallel structure in Chinese is mainly for rhetorical reasons. Plaks (1988) described Chinese parallel structure as 'one of its most obtrusive aesthetic features.' It is prevalent in almost all genres of literatures, not only in poetry, and prose in Archaic Chinese and Middle Chinese, but also fiction and drama in Early Modern Chinese. The discussion of parallel structures explores if parallel structure has impact on syntax or vice versa. I show that parallel structures do not introduce information structure features itself. However, they have a [rhetorical] force, as a metalinguistic feature, it forces the rest of parallel components to reduplicate the structure of the initial component, and as such, a parallel structure is formed. I define parallel structures as a structure which contains more than one components, each components are semantically opposite or similar and syntactically identical. The components can be words, phrases and clauses.

The reflexive *ji* in 194 fronts in a parallel structure, as the two embedded clauses have similar surface vP structures and each constituent has either opposite or identical semantic meanings. I argue that parallel structure itself does not bear any traditional linguistic features. However, it has a metalinguistic rhetorical force, which requires the parallel components to form their syntactic structure by reduplicating that of the initial component, including syntactic movements. *ji* fronting in the affirmative clause has to reduplicate the negative clause in order to be a valid component. As a result, the reflexive undergoes fronting in the affirmative clause. This fronting, however, is not caused by the parallel structure or focus, because the fronted reflexive in the negative clause is caused by the negation and modality. The parallel structure reduplicating can be further proved in a similar sentence in 195, in which when the negative clause does not trigger *ji* fronting, the affirmative clause does not either. Therefore, parallel structures do not lead to focus reading.

(194) 吾 闻 君子 屈 乎 不 己 知 者， 而 伸
Wu wen junzi*i* qu hu [bu ji*i* zhi zhe]*j*, er shen
I hear gentleman crook in.front.of NEG self understand Nmlz, CONJ stretch
乎 己 知 者。 Lvshichunqiu
hu [ji*i* zhi zhe]*k.*
in.front.of self understand Nmlz
'I hear that gentlemen crook (feel uncomfortable) in front of people who does not understand them, and stretch (feel comfortable) in front of people who understands them.'

(195) 士者 诎 乎 不 知 己， 而 申 乎 知
Shizhe*i* qu hu [bu zhi ji*i*]*j*, er shen hu [zhi
gentleman crook in.front.of NEG self understand, CONJ stretch in.front.of self

己。 Yanzichunqiu

ji[i]j.

understand

'Gentlemen crook (feel uncomfortable) in front of people who does not understand them, and stretch (feel comfortable) in front of people who understands them.'

However, if the initial clause has focus properties, the rest of components of parallel structures will copy them. The below example shows that as the initial component is in the focus position (contrastive focus, as the object raises to the pre-verbal position), the other component copies it because of [rhetorical] features and also have a contrastive focus interpretation.

(196) 我 這裏 翠簾車 先 控 着， 他那裏 黃金鐙 懶
Wo zheli cuilianche xian kong zhe, ta nali huangjindeng lan
I this.place green.curtain.car first control ZHE, he that.place golden.Stirrup lazy
去 挑 。 1260-1320
qu tiao.
go kick

'In my side, the car with green curtains is left empty; in his side, (someone) doesn't want to wear the golden stirrup.'

In this example, the objects *cuilianche* 'the car with green curtains' and *huangjindeng* 'the golden stirrup' are both fronted to pre-verbal position. The other two DPs in the clauses should be interpreted as a single locative DP, staying at the subject position: 'I', 'here' in the first clause means 'my side' and 'he', 'there' in the second clause means 'his side'[13].

---

[13] It is interesting to note that Early Modern Chinese also shows personal pronoun-demonstrative constructions (PPDCs) (Höhn, 2015). In some languages, personal pronouns and demonstratives are able to co-occur in the same DP, such as the nominal pronouns in Japanese and Korean, in several Pama-Nyungan languages, in Austronesian languages and in Maori. This challenges the hypothesis that personal pronouns and demonstratives have universally complementary distribution proposed by Blake (2001).

It is evident that as early as in Middle Chinese, PPDCs can be found in the literature. Early Modern Chinese also has PPDCs.

(1) 我 这里 一 物 也 无 Mazu yulu 618-907
Wo zheli yi wu ye wu
I this.place one thing also NEG.have
'There is not even one thing here in my side.'

(2) 想象 说 我 这心 也 自 无 所 不 知 Zhuzi yulei 1270
Xiangxiang shuo wo zhexin ye zi wu suo bu zhi
Imagine say I this.heart also naturally nothing SUO NEG know
'Imagine to say that my heart also naturally knows everything.'

Höhn (2015) suggests that the PPCPs might be related to the grammaticalisation of phi-feature in the language. Languages like Japanese and Korean do not grammaticalise their phi-feature tend to have PPCPs. Same generalisation should apply to Chinese, as Chinese do not grammaticalise the phi-feature as well.

I argue that in EMC, the TP internal area only has one position, that is, Internal Topic Position. This is against the low TP area structure in Mandarin Chinese (Paul, 2005) and in LAC (Wang, 2016), because they adopted a sentence internal topic position and a sentence internal focus position. I argue that this is not the case for EMC.

The Mandarin Chinese and LAC examples show the Topic and Focus positions in the low TP area.

(197)   Mandarin Chinese

Ni zui xihuan shenme hua?   Wo hua   (ne),   meiguihua zui xihuan.
you most like   what   flower? I   flower (PAR), rose   most like.
'What kind of flower do you like the most? Among flowers, rose I like the most.'

(198)   LAC

a. Internal Topic

齊宣   王   問   卿。   孟子   曰：'王   何   卿
Qi Xuan emperor wen   qing.   Mengzi yue: 'Wang   [he   qing]*i*
Qi Xuan emperor ask.about minister. Mencius say   Your.Majesty which minister
之   問   也？'   Mencius, (Wang, 2016, p. 186)
zhi [VP wen   *ti*] ye?'
ZHI   ask.about   Decl
'Emperor Xuan of Qi asked about ministers. Mencius said: "Which (kind of)
ministers is Your Majesty asking about?"'

b. Internal Focus

恒   公   曰：然則   吾   何   以   為   國？   管   子   對   曰：
Heng gong yue: 'Ranze wu [he   yi]   wei   guo?' Guan zi   dui   yue:
Heng Duke utter then   I   what with manage state Guan Hon reply utter
唯   觀   山海   為   可   爾。   (Wang, 2016, p. 157)
'Wei [guan   shanhai]   wei ke   er.'
WEI   exploit mountain.sea Cop appropriate Decl
'Duke Heng uttered: "Then with what do I manage the state?" Mr Guan replied:
"Only with exploiting mountains and seas that is appropriate."'

In the Mandarin Chinese example, the TP internal Topic *hua* 'flower' cooccurs and precedes the TP internal Focus *meiguihua* 'rose'. This internal topic can be base-generated, as the example shows. The internal focus corresponds to the *wh-* question position (Rooth, 1996). In LAC examples, both examples involve *wh-* phrases, the difference is that the internal Topic position allows D-linked *wh-* phrases Wang (2016). D-linked position is usually a Topic position, as it provides information that is generally known by speakers in the conversation. The Internal Focus position in LAC accommodates non-D-linked *wh-*phrases. The two positions in the low TP area, according to Wang (2016), are shown below:

```
                    TP
                  /    \
              DPsbj    T'
                      /   \
                    T     TopicP
                         /      \
                       XP       Topic'
                              /        \
                           Topic      HighFocusP
                                     /          \
                                   YP           HighFocus'
                                              /          \
                                        HighFocus        vP
```

(199)

The specifier position of TopicP and FocusP are the fronted DPs, the head position optionally accommodates particles (Mandarin Chinese) or fronting marker *zhi* (LAC). Wang (2016) also distinguishes a High Focus position (above negation) and a Low Focus position (beLow Negation) in LAC.

However, as I argued before, there is no evidence to show the distinction between the Internal Topic and the Internal Focus position. Therefore, they are very likely to be the same position. For the Mandarin example 197, the so-called base-generated topic can be analysed as a locative DP subject, which is composed of two DPs, with the second DP being a locative DP. Syntactically, *hua* is at a locative DP position, where it is qualified to be a locative DP. This locative DP will be argued to be a locative DP subject joint with an agent DP using Early Modern Chinese evidence.

(200)   Mandarin Chinese

Ni zui xihuan shenme hua?   Wo hua   (limian), meiguihua zui   xihuan.
you most like   what   flower? I   flower inside,   rose   most like.
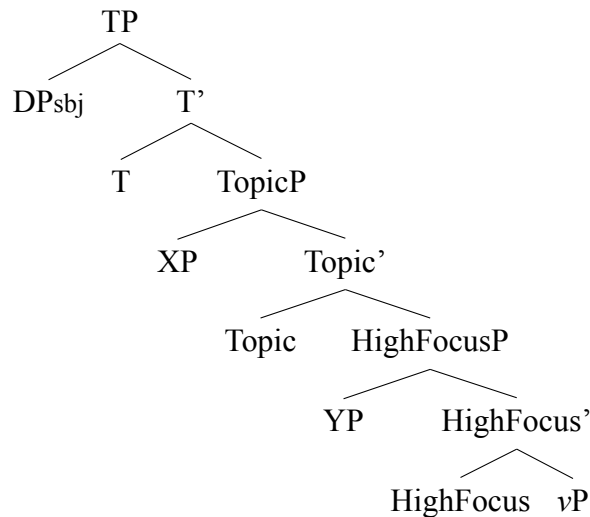'What kind of flower do you like the most? Among flowers, rose I like the most.'

Early Modern Chinese only shows the need for one position, the Internal Topic position.

(201)   我 這裏   翠簾車   先 控   着，他 那裏   黃金鐙   懶
        Wo zheli   cuilianche   xian kong zhe, ta nali   huangjindeng lan
        I   this.place green.curtain.car first control ZHE, he that.place golden.Stirrup lazy
        去 挑   。   1260-1320
        qu tiao.
        go kick
        'In my side, the car with green curtains is left empty; in his side, (someone) doesn't want to wear the golden stirrup.'

The two DPs are a locative DP subject instead of one subject DP and one internal topic DP. I have two reasons for this. One is that the animated DP have to appear with locative

DPs (e.g.*zhe li/bian* 'here' and *na li/bian* 'there') to deliver a contrastive meaning. In the example 202, the animate DP 'I' along with the locative DP 'here' forms a single DP, as the animate DP alone cannot be the subject of this sentence, as in 203.

The other reason is that the animated DP usually has a possessive semantic connection with the locative DP. In the example 204, the DP 'I' makes semantic distinction from the subject DP 'I' in 205, as 'I' in 204 is not the agent, but a genitive DP of the agent DP 'my side'. The agent refers to the people 'on my side', e.g. my friends, my colleagues, my team etc. Therefore, 'My side' should be treated as one single DP, and it as whole is the subject of the sentence.

(202)   Wo zhebian san   dian,   ni   nabian   ji   dian?
        I   this.side three o'clock, you that.side which o'clock
        'The time here (at the place I am) is three o'clock, what time is it there (at the place you are).'

(203)   *Wo san   dian,   ni   ji   dian?
        I   three o'clock, you which o'clock
        *'I (am) three o'clock, which o'clock are you?'

(204)   Wo zhebian mai-le   liangben shu, ta nabian   mai-le   shiben shu.
        I   this.side buy-ASP two.CL   book, he that.side buy-ASP ten.CL book
        '(The team) on my side bought two books, (the team) on his side bought ten books.'

(205)   Wo mai-le   liangben shu, ta mai-le   shiben shu.
        I   buy-ASP two.CL   book, he buy-ASP ten.CL book
        'I bought two books, he bought ten books.'

The fronted objects 'green curtain car' and 'golden stirrup' clearly do not cause a bi-partition translation, which is an important diagnostic for focus position. Therefore, this fronted position should be internal topic position, and this complies with my analysis of the TP internal structure in this thesis.

5.1.2   Fronted Objects with *shi*

Here I will discuss object fronting with *shi*. Two constructions both will be discussed with the fronted objects followed by *shi*. However, there is difference in that in one the object fronts to a focus position, where *shi* is a fronting marker, while the other one sees *shi* as a copula. I argue that the former tends to appear in AC, while the latter tends to appear in EMC. A construction involving cleft construction will also be introduced. I argue that this construction is a result of a cross-linguistic pronominal copula cycle.

5.1.2.1 Focus Marker *shi*

In Archaic Chinese, *shi* 是 is identified as a fronting marker (Aldridge, 2010; Wang, 2016). Fronting markers specifically refer to *shi* 是 and *zhi* 之 in Chinese, as both follow fronted objects and originates from pronouns. Wang (2016) is the first to discover the distribution asymmetry between these two fronting markers. She argues that the fronting marker *zhi* is able to distribute at the high focus and low focus positions, while *shi* is only available in low focus position beLow Negation (Wang, 2016, p. 56). However, I argue that these two fronting markers are complementarily distributed, in a manner that *zhi* is exclusively at the pre-Middle Negation position and *shi* is exclusively at the post-negation position. Furthermore, I will show that *shi* only follows fronted nouns and first and second person pronouns, excluding *wh-* phrases, demonstratives and third personal pronouns, while the fronting marker *zhi* follows fronted *wh-* phrases, nouns, demonstrative pronouns and the second person pronoun *zi* 'you'[14]. I will explore the nature of *shi* in this section, and suggest that it is an existential copula, but showing the similar properties of *shi* and existential copula *you*.

Two fronting markers *shi* 是 and *zhi* 之, and are identified in AC. *Shi* 是 'this' was a demonstrative pronoun while *zhi* 之 'it' was a third person pronoun in AC, and they both develop the function of fronting markers (Aldridge, 2010; Wang, 2016). When objects undergo fronting, the fronting marker follows the fronted objects. Therefore, their occurrence after an object indicates an object fronting. It is clear that when there is no object fronting, there are not fronting markers (as in 206a and 207a). When there is object fronting, fronting markers appear and immediately follow the fronted objects (as in 206b and 207b).

(206) a. 敝　邑　知　罪，敢　不　聽　命?   Zuozhuan
Bi　yi　zhi　zui, **gan** bu ting ming?
shallow county know guilt, dare not hear order
'(Our) shallow county knows our guilt, dare (we) not follow the order?'

    b. 敢　不　唯　命　是　　聽　?   Zuozhuan
Gan bu　wei　ming shi$_i$ [VP ting t_i]?
Dare NEG WEI order SHI hear
'(Who) dare not only follow the order?'

(207) a. 今　嬖宠　　　之　丧，不　敢　择　位   Zuozhuan
Jin　bichong　　zhi sang, bu **gan** ze　wei
today beloved.concubine Gen funeral, NEG dare choose position
'Now it is your favourite concubine's funeral, (other countries) do not dare to choose officers with the proper position to attend.'

---

[14]I argue that the second person pronoun *zi* 'you' behaves different from other personal pronouns, it is even different from other second person pronouns. I treat *zi* as a special personal pronoun with demonstrative properties.

b. 子產　曰：... 何　　位　　之　敢　　擇　　? (Wang, 2016, p. 51)
   Zichan yue: ···[he　wei]*i*　zhi **gan** [VP ze　　*ti*]?
   Zichan utter　which position ZHI dare　　choose
   'Zichan uttered: ···which position does (he) dare to choose?'

It is worth noting that the positions of the two fronting markers are different. This can be seen from the positions of the diagnostic elements— modal verb *gan* 'dare', Middle negator and Low negator. It can be seen that in 206b, the fronted DP object *ming* and the fronting marker *shi* are below the modal verb *gan*. In contrast, the fronted *wh*- phrase object with the fronting marker *zhi* lands at the position above *gan*. It should be noted that in 206b, the negator following *gan* is not the Middle negator, but Low negator. The Middle negator locates above *gan*, as shown in the double negation construction in 208. Middle negator is above *gan*, and Low negator follows *gan*.

(208)　子 亦　不　　敢　不　　服　　也。　　　　　　　　Zhanguo.liyi
　　　　Zi yi　bu　　gan bu　　fu　　ye.
　　　　Zi also NEG dare NEG wear SFP
　　　　'Zi also does not dare not to wear.'

Although there is no direct evidence of relative order between the Middle negator and the fronting marker *shi*, it is still clear that the fronted object with the fronting marker *shi* is below the modal verb *gan*, and as a result, below the Middle negator.

As for the position of the fronting marker *zhi*, because the Middle negator is above the modal verb *gan* and the fronting marker *zhi* along with the fronted object are above the Middle negator (as in 209), we can conclude that fronted objects with the fronting marker *zhi* are above negation. This means that they should be between TP and *v*P.

(209)　君子　　将 險哀　　　之　不　　　　暇　　Guoyu, (Wang, 2016,
　　　　junzi　　jiang xianai*i*　zhi bu　[VP　xia *ti*]　p. 50)
　　　　gentleman Fut　danger.sorrow ZHI NEG attend.to
　　　　'gentlemen will not (have time to) attend to danger or sorrow.'

(210)　不　唯　下　土　之　不　康靖。
　　　　Bu　wei [xia　tu] zhi bu　　kangjing.
　　　　NEG WEI under land Gen NEG peaceful
　　　　'Not only the world is not peaceful.'

210 does not involve object fronting, where the nominal DP *xiatu* 'the world' is actually the subject in an embedded clause, which is marked by the genitive case marker *zhi*. The reason I put it here is that the *wei...shi/zhi* focus construction should be distinguished, in order to locate the correct positions of *zhi* and *shi*. In 210, the Middle negator is the one

preceding the verb *kangjing* and following the genitive case marker *zhi*. The initial negator is the negator of the focus DP *wei xia tu* 'only the world'. This contrasts Wang's(2016) analysis of bi-clausal cleft construction, in which the initial negator is analysed as the Middle negator, and the *zhi* and *shi* are taken as a pair of markers exclusively for *wei...shi/zhi* focus construction. However, I argue that *wei...shi/zhi* is not a cleft construction, but simply marking a focus DP. *Wei* is an adverb 'only' and *shi/zhi* are DP fronting markers, as discussed in Section 3.1. The cleft intuition comes from the fact that the fronted DP is focused. The evidence below shows that *wei* can also appear before subjects and verbs without causing a cleft interpretation.

(211) a. 鲁 执政   唯 强   Guoyu
          Lu zhizheng wei qiang
          Lu manage   only force
          'Lu manage the area only using force.'

     b. 唯 忠 信 者 能 留 外 寇 而 不 害。
          wei [zhong xin   zhe] neng liu wai kou   er   bu hai
          only [loyal trustworthy person] can stop outside enemy CONJ NEG harm
          Guoyu

       'Only loyal and trustworthy people can stop the enemy outside and not do harm

       to the country.'

Moreover, *wei...shi/zhi* is not a fixed construction, as fronted objects can appear without *wei*.

(212) 将 虢 是 灭   Zuozhuan.Xigong
       Jiang [Guo$_i$ shi mie t_i]
       will Guo SHI kill
       '(I) will kill the Familly Guo.'

(213) 是 之 不 務   Zuozhuan
       shi$_i$ zhi bu [VP wu t_i]
       this ZHI not   conduct
       '(if you) do not conduct this.'

As shown above, the object *Guo* in 212 and *shi* in 213 are fronted with the fronting markers *shi* and *zhi*, respectively, without the occurrence of *wei*, and vice versa in 211 where only *wei* is used without fronting markers. Concluding with the arguments listed above, I suggest that *wei...shi/zhi* is not a construction which can change a mono-clause to a bi-clause. This means that *shi* and *zhi* are not interchangeable markers exclusively for this construction, but fronting markers locating in different positions.

In summary, the focus markers *shi* and *zhi* locate to different positions. To be more specific, *shi* locates at the position below the Middle negator, which is inbetween NegP and *v*P. *Zhi* locates at the the position above the Middle negator, which is between of TP and

*v*P. As the fronted *wh-* phrases with fronting marker *zhi* raise to the High focus position, the positions of the two fronting markers are as below:

```
                        TP
                    /        \
                DPsbj         T'
                            /     \
                          T        TopicP
                               /          \
                        Fronted DP        TopicP'
                                        /        \
                                    Topic        NegP-clausal
                                     |          /          \
                                  之 zhi   Neg-clausal       ModP
                                                          /      \
                                                        DP       Mod'
                                                        |       /    \
                                                     敢 gan   NegP-vP
                                                            /        \
                                                          Neg       FocusP
                                                                  /        \
                                                            Fronted DP     Focus'
                                                                         /       \
                                                                      Focus       vP
                                                                        |        /   \
                                                                     是 shi    DP    v'
                                                                                   /    \
                                                                                  v      VP
                                                                                       /    \
                                                                                     DP      V'
                                                                                           /    \
                                                                                          V    DPobj
```
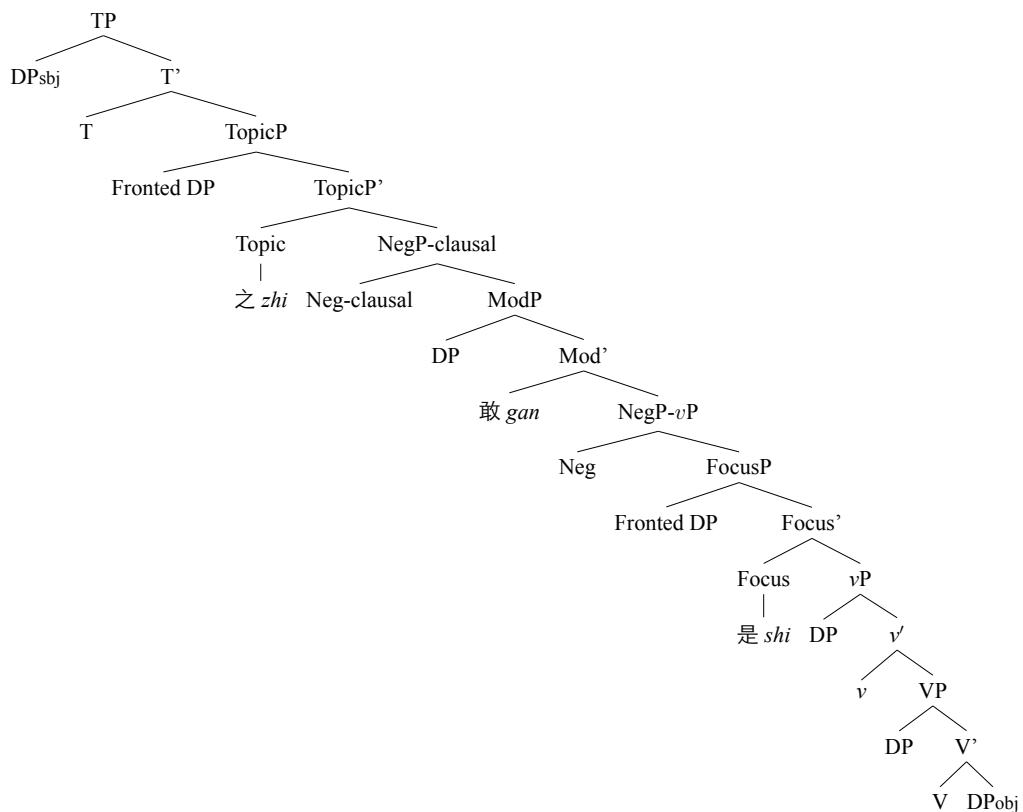
(214)

After locating the position of fronting marker *shi*, I further explore its nature. I suggest that this *shi* is a focus marker, in line with the analysis of the focus marker *shi* in Mandarin (Hengeveld et al., 1987; Zhan, 2012). As suggested by Hengeveld et al. (1987), *shi* in Mandarin Chinese also has the use of focus marker. One position it can stay is in between the focused DP and the verb, as in the example below. Similarly, In LAC, *shi* is in the same position, as in 216.

(215) MC

Wo mingtian Niu yue shi qu.
I   tomorrow New York SHI go
'It is New York that I will go to tomorrow.'

(216) LAC

将　虢　是　灭　　　　　　　　　　　　　Zuozhuan.Xigong
Jiang [Guo*i* shi mie *ti*]
will Guo SHI kill
'(I) will kill the Familly Guo.'

The focus property of *shi* can also be seen from its combination with the focus sensitive operator *wei*. As exemplified in 217, *wei* and *shi* both wrap around the fronted object *ming* to deliver a focused interpretation.

(217)　敢　不　唯　命　是　　聽　？　　　　　　　Zuozhuan
　　　　　Gan bu　wei　ming shi*i* [VP ting *ti*]?
　　　　　Dare NEG WEI order SHI hear
　　　　　'(Who) dare not only follow the order?'

The historical development of *shi* also supports the focus marker analysis. As suggested by Diessel (1999), one of categories that demonstratives are able to change to is the focus marker. This is consistent with the historical development of *shi*, as *shi* was a demonstrative in AC.

5.1.2.2　Copula *shi*

In this section, I discuss object fronting with copula 是 *shi*. As suggested by Diessel (1999),Van Gelderen (2011) and Van Gelderen (2015), demonstrative pronouns are a popular source for historical changes, and they have changed to various categories, such as personal pronouns, adverbs, articles or copulas. This is especially so with the demonstrative-copula development, which is a cross-linguistic phenomenon that is also observed in Arabic (third person pronoun used as copula) and Saramaccan etc (Van Gelderen, 2015). As for Chinese, I agree that the morpheme 是 *shi* changed from a demonstrative pronoun in AC to a copula in EMC, following Li and Thompson (1977), Peyraube and Wiebusch (1994), Chang (2006) and Zhan (2012). I suggest that object fronting to the TP internal Topic Position is involved in copula *shi* constructions, which leads to two positions of *shi* on the surface order: a sentence final position that has the object fronting and a canonical copula (before the predicate) position, in which the objects stay in situ. I also suggest that this difference caused by the object fronting finally leads to the disparate uses of the copula *shi*. To be more specific, the sentence final copula is finally reanalysed as an adverb due to the reanalysis of equational constructions.

Before presenting the object fronting and the historical development of *shi*, I first discuss the definition of Chinese copula I use in this thesis. I follow the definition proposed by Zhan (2012), in that Chinese copula *shi* is 'an invariant non-inflectional' verb, which forms the predicate of a sentence with certain lexemes that are DPs or Mod/*v*Ps. This differentiates Chinese copula from English ones, as Chinese *shi* also accepts verbal phrase to form predicates, as in 218, 219, 220 of the copula *shi* construction. *Shi* forms predicates with nominal DPs (218 and 219) or Mod/*v*Ps (220).

(218)　...大夫　　之　貪，　　　是　吾　罪　也。　　　　　　Guoyu
　　　　...Dafu　　zhi tan,　　shi [wu　zui] ye.
　　　　...Officials Gen corruption, COP 1.Gen guilt SFP
　　　　'... Ofiicials' corruption, it is my guilt.'

(219) 吾　不　能　早　用　　子，今　急　而　　求　子，是　寡人　之
Wu bu　neng zao yong　zhi, jin ji　er　qiu zi,　shi [guaren zhi
I　NEG can　early employ you,　now urgent CONJ ask you,　COP I　　Gen
过　　也。　　　　　　　　　　　　　　　　　　Zuozhuan.Xigong
guo]　ye.
mistake SFP
'I cannot employ you earlier, now it's urgent and I come to ask you, this is my
mistake.'

(220) ...郑　出　自　宣王，　王　而　虐　之，是　不　爱
...Zheng chu zi Xuanwang, wang er nue zhi, shi [bu ai
...Zheng come from Xuan.King, be.king CONJ mistreat 3.Obj, COP NEG love
亲　　也。　　　　　　　　　　　　　　　　　　Guoyu
qin]　ye.
relative SFP
'...Zheng comes from the King Xuan, after he becomes the king and mistreats them,
this is not loving his relatives.'

After putting forward the definition of Chinese copula, I discuss the origin of the copula
shi and the copula construction. I suggest that the Chinese copula originates from demon-
strative pronoun *shi*, as also discussed by Li and Thompson (1977),Peyraube and Wiebusch
(1994),Chang (2006),Zhan (2012). In AC, *shi* is used as a demonstrative, as can be seen
in example 221, where *shi* is a fronted demonstrative object to internal topic position. The
copula use of *shi* developed as early as LAC. 222 is an LAC example, in which *shi* in the last
clause 'this is my mistake' shows ambiguous interpretations that can be either interpreted
as a demonstrative or a copula. For a demonstrative interpretation, *shi* refers to the propo-
sition of the two clauses preceding it; 'the situation that I can not employ you earlier and
now I come to ask you when it is urgent'. For a copula interpretation, *shi* links the previous
two clauses and the nominal DP following it, which semantically fulfils the requirement of
copula. By the Early Middle and Middle Chinese periods, *shi* had lost any demonstrative
interpretation. Instead, it is clearly used as a copula, similar to that used in Mandarin today.
In example 223 taken from Early Middle Chinese, copula *shi* follows the adverb *nai* 'just',
which means it no longer occupies the clause initial position as a demonstrative would do.
In the same period, example 224 shows the copula-linking property that connects the subject
and the predicated DP. In example 225, which is from Middle Chinese, the adverb *yi* 'also'
precedes the copula *shi*.

(221) 是　之　不　　　務　　　　　　Zuozhuan, (Wang, 2016, p. 90)
shi*i* zhi bu [VP　wu *ti*]
this ZHI not conduct
'(if you) do not conduct this'.

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(222) 吾　不　能　早　用　　子，今　急　　而　　求　子，是　　　寡人
Wu bu   neng zao yong zhi, jin ji   er   qiu zi, [shi   guaren
I   NEG can early employ you, now urgent CONJ ask you, DEM/COP I
之　过　　也。　　　　　　　　　　　　　Zuozhuan.Xigong
zhi guo   ye].
Gen mistake SFP
'I cannot employ you earlier, now it's urgent and I come to ask you, this is my mistake.'

(223) 夫　邪　文　　　邪　言，乃　是　奸　　　灾　　之　主人　也。
Fu xie wen   xie yan, nai shi jian   zai   zhi zhuren ye
Part evil literature evil speech, just COP treacherous disaster Gen owner SFP
Shilun.Taipingjing 126-144

'Those evil literature and speech, are the owner of treacherous people and disasters.'

(224) 卿　何　等　神，恼　　我　如　是？比丘　言：吾　是　佛　　弟子。Xijin
Qin he   deng shen, nao   wo ru   shi? Biqiu yan: wu shi fo   dizi
You what kind god, annoy I   like this? Biqiu utter: I   COP buddha student
yijing 265-316

'What kind of god are you, that you are annoyed of me like this? Biqiu says: I am the student of Buddha.'

(225) 雖　　性　非　仁明，亦　是　勵精　　之　主。　　　670-749
Sui   xing fei renming, yi shi lijing   zhi zhu
Although nature NEG humane, also COP make.effort POSS governor
'Although (my) nature is not humane enough, (I) am still a good governor who makes great effort to govern.'

I also argue that the *shi* copula constructions come from the equational constructions *...(zhe)...ye*, where *zhe* is optional, because before *shi* changed to copula, it is the equational construction that fulfils the requirement for this construction. What is more, the copula use of *shi* is also developed from EC. For instance, 226 is an equational construction without copula *shi*, in which the subject *kan* that is marked by the determiner *zhe* are linked with the nominal predicate *shui* 'water' that is marked by the nominaliser *ye* through the constructional 'copula'. When copula *shi* is developed, as in 227, the linking job is done by *shi*.

(226) 坎　者，水　也　　　　　　　　　　　　　　Zhouyi, AC
Kan zhe, shui ye
Kan D,   water SFP
'Kan (the terminology in I Ching) is water.'

