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The Case for Case in Chinese

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22.1 What Is Case?

The building blocks of languages are their words/morphemes, which will be referred to as lexical items in this work. Each lexical item must take the behavior of some part of speech – noun, verb, adjective, preposition, etc. Parts of speech determine the grammatical positions of lexical items and the relation with other items in phrases or sentences. As these properties are generally shared across languages, it is desirable to have a common framework to capture the distribution of lexical categories in sentences and phrases so that similarities and differences among languages can be compared more meaningfully. In this vein, Case is a theoretical tool in the generative grammar to capture generalizations regarding categorial distribution, particularly the nominal category.¹ Case is also to capture the close relation between items, such as a verb/preposition and its object, or the subject of a sentence and the tense or agreement of the sentence. Such a close relation is encoded in terms of a Case assigner and a Case assignee or recipient (or Case features on two elements holding an agreement relation). Noun phrases in some languages may be marked with morphological cases, giving clues to their syntactic positions. For instance, a noun phrase marked with an accusative case is commonly the object of a verb. Case marking, therefore, can be an indicator of the syntactic positions and grammatical relations of noun phrases.² Languages without morphological case marking also require their noun phrases to occupy specific positions in relation to other categories. Such similarities among languages, with or without morphological case marking, can be captured by the same

¹ Following a widely adopted convention, we use the capitalized 'Case' to refer to the notion of abstract Case in Case theory.

² However, see Legate (2008) on instances where morphological case and abstract Case diverge. We focus on abstract Case in this work.

tool – the essence of the theory of abstract Case. Noun phrases are subject to the Case filter, which requires noun phrases to occur in the prescribed syntactic positions in relation to their Case assigners (or Case features must be checked/agreed with in specific configurations).

Case theory has also been used to capture the complementary distribution of noun phrases and verb phrases – the essence of the Case Resistance Principle (Stowell 1981), which disallows Case-assigning categories to occur in Case-receiving positions. A further application of Case theory is to ensure certain lexical categories have noun phrases as their objects – the essence of the Inverse Case filter (Bošković 1997) – every Case feature must be assigned or in agreement relation with a specific category.

22.2 Case and Grammatical Studies of Chinese

Building on the understanding that lexical categories have their designated positions in phrases and sentences and Case theory is a tool to capture generalizations regarding the distribution of various lexical categories, Koopman (1984), Li (1985, 1990), and Travis (1984) apply Case theory to capturing word order facts in different languages. Li further explores the role of Case in major constructions of Chinese. Issues studied include word order of the constituents in major phrasal categories, the type and number of constituents that can follow a verb in Chinese, the *ba* (disposal) construction, the *bei* construction (passive), topic structures, and the status of clauses and PPs in Case theory. Since then, there have been debates and further investigations on issues related to the notion of Case from the Chinese perspective, including word order generalizations and accounts, the Chinese postverbal constraint, the status of PPs and clauses in regard to Case theory, the distinction between finite and nonfinite clauses, and the role of Case in ellipsis constructions. This chapter will summarize the major issues that have been more extensively discussed in the literature and evaluate important claims with relevant assumptions clarified. I will demonstrate that, despite some changes and uncertainties due to the evolution and refinement of theoretical tools and assumptions, the notion of Case has been leading linguists to discover interesting empirical generalizations and to ask questions that otherwise would not have been raised. In turn, solutions and further questions will be explored. The essence of Case theory has helped and will continue to guide us in the investigation and understanding of the grammatical properties of Chinese, in relation to the core properties shared by human languages – Universal Grammar.

Section 22.2.1 will focus on the role of Case in word order typological studies over the decades. Section 22.2.2 turns to the controversial postverbal constraint in Chinese, which has been an important consideration in reaching proper empirical generalizations and adequate analyses of word

order within verb phrases. Related issues regarding PPs and NPs³ and the constituents inside NPs are the subject of Section 22.2.3. Section 22.2.4 focuses on the debate on whether Chinese distinguishes finite from non-finite clauses and what such a distinction means, especially in the context of Case. The Case status of clauses is further elaborated on in Section 22.2.5. Finally, the role of Case in recent studies regarding labeling of syntactic objects, licensing of null arguments, and linearization is briefly introduced, with the hope of demonstrating how Case can continue to provide a useful roadmap for linguists to keep discovering interesting properties of human languages.

22.2.1 Word Order Typology

Case theory has been advanced as a solution to the challenging question about Chinese in typological studies of word order correlations in human languages. Among the language universals and tendencies put forward by leading scholars such as Greenberg (1963) and Hawkins (1983), an important distinction is between those with verbs preceding their objects (VO languages) and following their objects (OV languages), correlated with various word order properties (e.g., prepositional vs. postpositional). Such word order correlations are also nicely captured in X'-theory (Chomsky 1970) – languages differ in the relative position between heads and complements but the head X of a phrase XP tends to precede or follow its complements consistently in a language. The head parameter states that languages may be head-initial (e.g., VO and prepositional) or head-final (e.g., OV and postpositional). In such studies, Chinese is a difficult language to categorize, because of its mixture of VO and OV properties. It seems to have both SOV and SVO orders, prepositional and postpositional, although nouns remain consistently at the final position of noun phrases throughout the history of Chinese (see Paul 2015 for a recent work on the issues and claims). Some linguists have suggested that the basic word order of Chinese should be SOV or in the process of changing to SOV (such as Tai 1973; Li and Thompson 1975), or is SVO (such as Chu 1979; S. Huang 1978; Li 1979; Mei 1979; Sun and Givón 1985), or Chinese is simply a mixed language (Paul 2015). Huang (1982) attempted to capture the consistencies and deviations in ordering across categories through statements in terms of X'-structure, as below (Huang 1982: 41; his (20)).

- (1) The X'-structure of Chinese is of the form
- a. $[X^n X^{n-1} YP^*]$ iff $n = 1, X \neq N$
 - b. $[X^n YP^* X^{n-1}]$ otherwise.

³ The traditional symbol NP is used to represent noun phrases, as the distinction between NP and DP is not a concern of this chapter.

X' refers to X and its subcategorized complements (N/V/A/P and their subcategorized complements). YP* means more than one YP is allowed.

This formulation highlights that N is unique, and that the level of X and its subcategorized complements, X', differs from the others. (1a) suggests that the order of N and its complements dominated by N' is an exception to an exception, although it actually conforms to the general head-final pattern in (1b). These X'-structure statements and the peculiarity of N led naturally to the introduction of Case into Chinese – an N is not a Case assigner (and A as well, when it does not behave like a V), but a V and a P are, in Case theory. If Chinese is essentially head-final, as the 'otherwise' statement in (1b) indicates, and when Case assignment is directional, it follows that the nominal projection is head-final; but Vs and Ps precede their objects (head-initial) when the objects have to be on the right of the Case-assigning heads in order to receive Case. This is