(227) 何　者　是　水？　　　　　　　　　　　　MidC, 784-841
He zhe shi shui?
what D   COP water
'What is water?'

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Another argument for the connection of equational constructions and copula construction is that they have the same subcategories. Both equational constructions and copula constructions can take nominal and verbal predicates. There are two kinds of equational constructions, : 1) subject DP with nominal predicate, which is interpreted as 'DP1 is DP2' ('DP *(zhe)*, DP *ye*'); 2) subject DP with verbal or clausal predicate. The first kind of equational constructions is exemplified in 226, where the subject DP1 is 'kan', and the predicate DP2 is 'water'. The second kind of EC are shown in 228a and 228b. To be more detailed, in 228a, the subject is a headless relative clause, and the predicate is a vP 'are good at making up for the mistakes'. The predicate of equational constructions in 228b is questioned by *wh*-word 'what', which requires the answer to be a clausal predicate. Thus the answer is the clause 'start (wars) too fast and win too fast' which is predicated under a pro-drop subject 'Wu state'. As mentioned earlier, copula constructions also are able to form nominal and verbal predicates with DPs and Mod/vPs, as in 219 and 220, repeat as 229a and 229b.

(228) ec

a. 无　咎　　者，善　补　　过　　也。　　　　　　Zhouyi, AC
Wu jiu　　zhe, shan bu　　guo　　ye.
NEG mistake D,　good make.up mistake SFP
'The person who has no mistakes are good at making up for the mistakes.'

b. 吴　之　所　以　亡　者　何　也？李克对曰：　骤　战　而　　骤
Wu zhi　suo　yi　wang zhe he　ye? Li ke duiyue: zhou zhan er　　zhou
Wu ZHI SUO for die　D　what SFP? Li ke answers: fast　fight CONJ fast
胜。　　　　　　　　　　　　　　　　　　　　Lvshichunqiu, LAC
sheng.
win
'What is the reason that Wu State perished? Li ke answers: because of starting wars too fast and winning too fast.'

(229) copula construction

a. 吾　不　能　早　用　　子，今　急　　而　　求　子，是　　寡人　之
Wu bu　neng zao　yong　zhi, jin ji　　er　　qiu zi,　shi　　guaren zhi
I　NEG can　early employ you, now urgent CONJ ask you, DEM I　　　Gen
过　　也。　　　　　　　　　　　　　　　　　Zuozhuan.Xigong
guo　ye.
mistake SFP
'I cannot employ you earlier, now it's urgent and I come to ask you, this is my mistake.'

b. ...郑　出　自　宣王，　王　而　虐　　之，是　不　爱
...Zheng chu zi Xuanwang, wang er　nue　zhi,　shi bu　ai
...Zheng come from Xuan.King, be.king CONJ mistreat 3.Obj, DEM NEG love

亲	也。						Guoyu
qin	ye.						
relative	SFP						

'...Zheng comes from the King Xuan, after he becomes the king and mistreats them, this is not loving his relatives.'

Concluding from the above descriptions of copula *shi* and its historical development, the demonstrative-copula change of *shi* that happens in LAC leads to a Spec T lowering movement. This lowering movement is a diachronic reanalysis and not a synchronic process. The landing position of this lowering should be above *v*P, because *shi* precedes Low Negations and *v*Ps in the *shi-v*P predicates, as in 229b. To be more precise, I argue that this position should be in head of Polarity Phrase, which is just above the Middle Negation. The main argument for this position comes from an indirect evidence of the relative position of the negative form of the copula *shi*, the copula *fei*. For the reasons that the copula *shi* still has ambiguous interpretations of demonstratives in LAC and the raising properties of modal verbs are strong in the same period, it is unlikely to show the position of the copula *shi* from direct evidence[15]. Because the parallel connection of the two forms of positive and negative copulas, *shi* and *fei*, has been identified in Yen (1986), I use the position of *fei* to reflect the position of *shi*.

The negation of the predicate in EC/copula constructions is realised by the negative copula *fei*. As in 230, 231 and 232, this negative copula appears above the Middle Negation and are predicated with nominal DP (in 230) and ModP (231 and 232).

(230)
溥	天	之	下，	莫	非	王	土		Anelects
Pu	tian	zhi	xia,	mo	fei	wang	tu		
broad	heaven	Gen	under,	none	Neg.COP	king	land		

'under the broad heaven, no land is not King's land.'

(231)
群	臣	不	尽	力	于	鲁君	者，	非	不	能	事
Qun	chen	bu	jin	li	yu	Lujun	zhe,	fei	bu	neng	shi
crowd	officials	NEG	finish	power	at	Lu.King	D,	Neg.COP	NEG	can	work.for

君	也。	Zuozhuan
jun	ye.	
king	Nmlz	

'The officials who does not devote to serve the King of Lu, it's not that they can not work for him...'

---

[15]*Shi* does not appear with modals like *ke*, *keyi* and *neng*. I argue that the inaccessibility of *shi* comes from the ambiguous interpretation of the demonstrative and the raising nature of the modals. Modals *ke*, *keyi* and *neng* are able to raise the nearest argument, such as the direct object or the PP argument of yi in *v*P, which are discussed in 6.2.1. When they appear in the same sentence, *shi* is likely to be interpreted as an object-raise-to-subject demonstrative that caused by the modals *ke*, *keyi* and *neng*.

(232) 其 耳 非   不 可 以 闻   也   Lvshichunqiu
[Qi er]*i* fei bu ke yi wen *ti* ye
3.Gen ear Neg.COP NEG can use hear Nmlz
'It is not that their ears can not hear.'

Due to the parallel connection of *shi* and *fei*, the position of the copula *shi* should also be in the head of PredP, so that it is predicated immediately under TP along with nominal DPs or Mod/*v*Ps. 233 is the structure of example 230, and 234 is the structure of example 231.

(233)

```
              TP
           /      \
        <shi>      T'
                 /    \
                T      PredP
                      /     \
                    Pred   DP-object
                     |
                   shi/fei
```

(234)

```
              TP
           /      \
        <shi>      T'
                 /    \
                T      PredP
                      /      \
                    Pred    Neg-clausalP
                     |       /        \
                  shi/fei  Neg-clausal  ModP
                                      /     \
                                    DP      Mod'
                                          /      \
                                        Mod     NegP-vP
                                               /       \
                                             Neg        vP
                                                      /    \
                                                   DPsbj    v'
                                                          /   \
                                                         v    VP
```
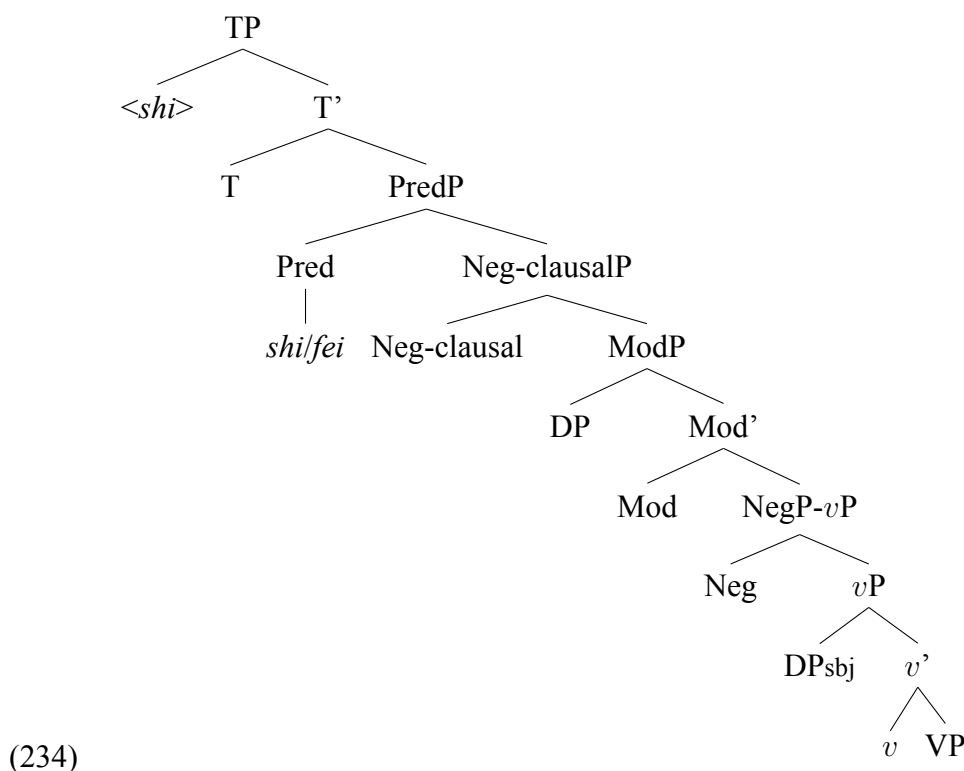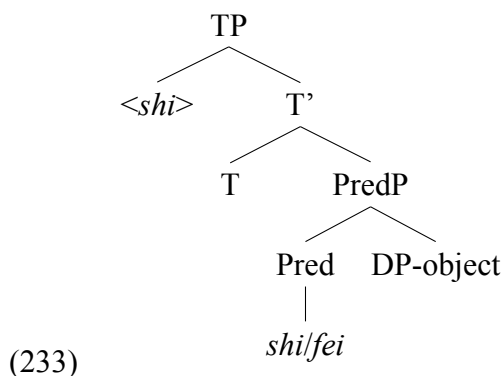
After introducing the background of copula constructions, I show that they also involve fronting. To be more specific, this fronting is the nominal DP predicate fronting to the internal TP Topic position. This fronting was originally found in a limited cases in the EMC texts of ChiPaHC, where the copula *shi* is in an unusual position, compared with the common copula use described above. As can be seen in 235, where the person's name *Zhangqian* fronts to a pre-copula position as the object.

(235) 自家 張千　　 的 便 是　 。　　　　　　　　　　　　　　1260-1320
Zijia Zhangqian de　bian shi.
Self Zhangqian Gen ADV COP
'I am Zhangqian.'

Generally speaking, the sentence final copula *shi* can possibly be generated in two ways. One way is through object fronting to the pre-copula position, and as a result, the copula is in the last position on the surface order. The other way is through an insertion, by which the two positions, the sentence final and the canonical copula positions are both open to *shi*, and *shi* is able to choose one position to undergo the insertion. This way does not involve any argument movement. However, I argue that this sentence final copula is caused by object fronting to TP Internal Topic Position, instead of a free insertion. The reason is that the object fronting hypothesis can account for the fact that despite of two kinds of predicates, only nominal predicates are able to have object fronting, as can be seen in the examples below, all the sentence final copulas are preceded by DPs, instead of *v*Ps. If the unusual position is generated by free order insertion, *shi* should also be preceded by *v*Ps in the predicates. However, this prediction is unattested in both ChiPaHC and CCL corpora. As in the examples below, all the fronted predicates are nominal DPs. Therefore I conclude that this unusual position of the copula *shi* is a result of object fronting.

(236) 人　 之 所 好 者　 何 也? 曰:　　　礼义、　　　辞让、　忠信
Ren zhi suo hao zhe he ye? yue: [liyi,　　　 cirang, zhongxin
people Gen SUO like Nmlz what SFP? answers: Ritual.justice, humility, loyalty.trustworthiness
是　 也。　　　　　　　　　　　　　　　　　　　　　　　 Xunzi
shi ye].
COP Nmlz
'What do people like? Answers: The qualities of ritual, justice, humility, loyalty and trustworthiness.'

(237) 故 为 不　 善 以 得 祸　 者, 桀 纣　 幽 厉 是　 也。　　　 Mozi
Gu wei bu shan yi de guo zhe, [Jie Zhou You Li shi ye].
So do NEG good to get disaster D, Jie Zhou You Li COP Nmlz
'So people who did bad things and get disasters are the King Jie, the King Zhou, the King You, the King Li.'

(238) 故 圣人　 听 於 无　 声,　 视 於 无　 形。 詹何、 田子方、 老耽
Gu shengren ting yu wu sheng, shi yu wu xing. [Zhanhe, Tianzifang, laodan
So wise.man hear at NEG sound, see at NEG shape. Zhanhe, Tianzifang, Laodan
是　 也。　　　　　　　　　　　　　　　　　　　　　 Lvshichunqiu
shi ye].
DEM Nmlz
'So wise man can hear voices with no sound, see things with no shape. Zhanhe, Tianzifang, Laodan are this kind.'

(239) 以   国   齐   义，   一 日 而   白，   汤武   是   也   。 Xunzi
     Yi   guo   qi   yi,   yi ri er   bai,   [Tangwu shi ye].
     Make country unify justice, one day CONJ famous, Tangwu COP Nmlz
     'The person who unifies and promote justice in his country and gets famous in one
     day are the King Tangwu.'

I further argue that the object fronting is specifically for two kinds of nominal predicates, the DP list and person's names[16]. Their movement is triggered by topic properties, because they bear topic-like properties. DP lists are a group of parallel DPs in the same syntactical and semantical categories. For instance, in 236, the DPs *liyi* 'ritual and justice', *cirang* 'humility' and *zhongxin* 'loyalty and trustworthiness' precede the copula *shi*. They are usually considered to be related to Topic-triggered movement. DP lists are able to conduct topicalisation to the external topic position. The other kind of DPs, names, especially person's names, are often fronted. As in 239, the person's name *Tangwu* fronts to the pre-copula position.

Another interesting fact is that the fronted object in 235 that is from EMC texts, repeated as 240, is followed by a possessive marker *de*. I argue that this is the internal TP topic position marker, which is an important evidence of the landing site of the fronted object. As discussed in 3.1, *zhi* in LAC is a genitive marker and it appears in the internal TP Topic position to mark the fronted objects. Aldridge (2016) has provided convincing evidence of the relation between genitive marker *zhi* in LAC and *de* in EMC and MC. Following her argument, I suggest that this *de* is also a genitive marker, which signals the movement to the topic position.

(240) 自家 張千   的   便   是   。   1260-1320
      Zijia Zhangqian de   bian shi.
      Self Zhangqian Nmlz ADV COP
      'I am Zhangqian.'

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[16]According to my topic-driven analysis, the objects of Mod/*v*P predicates should also be able to front, if they are DP lists or person's names. Though I have not encountered any positive examples of this kind in both ChiPaHC and CCL corpora, there is no counterexamples for this either. I therefore consider this is a valid prediction for this analysis.

5.2 Nominal Fronting to the Pre-Subject Position

In this section, three constructions are displayed: equational constructions, partial object in situ and DP lists. As argued before, the equational constructions with resumptive pronouns tend to happen after LAC. This hypothesis is borne out in ChiPaHC. The examples of below are all in EMC. They are fronted as topicalisation, as their landing sites are above the subject, and they have a resumptive pronoun or a partial object (possessee) in situ.

(241) 正　衙　　　法座，香木　　　為　之
[Zheng ya　　　fazuo]$_i$, xiangmu　　　wei　zhi$_i$
main　government throne,　fragrant.wood make 3SG
'The main government throne, xiangmu made it.'

(242) 溥　手教，余　得其　四　紙
[Fu　shoujiao$_i$],　yu de　qi$_i$ si　zhi
Fu's manuscript, I　have his four paper
'Fu's manuscripts, I managed to have four paper of them.'

(243) Partial Object in Situ

李玄道、　　蓋文達、　于志寧、　許敬宗、　　劉孝孫、　蔡允恭，　　　《唐書》
[LiXuandao, GaiWenda, YuZhining, XuJingzong, LiuXiaosun, CaiYungong]$_i$, <TangShu>
LiXuandao,　GaiWenda, YuZhining, XuJingzong, LiuXiaosun, CaiYungong,　<TangShu>
皆 不　書　　字。
Jie bu　shu　ti zi.
all NEG write　courtesy.name
'LiXuandao, GaiWenda, YuZhining, XuJingzong, LiuXiaosun, CaiYungong, <Tang-
Shu> didn't write their courtesy names at all.'

It is interesting to note that, these constructions are very similar to passives in EMC, except that they do not have a passive marker. As in the examples below, passives in EMC also has resumptive pronouns and partial subject in situ. This suggests that passives in EMC also involve some sorts of topicalisation. This is not surprising because the external topic position is active in this period.

(244) 只　见　一　个 人家　被　火　烧　坏　　土墙　　　　　Sanguoyanyi, CCL
Zhi　jian [yi　ge　renjia]$_i$ bei　huo shao huai　　ruqiang$_i$
only see　one CL house　BEI fire burn broken wall
'(I) only see one house's wall is burned until broken.'

(245) 孤　昨　　　与　夷夷　　交战　　被　他 射　死　战马　　　　Dongxijin
Gu$_i$ zuo　　　yu　yiyi　　jiaozhan bei　ta she si　ti zhanma
I　yesterday with barbarians fight　　BEI he shot kill　horse
yanyi, CCL

'Yesterday I fight with barbarians and my horse was shot and dead.'

(246)   (pro) 又   被 挤   住 了   脚
        (pro)*i* you bei ji   zhu le   *ti* jiao
        (pro) again BEI squeeze stop ASP   feet
        '(pro) feet again was squeezed.'

(247)   其 庵 忽   被 虎 拆 之   Taipingguangji, CCL
        [Qi yan]*i* hu   bei hu chai zhi*i*
        he house sudden BEI tiger break 3.Obj
        'His house was suddenly broke by tiger.'

(248)   (pro) 被 蛇   吸 之
        (pro)*i* bei she xi zhi*i*
        (pro) BEI snake bite 3.Obj
        '(pro) was bit by snake.'

(249)   余 兵   尽 被 姜维   坑 之   Sanguoyanyi, CCL
        [Yu bing]*i* jin bei Jiangwei keng zhi*i*
        rest soldier all BEI Jiangwei pit   3.Obj
        'The rest of soldiers are all killed in pit by Jiangwei.'

In summary, this section mainly demonstrated the objects fronting to a Spec C position, which is the external topic position assumed in this thesis.

5.3   Summary

This chapter discussed two kinds of nominal fronting: fronting to the Internal Topic Position (Inside TP) and the External Topic Position (Spec C). I suggested that the previous analysis of two object fronting positions inside TP should be reduced to one position— the Internal Topic Position, at least from EMC period and the periods afterwards, as the two position analysis did not have strong evidence to support the need for two positions. The single fronting position was examined by examples from EMC and MC, and it fitted well.

I also discussed nominal fronting constructions with *shi*. In AC, *shi* was identified as a fronting marker, and it always appeared after the fronted object in the Low Focus Position. In LAC, *shi* was observed to being in its reanalysis process, and became a copula in this period. The copula *shi* was observed stays after the fronted nominals in a sentence final position. The reanalysis of *shi* was explained by a T lowering movement, where *shi* moves down from Spec T to T.

The final section listed the situations where objects front to the external topic position. These fronting constructions mainly appeared after LAC, when the external topic position became active. The similarities between these constructions and passives were also shown.

Chapter 6. Raising Constructions

6.1 Raising in Equational Constructions

In this section, I will discuss the syntactic structure of object raising EC in LAC— the so-called Topic-Comment structures. I will compare ECs in LAC with those in later periods to show that ECs in LAC are raising structures, which are similar to the analysis of Mandarin passives in Chapter 8. On the other hand, ECs in MidC and EMC should be analysed as Topicalisation.
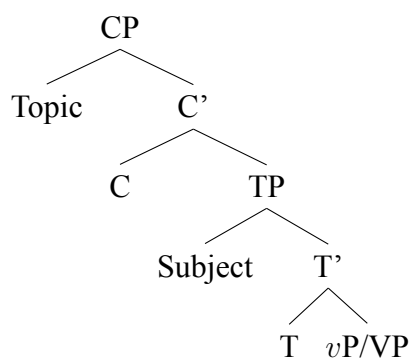
Equational constructions (ECs) are one of the most common constructions in Chinese. They form a 'X = Y' equation, where both the X and Y are nominal constructions. By saying nominal constructions, I include both nominal phrases and nominal clauses. As in 250, the two nominal phrases 'kan' and 'water' form an equational clause, linked by a null copula. In 251, the 'X' is a nominal phrase 'farming', and 'Y' is a nominalised clause, which has a structure including subject, verb and object. The nominalised clause always has the genitive marker *zhi* following the embedded subject, and also have the relative clause marker *suo* preceding the verb (Aldridge, 2013*a*). Clauses with *zhi suo* are considered as nominalised clauses, where they only contain structures as small as *v*Ps, and they are wrapped by a DP layer headed by the nominaliser *ye*. As in 252, the X and Y are both nominalised clauses.

(250) 坎 者，水 也   Zhouyi, AC
       Kan zhe, shui   ye
       Kan D,   water Nmlz
       'Kan (the terminology in I Ching) is water.'

(251) 夫 農，   民 之 所 苦   ...   Shangjunshu
       Fu   nong*i*, min zhi suo ku   *ti...*
       DEM farming, citizen Gen SUO worry
       'Farming is the thing that citizens are worried about.'

(252) 丘 之 所 言，皆 吾 之 所 弃   也。   Zhuangzi
       Qiu zhi suo yan, jie wu zhi suo qi   ye.
       Qiu Gen SUO say, all I   Gen SUO abandon Nmlz
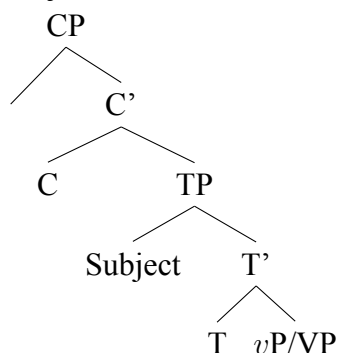   'What Qiu says are all what I abandon.'

The frequent occurrence of ECs is one of the cause for the assumption that Chinese has Topic-Comment structure and it should be distinguished from Subject-Predicate struc-

ture[17]. The definition of the Topic-Comment structure is that the Topic is what the sentence about and the comment provides the information or description of the topic. The Topic is not necessarily syntactically related to the comment, it can be semantically related to the comment to have an 'aboutness' interpretation (Li and Thompson, 1976; Shi, 2000). The syntactic difference between Topic-Comment and Subject-Predicate structure is that in Topic-Comment structure, the comment part is a full clause, which includes subjects and predicates. Therefore, the Topic-Comment structure is actually a Subject-Predicate structure with a compulsory Topic position, and this Topic position can be filled by subjects, objects, adverbial phrases.

(253)   Topic-Comment

```
                CP
              /    \
         Topic      C'
                  /    \
                 C      TP
                      /    \
                Subject     T'
                          /    \
                         T    vP/VP
```

(254)   Subject-Predicate

```
        CP
       /   \
             C'
           /    \
          C      TP
               /    \
          Subject    T'
                    /   \
                   T    vP/VP
```

The ECs were originally categorised as an OSV fronting without resumptive pronouns, due to the parsing structure I have set in ChiPaHC. However, after a careful examination

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[17]A typological distinction of Topic/Subject Prominent languages was argued by Li and Thompson (1976). According to them, Topic Prominent languages predominantly have a Topic-Comment structure, where Topic is the centre of the sentence, and the rest of structures are the syntactically or semantically related comments. On the other hand, Subject Prominent languages have the Subject-Predicate structure, where subject is the centre of the sentence. Some languages have both structures. The typical Topic Prominent languages are Chinese, and the Subject Prominent languages are Germanic, Romance and English languages. East Asian Languages such as Japanese and Korean allow both structures. However, as the Topic position in Chinese can be left null (Huang, 1984; Huang and Yang, 2013), Chinese actually allows both structures.

of its syntactic structure, it is found that the selection of structures for ECs experienced a change after LAC. That is, the constructions selected to express the semantic meaning of ECs were originally a raising construction, in which the object inside its nominalised clause raises to the subject position. However, in LAC, the object fronting in ECs starts to select topicalisation construction as its syntactic structure, in which the object fronting in ECs exhibits features of A' movement to Spec C. The important evidence for this is that the fronting tends to leave a resumptive pronoun in its base position. This might be caused by the internal change of the nominal clausal predicates, that in this time period they are in the process of developing to full clauses. The developments include that the subjects of ECs move to the external topic position, and the 'subjects' of the embedded nominal clauses move to the original subject position. The difference of ECs before and after the change is shown in the mini-pairs below. As in 255, the object 'farming' raises to the subject position without generating a resumptive pronoun. On the contrary, the movement of the objective nominal predicates left a resumptive pronoun in its base position, as in 256.

(255)   Without resumptive pronoun

夫　　農，　　民　　之　所　苦　　...　　　　　　　　　　　　Shangjunshu
Fu　nong$_i$,　min　zhi suo ku　　$t_{i...}$
DEM farming, citizen Gen SUO worry
'Farming is the thing that citizens are worried about.'

(256)   With resumptive pronoun

天子　之　所　是，　皆　　是之。　　　　　　　　　　　　　　Mozi
Tianzi$_i$ zhi　suo　shi,　(pro) jie shi　　　　zhi$_i$.
King　　Gen SUO right pro　all give.recognition 3.Obj
'King's rightness, (you) all give them recognition.'

I argue that the nominalised clauses in LAC are not complete clauses. My first reason is that these clauses are as small as vP, and lacking of evidence for higher structures. They only contain vP structures, including Low Negation, applicative structure and double object construction[18]. In the example 257, *suo* is above Low negator *bu* and the verb *neng*[19]. This means that *suo* should be higher than Low Negation. Similarly, in 261, *suo* precedes the instrumental Preposition *yi*. As the *yi* phrase is an applicative phrase, the structure below *suo* at least contains vP. In 259, the complement of *suo* contains a small clause complement.

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[18]As suggested in (Aldridge, 2013*a*, p. 6), *suo* is able to relativised any position within the vP. The examples 261 and 259 show that *suo* relativises the arguement in ApplP and the indirect object

[19]*Neng* in LAC can be at the position of V, v or Mod, as it has different status of a lexical verb, a root modal and a real modal. *neng* here is a lexical verb, as there is no other verbs following it.

(257) 夷吾 之 所 能 与 所 不 能...   Guanzi
Yiwu zhi suo neng yu suo bu neng...
I Gen SUO can CONJ NEG can
'My ability and inability...'

(258) 言 行， 君子 之 所 以 动 天 地 也。 Zhouyi.xici
Yan xing, junzi zhi suo yi dong tian di ye.
utterance behaviour gentleman Gen SUO use move world Nmlz
'Utterance and behaviour are the things gentleman use to move the world.'

(259) 此 臣 之 所 谓 哀。   Guanzi
Ci chen zhi suo wei ai.
DEM I Gen SUO call sadness
'This is what I called sadness.'

Positive evidence of CP below *suo* can not be found.

The nominalised clauses are not complete sentences, they have to combine with either another nominal DP (including the DPs with a demonstrative determiner) to be their subject or predicate. Examples similar to 260 is not found in any corpus, where the 'subject' equivalent is missing.

(260) *君子 之 所 以 动 天 地 也。 Zhouyi.xici
junzi zhi suo yi dong tian di ye.
gentleman Gen SUO use move world Nmlz
'the things gentleman use to move the world.'

(261) 言 行， 君子 之 所 以 动 天 地 也。 Zhouyi.xici
Yan xing, junzi zhi suo yi dong tian di ye.
utterance behaviour gentleman Gen SUO use move world Nmlz
'Utterance and behaviour are the things gentleman use to move the world.'

After analysing the syntactic structure of ECs in LAC, I further argue that topicalisation is also a structural choice for ECs, especially after LAC. I examine the 'say'-class verb 谓 *wei* as a case study, which is one of the most common verbs in ECs. 谓 *wei* means 'call', it often appears in ECs with a small clause complement. It can be seen that in 262, the subject is the demonstrative *ci*, which was originally the indirect object of the verb *wei*, and raised to the subject position. The nominalised clause is the predicate, in which the embedded subject *chen* is marked by genitive *zhi*. However, the EC behaves differently with the same verb *wei* in the same period in 263, in that it is a full clause with a topic position, as the resumptive pronoun *zhi* is in the base position of the moved objective clause.

(262) Raising EC
此 臣 之 所 谓 哀。   Guanzi
Ci chen zhi suo wei ai.
DEM I Gen SUO call sadness
'This is what I called sadness.'

(263) Topicalisation EC

三	不	利	而	无	所	利。	是	谓	之	贼。	Mozi
San	bu	li	er	wu	suo	li.	Shi	wei	zhi	zei.	
three	NEG	good	CONJ	NEG	SUO	good	DEM	call	3.Obj	crime	

'The three things are not benefactive, then nothing can be benefactive. This is called crime. '

With the syntactic difference in mind, I further examine the difference between raising and topicalisation in ECs quantitatively. I search three patterns: *zhi suo wei*, *zhi wei* and *wei zhi*. The former two patterns shows the raising structure in ec, as the *zhi* is the genitive marker for the embedded subject, and the relative clause marker *suo* is usually optional. The latter is the topicalisation pattern, as the *zhi* following *wei* is the resumptive pronoun.

Time Periods	之所谓 *zhi suo wei*	之谓 *zhi wei*	谓之 *wei zhi*
LAC	59	535	485
MidC	34	327	665
EMC	116	1584	3848

Table 19: The Occurrences of the Three Patterns in Equational Constructions

As shown in the table above, the former two patterns show a decreasing trend based on the numbers they occur through history, while the latter pattern shows a rise. The reason why the total occurrences are all increased in EMC is that the data size in this time period is bigger than the previous ones. It is more clear to see the change in the form of their frequencies.

Time Periods	Raising in 'say'-class verbs	Topicalisation in 'say'-class verbs
LAC	0.55	0.45
MidC	0.35	0.65
EMC	0.30	0.70

Table 20: The frequencies of raising and Topicalisation in in 'say'-class verbs of ECs

Therefore, to conclude, it is suggested that ECs undergo grammar competition in the history of Chinese, in which they select their syntactic structures between a raising construction and a topicalisation construction.

6.2 Real Modals: *v*-to-Mod Movement

In this section I argue that *ke* is a real modal, which raises the nearest argument to the subject position (Spec, T). First, I agree with Wang (2013) that *ke* is not a passive marker. I then

illustrate how the raising works.

Meisterernst (2008); Aldridge (2010) suggest that *ke* is a passive-like morpheme, which occurs in raising or passive constructions.

(264)   a. Han Period

楚　雖　　無　道，有　臣　　若　是，可　無　　存　　　乎！
Chu sui　　wu　dao, you chen*i*　ruo shi, ke wu　[VP cun　*ti*] hu?
Chu even.if NEG way, have official like this, can NEG　　preserve　SFP
Shiji:66; 2177, (Meisterernst, 2008, p. 17)

'Chu may not have the right way, but it has officials like these, is it possible that it may not be preserved / it must be preserved! '

   b. LAC

八佾舞　　　於　庭，是　可　忍　　也，孰　不　可　忍　　也。 Analects
Bayi wu　　yu ting, shi*i* ke ren *ti* ye, shu*i* bu ke ren *ti* ye.
Bayi perform in home this KE bear　Decl what not KE bear　Decl
3, (Aldridge, 2010, p. 26)

'Bayi performed in the home, if this can be borne, then what cannot be borne?'

(265) 則　山澤　　財物　不　為　用　。　　　　　Shangjunshu, ChiPaHC
Ze [shanze　caiwu]*i* bu　wei yong *ti.*
then mountain fortune NEG PSS use
'Then the mountains and fortunes are not used.'

In the Han period and LAC (as in example 264), *ke* illustrates the property of forcing the object fronting to the subject position. The short passive in LAC as in 265 also involves the object fronting to the subject position, therefore *ke* is argued to be a passive-like morpheme. Wang (2013) argues that *ke* and *neng* are not passive-related morphemes, but trigger object fronting to an object position.

(266) 故 人主　　左右　　不 可 不 慎　　　也。　　　　Hanfeizi
Gu renzhu　zuoyou*i* bu ke bu [shen　*ti*] ye.
so　monarch attendant not can not be.wary.of　Decl
'So the monarch cannot not be wary of attendants.'

(267) 吾 斯 之 未　　能　　信　　　　　　　　　Analects
Wu si*i* zhi wei　neng [xin *ti*]
I　this ZHI not.yet can　　be.confident.in
'I have not been able to be confident in this.' (Wang, 2013, p. 81)

The examples shows that *ke*, same as *neng*, is involved in object fronting to a non-subject position, immediately following the subject. Based on these examples, Wang concludes that *ke* is not passive morpheme, but a morpheme involving object fronting constructions. I agree with Meisterernst (2008); Aldridge (2010) in that *ke* triggers the object moving to the subject position, but it is not a passive morpheme. I agree with Wang (2013) in that

neng is related to object fronting to a non-subject position, specifically, pronoun fronting in a negation environment. But *ke* has the ability of raising the object to the subject position, especially in LAC, without introducing an external argument. Data from ChiPaHC shows that 77% of entries (61/80) with *ke* are object raising construction in LAC. The example of object fronting, Wang has shown, is a case of *ke* used in non-object raising construction.

Ke is not a passive morpheme as it can occur with unaccusative verbs, but passive morphemes can not.

(268) Ke with unaccusative verbs

    a. 与 死 人 同 病 者， 不 可 生 也； 与 亡 国
       Yu si ren tong bing zhe, bu ke sheng ye; yu wang guo
       with dead people same illness Nmlz, NEG MOD live SFP; with dead country
       同 事 者， 不 可 存 也。   Hanfeizi
       tong shi zhe, bu ke cun ye.
       same work Nmlz, NEG MOD exist SFP
       'People who has the same illness with dead people can not live, people who works with dead country can not exist.'

    b. 所 欲 虽 不 可 尽...   Xunzi
       Suo yu sui bu ke jin...
       SUO want though NEG MOD end...
       'Although what (you) want can not end...'

As shown above, *ke* occurs with unaccusative verbs *sheng* 'live', *cun* 'exist', *jin* 'end'. The internal arguments of these verbs undergo raising to the subject positions (Spec, T). This is in contrast to passive morphemes, as no evidence is found in CCL or ChiPaHC that passive morphemes occur with unaccusative verbs in the history of Chinese. Examples in Mandarin Chinese are given here to show that Mandarin Chinese passives are also prohibited from unaccusative verbs. This indicates that from AC to MC, there is no positive evidence to support the cooccurrence of Chinese passives and unaccusative verbs.

(269) Zhezhong shi bu cunzai.
    This.CL thing NEG exist
    'This kind of thing does not exist.'

(270) *Zhezhong shi bu bei cunzai.
    This.CL thing NEG PSS exist
    *'This kind of thing is not existed.'

A passive morpheme is disallowed in unaccusatives, as unaccusatives only have one internal argument, while Chinese passive morphemes, such as *bei* and *wei*, require another argument to fulfil the Full Interpretation Principle.

(271) Active–Passive

a. 芬 等　遂　敗　　　　　　　　　　　　　　　Sanguozhi ChiPaHC
Fen deng　sui　bai
Fen others　then lost
'Then Fen and others lost (this war).'

b. 譚 為 尚　所　敗　　　　　　　　　　　　　　Sanguozhi ChiPaHC
Tan wei Shang suo　bai
Tan PSS Shang SUO defeat
'Tan was defeated by Shang.'

Examples 271 show that by changing from an active to a passive, the passive morpheme *wei* licenses an external argument *Shang*, which is the Agent of the verb. *Ke* integrates well with unaccusatives. This means that *ke* is not a passive morpheme, and it does not license another argument in unaccusatives.

I argue that *ke* raises the nearest argument to the subject position, because the raised argument is above the key diagnostic elements, temporal modal *jiang*, adverbial *du* and the sentential negator. In previous section, the key diagnostic elements were used to determine the positions for fronted objects. Objects are all below these elements, while subjects are above these elements. As the examples above show that the fronted objects in *ke* raising constructions are above the key diagnostic elements, we say that the fronted objects raise to the subject position.

(272) 其　事　又　将　未　可　知　也。　　　　　Guoyu.Jinyu
　　　 Qi　shi　you　jiang wei　ke　zhi　ye
　　　 DEM thing again will　NEG MOD know Nmlz
　　　 'This thing will again not be knowable.'

(273) 故　　唯 白　马　独　可 以　应　耳。　　　　Gongsunlongzi
　　　 Gu　　wei bai　ma　du　ke yi　ying er
　　　 Therefore only white horse MOD YI count SFP
　　　 'Therefore only white horse can be counted.'

(274) 我 心 匪　石，不　可　转　也。　　　　　　　Shijing
　　　 Wo xin fei　shi,　bu　ke　zhuan ye
　　　 I　heart NEG stone, NEG MOD move　Nmlz
　　　 'My heart is not stone, and it can not be changed easily.'

6.2.1 Modal KE, KEYI and NENG

I agree with Wang (2013) that *ke* and *neng* are both involved in object fronting constructions, instead of passivisation. However, I argue that the modal *ke* is different from *neng* in terms of the syntactic positions and their functions. Moreover, *keyi* also has disparate properties from *neng*. Therefore *keyi* should be treated with a dynamic analysis— it was two separate words in LAC, in which *ke* is a modal and yi is an object fronting marker, but they underwent a fusion and changed to a word after LAC.

A modal selection phenomenon between *ke* and *neng* in Han period (202BC-220AD, the transition period from LAC to Middle Chinese) was observed by Mei (1991). "Modal selection" means that the modals *ke* and *neng* with the same semantic meaning can leads to different interpretations of the DPs in the subject position. The sentence with *neng* takes the DP in subject position as an agent, but the DP preceding *ke* is interpreted as a theme.

(275) 此 鱼 能 食 乎?
     Ci yu neng shi hu?
     this fish MOD eat Q.par
     'Can this fish eat?'

(276) 鱼 可 食。
     Yu ke shi
     fish MOD eat
     'fish is eatable.'

Though this phenomenon was observed decades ago, previous studies in relation to *ke*, *keyi* and *neng* make no distinction between the three modals. Meisterernst (2008) investigates the semantic values of modal *ke* and *keyi* in Han period, and treats *keyi* as a disyllable verb, syntactically and semantically identical to modal *ke*. She suggests that *ke* and *keyi* both express the modality value, whilst the deontic value is possible in negation context. Wang (2013) takes a further step to argue that in LAC, *ke*, *keyi* and *neng* show similar modality values.

I agree with them that *ke*, *keyi* and *neng* in LAC and the Han period have similar uses, which are also reflected in their semantic properties. However, I argue that a big syntactic difference between *ke* and *neng* has been shown in LAC, and the object fronting occurring with *ke* and *neng* are different kinds of fronting. The object fronting with *neng* is the personal pronoun fronting, which is triggered by the interaction between negation and modality, not by modal verb *neng* alone; the object fronting with ke is a raising construction, which is triggered particularly by the modal, and raising verb *ke*.

The first difference between *ke* and *neng* in LAC is their correlation with pronoun fronting. *Neng* correlates with pronoun fronting, but *ke* does not. Actually in the CCL corpus, recall the frequent verbs with pronoun fronting, *neng* has 0.91 proportion of pronoun fronting, which is the second highest proportion of co-occurence with the pronoun fronting among the frequent verbs selected with pronoun fronting. However, no data shows that *ke* with pronoun fronting in CCL and ChiPaHC.

(277) a. 莫 之 能 禦 也
       Mo zhi neng yu ye
       NEG it MOD resist Nmlz
       'No one can resist it.'

b. 则　虽　有　疾　风，亦　弗　之　能　惮　矣。　　Zhouli
Ze　sui　you　ji　feng, yi　fu　zhi neng dan　yi.
CONJ though have strong wind, CONJ NEG it　can　threaten SFP
'Therefore although there is a strong wind, it still cannot threaten it.'

c. 而 世　　主 莫 之　能　开　也　　　Shangjunshu
Er shi　　zhu mo zhi neng kai ye
but dynasty king NEG 3.obj MOD open Nmlz
'But the King of this dynasty can't open it.'

(278)　a. 无　可　　索 之。　　　　　　　　Guiguzi
Wu ke　　suo zhi.
NEG MOD ask it
'No one can ask for it.'

b. 圣　而　不　可　知　之　之 谓　神。　　　Mengzi
Sheng er　bu　ke　zhi　zhi　zhi wei shen.
sacred CONJ NEG MOD know 3.Obj Par call God
'The person who is sacred and others are not able to know him is called God.'

c. 夫　犬　马，人　所　知　也，旦 暮　　罄　于 前，不
Fu　quan ma, ren　suo zhi ye,　dan mu　　qing　yu qian, bu
DEM dog　horse, people SUO know Nmlz, day evening appear at　front, NEG
可　类　　之　　　　　　　　　　　Hanfeizi
ke　lei　　zhi
MOD describe it
'Those dogs and horses are things people knows. They appear in front of people day and night, therefore people is not able to describe them.'

In the above examples, object pronouns front above *neng* in negation (as in 277), whilst under the same context, pronouns do not front when they are with *ke* (as in 278). In fact, the cases where *ke* occurs with object pronouns in negation contexts are surprisingly lower than those of *neng*[20].

Modals	Total Number with Pronouns in Negation	Pronoun Fronting	Proportion
可 *ke* 'can'	6	0	0
可以 *keyi* 'can'	17	0	0
能 *neng* 'can'	93	85	0.91

Table 21: the comparison of pronouns fronting with *ke*, *keyi* and *neng* in negation in CCL

If *ke*, *keyi* and *neng* have the same status and form similar constructions, they are expected to behave alike in one syntactic phenomenon. But the above table shows that this

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[20]The searching string is '不 | 未 | 弗 | 莫 $1X$1 此 | 斯 | 彼 | 是 | 吾 | 他 | 子 | 之', while X is *ke*, *keyi* or *neng*. The time periods are Zhou, Chunqiu, Zhanguo. All the entries in the search result are twice-checked and calculated by myself.

is not the case. Pronoun fronting phenomenon is not related to *ke* and *keyi*, in contrast to the high relevance it has with *neng*. The second difference is the occurrence of *ke*, *keyi* and *neng* with double negation. Bearing the correlation between modals and double negations in mind, let us have a look at the situation for *ke*, *keyi* and *neng*. Evidence shows that *ke*, *keyi* and *neng* all have double negation. This means that they are modals and should occupy the Mod position in the syntactic tree.

(279) 察　仁义　　　之 本，天　之 意，　不　可　不　慎
　　　 Cha renyi　　 zhi ben, tian zhi yi,　 bu　ke　bu　shen
　　　 observe kindness.fairness Gen root, heaven Gen thought, NEG MOD NEG cautious
　　　 也。　　　　　　　　　　　　　　　　　　　　　　　　 Mozi
　　　 ye.

　　　'Observing the root of kindness and fairness, this is the heaven's thought, (we) cannot be too cautious about it.'

(280) 君　　 之 疆 也，不　可　以 无　主　　　　　　　　　 Guoyu
　　　 Jun　　 zhi jiang ye, bu ke　 yi wu　zhu
　　　 You.Hon Gen land　Nmlz, NEG MOD YI NEG governor
　　　 'Your land cannot have no governor.'

(281) 君　　 虽　不　安，不　能　不　听　　　　　　　　　　 Xunzi
　　　 Jun　 sui　bu　an,　bu　neng bu　ting
　　　 you.Hon though NEG peace, NEG MOD NEG listen
　　　 'Though you are nervous, you have to listen.'

However though the three words can appear in double negation, *ke*, *keyi* show sharp quantitative difference on their performance with double negation. The difference suggests that *ke*, *keyi* and *neng* are syntactically different. *Ke* tends to be a modal, *neng* tends to be a lexical verb. Keyi is in the middle, where it has more action verb property than *ke*, but it also has more modal verb property than *neng*. I investigate the entries of *ke*, *keyi* and *neng* with double negation in CCL, and also pick modal *gan* as a control group[21]. *Gan* appears in double negation and also appears in pronoun fronting.

Data from ChiPaHC shows that *ke* has the highest proportion among all the modal verbs. The proportion of *neng* in double negation is extremely low, comparing with *ke*, *keyi* and the

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[21]The searching string is '不｜未｜弗｜莫 $2X$2 不｜未｜弗｜莫', while X is *ke*, *keyi*, *neng* or *gan*. I leave 2 characters space between each constituent for possible adverbs. The time periods are Zhou, Chunqiu, Zhanguo. The entries of the double negation in the search result are twice-checked and calculated by myself.

[22]The total numbers are from the automatic count of entries shown on CCL corpus. The definition of one entry is based on the Chinese sentence period, therefore one entry may contain more than one CP. The total numbers of CP would be bigger. As CCL corpus is not parsed, cases where these words are used as other categories are included. However, as the major category of these words are modal verbs in LAC, the result would not be greatly influenced.

Modals	Double Negation	Total[22]	Proportion
可 *ke* 'can'	269	2155	0.125
可以 *keyi* 'can'	73	950	0.077
能 *neng* 'can'	5	2324	0.002
敢 *gan* 'dare'	87	1066	0.082

Table 22: the comparison of *ke, keyi* and *neng* in double negation in CCL

control group *gan*. The performance of the three words in double negation shows that they are syntactically different. Specifically, *ke* has the highest proportion in double negation, this means that *ke* is a real modal auxiliary. It should locate above the *v*P negator. The rareness of *neng* in double negation shows that *neng* is more a verb than a modal verb, which should locate inside *v*P and below the *v*P negator.

Another evidence of the relative order between *keyi* and *neng* is found in the CCL corpus.

(282) a. 闻　免　　父　之　命，不　可　　以莫　之　　奔　也；　亲戚
Wen mian　fu　zhi ming, bu　ke　yi mo　zhi　ben ye;　qinqi
hear exampt father Gen order, NEG MOD YI NEG 3.Obj run Nmzl; relative
为　戮，不　可　　以莫　之　　报　　也。　　　　　　　Zuozhuan
wei lu,　bu　ke　yi mo　zhi　bao　ye.
PSS kill, NEG MOD YI NEG 3.Obj revenge Nmlz
'Hearing the order of my father's impunity, I must run for it; relatives are killed,

I must revenge.'

   b. 亡　君　　夫人，不　可　　以莫　之　　死 也。　　　　　Zuozhuan
Wang jun　furen, bu　ke　yi mo　zhi　si ye.
lost　King wife,　NEG MOD YI NEG 3.Obj die Nmlz
'I lost the wife of the king, I have to die for this.'

(283) 莫　之　能　　禦　也
Mo　zhi neng　yu　ye
NEG it　MOD resist Nmlz
'No one can resist it.'

We know from the comparison of *ke, keyi* and *neng* with pronoun fronting that *ke* and *keyi* do not correlate with the pronoun fronting, in contrast to *neng*. In the double negation example 282, pronoun fronting happens in Low Negation, while the modal *keyi* is above this negation. The contrastive performance between *ke* (also *keyi*) and *neng* in pronoun fronting can be explained: *neng* locates in the Low Negation scope, where the pronoun fronting happens; *ke* is accommodated in ModP, which is higher than *neng*, and higher than the landing site of pronoun fronting.

6.2.2 The Historical Development of KE, KEYI, NENG

In this section I discuss the historical development of *ke*, *keyi* and *neng*. I show that though the modal use of *ke*, *keyi* and *neng* is similar in LAC, *ke* is mainly used as a raising verb, which allows object fronting to the subject position. *Keyi* also can be used in the raising construction in LAC, with a proportion lower than *ke*. In contrast, *neng* does not have this use. However, as observed in the ChiPaHC, the object raising construction with *ke* is gradually lost through history. In Early Modern Chinese, *ke* no longer is a raising verb, but develops other uses, such as a question marker and an affirmative adverb. As for the development of *keyi*, I argue that *keyi* was two separate words in LAC, but they undergo a fusion after LAC by *yi* raising above Low Negation and attaching to *ke*. The separation hypothesis comes from the fact that *yi* behaves like a medial landing site for objects. When *ke* appears with *yi*, object usually raises to *yi* first, and further preposes to the subject position. As for *neng*, it develops the raising construction in Mandarin Chinese. *Neng* also raises to Mod, like *ke* and *keyi*. In the Han period, *ke* and *keyi* are no longer responsible for object raising.

6.2.2.1 The Historical Development of KE

Ke can be used as a raising verb and a modal verb in LAC, as exemplified in the examples below.

(284) Object Raising

察　仁义　　　之 本，天　 之 意，　不　可　不　慎
[Cha renyi　　　 zhi ben]*i*,tian zhi yi,　 bu ke bu shen
observe kindness.fairness Gen root,　heaven Gen thought, NEG MOD NEG cautious

也。 Mozi
ti ye.
　 Nmlz
'Observing the root of kindness and fairness, this is the heaven's thought, (we) cannot be too cautious about it.'

(285) Modal Use

君　　 之 疆 也，　不　可　以 无　主　　　　　　　Guoyu
Jun　　 zhi jiang ye,　 bu ke yi wu zhu
You.Hon Gen land　Nmlz, NEG MOD YI NEG governor
'Your land cannot have no governor.'

Though *ke* has two uses in LAC, the proportion of it in the object raising construction is predominantly higher than the modal use. This table shows that the development of object raising use of *ke* from LAC until EMC. It can be seen that object raising was prevailing in the LAC text, with a proportion of 0.84 in overall uses. This construction gradually goes down in the range of 0.19-0.45 in the MC texts, and continuously goes down to 0.1-0.2

ime	Object Raising	Total number	Proportions	
390bc-338bc	27	32	0.84	
233-279	17	24	0.71	
284-363	15	36	0.42	
628-683	10	22	0.45	
670-749	5	27	0.19	
766-820	0	0	0	captionThe Changes of
1029-1093	1	4	0.25	
1130-1200	0	5	0	
1260-1320	0	8	0	
1574-1645	0	0	0	
1701-1754	2	14	0.14	

Object Raising in *Ke* Construction

in the EMC texts. With the highly contrasted proportions in LAC and EMC, it is safe to conclude that the object raising construction with *ke* is lost through the history. While the object raising use is lost, some other uses of *ke* develops. I list three new uses of *ke*: the first use is as affirmative predicate, the second use is as polar question marker and the third use is as an adverb. I argue that the former two uses of *ke* are related, and the third use is also observed in Mandarin Chinese. *Ke* develops the use of an affirmative predicate, locating after the subject or the object. As in 286, *ke* itself is the predicate of a clausal subject, with a meaning of confirming the correctness of the clause 'saint's reading on a book'. Example 287 is an existential construction. *Ke* is the predicate modifying the object 'what' 'what is not fine'. The two examples both show the affirmative predicate use of *ke*.

(286) 老子 曰: 聖人 之 讀 可 也...   Taipingguangji, 284-363
Laozi yue: shengren zhi du ke ye...
Laozi say: Saint ZHI read fine Nmlz
'Laozi said: Saint reading (this) is fine...'

(287) 有 何 不 可?   Qiannvlihun, 1260-1320
You he bu ke?
have what NEG KE
'Is there anything not fine?'

Another use of *ke* is associated with polar questions. Ke is used as a polar question marker in polar questions in EMC, corresponding to the negative marker— Middle negator. Polar questions in EMC are marked by *ke*, which precedes the vP. This is different from polar questions in Mandarin Chinese, as they appear as V-not-V form (the so-called A-not-A question Huang, Li Audrey and Li (2009)).

(288) Q: Ni you mei you xiaoshuo? A: You / Mei you.
　　　 Q: you have not have novel　　A: have / Not have.
　　　 'Do you have novels?' 'Yes / No.'

(289) Q: Ni you mei you ai　guo wo? A: You / Mei you.
　　　 Q: you have not have love ASP me　A: have / Not have.
　　　 'Have you loved me?' 'Yes / No.'

The example shows the question form and the answers for polar questions in Mandarin Chinese. Polar questions are formed by repeating the verb or the modal verb with a negator in between, as V-not-V form. The answers are formed by repeating the positive or negative form of the verb or the modal verb. However, in Early Modern Chinese, polar questions are not A-not-A questions, but formed by placing *ke* above the vP.

(290) 姐姐，你 可 曾 卜　一　　卦?　　　　　　　　Qiannvlihun, 1260-1320
　　　 Jiejie, ni ke ceng bu　yi　　gua?
　　　 Sister, you KE once divine one.CL
　　　 'Sister, have you had divination yet?'

(291) 曾　做　過　南昌　　太守，可 與　足下　　一家?　　　　　 Rulinwaishi,
　　　 Ceng zuo guo Nanchang taishou, ke yu zuxia　yijia?
　　　 once do ASP Nanchang mayor, KE with you.Hon one.family?
　　　 1701-1754

　　　 '(He) had worked as Nanchang Mayor, is he from the same family with you?'

(292) 詞訟　裏可 也 略　　有 些　甚麼　　通融?　　　　　　 Rulinwaishi,
　　　 Cisong li ke ye lue　　you xie shenme　tongrong?
　　　 Article in KE also slightly have some exception
　　　 1701-1754

　　　 'In the article is there any slight exception?'

(293) 王　太守　慢慢　　問道：地方 人情，　　可 還 有　甚麼　　出產?
　　　 Wang taishou manman wendao: difang renqing, ke hai you shenme chuchan?
　　　 Wang Mayor slowly ask:　　 local speciality, KE still have what　produce?
　　　 Rulinwaishi, 1701-1754

　　　 'Mayor Wang slowly asks: as for local speciality, is there anything produced?'

I argue that *ke* in polar questions is a polar question marker for two reasons. The first reason is that *ke* stays in the same position as the sentential negator, which is the NegP. This is reflected from the ellipsis constructions and the polar questions and answers.

(294) 有　一坐　橋　　塌　了。如今 可 曾　　　修　起 了 不　曾。
　　　 You yizuo qian ta　le. Rujin ke ceng　　 xiu qi le bu　ceng.
　　　 have one.CL bridge crush ASP now　KE have.already build up ASP NEG have.already
　　　 laoqidaxinshi.around 1400

　　　 'There was a bridge crushed, now it has been built up or not?'

(295) 万岁爷   道:"你 去时 可 曾   见 他面 么?" 天师   道:"
       Wansuiye dao:" Ni qu shi ke ceng   jian ta mian me?" Tianshi dao:"
       Emperor asked You go REL KE have.already see his face Q.Part? General said"
       去迟 了 些, 不   曾   得相   见。   sanbaotaijianxiyangji
       qu chi le xie, bu   ceng   de xiang   jian.
       go late ASP bit NEG have.already get each.other see
       1568

       'The emperor asked:" When you went there, have you met him?" The general said:"

       I was a bit late when I went there, I was not able to meet."'

In the example 294, the VP *xiu-qi-le* is ellipsed in the second conjunction clause. The NegP
bu with the temporal modal *ceng* correspond to *ke ceng* in the first conjunction clause. This
is different from the modal and raising verb *ke*, in which *ke* is the modal below the sentential
negator.

    In both the ChiPaHC and the CCL corpus, there is no example of negation preceding or
following *ke*. This means that *ke* is most likely to share the same position with negator *bu*.

(296) * 不 可 曾...
       bu ke ceng...
       Neg KE have.already
       'not have already...'

    The second reason is that in the answers of the polar questions, *ke* is not repeated.
Though the form of polar questions in EMC is different from Mandarin Chinese, the an-
swer forms are the same. The strategy of answering in EMC is repeating the affirmative or
the negative form of the modal verb or the action verb. Ke is not repeated in the answer
form, this means that *ke* is not a modal verb or a lexical verb.

(297) 长老   道:"二位   元帅   可 曾   看 过 《三国志》
       Zhanglao dao:" Erwei yuanshuai ke ceng   kan guo <Sanguozhi>
       master   asked two.CL general   KE have.already read ASP <Three.Kingdoms>
       么?" 二位   元帅   道:" 也   曾   略   节   看 过
       me? Erwei yuanshuai dao:" Ye   ceng   Lue jie kan guo
       Q.Part? Two.CL general   answer Affir.M have.already reduce section read ASP
       来。"   sanbaotaijianxiyangji 1568
       lai."
       ASP
       'The master asked:" Have you read <Three Kingdoms>?" The two generals said:"

       We have browsed it."'

(298) 元帅   道:"贵国   中   气候   常   暖,   可 还 有
       Yuanshuai dao:" Guiguo   zhong qihou chang nuan, ke hai you
       general   asked you.Hon.country in   weather always warm, KE still have

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冷时　　么？"　番王　　道："四时　　温和，　苦　无　　寒冷
lengshi me?" Fanwang dao:" Sishi wenhe, ku wu hanleng
cold.time Q.Part local.King said four.season warm.mild bother NEG.have cold
之　日。"　　　　　　　　　　　　　　　　sanbaotaijianxiyangji 1568
zhi ri."
Gen day
'The general asked:" In your respected country, the weather is always good. Do you have cold times?" The Local King said:"Four seasons are warm and mild, we do not have cold days."'

The answers in the above examples are from EMC. It is evident that the two answers are the repetition of the modal verb *ceng* and the verb *have*.

Based on the two evidence, I argue that *ke* in EMC can be used as a polar question marker. The structure of polar question constructions is shown below.

```
                    TP
                   /  \
              DPsbj    T'
                      /  \
                     T   NegP-Sentential/Polar
                         /  \
                    Neg/Ke   vP
                            /  \
                          DP    v′
                               /  \
                              v    NegP-VP
                                   /  \
                                Neg    VP
                                      /  \
                                 DPsbj    V'
                                         /  \
                                        V   DPobj
```

(299)
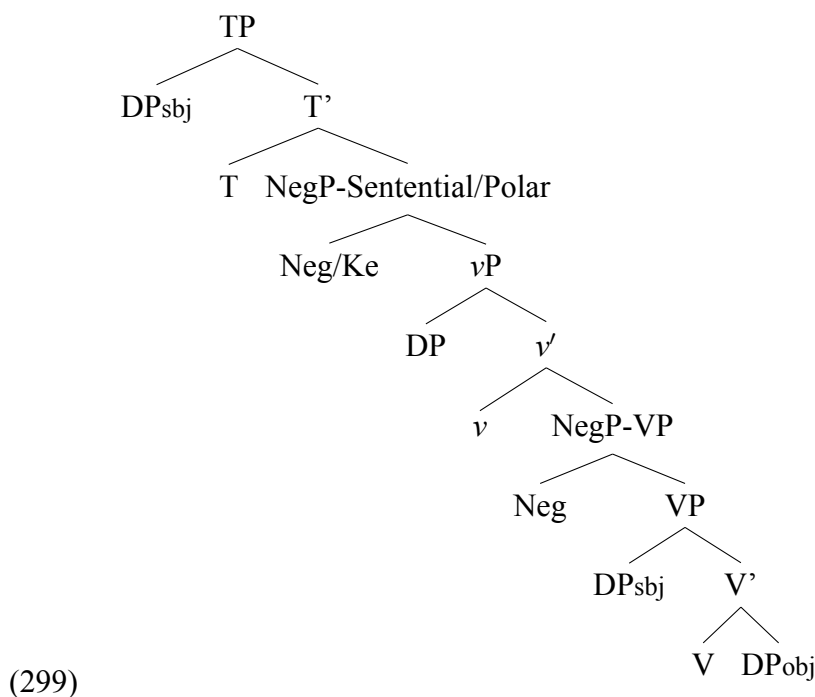
The third use is as a modal adverb with a meaning of 'indeed, really', to affirm the situation.

(300) 你 不 拘箝 我 可 倒 不 想　　　　　Qiannvlihun
Ni bu juqian wo ke dao bu xiang
you NEG restrain I KE on.the.contrary NEG want
'If you did not restrain me, I indeed had not wanted it.'

This use survives in Mandarin Chinese.

(301) Ni ke jizhu: Ni ke hai shi ge xiaohai!
you KE remember: you KE still COP CL child
'Remember that you indeed are still a child.'

Ke here delivers an affirmative mood, in order to stress the importance of the order 'Remember that...' and the fact 'you are still a child'.

In summary, *ke* lost its raising construction through the history. In EMC, it developed two new uses. One is as an affirmative predicate, the other is as a polar question marker. Evidence shows that *ke* raises from the modal verb position i.e. Mod head to the clausal Neg head when it is used as a polar question marker, and it further raises to the adverbial position above Middle Negation, as illustrated in the third use of an adverb.

6.2.2.2 The Historical Development of KEYI

My analysis is partially different from the disyllabic word analysis of *keyi* in Han period suggested by Meisterernst (2008) and Wang (2013). I agree with their observation that *keyi* can be a disyllabic verb in object raising constructions. However, I argue that *keyi* actually has a dual status in LAC, that it sometimes is a disyllabic real modal, but it most of time is a composition of two words, the real modal *ke* and the preposition *yi*. *Yi* introduces instrumental arguments or nominalised predicates and *ke* is the one that triggers argument raising. It merges with *ke* gradually in LAC and forms a new modal *keyi*.

In the non-raising construction of *keyi*, *yi* introduces an argument with instrumental meaning. For example, in 302, a non-raising example *yi* delivers the meaning 'by means of'. The subject is a locative DP 'government', and the *yi* means 'by sophistries', an instrumental role.

(302) 今　境　內　之　民　　及　　處　官爵　者，　見　[朝廷　　　之　可　以
Jin　jing　nei　zhi　min　ji　　chu　guanjue　zhe,　jian　chaoting　zhi　ke　yi
Now　field　in　Gen　citizen　CONJ　stay　official　Nmlz,　see　government　ZHI　KE　YI
巧言　　　辯說　　取　　官爵]　也　　　　　　Shangjunshu.ChiPaHC
qiaoyan　　bianshuo　qu　　guanjue　ye
tricky.words　debate　achieve　official　Nmlz
'Now citizens in this field and people who are officials see that the government allows people to get government jobs with sophistries.'

Sometimes the subject position of *keyi* is filled when the object is in situ. These subjects are the ones introduced by *yi*.

(303) 惟　无　为　可　以　規　　之。　　　　　　　　　Hanfeizi
[wei　wu　wei]$_i$　ke　yi　ti　gui　　zhi.
only　NEG　do　　KE　YI　observe　3.Obj
'Only by not doing anything (one) can observe it.'

(304) 無　思　無　為，　可　以　致　道　　　　Taipingguangji.ChiPaHC
[Wu　si　wu　wei]$_i$,　ke　yi　ti　zhi　dao
NEG　think　NEG　do,　KE　YI　reach　truth
'By not thinking and not doing, (one) can reach the route to truth.'

In 303, the subject is a verbal phrase *wu wei* 'not doing'. This verbal phrase is not the agent nor the patient of the verb, but the means to fulfil the action in VP 'observe it'. Similar in 304, the subject is a nominalised verbal phrase that is introduced by *yi*. These two examples show that the subject position in the *keyi* construction might be a argument raised from the *yi* phrase.

Except *yi*, *ke* also raises the DP in PPs. In the example below, the subject is the argument of preposition *yu* 'with' that is raised to the subject position. This further proves that *yi* should be treated separately from *ke* in LAC, as it behaves like a preposition, rather than a verb.

(305) 民　　不　可　與　　慮　　始，　　而　可　與　　樂　　成。
Min$_i$　bu　ke　[yu　$_{ti}$]　lv　　shi,　　er　ke　[yu　$_{ti}$]　le　cheng.
Citizen　NEG　KE　with　　discuss　beginning　CONJ　KE　with　　enjoy　success
Shangjunshu.ChiPaHC

'Citizens are not the people that one can discusses the beginning of the policies with, but the people that one can enjoy the success with.'

However, different from normal preposition in LAC, *yi* with the argument can land in Internal Topic position together, which does not happen to canonical prepositions, such as *yu*. *Yi* phrase raises to Internal Topic in the example 306, but PP like *yu* in 307, only has the DP of the PP raising and there is also no evidence to show that PP *yu* is able to precede the raising verb *ke*.

(306) 吾 以 三元　　秘 言 不 可 傳　泄 於中　　仙。 Taipingguangji
Wu yi sanyuan　mi　yan　bu　ke chuan xie yu zhong xian.
I　YI three.start secret words NEG KE spread leak at　middle fairy
'I with the three important secrets, they are not allowed to leak among the fairies in the middle level.'

(307) 此 邦　　　　之 人，　不 可 与 处。　　　　　　　Shijing
Ci　bang　　zhi ren,　bu　ke yu chu.
DEM ethnical.group Gen people, NEG KE with get.along
'The people in this ethnical group, (we) can not get along with them.'

Therefore, from a synchronic view, *yi* accommodates instrumental arguments rather than objects of the verbs as an intermediate landing site, where the arguments further undergo raising to the subject position.

Now let us look at the diachronic development of *keyi*. As the total number of *keyi* in ChiPaHC is small, the proportions of raising construction fluctuates. However, its changing route is still clear to be seen. As in *keyi* constructions, there are two arguments involved in object raising, the object of the verb and the argument of *yi*. Therefore, I call the first type of raising 'Object raising', consistent with the raising in *ke* constructions. The second type of

raising is called '*Yi* raising'. In LAC, *yi* raising takes up more than half of the total number

ime	Object Raising	*Yi* Raising	Total number	Proportion of *Yi* raising
390bc-338bc	1	11	20	0.55
233-279	0	2	2	1
284-363	0	2	12	0.17
628-683	0	0	0	0
670-749	0	0	8	0
766-820	0	0	0	0
1029-1093	1	0	1	0
1130-1200	0	0	0	0
1260-1320	0	0	0	0
1574-1645	0	0	0	0
1701-1754	0	1	1	1

Table 23: The Changes of Object Raising with *keyi*

of *keyi* construction. However, it soon drops to 0.17 in the Han period, and goes down to zero in later periods. Overall, the Object raising in *keyi* constructions is very rare throughout the history of Chinese. The data shows that in LAC, *ke* tends to raise the argument of *yi*, instead of the object of the verb to the subject position. Moreover, the overall frequencies of *keyi* raising (including object raising and *yi* raising) is smaller than *ke* constructions (0.55 vs 0.84), and this is also the case after LAC. This result is consistent with our syntactic analysis of *keyi*, in which *keyi* has a dual status of being a modal and two separate words. *Keyi* is expected to have less object raising than *ke*, because its disyllabic modal status is not as active as *ke* in raising constructions; however it is expected to have some object raising cases, as its two words status which makes it bears the same function with *ke*.

6.2.2.3 The Historical Development of NENG

In Mandarin Chinese, the modal selection between *ke* and *neng* is lost, as well as the raising verb *ke*. Instead, *neng* takes up the raising function (*keyi* also keeps raising status, but not as frequent as *neng*). This means that *neng* might undergo a raising from *v* to Mod.

(308) MC

Zhe yu hai neng/keyi chi ma?
DEM fish still can   eat Q.Part
'Is this fish still eatable?'

'Can this fish still eat?'

Evidence of *neng* raising can be found as early as in LAC. The correlation between *neng* and pronoun fronting in negation has been discussed. I show that in the pronoun fronting, though the numbers are very small, modals *neng* still show a pattern of 'Neg + modal + Pronoun + V', where the pronoun fronts to a position in between the modal and the verb, instead of to the pre-modal position.

(309) 其　　至　　者　　亦　　将　　不　　能　　之$_i$　会　ti　也　已，吾　　用　　御儿
Qi　zhi　zhe　yi　jiang bu　neng zhi$_i$　hui　ti ye　yi,　wu　yong yuer
3.Gen arrive Nmlz also will　NEG can　3.Obj meet　SFP SFP, 1.Sbj use　Yuer
临　　之　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　Guoyu
lin　zhi
confront 3.Obj
'Those who arrived also will not be able to meet them, I use Yuer Army to confront them.'

The position of the pronouns is different from the majority of the pronoun fronting, where in the majority of the cases, the pronoun precedes the modal. I suggest that this is related to a v-to-Mod movement phenomenon in the development of Chinese. From the relative order of *ke* and *neng* and their occurrence in the context of double negation, *ke* is proved to be structurally higher than *neng* in LAC, where *ke* is in Mod and *neng* stays in little v. In the mean time, *ke* is responsible for object raising to (Spec, T) and *neng* is responsible for pronoun fronting in negation context. However, the development of *ke* and *neng* shows that *ke* lost the object raising function and start to be grammaticalised as an adverb, an affirmative marker and an polar question marker, and *neng* and *keyi* take over the object raising function. This means that *neng* starts to raise to Mod in later periods. If we assume the v-to-Mod movement is true, *neng* raises from v to Mod, two results will be generated. First, *neng* should precede the fronted pronoun, a pattern of 'Neg + *neng* + Pronoun + v' should be generated. Second, the proportion of this kind of pronoun fronting should be much lower than the 'normal' pronoun fronting (Neg + Pronoun + modal + v), as the Mod head does not correlate with the pronoun fronting. The both results are borne out. Example 309 shows the pattern of 'Neg + *neng* + Pronoun + v', and at the same time, this pattern is very rare compare with the majority cases of 'Neg + Pronoun + *neng* + v'. Therefore the above evidence supports the existence of v-to-Mod movement in the history of Chinese[23].

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[23] I also suggest the v-to-Mod movement is not special for *neng*, other modals, like *gan*, also show the potential for a v-to-Mod movement, though *gan* does not involve object raising to (Spec, T).

(1) 以　其　　民　　安，　而　　天下　　莫　　敢　　之$_i$　危　　ti　　　　　　　Lvshichunqiu
Yi qi　min　an,　er　tianxia mo　gan zhi$_i$　wei　ti
YI 3.Gen people peace, CONJ world　NEG dare 3.Obj threat
'Its people is peaceful, in the world no one dare to threaten it.'

This change should be reflected in ChiPaHC as increasing numbers of the object raising construction through the history of Chinese. However, as the table shows, no object raising with *neng* is found in ChiPaHC. Due to the small sample of ChiPaHC, the pattern can not be presented. However, this does not conflict with the raising status of *neng*, as the total number of *neng* is reducing as time goes by, but the percentages stay the same. This from the other side supports the expected result of a slow rise of the proportion of *neng*. I leave this for future research.

ime	Object Raising	Total number	Proportions
390bc-338bc	0	32	0
233-279	0	17	0
284-363	0	28	0
628-683	0	7	0
670-749	0	28	0
766-820	0	11	0
1029-1093	0	3	0
1130-1200	0	8	0
1260-1320	0	6	0
1574-1645	0	2	0
1701-1754	0	1	0

Table 24: The Changes of *neng* with respect to Object Raising

In summary, this section discussed the historical development of *ke*, *keyi* and *neng* from quantitative and qualitative perspectives. Quantitative data from ChiPaHC shows that *ke* was closely related to the object raising construction in LAC. It gradually lost the raising function in later periods, and develops three new uses: affirmative predicate use, polar question marker use and adverb use. In Mandarin Chinese, only the adverb use of *ke* survives. As for *keyi*, I suggest in previous section that yi is a preposition-like constituent, it takes a DP to form a yi phrase. When there is yi in *ke* construction, *ke* tends to raise the argument introduced by yi, instead of the object of the verb. Neng was not related to object raising constructions in LAC. However, it survived as a modal and raising verb, as well as *keyi*, in Mandarin Chinese. The development of *keyi* and *neng* is not quantitatively reflected in ChiPaHC, due to the limited sampling and the unbalanced distribution of the clause num-

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(2) 莫　之*i* 敢　指　　*ti*   Shijing.Guofeng
     Mo　zhi*i* gan zhi　*ti*
     NEG it　　dare point
     'No one dare to point at it.'

bers.

Chapter 7. Previous Competing Approaches to Mandarin Passives

Two approaches to Chinese passives, the Movement approach and the Complementation approach, have been the subject of considerable controversy. The two approaches are opposite in nature, concentrating on whether the passive subject is derived by movement. A combination of the two approaches, called 'Null Operator Movement (NOP)', is favoured and has achieved consensus among most Chinese linguists in the 1990s. However, as the study of Passives continues, new analyses in the spirit of the Movement Approach provide more concrete evidence to better explain Chinese passive. This chapter is going to review the previous approaches and further discuss why taking a movement approach, in particular, a unified A movement approach to all Chinese passives, i.e. long distance passives, local long and short passives and indirect passives is better than previous approaches.

7.1 Previous Accounts of The Long Distance Passives

7.1.1 Movement Approach

The spirit of the Movement Approach is that passives are derived from movement, where the object moves from its original position to subject position.

7.1.1.1 Early Movement Approach

Li (1985), Li (1990) and more previous works, Hashimoto (1964), Annear and Lilliam (1964), Wang (1970) and Wang (1972) (among others) follow Chomsky's transformational treatment of English passive, proposing the movement approach to Chinese passive. The core idea of the this analysis is that the object of the active sentence moves to the canonical subject position, and the thematic subject is demoted and forms a phrase headed by *bei*, which is equivalent to English 'by' phrase. *Bei* is treated as a non-verbal category, either a preposition or a particle under the movement approach.

(310) Lisi da-le   Zhangsan.
       Lisi hit-ASP Zhangsan
       'Lisi hit Zhangsan.'
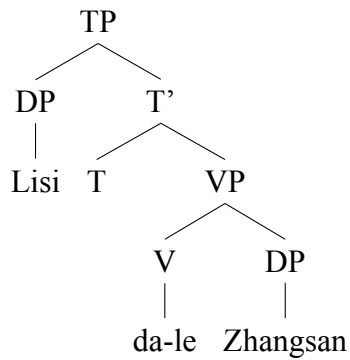
```
              TP
           ┌──┴──┐
          DP     T'
           |   ┌──┴──┐
         Lisi  T     VP
                  ┌──┴──┐
                  V     DP
                  |     |
                da-le  Zhangsan
```

(311) Zhangsan bei Lisi da-le.
       Zhangsan BEI Lisi hit-ASP
       'Zhangsan was hit by Lisi yesterday.'

```
              TP
          ┌───┴───┐
         DP       T'
          |    ┌───┴───┐
     Zhangsan_i T      VP
                    ┌───┴───┐
                   PP       VP
                 ┌─┴─┐    ┌─┴─┐
                 P   DP   V   DP
                 |   |    |   |
                BEI Lisi da-le  e_i
```
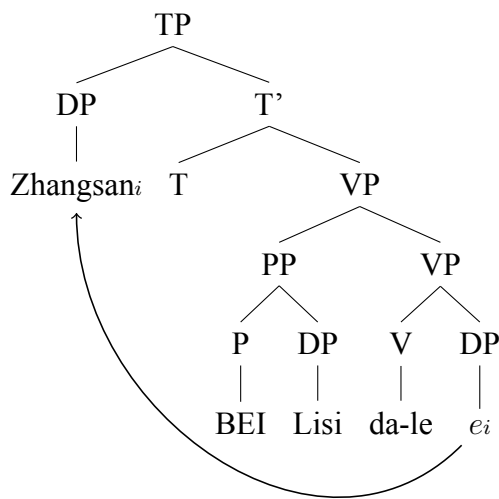
The examples above show the movement of the object in the active to its passive counterpart. At the same time the subject *Lisi* is demoted from the original subject position and forms a Prepositional phrase with *bei*. Taking *bei*+DP as a prepositional phrase makes an A-movement possible, as there is no intervening argument breaking the chain. The movement approach explains the relation between the object in the active and the subject in the passive; they are the same argument. It correctly predicts that the complement of V in passive is a trace left by the object, which can't be filled by lexical material (Huang, 1999).

(312)   a. *Zhangsan bei Lisi da-le   ta.
            Zhangsan   BEI Lisi hit-ASP him
            'Zhangsan was hit (*him) by Lisi.'

        b. *Zhangsan bei Lisi da-le   ziji.
            Zhangsan   BEI Lisi hit-ASP self
            'Zhangsan was hit (*self) by Lisi.'

c. *Zhangsan bei Lisi da-le   Wangwu.   (Huang, 1999, p. 4)
Zhangsan   BEI Lisi hit-ASP Wangwu
'Zhangsan was hit (*Wangwu) by Lisi.'

Two more problems of this approach are raised by Huang (1999). First, the subject position of the passive (specifier of TP) is non-thematic, but it allows subject-oriented verbs, which indicates that this position isn't purely a Patient or Theme role.

(313) Zhangsan guyi   bei Lisi da le.
       Zhangsan intentionally BEI Lisi hit ASP
       'Zhangsan intentionally got hit by Lisi.'

He compares this phenomenon with English be-passive, the derived subject in English is not compatible with subject-oriented adverbs.

(314)   a. *The pedestrian deliberately was hit.

        b. ??Rodman intentionally was fouled by Ewing.
           (Huang et al. 2009, p.115)

The unnaturalness of 314b was argued to be due to the adverb position (Biggs, 2014). If the adverb is placed after verb 'be', it is acceptable.

(315)   The guy with red hat was deliberately hit.

(316)   Rodman was intentionally fouled by Ewing.

The second problem concerns the prepositional status of *bei*. As argued in Huang (1999) and Biggs (2014) among others, *bei* doesn't form a constituent with either the pre-*bei* DP or the post-*bei* DP.

Bei doesn't form a PP with pre-*bei* DP because adverbials can sit in between the two elements, as in 317. It also can't be moved as a constituent, as in 318.

(317)   a. Zhangsan zuotian   bei Lisi da-le.
           Zhangsan yesterday BEI Lisi hit-ASP
           'Zhangsan was hit by Lisi yesterday.'

        b. *Zhangsan bei zuotian   Lisi da-le.
           Zhangsan   BEI yesterday Lisi hit-ASP
           'Zhangsan was hit by Lisi yesterday.'

(318)   a. *Zhangsan bei, Lisi da-le.
           Zhangsan   BEI, Lisi hit-ASP
           'Zhangsan was hit by Lisi.'

        b. *Zuotian Lisi da-le,   Zhangsan bei.
           yesterday Lisi hit-ASP, Zhangsan BEI
           'Zhangsan was hit by Lisi yesterday.'

Bei also doesn't form a PP with post-*bei* DP, because, first, it can't be displaced like a normal PP does, as in 319. Second, the post-*bei* DP plays a part in binding reflexive *ziji*, which a DP in PP can't do. As in 320, post-*bei* DP can bind *ziji*, while DP in PP *gen Lisi* cannot. This means that the DP is not embedded inside a PP. Third, *bei* and the DP doesn't show constituency in conjunction test, as in 321. This means that the DP is not necessarily a consitituent of a PP.

(319) a. Zhangsan zuotian   bei Lisi da-le.
           Zhangsan yesterday BEI Lisi hit-ASP
           'Zhangsan was hit by Lisi yesterday.'

       b. *Bei Lisi Zhangsan zuotian   da-le.
           BEI Lisi Zhangsan yesterday hit-ASP
           'Zhangsan was hit by Lisi yesterday.'

       c. Zhangsan zai xuexiao kan-shu.
           Zhangsan at school   read-book
           'Zhangsan reads at school.'

       d. Zai xuexiao, Zhangsan kan-shu.
           at   school, Zhangsan read-book
           'Zhangsan reads at school.'

(320) a. Akiu$_i$ gen Lisi$_j$ taolun [ziji$_{i/*j}$ de jingyan]
           Akiu with Lisi discuss self   DE experience
           'Akiu$_i$ discussed his$_{i/j}$ own experience with Lisi$_j$.'

       b. Akiu$_i$ bei Lisi$_j$ jieshao   gei [ziji$_{i/j}$ de   erzi]   (Biggs, 2014, p. 235)
           Akiu BEI Lisi introduce GEI SELF POSS son
           'Akiu$_i$ was introduced to self's$_{i/j}$ son by Lisi$_j$.'

(321) Ta bei Lisi ma-le   liang sheng, Akiu ti-le   san-xia.   (Huang, Li and Li,
       he BEI Lisi scold-ASP two   CLF   Akiu kick-ASP three-times
       2009, p.117)
       'He was scolded twice by Lisi, and kicked three times by Akiu.'

7.1.1.2 Biggs' A movement Approach

The classic LD passive examples involve object control verbs such as *jiao* 'ask', *rang* 'let', *qing* 'ask', *bi* 'force', *pai* 'send', *quan* 'urge', *tuo* 'request' etc.

Biggs (2012, 2013, 2014) has extensively argued against the NOP account to LD passive, and proposes a revised A movement account, which treats the complement after *bei* as a restructuring predicates, and treats *bei* as a functional morpheme–Voice.

(322)   Neifeng xin   bei wo jiao Lisi qing Akiu tuo ta meimei jizou-le.   (Huang et al.
        that.CL letter BEI I   tell Lisi ask Akiu ask his sister   send-ASP
        2009, p.125)

        Lit: 'That letter was told-Lisi-to-ask-Akiu-to-request-his-sister-send by me.'

        ('That letter was such that I told Lisi to ask Akiu to request his sister send [it].')

The essence of the NOP approach is that 1) the subject is base-generated and 2) *bei* passive is bi-clausal.

Biggs (2012, 2014) argued that the subject is not base-generated *in situ* but is derived. The NOP analysis claims the initial DP is base-generated and selected by *bei*, which assigns the theta-role Experiencer/Agent. Therefore the subject can select subject-oriented adverbs, such as 'intentionally', 'deliberately'.

However, object-oriented adverb are not robust evidence for the status of a subject as base-generatied or derived, as the adverbs scope over arguments regardless of theta roles (Biggs, 2012, 2014).

(323)   Intentionally, Katherine was seduced by John.

(324)   Willingly, Katherine was hired by the contractor.

(325)   Intentionally, Rodman was fouled by Ewing.

On the semantic interpretation, inanimate arguments such as *na feng xin* 'that letter' can not be interpreted as Experiencer/Agent, but should be Theme (Biggs, 2012, 2014). Moreover, subject-oriented adverbs can be used in English *be* passive, where the subject is widely accepted as a derived argument.

(326)   Katherine was intentionally seduced by John.

(327)   Katherine intentionally was seduced by John.

Dowty (1991) summarises that volitionality is one of the four properties of prototypical Agent role. Therefore volitionality is not a sufficient condition for agentivity. Wyner (1998) concludes that subject oriented adverbs trigger the existence of volitionality. Therefore subject oriented adverbs only forces volitionality, not agentivity. To avoid misunderstanding, I will use volition oriented verbs instead of subject oriented verbs henceforth. Other evidence against base-generated initial DP comes from reconstruction effects– reflexive binding and scope ambiguity. First, a base generated topic cannot contain reflexive *ziji* since *ziji* should be c-comanded by an antecedant. However, it can appear in the derived subject of a LD passive.

(328)   a. Nei ben shu, Zhangsan dou shui-zhao le.
           DEM CLF book Zhangsan even fall-asleep ASP
           '(As for) that book, even Zhangsani is about to fall asleep.'

b. *Ziji$_i$ de shu, Zhangsan$_i$ dou shui-zhao le.   (Huang et al. 2009, p. 205)
   REFL DE book Zhangsan even fall-asleep ASP
   '(As for) self's$_i$ book, even Zhangsan$_i$ is about to fall asleep.'

c. [ziji$_i$-de shu]$_j$, Zhangsan$_i$ bu xiang kan e_j.
   self's book Zhangsan not want read
   'His$_i$ own book, Zhangsan$_i$ did not want to read.'

(329) a. [Ziji$_i$ de   zuoye]$_j$ bei laoshi jiao wo$_i$ chongxin zuo t_j.
         [self$_i$ POSS homework]$_j$ BEI teacher ask I$_i$ again   do t_j
         'My own homework is such that the teacher asks me to do it again.'

Second, reconstruction for quantifier scope shows that subject undergoes movement.

(330) a. Yige ren   qi-ku-le   meigeren. $\exists > \forall, *\forall > \exists$
         a   person angry-cry-ASP everyone
         'a person makes everyone cry.'

      b. Meige jingcha   jiancha-le youxie xiaotou-de koudai. $\forall > \exists, *\exists > \forall$
         every policeman check-ASP some   thief's   pocket
         'every policeman checked some thieves' pocket.'

      c. Meigeren dou bei yige ren   qi-ku-le. $\exists > \forall, \forall > \exists$
         everyone all BEI a   person angry-cry-ASP
         'Everyone is made to cry by a person.'

      d. youxie xiaotou-de koudai bei meige jingcha   jiancha-le. $\forall > \exists, \exists > \forall$
         some   thief's   pocket BEI every policeman check-ASP
         'some thieves' pocket is checked by every policeman.'

      (Biggs, 2014, p.232)

However I don't see reconstruction effects (330c and 330d only allow narrow readings according to myself and my informants' intuition). Definiteness plays a role in subjects position in Mandarin, as definite arguments usually tend to be in higher positions.

LD passive is mono-clausal, as the post-*bei* embedded clause lacks a CP layer and further, lacks a TP layer. Thus, under the A movement analysis, *bei* complement in LD passive is within *v*P, therefore it doesn't need an operator to undergo movement. More specifically, she thinks *bei* complement is a restructuring predicate, as it is limited to non-finite clauses (object control verbs), lacks temporal evidence and lacks negation.

Topics are incompatible with the *bei* complement. As Topic is available in all embedded CPs, the lack of Topic leads to the conclusion that the presence of CP is lacking.

(331)   Zhangsan, wo zhidao Zhangsan, Lisi juede Zhangsan, jingcha hui zhua-zou.
        Zhangsan, I know Zhangsan, Lisi think Zhangsan, police will arrest
        'Zhangsan, I know that Lisi thinks that police will arrest him.'

In non-finite complements, topicalisation is also allowed in the left edge.

(332) Wo quan   ta jintianwanshang tianheiyihou lai.
       I   persuade he tonight   sky.dark.after come
       'I persuade him to come after sky becomes dark tonight.'

The *bei* complement doesn't allow Topic, either derived or base-generated, in LD passive. As well as the non acceptance of Topic, she also mentioned that no material can intervene between *bei* and the post-*bei* DP, although it was convincing that *bei* and the post-*bei* DP do not form a constituent.

(333)   a. *Zhangsan bei jingcha, Lisi pai   zhuazou-le.
           Zhangsan   BEI police, Lisi send arrest-ASP
           'Zhangsan is arrested by the police who Lisi sent.'

        b. *Zhangsan bei jintianwanshang Lisi pai   jingcha zhuazou-le.
           Zhangsan   BEI tonight   Lisi send police   arrest-ASP
           'Zhangsan is arrested by police who Lisi sent tonight.'

The scope of interrogative particles also provide further evidence to the missing CP and further, the defective TP in LD passives. By saying defective I mean that the TP in LD passives, if any, is syntactically incomplete and thus lack of certain functions, compared with a full TP. Interrogative particles usually only scope over matrix clause, excluding the embedded clause. The evidence is shown both in finite and non-finite clauses.

(334)   a. Finite

                                                                          [24]
           Ta bu   zhidao Zhangsan zai zuo   fan   ma?
           he NEG know   Zhangsan at   make food PQ.PART
           'Doesn't she know that Zhangsan is cooking?'

           * 'She doesn't know if Zhangsan is cooking or not?'

        b. Non-finite

           Hongjian dasuan rang Zhangsan xi-wan   ne?
           Hongjian plan   let   Zhangsan wash-bowl PART
           'Is Hongjian planning to let Zhangsan do the washing?'

           * ' Hongjian plans that Zhangsan will wash up or won't?'

   The interrogative particle only functions for the matrix clause, not the embedded clause (CP in the finite clause and TP in the non-finite clause), as above. But the interrogative particle scopes over the whole sentence as a whole clause in the passive.

(335)   Zuotian   yurou bei Zhangsan bi   Lisi chi-le   ma?
        Yesterday fish   BEI Zhangsan force Lisi eat-ASP PQ.PART
        'Yesterday, was fish or was not fish such that Zhangsan forced Lisi to eat it?' (Matrix

---

[24]PQ.PART= Polar question particle

reading)

'Yesterday, was there fish such that Zhangsan force Lisi to eat or not?' (Embedded reading)

The interrogative particle allows both "matrix" and "embedded" reading in this LD passive— it does not distinguish matrix and embedded clauses, if there is the distinction in LD passives. This contrasts the normal behaviour of interrogative particles. The only possibility is that the LD passives do not have an embedded clause (a CP/ a TP), but they are simply mono-clausal.

Temporal adverbs[25] are prohibited in *bei* complement[26]. Therefore it shows that if *bei* complement has a TP, the TP is at least defective.

(336) a. Mingtian nei   feng xin   hui bei wo jiao Lisi qing Wangwu jizou.
         Tomorrow DEM CLF letter will BEI 1SG tell Lisi ask   Wangwu send
         Lit: 'Tomorrow that letter will be told Lisi to ask Wangwu to send away by me.'

         'Tomorrow, that letter is such that I will tell Lisi to ask Wangwu to send away.'

       b. *nei feng xin   bei mingtian wo hui jiao Lisi qing Wangwu jizou.
          DEM CLF letter BEI tomorrow 1SG will tell Lisi ask   Wangwu send
          'That letter is such that I will tell Lisi to ask Wangwu to send away tomorrow.'

The complement of *bei* is structurally smaller than a TP, as it lacks independent temporal evidence Biggs (2012, 2013, 2014). Sentential *-le* usually denotes perfectivity. It scopes obligatorily over embedded clause and optionally over matrix clause, it thus exhibit independent temporal evidence (Biggs (2012, 2013, 2014) in the sense of Landau (2004)).

(337) Ta bu   zhidao Zhangsan zuo-fan-le.
       3SG NEG know   Zhangsan make-food-ASP
       a. 'She doesn't know that Zhangsan had cooked' (Embedded reading)
       b. 'She didn't know that Zhangsan had cooked' (Matrix and embedded reading)
       c. *'She hasn't know that Zhangsan is cooking.' (Matrix only reading)

---

[25]Temporal adverbs is at TP in Mandarin.

[26]It is interesting to note that LD passives actually only prohibit future-oriented adverbs. BEI complements accept past temporal adverbs.

(1) a. Zuotian nei   feng xin   hui bei wo jiao Lisi qing Wangwu jizou.
        Yesterday DEM CLF letter will BEI 1SG tell Lisi ask   Wangwu send
        Lit: 'Yesterday that letter will be told Lisi to ask Wangwu to send away by me.'
        'Tomorrow, that letter is such that I will tell Lisi to ask Wangwu to send away.'

     b. nei   feng xin   bei wo zuotian   jiao Lisi qing Wangwu jizou.
        DEM CLF letter BEI 1SG yesterday tell Lisi ask   Wangwu send
        'That letter is such that I told Lisi to ask Wangwu to send away yesterday.'

On the contrary, Long distance passive is obligatorily scoped as a whole event by SFP *-le* (Biggs, 2012, 2014). It indicates that *bei* complement should be structurally smaller than TP.

(338)   Neifengxin bei   wo jiao Lisi ji-zou-le.
        that.letter   BEI I   tell Lisi send-away-ASP
        a. *'That letter is such that I told Lisi to send it away.' (Embedded reading)
        b. 'That letter was such that I told Lisi to have sent away.' (Whole event reading)

Now let's discuss the status of *bei*. Evidence at the end of section 7.1.1.1 shows that *bei* is not a preposition. It is more like a grammaticalised object control verb. However, it is no longer a lexical verb as it does not bare lexical meaning, and syntactically cannot be used as a main verb.

(339)   *Wo bei (ta).

The A movement analysis treats *bei* as a Voice head. The Case-relation between the most embedded object and the T head drives the object compulsorily undergoing A movement (if there is no movement, the sentence is illicit, as 340a). The external argument needs a functional head to get its Case. Based on the Case Dissociation hypothesis (Biggs, 2014), the functional head which assigns Case to the DP does not introduce it. *Bei* does not introduce the external argument (the external argument is introduced by Cause head), but assigns Case to it. Also, unaccusatives are sensitive to *bei*-construction (as 341). Unaccusatives only have one internal argument to be valued. However, T and Voice both are able to assign Case in passives. In passives, two uninterpretable features has to be valued under the Full Interpretation principle, in order to converge the derivation. Unaccusatives can not fulfil this condition, therefore they are ruled out from passive derivation, as shown in 341. The unacceptability of unaccusatives shows that *bei* should be a functional head bearing an uninterpretable feature. Therefore the Voice analysis successfully holds on both theoretical and empirical grounds.

(340)   a. *Bei wo jiao Akiu tuo ta meimei ji-zou-le   neifengxin.
           BEI I   tell Akiu ask he sister   send-ASP that.letter
           'That letter was such that I told Akiu to request his sister to send it.'

(341)   a. San   zhi   huli si-le.
           Three CLF fox die-ASP
           'Three foxes died.'

        b. *San   zhi   huli bei   si-le.
           Three CLF fox BEI die-ASP
           'Three foxes were died.'

Bei, as the head of Voice projection, selects a *v*P. It is a cross-linguistic consensus that object control verbs have an equivalent structure to ditransitives (Larson, 1991; Landau, 2001*a*, 2008). Therefore object control *v*Ps, in parallel to ditransitives, include an applicative projection, which bares the function of Case licensing for *v*P. Within the *v*P, the verb 'tell' undergoes movement via V-appl-*v*. This head movement does not eliminate its ability to assign Case. Chomsky (1986) and Baker (1988) mentioned the conditions of Case assignment under head movement. Assume *a1* and *a2* are two heads of X^0 level. Now *a2* moves to *a1* and incorporates with *a1*. If the landing site of the head movement (*a1*) is a functional category, the trace of the moved element (*a2*) is still able to assign Case. On the contrary, if the landing site is a lexical category, the trace is blocked from Case assignment.

(342)   *a1— a2*

As little *v* is a functional category, appl still keeps its Case assigning ability after moving to *v*. The extra arguments (objects of object control verbs) are Case-lisenced by appl, and afterwards stay inactive. Therefore they are not interveners for further Agree-relation valuation, including the Agree-relation between internal argument and Spec, TP.
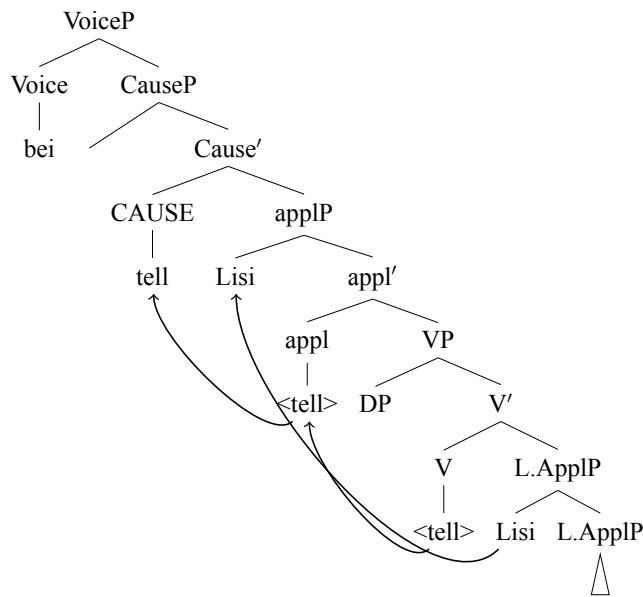
(343)

The internal argument undergoes movement to the subject position for Case reasons (Biggs, 2012, 2013, 2014). I follow this analysis in the sense that only functional projections assign Case. The full processes of passive Case assigning are: 1) Voice *bei* assigns Case to the initial DP of *bei* complement (spec, CauseP) through a head-complement relation. 2) Object control verbs raise to *v* through head movement V-Appl-*v*. Originally Appl and *v* both assign Case. According the the Case filter, only *v* is able to assign Case. The extra argument is assigned Case by *v* at the specifier of *v*P, and it is no longer an intervention for the most

deeply embedded object. 3) The lowest vP does not include applicative projection, as 'send' is a transitive verb, therefore the internal argument is left unvalued. T looks downwards for Agree relation, it passes the valued initial DP and external argument, finally reaches internal argument. According to EPP, the object DP has to raise to the spec, TP and receives a Case there.

The comparison of Case assignment between actives and passives are as below:

(344)   Active[27]

      a. T— external argument

      b. Voice+v— internal argument

      c. appl— extra argument

(345)   Passive

      a. T— internal argument

      b. Voice— external argument

      c. appl— extra argument

The full structure of LD passive of object control verbs is as below:

(346)   Nei   feng xin   bei   wo   jiao Lisi jizou-le.
       DEM CLF letter BEI 1SG tell Lisi send-ASP
       'That letter was told Lisi to send by me.'

---

[27]It assumes that Voice is a locus of parametric variation, unlike its English counterpart, it assigns Case in Chinese (Biggs *p.c.*). However, in Chinese passives, Voice and little v are separate heads, while they are syncretic and form a Voice-v head in actives.

TP
DP T'
that letter T VoiceP
u[F] Voice CauseP
bei Agent Cause'
I CAUSE applP
tell Lisi appl'
appl VP
<tell> DP V'
V L.ApplP
<tell> Lisi L.Appl'
L.Appl vP
DP v'
v VP
V'
V DP
send t
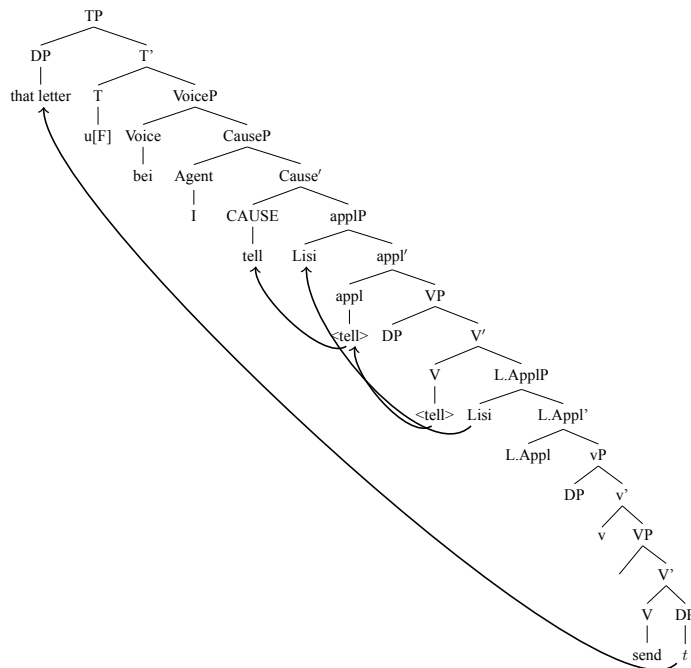
In summary, A movement analysis is compatible with LD passive of object control verbs. Evidence showed that LD passive does not necessarily unbounded. The subject of LD passive is derived based on the reconstruction effects. The LD passive is monoclausal, as the *bei* complement is defective TP (possibily as small as vP). The derivation of *bei*-construction is fully demonstrated in this section.

7.1.2 Complementation Approach

Different from the Movement Approach, Complementation Approach is concerned with the complex structure of Passive. Chinese passive is considered to be bi-clausal under this approach, therefore it is not possible for the subject to move cyclically through A-positions, and the long movement would violate locality restrictions on movement. Their solution for connecting the relation between subject and object is Control. The matrix subject controls the embedded object; therefore the two DPs are connected without movement.

7.1.2.1 Early Complementation Approach

The Early Complementation approach suggests that the Chinese passive doesn't involve movement. Hashimoto (1969, 1987), following Hasegawa (1968), assumes that the passive in Chinese is bi-clausal, the matrix clause of which has *bei* as the verb and takes an embedded clause. The embedded clause has a subject, verb and object, and the subject in the matrix clause is identical with the object in the embedded clause. The object undergoes compulsory deletion on the surface structure. This approach isn't well explored and there remains many

unsolved questions, such as 1) how does the deletion work? 2) Are the derived subject and embedded object in a chain relation? 3) is there any resumptive element?

(347)　　a. *bei* construction: Subject+*bei*+complement

　　　　b. Complement: subject+verb+object

```
                    TP
               ┌─────┴─────┐
              DP           T'
               │        ┌──┴──┐
           Zhangsan     T     VP
               ↑           ┌──┴──┐
               └──────────DP     V'
                              ┌──┴──┐
                              V     TP
                              │   ┌──┴──┐
                             BEI DP     T'
                                  │   ┌──┴──┐
                                 Lisi  T    VP
                                         ┌──┴──┐
                                         V     DP
                                         │     │
                                       da-le Zhangsan
```
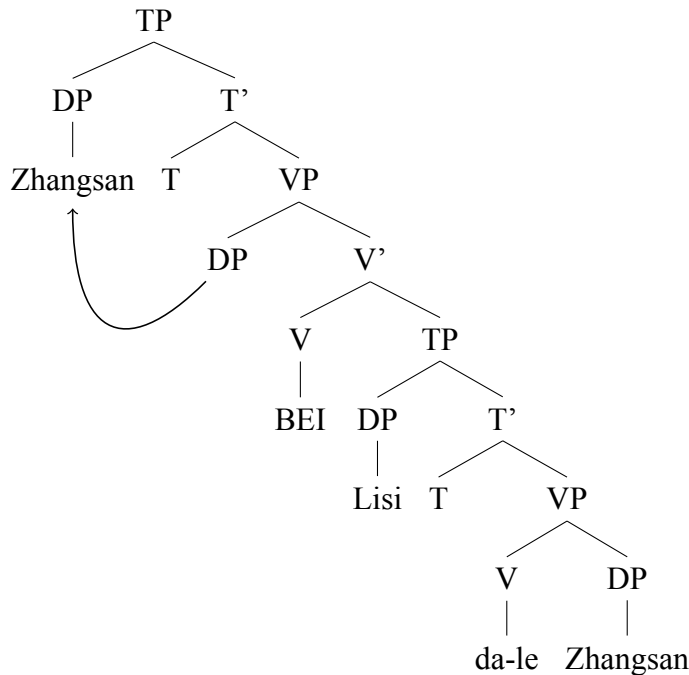
(348)

The subject is base-generated as the specifier of VP headed by *bei*, and moves to the specifier of TP to receive nominative Case. It is assigned an Experiencer role from *bei* (Huang, 1999).

The two arguments *Lisi* and *Zhangsan* in the embedded clause receive Cases from T and V, and receive theta roles (Agent and Patient) from the verb *da*. First, as opposed to the movement approach, this approach accounts for the compatibility with subject-oriented adverbs as shown in 313 and the reflexive *ziji* binding, as 320b. Subject-oriented reflexive *ziji* is a test for subjects. *Ziji* can be bound by both *Akiu* and *Lisi*, therefore they are both subjects, and it also shows that the passive is bi-clausal. Second, it also explained that *bei* doesn't form a constituent with the postverbal DP, as the postverbal DP is the subject of the embedded clause. However, there seems to be no explanation for the compulsory deletion of the embedded object. The object receives Case and Theta role from V, it should be realised on the surface structure.

(349)　　*Zhangsan bei Lisi da-le Zhangsan.

7.1.2.2 The Null Operator Movement Analysis

Several linguists has proposed the Null Operator Movement (NOP) analysis for long passive (e.g. Feng, 1995; Chiu, 1995; Ting, 1998; Huang, 1999 and Tang, 2001). The idea was first proposed by Feng (1995), and fully supported and explained by Huang (1999). Under this analysis, long passive is treated on a par with English *tough* construction in the sense that NOP involves two-step transformations— movement and predication.

Bei passives are bi-clausal under this analysis. *Bei* selects a DP as its subject and a clause as its complement, the embedded clause has a null object and a null operator, and the null object moves to the adjunct of IP or CP (Huang, 1999; Huang, Li and Li, 2009).
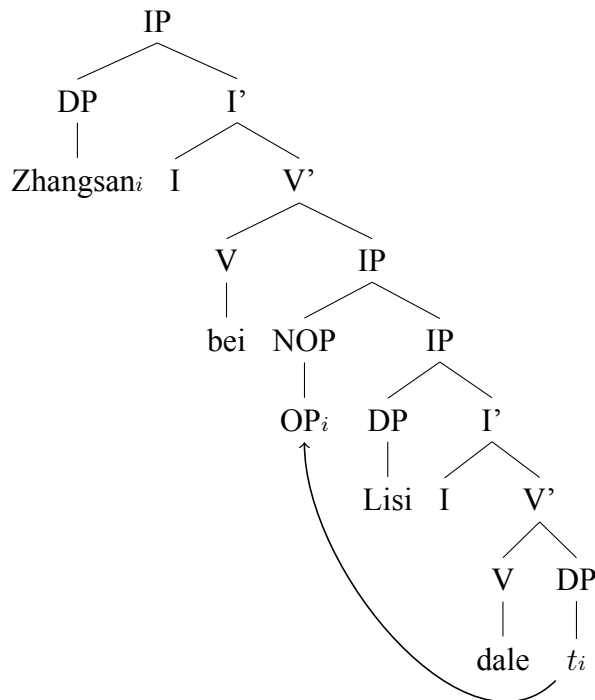
Despite the claim of Huang (1999) that this analysis is a combination of the previous movement and complementation approach, the NOP analysis is actually a development based on the previous complementation approach, the essence of the analysis is that 1) instead of movement, the subject is base-generated; 2) the construction is bi-clausal. It improves the complementation approach in the way that it explains that the object position cannot be filled by lexical element by saying the object is an empty category, and also explains the matrix subject controls a null operator which binds the variable— the embedded object.

The evidence of base generated subjects comes from the compatibility of the subject-oriented adverbs. The subject-oriented verbs restrict the selection of subjects to an Agent or Experiencer role.

(350) Zhangsan guyi   bei Lisi da le.   (Huang, 1999, p.428)
       Zhangsan intentionally BEI Lisi hit ASP
       'Zhangsan intentionally got hit by Lisi.'

Huang (1999) compared LD passives with four properties of relative clauses, which involves typical A bar movement: potentially unbounded dependencies, island sensitivity, distribution of resumptive pronouns and relative clause marker *suo*.

He argues that unbounded dependencies are evident in long-distance passive, in parallel to English tough construction. Unbounded dependencies mean that there is no direct connection between two phrases or words, to be more specific, there is no limit to how deeply the gap of the moved object is embedded within the clauses. Unbounded dependencies(or discontinuities, long-distance dependencies) is a property of A bar movement constructions, which is found in topicalization, wh-fronting, scrambling, and extraposition (Stockwell,1977; Baker,1978; Borsley,2014; Grewendorf and Sternefeld,1990 among others).

(351) neifeng xin   bei wo jiao Lisi qing Wangwu tuo   ta meimei ji-zou le.
       that   letter BEI me tell Lisi ask   Wangwu request his sister   send   ASP
       Literal: That letter was "ask LS to ask WW to get his sister to send" by me
       "That letter was such that I ask Lisi to ask Wangwu to get his sister to send."

(352) This problem is too easy for me to ask the teacher to help me solve.

The Island effect is also evident in LD passives.This is considered to be related to *wh* movement, and extraction from a relative clause, which are typical an A bar movement. It supports that LD passives are A bar movement. The subject *Zhangsan* is derived from the object position of a complex DP *zanmei ta de shu* 'books that praising him', which contains a relative clause. The pronoun *ta* is compulsory here.

(353) Zhangsan bei wo tongzhi Lisi ba zanmei *(ta) de shu   dou mai-zou   le.
       Zhangsan BEI me inform Lisi BA praise (him) De book all buy-away ASP
       (Huang 1999)
       'Zhangsan had me inform Lisi to buy up all the books that praise (him).'

Huang (1999) argues that the existence of resumptive pronouns and SUO clause markers in passives also supports an A bar movement anaysis. Only typical A bar movement, such as relative clauses, allows resumptive pronoun strategy.

(354) Zhangsan da-le   ta yi-xia de nageren   lai   le.
       Zhangsan hit-ASP him once   DE that.person come ASP
       'The person that Zhangsan hit him once came.'

Ta is the resumptive pronoun bounded by *nageren*. Resumptive pronoun strategy is

employed to repair the island effect in this relative clause. In passives, there are a number of cases where resumptive pronouns are also allowed.

(355) ?Zhangsan bei Lisi da-le   ta   yi-xia.
       Zhangsan   BEI Lisi hit-ASP him once
       'Zhangsan was hit once by Lisi.'

Ta is the resumptive pronoun bounded by *Zhangsan*. As the same resumptive pronoun strategy is employed here, Huang (1999) claims that passives also undergoes A bar movement.

However, it should be noted that it is only grammatical to have resumptive pronoun followed by an adverbial in long passives, like *yixia* 'once'. Without the adverbial, the sentence is ungrammatical, as shown below.

(356) *Zhangsan bei Lisi da-le   ta.
       Zhangsan   BEI Lisi hit-ASP him
       'Zhangsan was hit by Lisi.'

Similarly, the relative clauses, so-called typical A bar movement constructions, can not emploit resumptive pronoun strategy without an adverbial either.

(357) Zhangsan da-le   (*ta) de nageren   lai   le.
       Zhangsan hit-ASP him DE that.person come ASP
       'The person that Zhangsan hit him once came.'

As the example shown, without the adverbial 'once', the resumptive pronoun strategy results in ungrammaticality. There is not yet a convincing explanation for this phenomenon, but at least it shows that resumptive pronoun strategy is not a robust test for A/A bar movement in Mandarin.

SUO is the remnant of Ancient Chinese, and it is recognised as a resumptive pro-nominal clitic (Ting, 2003), which occurs in relative clauses.

(358) xiaotou suo meiyou touzou [ ] de naxie shu   zai zhuozi-shang   (Huang 1999)
       thief   suo not-have steal   [ ] DE those book at   table-top
       The books that the thieves have not stolen are on the table.

As Mandarin relative clauses involve A bar movement (Huang, 1999), Huang claims that the occurrence of SUO in passives indicates that passives also involve A bar movement.

(359) zhexie shiqing bu neng bei tamen suo   liaojie.
       these thing   not can BEI they SUO understand
       These things cannot be understood by them.

This claim has been argued against by (Li, 2015) in the sense that there are two kinds of SUO, the position for the SUO in relative clauses (in TP), higher than the SUO in passives (inside vP). Therefore the occurrence of SUO in passives is not a sufficient condition to support A bar movement analysis of Chinese passives.

7.2   Previous Accounts for Local Long and Short Passive

Chinese has long and short passives. The difference is that short passives do not have an overt Agent.

(360)   a.   Long Passive

Zhangsan bei   Lisi da-le.
Zhangsan BEI Lisi hit-ASP
'Zhangsan is hit by Lisi.'

b.   Short Passive

Zhangsan bei   da-le.
Zhangsan BEI hit-ASP
'Zhangsan is hit.'

As LD passives are taken as a special form of local long passives, previous accounts for LD passives (Movement and Control) and their arguments also apply to local long passives. Here I review previous analyses of short passives.

From the surface relation between the two passives, it is easy to conclude that short passives are derived from long passives, which is compatible with Hashimoto's (1987) analysis of short passives. However, this analysis is rejected because it contradicts both the syntactic and historical evidence.

The Agent is in a position where no argument can be deleted (Huang, 1999). No matter whether *bei* is a preposition or a verb, the complement cannot be deleted.

(361)   a.   *Ni$_i$, wo gen t_i yiqi   qu shudian.
you I   with t together go bookshop
'I go to book shop with you together.'

b.   *Ni$_i$, Wo jiao t_i yiqi   qu shudian.
you, I   ask t together go bookshop
'I ask you to go to bookshop with me together.'

From the historical view, this analysis assumes short passives are derived from long passives, which contradicts the historical evidence that short passives appear earlier than long passives in history (Wei, 1994). According to Wei (1994), short passives appear in 300 B.C., while long passives appear 500 years later in 200 A.D.. Contrary to the Agent-deletion analysis, Huang (1999) proposes a control analysis, based on the NOP analysis to long passives. The argument for this analysis is that, similar to long passives, the subject of short passives show agentivity. Therefore it is not derived but base-generated. The evidence still comes from subject oriented adverbs.

(362)   a.   Zhangsan guyi   bei da le.
Zhangsan intentionally BEI hit ASP
'Zhangsan intentionally got hit.'

Short passives show structural differences from long passives. First, manner adverbials are VP adverbials, while place adverbials are sentential adverbials. Short passives only allow manner adverbials while long passives allow manner and place adverbials.

(363) a. Zhangsan bei Lisi qiaoqiaodi pianzou-le.
           Zhangsan BEI Lisi secretly   abduct-ASP
           'Zhangsan was secretly abducted by Lisi.'

       b. Zhangsan bei qiaoqiaodi pianzou-le.
           Zhangsan BEI secretly   abduct-ASP
           'Zhangsan was secretly abducted.'

(364) a. Zhangsan bei Lisi zai-xuexiao pianzou-le.
           Zhangsan BEI Lisi at-school   abduct-ASP
           'Zhangsan is abducted by Lisi at school.'

       b. *Zhangsan bei zai-xuexiao pianzou-le.
           Zhangsan   BEI at-school   abduct-ASP
           'Zhangsan is abducted at school.'

This means that short passives contain a VP, long passives contain at least a TP. Second, Huang argues that the long distance passives are possible for long passives but not short passives, because short passives do not have "unbounded dependencies" like the long passives have.

(365) a. Nafengxin bei wo jiao Lisi tuo tameimei jizou-le.
           that.letter   BEI I   ask Lisi ask his.sister send.away-ASP
           'That letter was such that I asked Lisi to request his sister to send way.'

       b. *Nafengxin bei jiao Lisi tuo tameimei jizou-le.
           that.letter   BEI ask Lisi ask his.sister send.away-ASP
           'That letter was such that asked Lisi to request his sister to send way.'

However, this "unbounded dependencies" usually refers to A bar movement like wh-movement, relativisation etc., it means that the moved constituent crosses at least one CP. The next section 8.1 argues against the existence of CP in the complements of Mandarin long passives. The object in long distance passives crosses truncated object control verb complement of *bei* (*wo jiao Lisi tuo tameimei jizou-le* 'I asked Lisi to request his sister to send way'), which is structurally smaller than a TP, therefore the complement of Mandarin long passives is not distinct from short passives (both smaller than TP). Therefore this "unbounded dependencies" of long distance passives do not provide evidence for the difference between long and short passives. Third, short passives do not allow SUO particles, which is an indicator of A' movement, as it also appears in relative clauses.

(366) a. Wo zuizhong bei tamen suo   jieshou.
           I   finally   BEI they   SUO accept
           'I am finally accepted by them.'

b. *Wo zuizhong bei suo   jieshou.
   I   finally   BEI SUO accept
   'I am finally accepted.'

This will be argued against in later section, in that there are actually two positions for SUO, one for passives and the other for relative clauses. Therefore, the occurrence of SUO is not a valid evidence.

The last evidence Huang has given is that resumptive pronouns strategy are disallowed in short passives, whilst they are totally acceptable in long passives[28].

(367) a. ?Zhangsan bei Lisi da-le   ta   yi-xia.
           Zhangsan   BEI Lisi hit-ASP him once
           'Zhangsan was hit once by Lisi.'

       b. *Zhangsan bei da-le   ta   yixia.
           Zhangsan   BEI hit-ASP him once
           'Zhangsan was hit once.'

Concluding the above evidence, Huang (1999) provides a structure for short passives:

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[28]The acceptability of resumptive pronouns are arguable in long passives. The acceptability increases when an adverbial is inserted after the resumptive pronoun. Huang (1999) uses 2 as the argument to prove the different performance of resumptive pronouns in short and long passives. I suggest this example alone is not sufficient for proving the compatibility of resumptive pronouns in long passives.

(1) *Zhangsan bei Lisi da-le   ta.
     Zhangsan   BEI Lisi hit-ASP him
     'Zhangsan was hit by Lisi.'

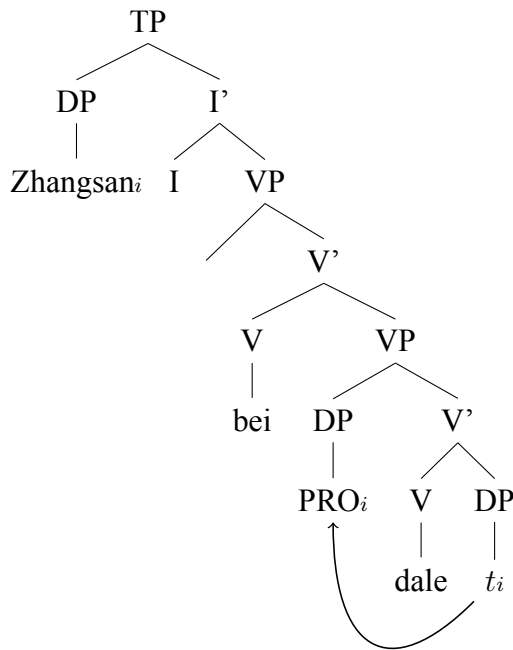(2) ?Zhangsan bei Lisi da-le   ta   yi-xia.
     Zhangsan   BEI Lisi hit-ASP him once
     'Zhangsan was hit once by Lisi.'

```
                          TP
                      ╱        ╲
                   DP            I'
                   │          ╱     ╲
              Zhangsan_i    I        VP
                                      ╲
                                       V'
                                    ╱      ╲
                                  V          VP
                                  │       ╱      ╲
                                 bei    DP         V'
                                        │       ╱     ╲
                                      PRO_i    V       DP
                                               │       │
                                              dale     t_i
```

(368)

Instead of a TP as in long passives, *bei* and its complement are treated as a VP in short passives. The subject *Zhangsan* controls PRO, which is moved from the object position, complement of VP. However, this analysis has many disadvantages. In order to be consistent with the bi-clausal analysis for long passives, the analysis for short passives also employs PRO. This cannot reflect the mono-clausal features displayed above. Moreover, unlike long passives under the NOP analysis, PRO in short passives moves from the complement to the specifier of a same projection. This local movement violates anti-locality (Abels, 2003; Doggett, 2004; Bošković, 2005; Boeckx, 2005).

7.3 Previous Accounts for Indirect Passives

Similar to direct passives, indirect passives also involve movement. However, indirect passives do not seem to contain a gap, which should be left as a result of the derivation. Thus indirect passives are also called "gapless" passives. They were first discovered and extensively studied in Japanese, and later Huang (1999, 2002) brought Chinese indirect passives to our attention. Despite previous research on these constructions, indirect passives are still understudied compared to direct passives. Indirect passives can be classified in two ways (Washio, 1993); inclusive indirect passives and exclusive indirect passives, which have been observed in many languages such as Japanese and the Romance languages. If we count indirect passives as passive constructions, the categories are as below:

(369)   Direct passive

      1.   Long distance passives

2. Local long passives

3. Local short passives

(370)   Indirect passive

1. Inclusive— possessive

2. Exclusive— adversative

Inclusive passives seem related to partial objects (usually possessors) raising to the subject position. The moved part of the object semantically includes the unmoved part. It is claimed that exclusive passives do not involve any movement. Instead, the subject has an Affectee thematic role and it is affected by the whole event predicating *bei*. Japanese examples are from Washio (1993).

(371)   a. gakusei-ga   sensei-ni   te-o   tukam-are-ta.
            student-Nom teacher-BY hand-Acc catch-Pass-Pst
            'The student was caught by the hand by the teacher.'

        b. gakusei-ga   kodomo-ni nak-are-ta.
            student-Nom child-BY   cry-Pass-Pst
            'The student was affected by the child's crying.'

371a is an inclusive indirect passive, where the 'student's hand' is the object of verb 'catch' but only part of the object 'student' fronts to Spec TP from the complement of VP. Because 'student' semantically is the possessor of 'hand', inclusive indirect passives are also called possessive passives. 371b is exclusive indirect passive, where the 'student' is not moved from complement of VP because the verb is intransitive but the 'student' is affected by the action. Exclusive indirect passives are also called 'adversative passives', which means that the subject is affected by the predicating event, but the subject is not a themantic argument of the verb. I will use possessive passives and adversative passives to refer to these two constructions.

7.3.1 Possessive Passives

Mandarin Chinese allows for possessive passives; As shown in 372, the subject *Zhangsan* is the possessor of the object *yitiao tui*. However Mandarin only allows a limited number of adversative passives (Huang, 1999), as in 373.

(372)   Inclusive

        a. Zhangsan bei Lisi da-duan-le   yitiao tui.
            Zhangsan BEI Lisi hit-break-ASP one   leg
            'Zhangsan had a leg broken by Lisi.'

    b. Zhangsan bei Lisi da-si-le   baba.
        Zhangsan BEI Lisi hit-dead-ASP father
        'Zhangsan's father is hit until dead by Lisi.'

(373)   Exclusive

    a. Lisi you   bei Wangwu jichu-le yi-zhi quanleida.   (Huang, 1999)
        Lisi again BEI Wangwu hit-ASP one   home-run
        'Lisi again had Wangwu hit a home run [on him].'

    b. [29] Kanshou bei fanren   pao-le.
          guard   BEI prisoner escape-ASP
        'The guard is affected by the prisoner's escape.'

In possessive passives, the fronted DP in Spec TP is semantically a possessor of the DP of the complement V.

(374)   Zhangsan$_i$ bei Lisi da duan-le   tui$_i$
        Zhangsan BEI Lisi hit broken-PERF leg
        'Zhangsan's leg is hit by Lisi until broken'.

For example, 'Zhangsan' is the possessor of 'leg'. However the active counterpart of this passive is not 100% accepted by native speakers.

(375)   [30] ??Lisi da duan-le   Zhangsan tui
        Lisi   hit broken-PERF Zhangsan leg
        'Lisi hit Zhangsan's leg until broken'.

The acceptability greatly increases if the possessive marker de or DP quantifiers are added in front of the second DP.

(376)   Lisi da duan-le   Zhangsan de   tui
        Lisi hit broken-PERF Zhangsan POSS leg
        'Lisi hit Zhangsan's leg until broken'.

(377)   Lisi da duan-le   Zhangsan yi-tiao tui
        Lisi hit broken-PERF Zhangsan one-CL leg
        'Lisi hit Zhangsan one leg until broken.'

This means that the leftover object needs either the possessor to form a single DP or a quantifier to form a DP. The verb in 376 is transitive, where *Zhangsan* is syntactically

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[29]Both as ergative verbs, 373b is acceptable in Mandarin. However, 'cry' is not possible in Mandarin, on the contrast to the fact that it is grammatical in Japanese, as in 371b.

(1)   *Wo bei ta ku le.
       I   BEI he cry ASP
       'I was affected by him crying.'

[30]3 out of 7 informants think this sentence is grammatical.

part of the DP *tui* and semantically possesses it. The verb in 377 is ditransitive where the *Zhangsan* is syntactically independent from the *yitiaotui* and the semantic possessor of it. This raises questions: (1) Is the fronted DP a possessor or an extra argument? (2) Whether the derivation of this kind of indirect passive is via possessor raising or extra argument raising, or another way?

Huang (1999, 2002) provide the 'outer object hypothesis' to both indirect passives. In this analysis, possessive passives are assumed to derive a passivisation of an outer object which is less embedded than the real object (complement of VP). In 378, the extra argument is *Zhangsan*, it moves from the object position of V' to the operator, adjunct of TP. An empty category at the possessor of the real object [e] is controlled by the outer object, which is the derived subject *Zhangsan*.

(378)   Zhangsan bei Lisi daduan-le yitiaotui.
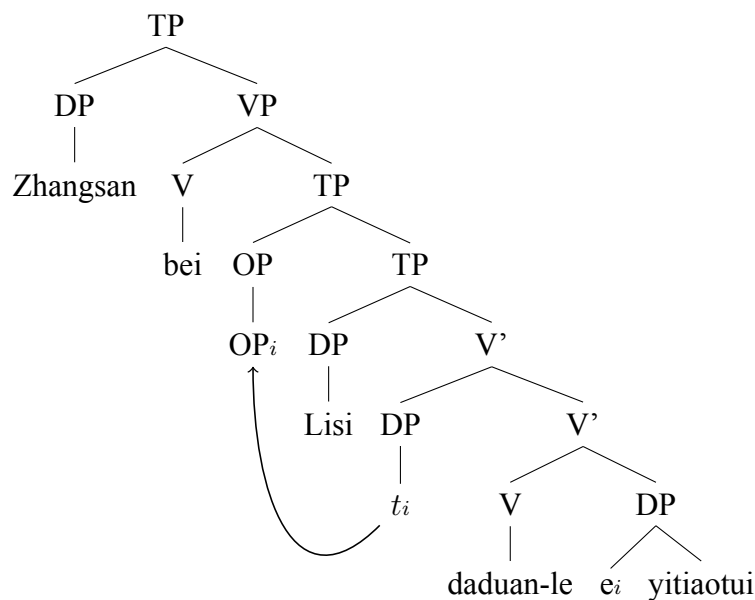
(379)

Hole (2004, 2005, 2006) also proposes that the so-called 'possessor' in possessor raising is actually an extra argument, semantically represented as Affectee, in the spirit of Kratzer (1996, 2003). He tests the extra argument hypothesis on Mandarin unaccusatives and passives and demonstrates cross-linguistic evidence of extra arguments in German and Korean, which supports the outer object analysis.

This analysis avoids the Left Branch Condition (LBC) (Ross, 1967) violation. According to LBC, the leftmost constituent of an NP cannot be extracted.

(380)   *Whose$_i$ did you see [t_i father]?

(381)   *Beautiful$_i$ he saw [t_i houses].

(382)   *His is hit leg by John. (intended meaning: His leg is hit by John.)

It also explains the possessive relations between the derived subject and the object, by having an empty category controlled by the outer object. However, it cannot explain the awkwardness of the corresponding actives. If the subjects of possessive passives are derived from the outer objects of actives, an explanation is required for why the active counterparts are not as natural as normal ditransitives.

(383)   a.   Zhangsan$_i$ bei Lisi da duan-le   tui$_i$.
             Zhangsan BEI Lisi hit broken-ASP leg
             'Zhangsan's leg is hit by Lisi until broken'.

        b.   ??Lisi da duan-le   [Zhangsan] [tui].
             Lisi   hit broken-ASP [Zhangsan] [leg]
             'Lisi hit Zhangsan's leg until broken'.

(384)   a.   Zhangsan$_i$ bei Lisi da shang-le   baba$_i$.
             Zhangsan BEI Lisi hit injure-ASP father
             'Zhangsan's father is hit by Lisi until injured.'

        b.   ??Lisi da shang-le   [Zhangsan] [baba].
             Lisi   hit injure-ASP Zhangsan   father
             'Lisi hit Zhangsan's father until injured.'

(385)   a.   Juzi   bei wo bo-le   pi.
             Orange BEI I   peel-ASP skin
             'The orange is peeled skin by me.'

        b.   ??Wo bo-le   [juzi] [pi].
             I   peel-ASP orange skin
             'I peeled orange skin.'

(386)   a.   Men bei wo chuo-le   dong.
             Door BEI I   poke-ASP hole
             'The door is poked a hole/holes by me.'

        b.   ??Wo chuo-le   [men] [dong].
             I   poke-ASP door   hole
             'I poked a hole/holes on the door.'

Since the derived subject is semantically related to the object, one approach to possessive passives is via possessor raising, in which the possessor raises to a Case-related position from inside of possessive DP.

(387)   Zhangsan$_i$ bei Lisi da duan-le   [t_i tui]
        Zhangsan BEI Lisi hit broken-PERF [t leg]
        'Zhangsan's leg is hit by Lisi until broken'.

Kayne (1993), Szabolcsi (1981, 1983), Landau (1999) and Gavruseva (2000), among others, provide cross-linguistic evidence for possessor raising, such as French, Hebrew, Hungarian, Italian etc.. Possessive passives are considered to undergo possessor raising in

some languages, such as Japanese (Ishizuka, 2010). However, the biggest problem that the possessor raising account is facing is the violation of the LBC.

Uriagereka (1988) observes that the only languages that allow LBC violations are those languages that do not have articles. The distinctions can be observed in Latin and some Slavic languages such as Russian and Czech, where they do not have articles and thus they allow LBC. In Bulgarian and Macedonian, on the other hand, where they do have overt articles, LBC is disallowed. Mandarin does not have definite or indefinite articles (Li and Thompson, 1981), although certain determiners (*zhe* 'this', *na* 'that') or numerical classifiers (*yi ge* 'one CL') are used to deliver definiteness and indefiniteness. If the distinction is genuine, based on the article-less property, Mandarin has the possibility to be excluded from LBC violations. Moreover, LBC violations is only applicable to A bar movement. If the possessor raising is A movement, which was mentioned as a possibility in Huang (1999, 2002), the LBC violations does not apply to possessor raising.

This has been further proved from Mandarin's LBC behaviour, as Mandarin does not allow all kinds of left branch extraction. As noted by LBC, although the condition mainly applies to Germanic languages, German exhibits a mixed extraction condition, it varies based on that the syntactic category of the extractee is DP or PP (Boeckx, 2003, p.39).

Mandarin also exhibits a mixed extraction condition. This mixed condition is different from German's DP/PP condition, and is more limited than Slavic languages such as Russian and Czech,which allow the extraction of the leftmost constituent inside a DP. Mandarin does not allow PP extraction, and in DP category, it only allows possessor extraction. Since objective *wh-* word in interrogatives do not undergo fronting (A bar movement) in Mandarin, there is no chance for a LBC violation. Adjectival raising is also not allowed (A or A bar movement).

(388)   *Piaoliangde$_i$ ta kanjian-le [$_{ti}$ fangzi].
        beautiful   he see-ASP   [$_t$ house]
        'He saw a beautiful house.'

Xu (2005) supports a possessor raising approach to Chinese possessive passives. He suggests that the possessor raises out of a single NP for Case reasons (assigned Case by T head), and the possessee receives a partitive Case by VP.

```
                        TP
                      /    \
                    DP      T'
                    |      /  \
               Zhangsan   T    VP
                          /  \
                         V    vP
                         |   /  \
                        bei     v'
                              /    \
                             v      VP
                             |    /    \
                         daduan-le t₁   V'
                                       /  \
                                      V    DP
                                      |   /  \
                                     tᵢ  t₂  yitiaotui
```
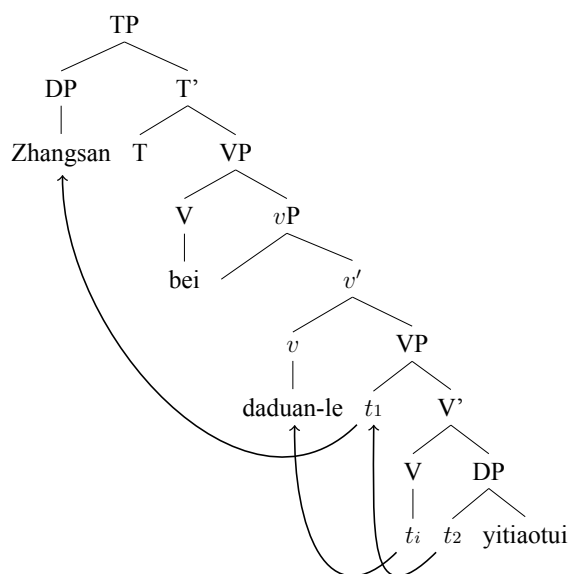
(389)

In Section 8.4, I will argue for a possessor raising approach to possessive passives and prove that the possessive passives also can be incorporated into the unified passive analysis.

7.3.2 Adversative Passives

As mentioned before, Mandarin is more constrained in adversative passives than Japanese. Japanese has four types of adversative passives, which are intransitives—source type, on-directional type, at-directional type and Dative theme type, according to Ishizuka (2010). Mandarin only has the source type. Japanese and Mandarin both have transitive adversative passives.The a examples are Japanese from Ishizuka (2010), b examples are their counterparts in Mandarin.

(390)   Source type

    a. Japanese

      Ken-ga   Naomi-ni   nige-rare-ta.
      Ken-NOM Naomi-DAT escape-PASS-PAST
      'Ken was escaped from by Naomi.'

    b. Mandarin

      Kanshou bei fanren   pao-le.
      guard   BEI criminal flee-ASP
      'Guards were such that criminals fled.'

(391)   on-directional

    a. Tokyo-ga   ooame-ni   hu-rare-ta.
      Tokyo-NOM heavy.rain-DAT descend-PASS-PAST
      Lit. 'Tokyo was descended upon by the heavy rain.'

    b. *Beijing bei baoyu xia-le.
       Beijing BEI heavy.rain descend-ASP
       Lit.'Beijing was descended upon by the heavy rain.'

(392)   at-directional

    a. Ken-ga Naomi-ni donar-are-ta.
      Ken-NOM Naomi-DAT yell-PASS-PAST
      'Ken was such that Naomi yelled at him.'

    b. *Zhangsan bei Lisi dahandajiao-le.
      Zhangsan bei Lisi loudly.yell-ASP
      'Zhangsan was such that Lisi loudly yelled at him.'

(393)   Dative theme

    a. Ken-ga Naomi-ni nak-are-ta.
      Ken-NOM Naomi-DAT cry-PASS-PAST
      'Ken was such that Naomi cried because of him.'

    b. *Zhangsan bei Lisi ku-le.
      Zhangsan BEI Lisi cry-ASP
      'Zhangsan was such that Lisi cry because of him.'

(394)   a. John$_i$-wa Mary$_j$-ni $_{ti}$zibun□$_{i/j}$-no koto-o ziman.s-are-ta.   (Ishizuka,
      John-TOP Mary-DAT $_{ti}$self-NO matter-ACC brag.do-PASS-PAST
      2010, p. 203)

      'John was bragged to by Mary about self's (=*John's/Mary's) matter.'

    b. Zhangsan bei Lisi jichu-le yi-zhi quanleida.   (Huang, 1999)
      Zhangsan BEI Lisi hit-ASP one-CL home-run
      'Zhangsan again had Lisi hit a home run [on him].'

The Outermost Object Analysis (Huang, 1999, 2002) takes the derived subject as an outermost object of the verb, which is at the left most specifier of VP. It moves to the operator, specifier of TP and is controlled by the subject.

```
                              TP
                    ┌─────────┴─────────┐
                   DP                   VP
                    │            ┌───────┴───────┐
                Zhangsan         V               TP
                                 │        ┌───────┴───────┐
                                bei      OP               TP
                                    ┌─────┴─┐        ┌──────┴──────┐
                                  OPi      DP        DP           V'
                                   ↑        │    ┌────┴────┐  ┌────┴────┐
                                  Lisij    ei   DP        VP
                                                 │    ┌────┴────┐
                                                 tj  DP        V'
                                                      │    ┌────┴────┐
                                                           V        DP
                                                           │         │
                                                       jichu-le  yizhiquanleida
```
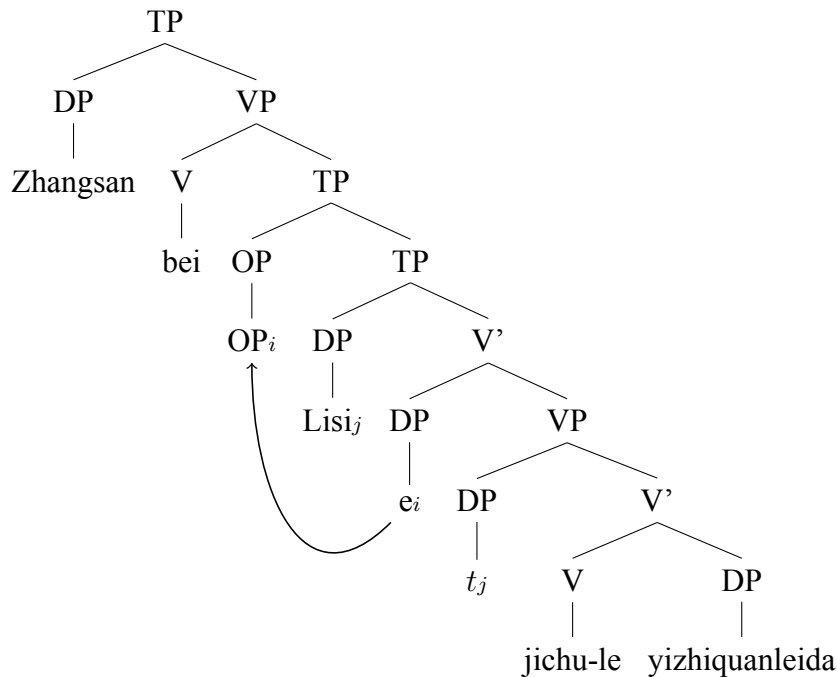
However, the first problem of this analysis still comes from the island constraint. Huang's analysis is still a bi-clausal analysis, which involves A bar movement. However, the derivation of adversative passives is not an A bar movement. Evidence comes from different results of fronting the "object" of adversative passives and that of topicalisation and relativisation.

(395) a. Nageren   bei wo zi-mo   le.
          that.person BEI I   self-draw ASP
          'That person had me self-drawing (a winning tile) on him.'

       b. ??Nageren, wo zi-mo   le.
          that.person I   self-draw ASP
          'That person, I self-drew (the winning tile).'

       c. *[wo zi-mo   le   de] nageren   yijing mei qian le.
          [I   self-draw ASP DE] that.person already NEG money ASP
          'That person such that I self-drew the winning tile is already broke.' (Huang
          2002, p.7 with modifications)

The same "object" (*nageren*) fronts in adversative passives (395a), but not possible in topicalisation (395b)and relativisation (395c). This means the "object" moves to an A position instead of an A bar position.

The second problem is that the so-called "outer object" is not an object of the verb, syntactically outside the *v*P. Arguments that are not subcategorized for by the verb are non-core arguments (Grashchenkov and Markman, 2008). Therefore they should be defined and analysed in different fashion. The arguements in Taiwanese and French that Huang (2002) uses to show the "overt outermost subject" are both non-core arguments.

(396) Taiwanese

goa kinazit be khimo, be lai   ka i   thetsa hapan.
I   today not happy will come KA him earlier take-off
'Today I'm pissed, so I will quit early for the day on him [e.g., my boss].'

(397) French

Jean s'est   fait broyer par un camion.   (Huang 2002: 6)
Jean her/himself fact crush by a truck
'Jean has been crushed by a truck.'

Taiwanese *ka* is a near equivalent to Mandarin *ba* (Yang et al., 2006), as they both mark the following DP as patient/theme, source or goal. When it functions as an benefictive/adversative marker of the following DP, it is similar to Mandarin *gei*. In 398, the argument 'him' following *ka* is not an object but a non-core argument, as the verb 'take-off' does not have a direct effect to 'him'. It does not make a difference to the verb if taking out the *ka* phrase.

(398) Taiwanese

goa kinazit be khimo, be lai   thetsa hapan.
I   today not happy will come earlier take-off
'Today I'm pissed, so I will quit early for the day.'

Tsai (2009) points out that Mandarin "outer object" construction (outer affective construction in his term), is alike Ethical Datives in Romance languages. Ethical Datives has also been called as personal Datives, non-argument datives and Coreferential Datives, the nature of these constructions are a person is affected by the action of the verb, even though the person is not an argument of the verb.

The analysis of French *se* (Boneh and Nash, 2011) also rejects Huang's outer object analysis. frenchse above is an Ethical Dative construction[31]. *Se* is reflexive and co-referenced with the subject to "implicating that the subject experiences enjoyment and easy-goingness". Boneh and Nash argue that the Ethical Datives are syntactically distinct from the beneficiary construction.

(399) Beneficiaries

Elle se   peint son portail.
She 3.SE paints her gate
'She paints the gate for herself.'

(400) Ethical Datives

---

[31]Boneh and Nash (2011) think that French *se* involves at least two constructions, and the Ethical Dative is the third construction, which distinguishes from Coreferential Datives. However, I take Ethical Datives and Coreferential Datives as the same construction here

Elle se   fume   un cigare.
She 3.SE smokes a   cigar
'She smokes her a cigar.'

The most convincing evidence that syntactically distinguishing the two constructions is that they behave differently when embedding under the causative-*faire*.

(401) Beneficiaries

Elle a fait se   peindre son portail à Paul.
She made 3.SE paint   his gate   to Paul
'She made Paul paint his gate for himself.'

(402) Ethical Datives

*?Elle a fait se   fumer un cigare à Paul.
She   made 3.SE smoke a   cigar to Paul
intended: 'she made Paul smoke him a cigar.' (Boneh and Nash, 2011, p. 65)

The embedded agent 'Paul' appears as a dative, which is intended to be co-reference with reflexive *se*, positioning under the tight unit of *faire* and VP. This results a violation of Condition B, where the antecedent 'Paul' must c-command the anaphor *se* in the governing category. The above two examples should be both ungrammatical. But this is contrast with the evidence. Therefore Burzio (1986); Kayne (2004); Boneh and Nash (2011) provide a solution, that these constructions have undergone a VP preposing, in which the VP *peindre son portail/fumer un cigare* moves to the main *V*P under *v faire*, and left the embedded agent in-situ. The *se* is held under ApplP as an extra argument, which is attached to the embedded VP. Therefore The embedded agent can c-command the anaphor. However, the evidence shows that *se* can co-reference with the embedded agent 'Paul' in beneficiaries, but cannot do so in Ethical Datives. The only possibility is that *se* in Ethical Datives positions higher than the embedded agent, which is outside of embedded *v*P, in contrast to *se* in Beneficiaries.

More supporting evidence comes from pronouns and wh-word embedded agent in Ethical Datives. When the embedded agent is pronoun or wh-word, the sentence is grammatical.

(403) Elle lui   a fait se   fumer un cigare.
She 3S.DAT made 3.SE smoke a   cigar
'She made him smoke a cigar.'

(404) A qui elle a fait se   fumer un cigare?
To who she made 3.SE smoke a   cigar
'Who did she make smoke a cigar?'

Pronouns are clitics and locates in TP. Wh-words are at the specifier of CP. They are both higher than the main *v*P headed by *faire*. As the embedded agents are higher than the embedded *v*P, the sentence is licit. Therefore the position of *se* in Ethical Datives should be outside of embedded *v*P, but lower than *v faire*. This analysis of French *se* distinguishes

the Ethical Datives from the beneficiaries: the Ethical Datives is outside of the vP while the beneficiaries are within the vP. This is against the outer object analysis and provide further cross linguistic evidence for the difference between adversative constructions and beneficiary constructions.

Another analysis of adversative passives is from Ishizuka (2010). She treats Japanese adversative passives in parallel to English pseudo passives. In English passives, sometimes the subjects are derived from a PP because the verb does not take internal arguments.

(405)   a. John$_i$ was spoken to t_i by the teacher.

        b. Harry$_i$ was cared for t_i.

In Japanese, a good number of verbs realise their 'direct object' as Dative rather than Accusative, and these Dative objects can undergo passivisation. The Japanese examples of adversative passives have active counterparts, which take Dative objects.

(406)   on-directional

        a. Tokyo-ga   ooame-ni   hu-rare-ta.
            Tokyo-NOM heavy.rain-DAT descend-PASS-PAST
            Lit. 'Tokyo was descended upon by the heavy rain.'

        b. Ooame-ga   Tokyoo-ni   hut-ta.
            heavy.rain-NOM Tokyo-DAT descend-PAST
            Lit. 'Heavy rain descended upon Tokyo.'

(407)   at-directional

        a. Ken-ga   Naomi-ni   donar-are-ta.
            Ken-NOM Naomi-DAT yell-PASS-PAST
            'Ken was such that Naomi yelled at him.'

        b. Naomi-ga   Ken-ni   donat-ta.
            Naomi-NOM Ken-DAT yell-PAST
            'Naomi yelled at Ken.'

        (Ishizuka, 2010)

This analysis cannot apply to Mandarin. First, putting Mandarin covert Case system aside, Japanese allows an extra argument, marked as Dative Case in intransitives while Mandarin does not.

(408)   a. Source type

          i. Japanese Ken-ga   Naomi-ni   nige-rare-ta.
                       Ken-NOM Naomi-DAT escape-PASS-PAST
            'Ken was escaped from by Naomi.'

        b. *Fanren (kanshou) pao-le   (kanshou).
            prisoner guard   escape-ASP guard
            'The prisoners escaped (the guards).'

Therefore the pseudo passives have an active counterpart in Japanese but they do not in Mandarin. Therefore there is no direct evidence to show how the passives are derived. Moreover, Mandarin does not allow pied-piping. There is yet an evidence to show any kind of object fronting is related to the fronting of DP in a PP. This makes any indirect evidence impossible. In summary, the two analyses are both unable to account for Mandarin adversative passives. I will argue for a new analysis in later section.

Chapter 8. Unifying Analyses for Mandarin Passive

Long distance (LD) passives are a special case of Mandarin long passives (passives with an overt agent). LD passives involve more than one extra arguments intervening between the derived subject and its gap, it therefore becomes the real "tough" construction of Chinese passives. LD passive is first mentioned in Huang (1999), he shows its similarity with English *tough* construction and extend the English NOP analysis to Mandarin LD passives. It is therefore known as one of the most convincing argument of the NOP analysis of Mandarin passives.

(409) Nafengxin$_i$ OP$_i$ bei wo jiao Lisi qing Wangwu tuo   tameimei jizou-le
       that.letter OP$_i$ BEI I   ask Lisi ask Wangwu request his.sister send.away-ASP
       t_i.
       t_i
       'That letter was such that I asked Lisi to ask Wangwu to request his sister to send way.'

(410) This problem$_i$ is too easy for me to ask the teacher to help me solve t_i.

According to Huang (1999), Mandarin LD passives and English *tough* constructions both involve more than one extra argument and infinitive clauses, therefore the object should undergo an A bar movement and be controlled by a null operator OP. The OP selects an subject, which controls the OP. However this view is recently challenged by Biggs (2012, 2013, 2014). One of the most valuable points in her works is that LD passives are only restricted to a few object control verbs. This means that LD passives are not unbounded, but are constrained to some deeper mechanism.

It has been observed that LD passive is not only limited to object control verbs, but also to subject partial control verbs Hu et al. (2001). This poses a challenge again for an A movement analysis Grano (2012). In this section, I will demonstrate a unified analysis for LD passive, following the A movement analysis for LD passive of object control verbs. I will review the analysis of LD passive of object control verbs, and extend it to that of subject partial control verbs. I will show that LD passive of subject control verbs is also constrained to certain verb categories and patterns. I will show that an A movement analysis is suitable for all passive constructions in Mandarin. This section will start by discussing two LD passives in the first and second parts. It is followed by the third section, showing local long and short passives based on an A movement analysis. Detailed analysis for indirect passives will also be demonstrated.

8.1 Long Distance Passive–Object Control Verbs

I follow Biggs' A movement treatment for LD passives in this thesis. I further provide two evidence to support the deficiency of BEI.

The first evidence comes from VP ellipsis. Mandarin allows VP ellipsis with *ye shi*[32]. *Ye shi* is above TP (Xu, 2003), therefore for ellipsis containing TP, *ye shi* will present; for ellipsis lacking TP (i.e. vP), no *ye shi* ellipsis is available. The comparison below shows that there is only a matrix TP that is above *bei*, therefore *ye shi* ellipsis is available. The *bei* complement does not have a TP, thus *ye shi* ellipsis is not available in the complement.

(411) a. Neifengxin bei wo jiao Lisi ji-zou-le,   neibenshu ye shi.
that.letter   BEI I   tell Lisi send-away-ASP, that.book also COP
'That letter was such that I asked Lisi to send it away, that book was such that I asked Lisi to send it away too.'

  b. *Neifengxin bei wo jiao Lisi ji-zou-le,   neibenshu bei wo (jiao Lisi)
that.letter   BEI I   tell Lisi send-away-ASP, that.book BEI I   (tell Lisi)
ye   shi.
also COP
'That letter was such that I asked Lisi to send it away, that book was such that I asked Lisi to send it away too.'

The second evidence is from the behaviour of Negative Polarity Items (NPI) *renhe* 'any' in indirect long distance passives. Li (1990) observes that *renhe* can only be licensed by the NegP within the same clause.

(412) a. Ni bu   chi renhe shiwu jiu   gaosu wo.
you NEG eat any   food   then tell   me.
'If there is any food you don't eat, just tell me.'

  b. *Ni bu   gaosu wo ta chi renhe shiwu.
you NEG tell   me he eat any   food
'You don't tell me that he eats any food.'

In long distance passives, *renhe* can be licensed by the matrix Neg head, which is above *bei*. The matrix NegP scopes the whole event, including *bei* complement. This provides further evidence that sentences with *bei* complement is mono-clausal.

(413) Wo bu   hui bei Lisi jiao jingcha   qiang-zou renhe dongxi de.
I   NEG will BEI Lisi ask police.man rob-away any   thing   DE
'I such that anything of mine will not be robbed by the policeman who is asked by Lisi.'

---

[32]There is debate about whether *ye shi* is similar to English do support and if it should be analysed as an auxiliary (Xu, 2003; Su, 2008), a copula (Ai, 2014) or a focus (Wei, 2010). However there is no doubt that *ye shi* is above TP.

8.2 Long Distance Passive–Partial Control Verbs

According to Biggs(2014), LD passives are restricted to a few object control verbs. However, it has been observed that LD passives do not only appear in object control verbs, but also in subject partial control verbs Hu et al. (2001).

(414) a. [33] zhege houxuanren bei dajia   yizhi renwei shi   shanliang   de ren.
           this   candidate   BEI everyone all   believe COP kind-hearted DE man
           'This candidate is unanimously believed to be a kind-hearted man by everyone.'

       b. zhexie fanren   bei fating xuanbu   guanya   15 nian.
           These criminal BEI court announce imprison 15 year
           'These criminals were announced to be imprisoned for 15 years by the court.'

This observation challenges the movement analysis of LD passive, since complements structure of object control verbs are highly different from those of subject partial control verbs. This section focuses on solving the problem of how to maintain the A movement analysis for LD passive with partial control verbs.

Mandarin embedded predicates are categorised into two classes, based on whether they allow or disallow an overt subject in the embedded complement (Huang, 1998; Tang, 2000 among others). These classifications largely fall into the division of Partial Control (PC) (as listed) and Exhaustive Control (EC) proposed by Landau (2001*b*). Grano (2012) classifies Mandarin subject control verbs under these two categories, also provide two different structures for them– control analysis for the PC type and raising analysis for the EC type .

(415) 'Partial Control' / Biclausal control

       a. Propositional: *cai* 'guess', *gaosu* 'tell', *renwei* 'believe', *shuo* 'say', *tingshuo* 'hear (that)', *xiangxin* 'believe', *xuanbu* 'announce', *yiwei* 'believe erroneously', *zhidao* 'know'

       b. Factive: *gaoxing* '(be) happy', *jide* 'remember', *jingya* '(be) surprised', *nanguo* '(be) sad', *yihan* 'regret'

       c. Desiderative: *dasuan* 'plan', *jueding* 'decide', *xiangyao* 'want', *xiwang* 'hope', *zhunbei* 'prepare'

       d. Interrogative: *xiang zhidao* 'want to know (= wonder)', *wen* 'ask'

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[33]This example is adpoted from Hu et al. (2001) with modifications. The original example is considered unacceptable according to my informants and myself's intuition. Also, I can not find any similar example in the CCL corpus.

(1) *zhege houxuanren bei dajia   yizhi renwei jihu   meiren hui xuan.   (Hu et al. 2001:1137)
      this   candidate   BEI everyone all   think   almost nobody will elect
      'This candidate is unanimously thought by everyone that almost nobody will elect him.'

I will not discussed details of the analysis for the two constructions here, cf Grano (2012) for more details.

(416)   PC Type: *renwei*-class[34]

    a. Zhangsan renwei Lisi da-le   ren.
       Zhangsan believe Lisi hit-ASP person
       'Zhangsan believes that Lisi hit someone.'

    b. Zhangsan zhidao Lisi chi-le   fan.
       Zhangsan know   Lisi eat-ASP rice.
       'Zhangsan knows that Lisi ate rice.'

(417)   EC Type: *shefa*-class

    a. Zhangsan shefa (*Lisi) da ren.
       Zhangsan try   (*Lisi) hit person
       'Zhangsan tries (*Lisi) to hit someone.'

    b. Zhangsan dei   (*Lisi) chi fan.
       Zhangsan have.to (*Lisi) eat rice.
       'Zhangsan has to (*Lisi) ate rice.'

(418)   a.

```
            /\
          /    \
        DP      VP
        |      /  \
   Zhangsan_i V     CP
             |    /    \
          renwei Lisi da-le Zhangsan
```

    b.

```
            /\
          /    \
        DP      FP
        |      /  \
   Zhangsan_i F     CP
             |    /    \
          shefa Zhangsan_i da-le Zhangsan
```
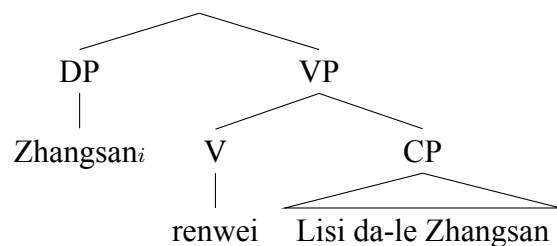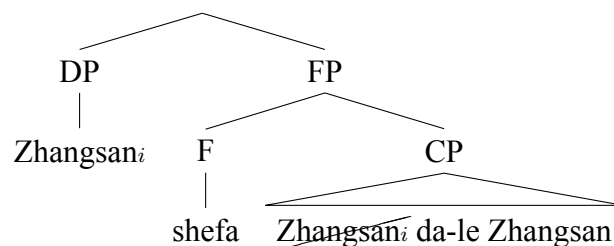
The EC type is monoclausal and undergoes A movement (Grano, 2012), which is consistent with the movement analysis adopted in this chapter. The PC type is biclausal and undergoes A' movement, which challenges the current analysis.

To solve this problem, there are three questions that need to be answered: (A) Is it true that all PC verbs are able to be passivised to LD form? (B) If not, which verbs are able to? (C) Is there any constraint for passivisation? How do the LD passives derive?

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[34]In Grano (2012), Mandarin PC type is called *renwei*-class (*renwei* = 'think, consider, believe', analysis 418), EC type is called *shefa*-class (*shefa*='try', analysis 418b). They also have the same structures with the English semantical equivalents.

The answer for (A) is no. Not all PC verbs are able to be passivised to LD form. As early as in Huang(1999), he suggests finite/nonpropositional verbs can not have LD passivisation. His finite/nonpropositional verbs are PC verbs, such as *shuo* 'say', *yiwei* 'think'.

(419)   Active

      a. Lisi shuo jingcha zhuazou-le Zhangsan.
          Lisi say police arrest-ASP Zhangsan
          'Lisi said that police arrested Zhangsan.'

      b. wo yiwei Lisi shuo Wangwu jizou-le   nafengxin.
          I   think Lisi say Wangwu send.away-ASP that.letter
          'I thought that Lisi said that Wangwu send away that letter.'

(420)   Passive

      a. *Zhangsan bei Lisi shuo jingcha zhuazou-le.
          Zhangsan BEI Lisi say police arrest-ASP
          'Zhangsan is said that police arrested him by Lisi.'

      b. *Nafengxin bei wo yiwei Lisi shuo Wangwu jizou-le.
          that.letter   BEI I   think Lisi say Wangwu end.away-ASP
          'That letter is such that I thought Lisi said that Wangwu send away.'

LD passivisation is not available for any verbs under the Factive, Desiderative (with one exception— *jueding* 'decide') and Interrogative types.

(421)   a.   Factive

         Zhangsan hen jingya   Lisi chi-le   niurou.
         Zhangsan very surprise Lisi eat-ASP beef
         'Zhangsan is surprised that Lisi ate beef.'

      b.   Desiderative

         Zhangsan xiangyao Lisi chi niurou.
         Zhangsan want   Lisi eat beef
         'Zhangsan wants Lisi to eat beef.'

      c.   Interrogative

         Zhangsan xiangzhidao Lisi you-mei-you chi niurou.
         Zhangsan wonder   Lisi have-not-have eat beef
         'Zhangsan wonders whether Lisi ate beef.'

(422)   a.   Factive

         *Niurou bei Zhangsan hen jingya Lisi chi-le.
         beef   BEI Zhangsan very surprise Lisi eat-ASP
         'Beef is such that Zhangsan is surprised that Lisi ate it.'

      b.   Desiderative

         *Beef bei Zhangsan xiangyao Lisi chi.
         beef   BEI Zhangsan want   Lisi eat
         'Beef is such that Zhangsan wants Lisi to eat it.'

c. Interrogative

*Niurou bei Zhangsan xiangzhidao Lisi you-mei-you   chi.
beef   BEI Zhangsan wonder   Lisi have-not-have eat
'Beef is such that Zhangsan wonders whether Lisi ate it.'

From the above sentences we can see that not all PC verbs are available for LD passivisation. This brings us to question (B): which verbs are available for it? It is very rare for Mandarin native speakers to use LD passive in daily conversation (I will argue this is because of stylistic reasons in this section), I will use corpus data instead of intuition judgements to examine these constructions. In order to answer the second question, I examined the Mandarin Chinese data of the CCL corpus for all the PC verbs. The data shows that verbs which are available for LD passivisation are all under the propositional category (with one under Desiderative, *jueding* 'decide'). *Gaozhi/tongzhi* 'tell/notify' is not in Grano's (2012) control verb list, but it also shows availability for LD passivisation. It falls into 'propositional' based on its semantic meaning.

(423)   Propositional: *renwei* 'believe', *xiangxin* 'believe', *xuanbu* 'announce', *yiwei* 'believe erroneously', *zhidao* 'know', *gaozhi/tongzhi* 'tell/notify'

(424)   Desiding:*jueding* 'decide'

Now to question (C): Is there any constraint for passivisation? The answer is Yes. 420b above shows that although verb *yiwei* has availability for LD passivisation, it is not the case that all sentences with *yiwei* can form LD passive. In fact, similar to the performance with LD passive of object control verbs, LD passive is highly constrained (even more constrained then it is with object control verbs) for *renwei*-class as LD passives only allow three constructions: 1) PC verbs with nominal predicates (414a, repeated as 425a; 2) PC verbs with V-V compound (414b, repeated as 425b); 3) PC verbs (only *gaozhi/tongzhi* 'tell/notify') in pseudo-Double object construction (as 425c).

(425)   a. zhege houxuanren bei dajia   yizhi renwei shi   shanliang   de ren.
              this   candidate   BEI everyone all   believe COP kind-hearted DE ren
              'This candidate is unanimously believed to be kind-hearted by everyone.'

        b. zhexie fanren   bei fating xuanbu   guanya   15 nian.
              These criminal BEI court announce imprison 15 year
              'These criminals were announced to be imprisoned for 15 years by the court.'

        c. Gonghuoshang bei meiti gaozhi/tongzhi zhege jijie   liuxing caise   siwa.
              supplier   BEI media tell/notify   this   season favour coloured legging
              'Suppliers are told/notified by media that in this season (consumers) favour coloured leggings.'

Moreover, object control verbs in LD passive have unbounded dependency, but PC verbs

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in LD passive do not. A maximum of one PC verb is allowed in a LD passive. In this sense, LD passive of PC verbs is more constrained then LD passive of Object control verbs.

(426) a. neifeng xin   bei wo jiao Lisi qing Wangwu tuo   ta   meimei ji-zou le.
           that   letter BEI me tell Lisi ask Wangwu request his sister   send   ASP
           "That letter was such that I ask Lisi to ask Wangwu to get his sister to send."

       b. *zhege houxuanren bei wo renwei Lisi xiangxin shi   shanliang   de.
           this   candidate   BEI I   think Lisi believe COP kind-hearted DE
           'This candidate is such that I think Lisi believe to be kind-hearted by everyone.'

To find the answer to why LD passive of PC verbs has such constraints, I first examine PC verbs with nominal predicates. Nominal predicates are composed of an optional copula *shi*/*wei* and a DP. Copula *shi* is recognised as a semi-verb in Mandarin, as it bears some verbal properties. The verbal feature can be tested with A-not-A, negation.

(427) A-not-A

       a. Zhe shi   mudanhua.
           this COP peony
           'This is peony.'

       b. Zhe shi-bu-shi   mudanhua?
           this COP-NEG-COP peony
           'Is this peony or not?'

(428) Negation

       a. Zhe bu-shi   mudanhua.
           this NEG-COP peony
           'This is not peony.'

However, it is not compatible with aspect markers.

(429) a. *Zhe shi-le/guo/zhe   mudanhua.
           this   COP-ASP/ASP/ASP peony
           'This was/had been/is being peony.'

This can be explained by the historical development of *shi*. In Old Chinese, *shi* was a demonstrative e.g. *shi ri* 'this day'. It evolved to a copula, taking nominal predicates as its complement.

Copula *wei* is used in Old Chinese, baring the same features and function as *shi*. *Wei* is replaced by *shi* in Mandarin. However, *wei* is still widely used in formal writing.

The copulas occupy a functional projection— Predicate Phrase, which is lower than NegP (Van Gelderen, 2015).

```
                    AspP
                   /    \
               NegP      Asp
              /    \
           Neg    PredP
                    |
                   Pred
                    |
                 shi/wei
```
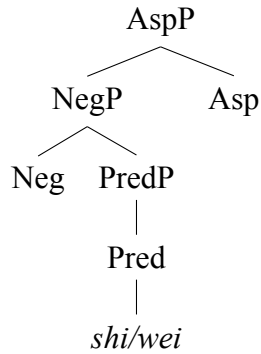
The construction appears to be bi-clausal at first glance, as analysed by Grano (2012). However, I will demonstrate that this complement shows significant similarities to the complement of LD passive of object control verbs: There is no higher structure allowed above vP.

First, this construction lacks evidence of a CP layer because base-generated Topics are not allowed.

(430)   a.   Topic

Hua,   ta bei dajia   renwei shi   mudanhua.
Flower, it BEI everyone believe COP peony
'When it comes to flower, it is believed as peony by everyone .'

   b.   *Ta bei hua,   dajia   renwei shi   mudanhua.
   it   BEI flower, everyone believe COP peony
   'When it comes to flower, it is believed as peony by everyone.'

   c.   *Ta bei dajia   renwei shi, hua,   mudanhua.
   it   BEI everyone believe COP flower peony
   'When it comes to flower, it is believed as peony by everyone.'

Moreover, projections in TP, auxiliaries, tense/aspect markers and negation are not allowed.

(431)   a.   Auxiliaries

Ta bei tajia   (*neng/*yinggai) renwei (*neng/*yinggai) shi   mudanhua.
it BEI everyone (can/should)   believe (can/should)   COP peony
'It (can/should) be believed by everyone that it (can/should) be peony.'

   b.   Tense/Aspect

Ta bei tajia   renwei(*-le/*-guo/*zhe)   shi   (*-le/*-guo/*zhe) mudanhua.
it BEI everyone believe(-ASP/-ASP/-ASP) COP (*-le/*-guo/*zhe) peony
'It was/had been/ is being believed by everyone that it was/had been/ is being peony.'

   c.   Negation[35]

---
[35] The judgement for second position of negation marker might be controversial, however according to the CCL corpus, there is no data supporting the availability of negation markers that precedes the copula.

Ta bei dajia   (*bu) renwei (*bu) shi   mudanhua.
it   BEI everyone NEG believe NEG COP peony
'It is (not) believed by everyone that it is (not) peony.'

The future-oriented temporal adverbs are prohibited in subject controlled LD passives. This is also the case for object controlled LD passives.

(432)   Ta bei dajia   (*mingtian) renwei (*mingtian) shi   mudanhua.
        it   BEI everyone tomorrow   believe tomorrow   COP peony
        'It is believed by everyone that it is peony tomorrow.'

Mandarin *shi...de* focus cleft also disallows future-oriented adverbs.

(433)   *Shi ta mingtian ji   de nafengxin.
        COP he tomorrow send DE that.letter
        'It was him that send away that letter tomorrow.'

Focus cleft is a vP that directly follows *shi* Paul and Whitman (2008). The properties of focus cleft shows significant similarities to the complement of LD passive of object control verbs: There is no higher structure allowed above *v*P, as focus clefts lack evidence of topics, auxiliaries, tense/aspect markers and negation.

(434)   a.   Topic

             *Shi ni-de-gou   wo zhaodao de.
             COP you-POSS-dog I   find   DE
             'It was your dog that I found.'

        b.   Auxiliaries

             *Shi didi   yinggai/neng xi   de panzi.
             COP younger.brother should/can   wash DE plate
             'It was younger brother who should/can wash the plates.'

        c.   Tense/Aspect

             Shi   ta dapo*-le/*-guo/*zhe   de panzi.
             COP he break*-ASP/*-ASP/*-ASP DE plate
             'It was he that broke/have broken/ is breaking the plates.'

        d.   Negation

             *Shi didi   bu/mei xi   de panzi.
             COP younger.brother NEG   wash DE plate
             'It was younger brother who didn't do the plates.'

The comparison of the two structures indicates that the BEI complements the subject controlled LD passives are also defective.

Another feature of the *bei* complement is that the PC verb and the copula are highly syncretic. First, there is no constituent between the PC verb and the copula. For example, *bei...xuanbu wei* 'is announced as', *bei (X) renwei shi* 'is believed as' appear as set phrases.

No data of intervening elements in these set phrases has been found in the CCL corpus[36]. Second, PC verbs show syncretic properties. *Renwei* means 'believe', which is composed of *ren* 'recognise' and *wei* 'be'. The second character *wei* is the same character with the copula *wei*, which provides the condition for reanalysis. Data shows that some *renwei* LD passives do not require copulas.

(435) Ta bei dajia   renwei mudanhua.
      it BEI everyone believe peony
      'It is believed by everyone that it is peony.'

(436) Ni... bei laoshi renwei   bu   hao   de   xuesheng.
      you... BEI teacher believe.COP NEG good GEN student
      'You... are believed as a bad student by teachers.'

This shows that the PC verb *renwei* is reanalysed and is synthesized with the copula.

I will demonstrate the derivation of LD passives of PC verbs and show that similar to LD passives of Object control verbs, this constructions also involve A movement.

(437) a. Dajia   renwei ta shi mudanhua.
         everyone believe it COP peony
         'Everyone believes it is peony.'

      b. ta bei dajia   renwei t_i shi mudanhua.
         it BEI everyone believe t_i COP mudanhua
         'It is believed to be peony by everyone.'

In LD passive of PC verbs, VoiceP selects a vP as its complement, and the external argument is at the specifier of vP. Similar to LD passive of object control verbs, the external argument is assigned Case by Voice, and stays inactive. Following Biggs (2014), in actives the VoiceP synthesizes with vP and forms Voice-vP. To be more specific, the active VoiceP synthesizes with PredP here. The vP selects the Voice-PredP as its complement, and the 'extra argument' (the external argument of embedded complement) is at the specifier of Voice-PredP. The internal argument is at the complement of Voice-PredP. T probes down and reaches the 'extra argument', as the embedded complement lacks TP, for reasons of Case, it raises to the matrix Spec, TP. Voice-Pred is a functional head and assigns Case to the internal argument. As the matrix v and embedded Pred is syntretic, the Pred is able to move to matrix v through head movement.

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[36]The search string is (bei(X,1-5)*renweiyshi*), (bei(X,1-5)*xuanbuywei*), while 'y' is, noun, auxiliary, negation or adverb. I tested 'y' as *bixu* 'must', *yinggai* 'should', *neng* 'can', *bu* 'not'. Only *yinggai* 'should' has one entry of LD passive, taking 0.1% in *renwei* LD passives.

```
                        TP
                   ┌────┴────┐
                  DP         T'
                  │      ┌────┴──────┐
                 ta_i    T          VoiceP
                         │      ┌────┴────┐
                         uF   Voice       vP
                              │      ┌─────┴─────┐
                             bei    DP           v'
                                    │       ┌────┴─────┐
                                  dajia      v      Voice-PredP
                                             │     ┌────┴────┐
                                        renwei-shi_j DP     Pred'
                                                     │   ┌───┴───┐
                                                    t_i Pred    DP
                                                         │       │
                                                        t_j   mudanhua
```

(438)
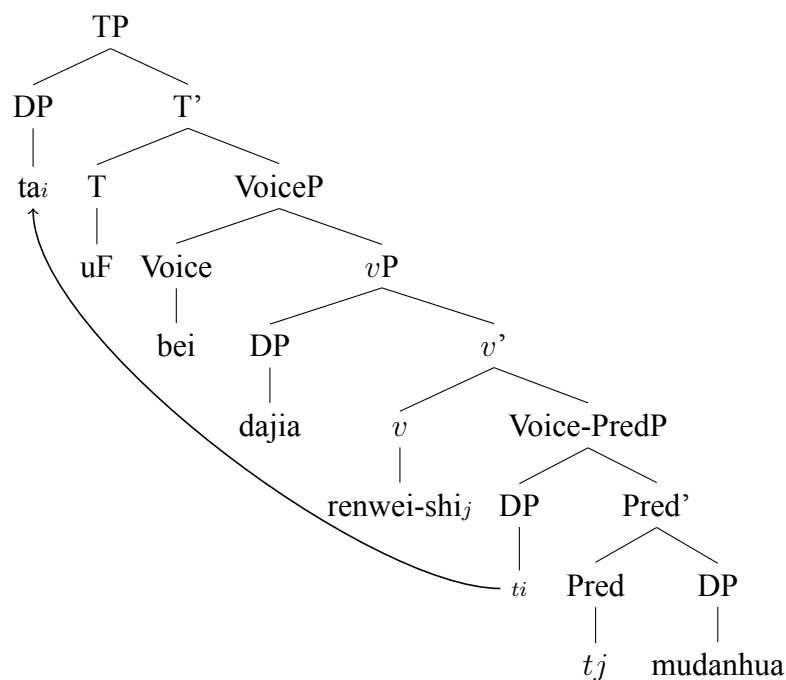
This construction is in parallel to the 'believe' Exceptional Case Marking construction on the surface structure, which can also be found in English and Japanese. However, the complement of the Chinese counterpart is vP, which is smaller than it is in English (TP) and Japanese (CP)Grano (2012). This means that the internal argument is also 'transparent' for movement. However, It should be pointed out here that similar to English and Japanese, only the subject of the embedded complement can be fronted to the matrix Spec, TP. I leave the reason for further exploration.

I now return to the second and third type of LD passive with PC verbs: 1) PC verbs with V-V compounds; 2) PC verbs in pseudo-Double object constructions (as 425c). Theses two types are very limited, and they only happen to a couple of verbs. The second type only appears with *xuanbu* 'announce' and the third type only appears with *gaozhi/tongzhi* 'tell/notify'.

Recall the example 425b (repeated as below). This type of LD passives is highly restricted to genre, such as in formal legal documents. Examples from the CCL corpus support this point.

(439)   a.   ...tanpan   bei xuanbu   wu-xian-qi   tuichi.
             negotiation BEI announce NEG-limit-duration postpone
             'The negotiation is announce to be postpone for unlimited duration.'

        b.   Guomindang bei Yuanshikai xuanbu   qudi.
             Guomindang BEI Yuanshikai announce ban
             'Guomindang is announce to be banned by Yuanshikai.'

c. Sidanco ... bei fating xuanbu   pochan
Sidanco ... BEI court announce bankrupt
'Sidanco ... is announced that it is bankrupt by the court.'

d. Meierdelun ... bei jinzhengfu   xuanbu   quzhuchujing.
Meierdelun ... BEI jin-government announce expel
'Meierdelun ... is announced to be expelled by jin-government.'

I analyse the complement of *xuanbu* as a gerund or verbal phrase. There are two situations, one is 'subject' raising (as 440, *xuanbu DP pochan* 'announce that DP is bankcrupt'), the other is object movement (as 441, *xuanbu guanya DP* 'announce that DP will be imprisoned'). In both situations they lack a v layer and are as small as a VP. There is no element separating *xuanbu* and its gerund complement based on the corpus data. All complements are legislative terminologies, which should be word chunks. For example, *quzhuchujing* 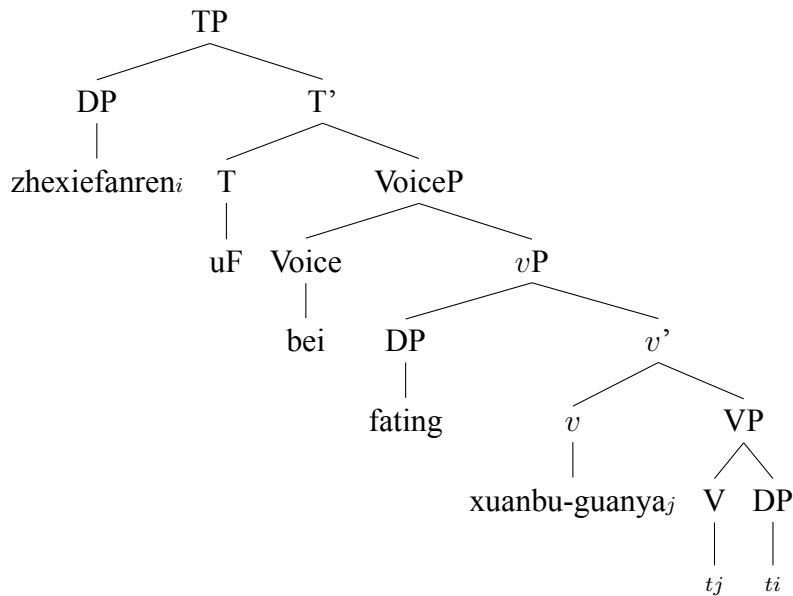is a chunk of 'expel him and urge him to leave the boarder'. The object position is in the middle of *quzhu ta chujing* 'expel him and urge him to leave the boarder'. I argue that stylistic reasons should be taken into account. In the CCL corpus, the percentage of objects in the middle of the word chunk *xuanbu*+x is only 2% (12/450). Passive voice is also used more frequently than it is in other genres to achieve such formalness.

Although the derived subject is generated between *xuanbu* and *pochan* in 440, I argue that because of stylistic reasons and Case assignment, it has to undergo movement to the subject position. As there is no intervening element between *xuanbu* and its gerund verb complement, the verb complement undergoes head movement to v to incorporate with *xuanbu*.

(440)

165

TP
├─ DP
│   └─ zhexiefanren$_i$
└─ T'
    ├─ T
    │   └─ uF
    └─ VoiceP
        ├─ Voice
        │   └─ bei
        └─ vP
            ├─ DP
            │   └─ fating
            └─ v'
                ├─ v
                │   └─ xuanbu-guanya$_j$
                └─ VP
                    ├─ V
                    │   └─ t_j
                    └─ DP
                        └─ t_i
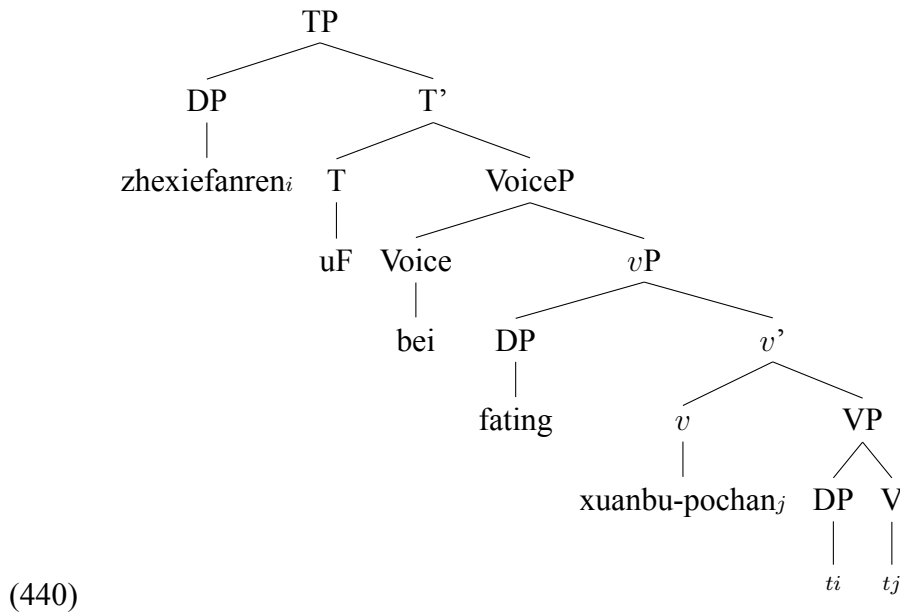
(441)

The last type of LD passive with PC verbs is the pseudo-double object construction (DOC). The reason it is 'pseudo' is that it takes one indirect object and a CP clause, instead of two double objects. This type is restricted to the verb *tongzhi/gaozhi* 'tell, notify'. I analyse it as canonical DOC, where the IO precedes DO (CP clause here), therefore there is no intervening argument for IO to move to the subject position.

(442) a. Gonghuoshang bei meiti gaozhi/tongzhi zhege jijie liuxing caise siwa.
supplier   BEI media tell/notify   this   season favour coloured legging
'Suppliers are told/notified by media that in this season (consumers) favour coloured leggings.'

b. Xuexiao gaozhi/tongzhi-le women yijianshi.
school   tell/notify-ASP   we   one.thing
'The school told/notified us one thing.'

c. Women bei xuexiao gaozhi/tongzhi-le yijianshi.
we   BEI school   tell/notify-ASP   one.thing
'We are told/notified by school about one thing.'

```
                          TP
                   ┌───────┴───────┐
                  DP              T'
             Gonghuoshangᵢ   ┌────┴────┐
                            T         VoiceP
                            │      ┌────┴────┐
                           uF    Voice      vP
                                  │      ┌───┴───┐
                                 bei    DP      v'
                                        │    ┌──┴──┐
                                      meiti  v    ApplP
                                             │   ┌──┴──┐
                                         tongzhiⱼ DP   Appl'
                                                  │   ┌─┴──┐
                                                 tᵢ  Appl  VP
                                                      │    │
                                                     tⱼ    V'
                                                        ┌──┴──┐
                                                        V    CP
                                                        │     │
                                                       tⱼ    C'
                                                          ┌───┴───┐
                                                          C       TP
                                                              ┌────┴────┐
                                                             DP         T'
                                                          zhege jijie ┌─┴──┐
                                                                      T   VP
                                                                       ┌──┴──┐
                                                                       V    DP
                                                                       │    │
                                                                   liuxing caisesiwa
```
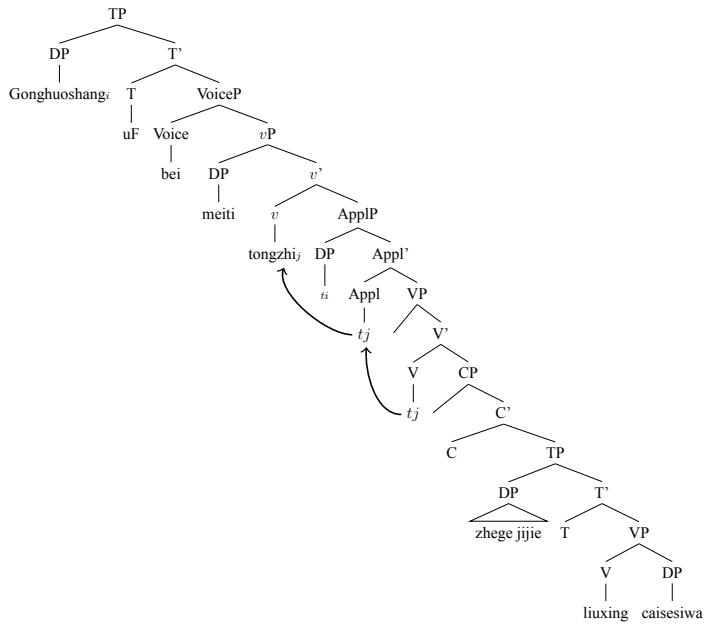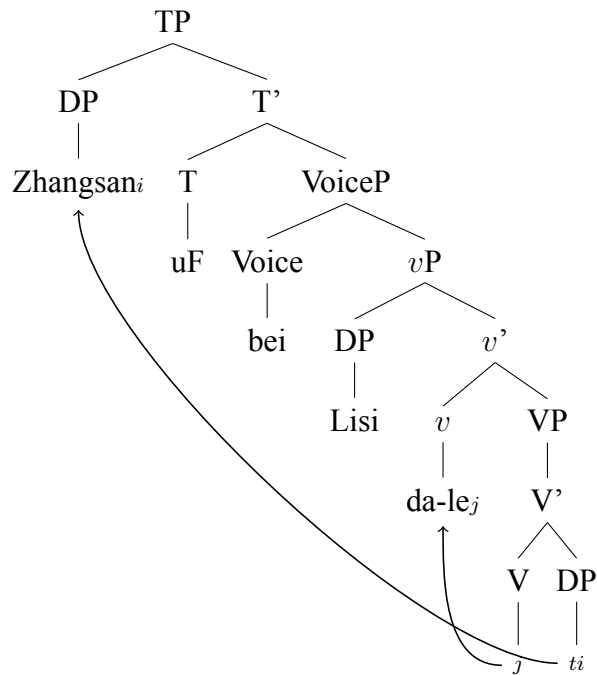
In summary, the first type of LD passive of PC verbs are ECM passives, although the embedded complement is vP, in contrast to IP in English ECM. The second type is the *xuanbu* V-V compound. I adopted the verb compound analysis and treated the PC verb *xuanbu* and the following verb as a verbal phrase. The third type is pseudo-DOC with *tongzhi/gaozhi*. I adopted a canonical DOC analysis for this type, where the IO precedes DO and thus can be fronted to the subject position. It can be seen that the LD passive of the PC type is highly restricted.

8.3   Local Long and Short Passives

Contrary to LD passives, local passives are the passives which do not involve more than one extra argument in *bei* complement. Local passives have long and short distinction. I argue that a unified A movement analysis is compatible for local long and short passives. I suggest the only difference between local long and short passives are that long passives have an overt agent while a covert agent is syntactically represented as an arbitrary PRO in short passives. Similar to LD passives, *bei* takes a vP as its complement. The structure for local long passives are largely based on Liu (2012) and Biggs (2014), in the spirit of Collins (2005).

```
                              TP
                      ┌────────┴────────┐
                     DP                 T'
                      │           ┌──────┴──────┐
                 Zhangsanᵢ        T           VoiceP
                      ↑           │       ┌──────┴──────┐
                      │          uF     Voice          vP
                      │                   │       ┌──────┴──────┐
                      │                  bei     DP             v'
                      │                          │        ┌──────┴──────┐
                      │                         Lisi       v           VP
                      │                                    │            │
                      │                                 da-leⱼ          V'
                      │                                    ↑       ┌─────┴─────┐
                      │                                    │       V          DP
                      │                                    │       │           │
                      └────────────────────────────────────┴───── ⱼ──── tᵢ
```

(443)

Mandarin short passives syntactically need a covert external argument, similar to English and Japanese counterparts (Collins, 2005; Ishizuka, 2010). First, Short passives allow reflexives bound by the implicit argument.

(444) a. Zhefengxin zuizhong bei liu-gei-le   ziji.
           this.letter   finally   BEI keep-give-ASP self
           'This letter is finally kept to oneself.'

       b. Such privileges should be kept to oneself. (Baker et al., 1989)

Second, short passives are compatible with volition oriented adverbs and depictive predicates controlled by implicit arguments. It means that there is a syntactic licenser for volition oriented adverbs and depictive predicates, although it is not phonetically overt.
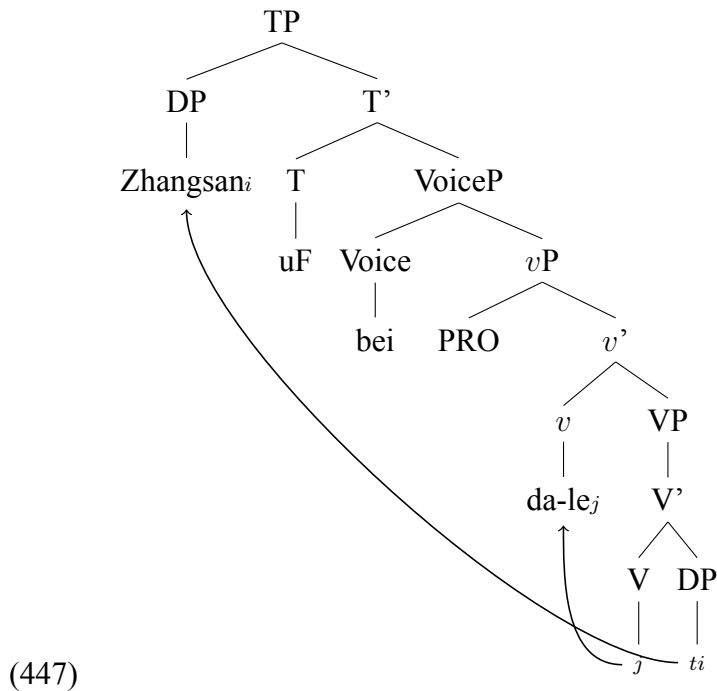
(445) a. Zhangsan bei guyi   da-le.
           Zhangsan BEI intentionally hit-ASP
           'Zhangsan is intentionally hit (by someone).'

       b. Zhangsan bei henhendi   da-le.
           Zhangsan BEI mercilessly hit-ASP
           'Zhangsan is hit mercilessly (by someone).'

(446) a. Zhefengxin bei ku-zhe   xiewan-le.
           this.letter   BEI cry-ASP write.finish-ASP
           'This letter is written while (someone) cries.'

       b. Zaocan   bei guang-zhe chiwan-le.
           breakfast BEI nude   eat.finish-ASP
           'The breakfast is eaten nude.'

Guyi and *henhendi* scope and only scope the covert Agent. Depictive predicates *ku-zhe* and *guang-zhe* also can only be licensed by the covert Agent. Following Collins (2005) for English short passives and Ishizuka (2010) for Japanese short passives, I propose that Mandarin short passives also contain a covert external argument. It is an arbitrary PRO and it stays at the specifier of vP.

(447)

```
                        TP
                ┌───────┴───────┐
               DP              T'
                │        ┌──────┴──────┐
           Zhangsanᵢ    T            VoiceP
                │        │        ┌─────┴─────┐
               uF      Voice     vP
                        │     ┌───┴────┐
                       bei   PRO       v'
                              ┌────────┴────────┐
                              v               VP
                              │                │
                           da-leⱼ             V'
                                          ┌────┴────┐
                                          V        DP
                                          │         │
                                          ⱼ         tᵢ
```

I propose that a unified A movement analysis applies to Mandarin short passives. The covert external argument is structurally required, it is represented as an arbitrary pro, rather, being assigned Case like an overt pronoun.

The first evidence supporting an A movement analysis is that the object of idiom chunks allows passivisation (Huang, 2013; Liu, 2012).

(448)   Ta jiu ai   zhan   pianyi.
        he just love occupy cheap
        'He just likes taking advantages (of others).'

(449)   pianyi dou bei (ta) zhan-jin-le
        cheap all   BEI he   occupy-end-ASP
        'All the advantage was taken by him.'

Idiom chunks usually have a idiomatic interpretation when the are composed by certain words. The idiomatic interpretation is kept when part of the chunk undergoes direct movement, otherwise it loses the interpretation (including operator movement or control) (Bruening, 2015). Idiom chunks are therefore used to test raising vs control analysis since Postal (1974). This is the direct evidence of an object movement instead of the "base-

generate subject" in Huang's NOP analysis. The difference between local long and short passives shown by Huang (1999) also needs further consideration.

(450)   a. Zhangsan bei Lisi zai xuexiao xiji-le.
              Zhangsan BEI Lisi at   school   attack-ASP
              'Zhangsan is attacked by Lisi at school.'

         b. *Zhangsan bei zai xuexiao xiji-le.
              Zhangsan BEI at   school   attack-ASP
              'Zhangsan is attacked at school.'

First, the insertion of place adverbials in *bei* complements should cause the same unnaturalness for short passives and long passives, because the canonical position for the place adverbs is actually above *bei*. The long passive is more acceptable than the short one. This comes from both *bei* and post-*bei* DP presented, as no constituent intervenes between *bei* and post-*bei* DP. In short passives the external argument is covert, and the surface structure is more compact— only *bei* and the verb are presented. It is not clear whether the insertion aims at pre-DP or post-DP positions, therefore it shows sensitivity to any insertion between the Voice and v. Another possibility is that, as the head of a place adverbial indicating a location, *zai* also functions as a progressive aspect marker. It also cause ambiguity when it is followed by a locative DP and a VP (Williams, 2016). It might be the case that *zai* is analysed as progressive aspect marker in short passives. *Zai* immediately following *bei* damages the structure more than following an Agent DP (like it does in long passives).

(451)   Zhangsan zai tushuguan kan shu.
        Zhangsan ZAI library   read book
        'Zhangsan is reading books in library.'

        'Zhangsan reads books in library.'

    Second, SUO is not a diagnostic for A' dependency. Evidence shows that SUO has different distribution in relative clauses from its distribution in passives.

(452)   a. Ta (wanquan/yijing) bei jiejie   suo   (*wanquan/yijing) liaojie-le.
             he all/already   BEI elder.sister SUO all/already   understand-ASP
             'He was fully/already understood by the elder sister.'

         b. Jiejie   suo wanquan/quanbu liaojie   de nageren
             elder.sister SUO all/already   understand DE that.person
             'that person who is fully understood by the elder sister'

It can be shown that the degree adverb *wanquan* and the aspectual verb *yijing* cannot stay below SUO in passives but can do so in relative clauses. As the adverbs are in between TP and vP, it shows that the SUO in relative clauses is structurally higher than the SUO in passives. The prohibition of modals also prove this point.

170

(453) a. *Zhejianshi bei jiejie suo neng/hui/jiangyao liaojie.
this.thing BEI elder.sister SUO can/will/will understand
'This thing can/will be understood by the elder sister.'

b. Jiejie suo neng/hui/jiangyao liaojie de shi
elder.sister SUO can/will understand DE thing
'things that can/will be understood by the elder sister'

It seems that the SUO in passives is closely attached to the lowest VP, while the SUO in relative clauses closely follows the specifier of TP. As there are two positions for SUO, the occurrence of SUO is not a diagnostic for A' dependency.

Third, it is difficult to directly argue against the resumptive pronoun evidence at the moment. I only argue that resumptive pronouns in long passives are a remnant of Old Chinese. Passives in Mandarin Chinese tend not to allow resumptive pronouns or to have more restrictions on using them. It is observed by Wei (1994) that long passives with resumptive pronouns appear in the beginning of Middle Chinese (300AD).

(454) a. 其 財物 悉 被 淫 女人 奪 之。 Soushenji, 286AD, Huang
Qi caiwu xi bei yin nvren duo zhi.
his wealth all BEI whorely woman grabbed it
(1999)

'His wealth were all snapped by the whorely woman.'

b. （李子敖）被 鳴 鶴 吞 之。 Soushenji, 363AD, Feng (2013)
(Li zi'ao) bei ming he tun zhi.
(Li zi'ao) BEI chirping crane swallow him
'(Li zi'ao) is swallowed by the chirping crane.'

c. (天女) 被 池主 見 之。 Soushenji, 363AD, Huang (1999)
(Tiannv) bei chizhu jian zhi.
(Tiannv) BEI pool.owner see her
'She is seen by the pool owner.'

It is worth noting that compared with Mandarin long passives, Old Chinese is less restricted in terms of using resumptive pronouns. Long passives in Mandarin are not able to use resumptive pronouns without adverbials *yi-xia* 'once', *san-ci* 'three times' etc.

(455) a. *Zhangsan bei Lisi da-le ta.
Zhangsan BEI Lisi hit-ASP him
'Zhangsan was hit by Lisi.'

b. ?Zhangsan bei Lisi da-le ta yi-xia.
Zhangsan BEI Lisi hit-ASP him once
'Zhangsan was hit once by Lisi.'

This historical development shows that the A' movement features of passives change to a more restricted level.

In summary, all the empirical evidence shows that short passives are compatible with the A movement analysis.

8.4 Indirect Passives

8.4.1 Possessive passives

In this section I will first discuss the properties of Chinese possessive passives, and compare the two analyses— the Outer Object Analysis and the Possessor Raising Analysis. I side with the later approach and will provide evidence to support this analysis.

Huang (2007) distinguished the thematic roles of three-place verbs:

(456) 'Rob' class: AGENT V AFFECTEE THEME/PATIENT

(457) 'Give' class: CAUSER EXPERIENCER/BANEFICIARY V THEME

According to his division, possessive passives come from the 'rob' class. The external argument (AFFECTEE) is promoted as the subject in Mandarin passives, while the internal argument (THEME/PATIENT) is not able to derive passives, as in 458. For the 'give' type, only the internal argument (THEME) can be derived to the canonical subject position, the external argument (EXPERIENCER) cannot, as in 459. I argue that the 'rob' class verbs are the actives for possessive passives, while the 'give' class verbs are the canonical Double Object Construction (DOC) in Mandarin.

(458) 'Rob' class

    a. Ta chi-le   wo liangwan mian.
       He eat-ASP I   two-bowl noodle
       'He ate two bowls of noodle off me'.

    b. Wo bei ta chi-le   liangwan mian.
       I   BEI he eat-ASP two-bowl noodle
       'I was such that he eats two bowls of noodle off me'.

    c. *Liangwan mian   bei ta chi-le   wo.
       two-bowl   noodle BEI he eat-ASP I
       'Two bowls of noodle is eaten by him off me.'

(459) 'Give' class

    a. Zhangsan gei-le   ta yiben shu.
       Zhangsan give-ASP him one-CL book.
       'Zhangsan gave him a book.'

    b. Yiben shu bei Zhangsan gei-le ta.

       one-CL book BEI Zhangsan give-ASP he

       'A book is given to him by Zhangsan.'

c.　*Ta bei　Zhangsan gei-le　　yiben　　shu.
　　　　He　BEI Zhangsan give-ASP one-CL book.
　　　　'He is given a book by Zhangsan.'

The two class verbs behave differently in passivisation. In the 'rob' class, the 'indirect object (IO)' AFFECTEE can be passivised but the 'direct object (DO)' THEME/PATIENT cannot. On the contrary, the IO BENEFICIARY cannot be passivised, but the DO THEME can. If the 'rob' class of verbs share the same construction with 'give' class verbs, aka DOC, the 'DO', internal argument, should be the one which is fronted. This means that the 'rob' class must have different construction with 'give' class.

The differences between the two approaches to possessive passives are: 1) the semantic relation between the 'IO' and the 'DO'; 2) the relation between the verb and the 'IO'; 3) whether possessive passives exhibit locality; 4) the empty category in the specifier of DP is a trace or a PRO.

	Outer Object	Possessor Raising
Semantic relation of 'IO' and 'DO'	Affectee and Theme/Patient	Possessor and possessee
Verb and 'IO' relation	Verb argument	Not verb argument
The empty category	PRO	Trace
Locality	No	Yes

As for the difference in 1) and 2), I will argue against Huang's (1999, 2002) outer object analysis by comparing 'rob' class verbs and 'give' class verbs. As 'give' class verbs have canonical DOC construction, Huang's Outer Object Analysis is a version of DOC, since he takes the 'IO' of the 'rob' class verbs as an object of the construction.

First, I will argue that a Possessor–Possessee relation of 'IO' and 'DO' includes all the properties described in Affectee–Theme/patient relations, but not vice versa.

Semantically, the 'IO' of 'rob' class verbs always has possessor/creator meaning of the 'DO', while the counterpart in the 'give' class does not have. This is one reason why Chinese linguists defined the two classes of verbs, the 'rob' type means that possessions are stolen (i.e. robbed) from possessors, and the 'give' type means that things are given to the non possessors.

(460)　'Rob' class

　　a.　Ta da-le　　wo liangtiao gou.
　　　　He hit-ASP I　two-CL　dog
　　　　'He hit my two dogs'.

　　b.　Ta chaoxi-le　　　wo yiben　shu.
　　　　he plagiarize-ASP I　one-CL book
　　　　'He plagiarized one book off me.'

(461) 'Give' class

    a. Zhangsan gei-le   ta   yiben   shu.
       Zhangsan give-ASP him one-CL book.
       'Zhangsan gave him a book.' (He was not the possessor or the author of this book.)

    b. Ta zeng-le wo liangfu hua.
       he handsel-ASP I two-CL picture

       'He handselled two pictures to me.' (I was not the possessor or the author of the two pictures.)

In addition to the existence of the possession relation in 'rob' class verbs, it is also 'obligatory'. This can be seen from its sensitivity to multiple possession construction.

(462) *Ta gai-le   wo Zhangsan de   mingzi.
     He change-ASP I   Zhangsan POSS name
     *'He changed my Zhangsan's name'.

(463) Zhangsan gei-le   ta Lisi de   yiben shu.
     Zhangsan give-ASP him Lisi POSS one-CL book.
     'Zhangsan gave him a book which is written/owned by Lisi.'

'Rob' class verbs equire the 'IO' to be the possessor/creator of the 'DO', therefore a clash happens if 'DO' has another possessor/creator. 'Give' class verbs do not have this requirement.

In the spirit of Kratzer (1996, 2003), Hole (2004, 2005, 2006) and Huang (1999, 2002) in analysing 'IO' of 'rob' class verbs as an extra argument, semantically represented as Affectee. They consider that the thematic role of the extra argument is in the middle of an agent and a patient, as it shares both proto-agent properties (sentience/consciousness) and the proto-patient properties (causal affectedness), outlined by Dowty (1991). As such, there is a requirement for the extra argument to be sentient/conscious, but this is not a requirement for possessors. If the extra argument were a possessor, as the raising of the possessor, the construction could not be grammatical if the possessor is semantically non-sentient/conscious.

(464) a. Zhangsan died.

    b. Houlai,   tade muqin ye si-le.
       afterwards his   mother also die-ASP
       'Then his mother died, too.'

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c. *Houlai,   ta ye si-le   muqin.
afterwards he also die-ASP mother
'Then his mother died on him, too.'

In fact sentient/conscious is not a necessary condition for possessive passives.

(465)   a. Confucius died.

b. Confuzi   bei za-le   fuzimiao.
Confucius BEI destroy-ASP temple
'Confucius temple was destroyed.'

(466)   Jia-li   bei tou-le   yidui   yinzi.
home-in BEI steal-ASP one-CL money
'A lot of money was stolen from home.'

Dead or locative DP can appear in possessive passives, Affectees have to be sentient/conscious but possessors do not. Therefore treating 'IO' as a Possessor covers more properties of possessive passives.

Second, syntactically, the 'rob' class 'IO' is not the argument of the verb. This is because the 'rob' class 'IO' can be omitted, while the 'give' class IO cannot.

(467)   'Rob' class

a. Ta da-le   (wo) liangtiao gou.
He hit-ASP I   two-CL   dog
'He hit (my) two dogs'.

b. Ta chaoxi-le   (wo) yiben   shu.
he plagiarize-ASP I   one-CL book
'He plagiarized one book (off me).'

(468)   'Give' class

a. Zhangsan gei-le   *(ta) yiben   shu.
Zhangsan give-ASP him one-CL book.
'Zhangsan gave *(him) a book.' (He was not the possessor or the author of this book.)

b. Ta zeng-le *(wo) liangfu hua.
he handsel-ASP I two-CL picture

'He handselled two pictures *(to me).' (I was not the possessor or the author of the two pictures.)

The 'rob' class verbs do not require an extra argument. The 'IO' is actually not an argument of the verb, therefore it is not obligatory for the construction. In contrast the
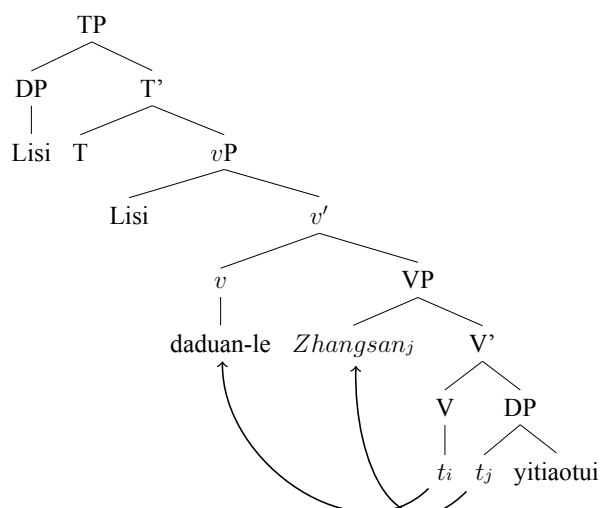
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'give' class requires three arguments, therefore the IO cannot be omitted. This also means the 'rob' class is not a real three-place construction. Further can be seen in control conditions in purpose clauses. The PRO in purpose clauses is controlled by the nearest antecedent. The 'IO' in the 'rob' class cannot control the PRO in purpose clauses, but the IO in the 'give' class can.

(469)   a. Ta$_i$ chi-le   liangwan mian   [PRO$_i$ xuanyao].
          He eat-ASP two-bowl noodle [PRO show.off]
          'He ate two bowls of noodle off me to show off'.

       b. *Ta chi-le   wo$_i$ liangwan mian   [PRO$_i$ xuanyao].
          He eat-ASP I   two-bowl noodle [PRO show.off]
          'He ate two bowls of noodle off me for me to show off'.

       c. Ta$_i$ chi-le   wo liangwan mian   [PRO$_i$ xuanyao].
          He eat-ASP I   two-bowl noodle [PRO show.off]
          'He ate two bowls of noodle off me to show off (himself)'.

(470)   a. Zhangsan$_i$ mai-le   yiben   shu [PRO$_i$ kan].
          Zhangsan give-ASP one-CL book [PRO read].
          'Zhangsan bought a book to read.'

       b. Zhangsan maigei-le   ta$_i$ yiben   shu [PRO$_i$ kan].
          Zhangsan buy.give-ASP him one-CL book [PRO read].
          'Zhangsan gave him a book for him to read.'

Subjects and the IO of 'give' class can bind PRO. The 'IO' of 'rob' class is unable to bind PRO, when there is a PRO in 'rob' verbs, only the subject can bind it. Failing to control a PRO means that the 'IO' is not an argument of the verb and so cannot enter a control relation with verbal arguments or their predicates.

By comparing the two classes of verbs, we conclude that the 'rob' class verbs should have different structures from the 'give' class verbs. As the 'give' class verbs are canonical DOC constructions, an Outer Object analysis (aka DOC) should be ruled out for 'rob' class verbs.

The Possessor Raising analysis argues that the possessor is raised from inside a DP to an A position, therefore it is assigned a theta role inside the DP, at its base position. The possessor and its trace have only one theta role. The base position of the possessor is a Case-less position, therefore it moves out of the DP for Case reasons. Following Landau (1999), I assume it is raised from a Spec, DP, instead of Spec, NP. I argue that the landing site is the specifier of VP.

```
                    TP
                  /    \
                DP      T'
                |      /  \
              Lisi    T    vP
                          /  \
                       Lisi   v'
                            /    \
                           v      VP
                           |     /   \
                     daduan-le Zhangsanⱼ  V'
                                        /  \
                                       V    DP
                                       |   /  \
                                      tᵢ  tⱼ yitiaotui
```

(471)

For Case assignment in Possessor raising approach, there are two hypotheses. Xu (2005) suggests that the possessor raises to the Spec, TP to receive a nominative Case and the leftover of DP is assigned a partitive Case. Han (2000) agrees that the possessor receives a nominative Case, but Han suggests that the leftover DP receives Case through the chain with the moved DP. This means the raised possessor and the leftover DP share a Case. In this section, I will argue that the Case assignment in possessor raising approach is compatible with that of DOC.

The phenomenon of possessors which raises out of the internal argument DP to receive a Dative Case has been studied in many languages, such as French (Vergnaud and Zubizarreta, 1992), German (Hole, 2005), Hebrew, Romance languages (Landau, 1999) and Korean (Maling and Kim, 1992) among others. The leftover internal argument DP is assigned Accusative Case in these languages. Therefore the Possessor and possessee DP have independent Cases. This means that Xu (2005) and Han (2000) do not make a correct prediction in this case. I propose that the Case assignment of 'rob' construction and possessive passives are:
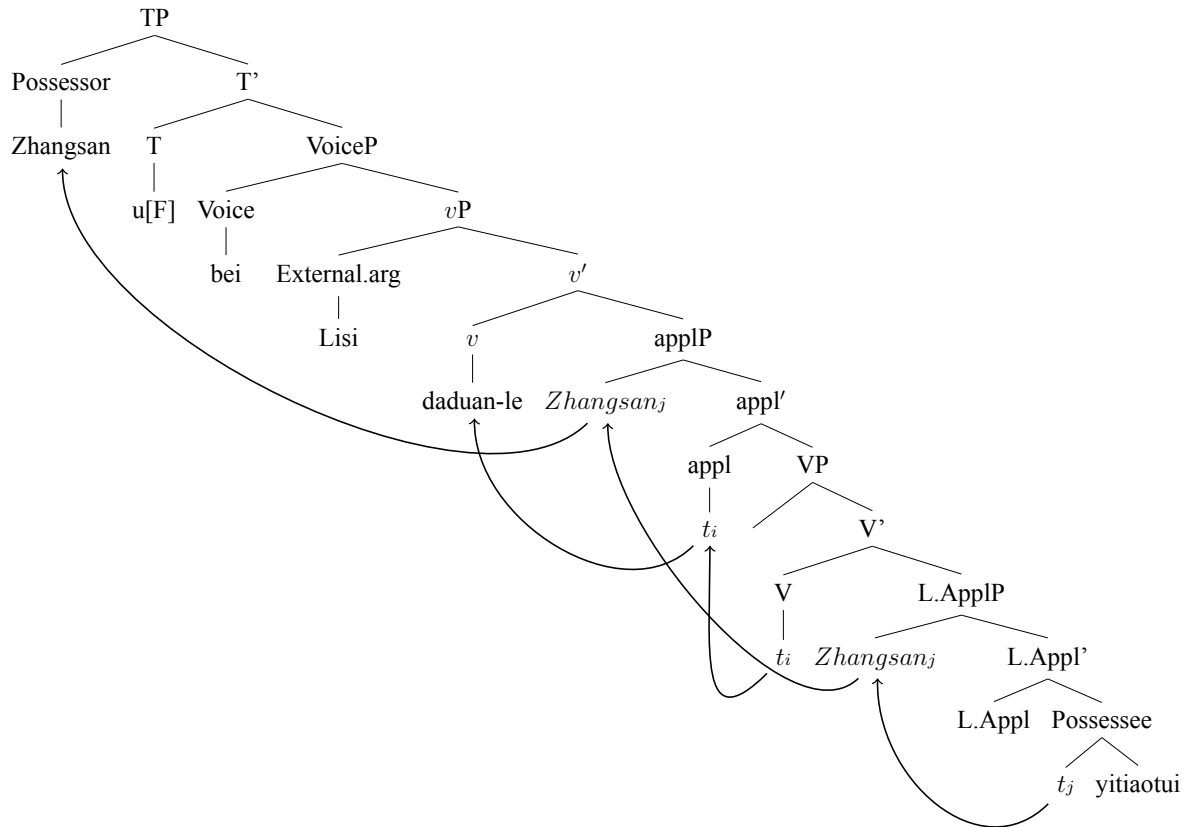
(472) 'Rob' construction

    a. T— External argument

    b. Voice+v— Possessor

    c. appl— Possessee

(473) Possessive passives

    a. T— Possessor

    b. Voice— External argument

    c. appl— Possessee

Similar to the Case assignment in DOC construction, the functional heads T, Voice and appl assign Case to the three arguments. However, the Internal argument in DOC is the one T probes, and it undergoes movement. Possessees never undergo movement without possessors, however. It either moves with the possessor as a whole, or stays in situ. The reason is that trace never precedes its antecedent. As the possessee DP contains possessor's trace, it cannot precede the possessor.

TP
  Possessor — Zhangsan
  T'
    T — u[F]
    VoiceP
      Voice — bei
      vP
        External.arg — Lisi
        v'
          v — daduan-le
          Zhangsan$_j$
          applP
            appl'
              appl — t_i
              VP
                V — t_i
                V'
                  L.ApplP — Zhangsan$_j$
                    L.Appl'
                      L.Appl
                      Possessee — t_j yitiaotui

(474)

This analysis predicts that there is a trace in the possessee DP, therefore it should be bound by quantifier DP. The prediction is that the possessor raising construction should show the DP quantifier binding, DOC should not.

(475) a. Zhangsan shao-le   wo zuimei   de   qunzi.
            Zhangsan burn-ASP I   most.beautiful POSS dress
            'Zhangsan burned my most beautiful dress.'

       b. Zhangsan shao-le   meige   nvhai zuimei   de   qunzi.
            Zhangsan burn-ASP every.CL girl   most.beautiful POSS dress
            'Zhangsan burned every girl's most beautiful dress.'

(476) a. Zhangsan gei-le   wo zuimei   de   qunzi.
            Zhangsan give-ASP I   most.beautiful POSS dress
            'Zhangsan gave me the most beautiful dress.'

b. *Zhangsan gei-le meige nvhai zuimei de qunzi.
Zhangsan give-ASP every.CL girl most.beautiful POSS dress
'Zhangsan gave every girl the most beautiful dress.'

The prediction is borne out. The quantifier 'every' binds 'girl' and 'dress' in the possessor raising construction, while it clashes with the requirement of multi assignments of the two DPs in DOC.

This also supports all the arguments for the Outer Object analysis.

8.4.2 Adversative Passives

I side with the Outermost Object analysis in that the derived subject of adversative passives are from a projection that is at the outer area of vP, instead of a prepositional phrase. I also side with the Oblique raising analysis (Ishizuka, 2010) in that the derived subject is not a verbal argument. I propose that this argument is generated at the specifier of VoiceP, which is outside of vP.

I start from the first type of adversative passives— unergatives.

(477) a. Yifu hua gua zai qiang-shang.
one.CL painting hang at wall-on
'One painting is hanging on the wall.'

b. Qiang-shang gua-le yifu hua.
wall-on hang-ASP one.CL painting
'There is a painting hanging on the wall.'

c. *Yifu hua gua-le qiang-shang.
one.CL painting hang-ASP wall-on
'One painting is hanging on the wall.'

(478) a. Fanren pao-le.
prisoner escape-ASP
'The prisoners escaped.'

b. Kanshou pao-le fanren.
guard escape-ASP prisoner
'The guard is affected by/is the cause of the prisoner escaped.'

c. *Fanren pao-le kanshou.
prisoner escape-ASP guard
'The guard is affected that the prisoner escaped.'

In 477b, the unaccusative verb takes one internal argument 'one painting', while the other argument 'wall-on' fills the 'subject' position, Spec TP. In 477a, when the internal argument occupies Spec TP, the 'wall-on' can appear only if it is licensed by the preposition 'at'. In 478a, the unergative verb takes one external argument 'prisoners', and can take an extra argument 'guard' to add an 'affected' meaning. The 'guards' are affected because of 'the
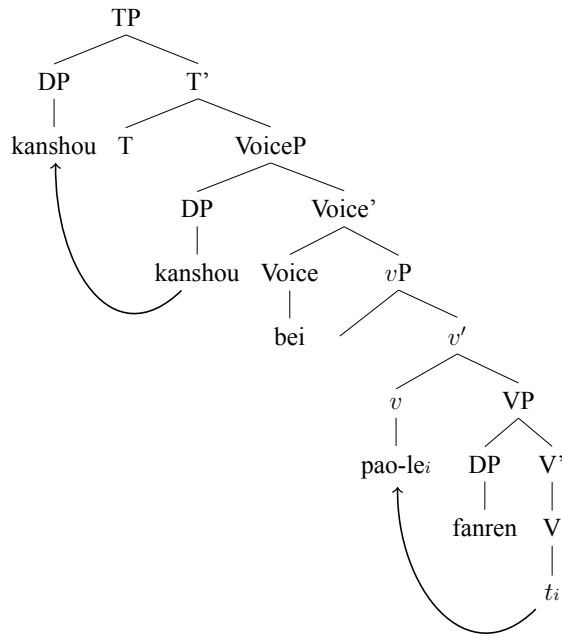
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escaping of the prisoners'. This extra argument has to be at the Spec TP, otherwise it is ungrammatical, as 478c.

The most interesting point is that these two extra arguments can be passivised, but the internal argument of unaccusatives and the external argument of unergatives cannot.

(479) a. Qiang-shang bei gua-le   yifu   hua.
           wall-on   BEI hang-ASP one.CL painting
           'The wall is hung a painting on.'

       b. *Yifu hua   bei gua-le   qiang-shang.
           one.CL painting BEI hang-ASP wall-on.
           'One painting is hung on a wall.'

       c. Kanshou bei fanren   pao-le.
           guard   BEI prisoner escape-ASP
           'The guard is affected that the prisoner escaped.'

       d. *Fanren bei kanshou pao-le.
           prisoner BEI guard   escape-ASP
           'The guard is affected that the prisoner escaped.'

This means that the extra arguments are not arguments of verbs, but they are DPs bearing uninterpreted features and have a need for Case. The ungrammaticality comes from the failure of vP internal functional head to assign Case for the two extra arguments. They only receive Case outside of vP.

Based on the observation above, I assume that the extra arguments are base-generated at the spec VoiceP, and move to spec TP to receive Case in the actives. The external/internal arguments of unergatives/unaccusatives receive Case from the syncretic Voice-v head. In adversative passives, the external arguments still raise to spec TP to receive Case, and Voice assigns Case to the other argument.

TP
DP   T'
kanshou   T   VoiceP
                DP   Voice'
               kanshou   Voice   vP
                         bei   v'
                                 v   VP
                              pao-le$_i$ DP   V'
                                         fanren   V
                                                  t$_i$

(480)

This approach combines the advantages of the two analyses, and explains the necessity of the external argument raising to Spec TP in both actives and passives. It also indicates that the external argument is not a verbal argument, this kind of Case assignment is more like assignment of inherent Case. Now we turn to the adversative passives discussed by Huang (1999, 2002).

TP
DP   T'
Lisi   T   VoiceP
              DP   Voice'
             Lisi   Voice   vP
                             DP   v'
                           Wangwu   v   VP
                                  jichu-le$_i$ DP   V'
                                              Wangwu   V   DP
                                                      t$_i$ yizhi-quanleida
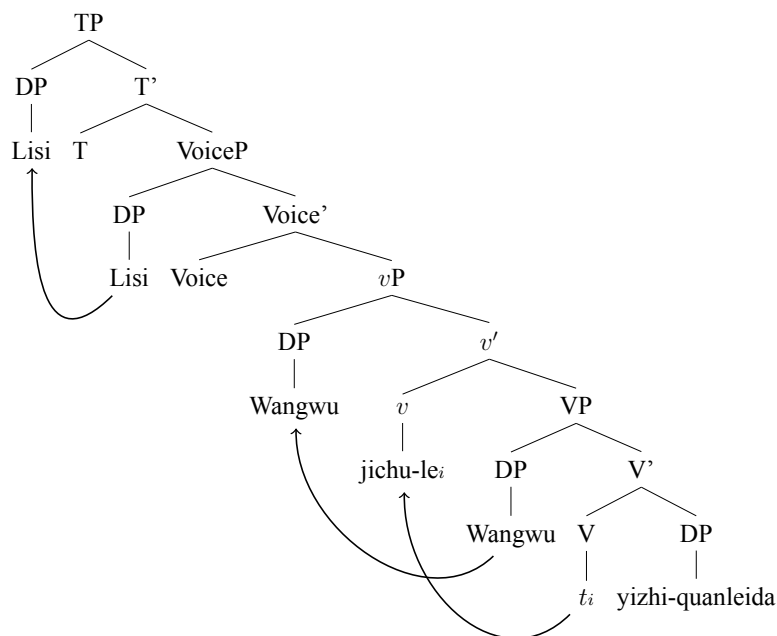
(481)

An alternative analysis is that the subject is base generated, not derived. However, the problem is the subject does not show volitionality, which is a necessary but not sufficient condition for being a subject. The subject oriented adverbs do not scope the subject. As

mentioned in the analysis of long distance passives, when the subject oriented adverb is topicalised, it scopes over both the external argument and extra argument. However in adversative passives, the subject does not show the scope effect of the adverbs.

(482) Guyide, nageren bei wo zimo-le.
Intentionally, that.person BEI I self.draw-ASP.
*'That person is such that he intentionally makes me self draw (a majiong tile) and won him.'

'That person is such that I intentionally self draw (a majiong tile) and won him.'

8.5 Discussion

It was argued in this section that all types of passive derive from A movement. Two types of LD passive– object control and subject partial control were discussed. It was evident that both types are not unbounded— they are highly constrained for various reasons. The complement of LD *bei*-construction is generally defective, which shows monoclausal properties. These observations support an A movement analysis. As LD passive was one of the biggest challenges for unifying passive constructions, the analysis moved a step forward to a unified Chinese passive analysis. It was followed by the A movement analysis of local long and short passives. I argued that the only difference between local long and short passives are whether the external argument is overt DP or a PRO. I argued against the NOP analysis and proposed that A movement analysis perfectly fits the two constructions. For the indirect passives, I argue for a possessor raising analysis to possessive passives. Evidence shows that the possessor is not a verbal argument semantically and syntactically. It compulsorily delivers a possessor meaning, and it moves out from the object DP, then to the derived subject position. I argue for a new analysis to the adversative passives, in which the subject of the passives is derived, but it is not derived from a position inside vP (Huang, 1999, 2002) or a complement of PP (Ishizuka, 2010), but derived from specifier of VoiceP. This analysis combines the advantages of the previous two analyses, and incorporates adversative passives into the A movement analysis. This section also explores Mandarin Case assignment, it mainly follows the Disassociation hypothesis (Biggs, 2014), in that a DP is always Case-assigned by a different head from it's theta role assigner. In terms of the inherent Case assignment, i.e. indirect passives, the hypothesis is also applicable.

Chapter 9. Summary and Conclusions

In this thesis, I have examined various kinds of object fronting constructions throughout the history of Chinese, by using quantitative and qualitative methods. I provided a unified account for these constructions in that four fronting positions are distinguished: Spec v below Low Negation, TP internal position above Middle Negation (Internal Topic), Spec T (subject) and Spec C (Topic).

Spec v below Low Negation accommodates the fronted objects of the movement of pronoun fronting and the focus movement. The former specially refers to the movement of person pronoun objects triggered by the influence of Low Negation and modality. The latter includes the movement of *wh*-adverbials of instruments and nominal fronting in *shi* focus constructions, which are both triggered by focus features. Internal Topic locates in the TP internal position, which was a common landing site for D-linked *wh*-objects, the *wh*-adverbials of reasoning, demonstratives and nominal objects. The subject position, which is the destination in Spec T for raising constructions, such as equational constructions and *ke* constructions. The fourth position, which is the Topic position in Spec C, is the position for topicalisation that becomes a popular landing site for fronted objects with topic properties.

The former three positions are active as landing sites of object fronting constructions in LAC, but the movement to the latter is relatively quiet in the same time period, as moving to Spec C only has very limited cases in *wh*-predicates fronting. However, this situation was changed after LAC, as object raising in equational constructions select Topic position in Spec C as the landing site instead of the subject position in Spec T. On the other hand, Spec v below vP negation lost pronoun fronting and *wh*-adverbials, while Internal Topic lost *wh*-objects and *wh*-adverbials of reasoning. Other movement such as v-Mod (exemplified by the difference between *neng* and *ke*), Mod-Polar/high adverbials (*ke* becomes a question marker and an adverb), demonstrative-copula/focus marker (the uses of *shi* in different constructions) are also observed as a part of syntactic changes happened after LAC.

Passives are examined in this thesis as an important instance of object fronting constructions. A unified analysis of Mandarin Passives shows a series of strong A movement features in the constructions. This is different from those in EMC, where they seem to exhibit typical A' movement.

Primary Resources

The Chinese Parsed Historical Copus

Li, M. (2016), Chinese Parsed Historical Corpus (ChiPaHC). Version 1.

An electronic copy of the full corpus is submitted in the CD-ROM

CCL Corpus [Electronic Corpus of Chinese Texts]

http://ccl.pku.edu.cn:8080/ccl_corpus/

Center for Chinese Linguistics, Peking University, Beijing, China

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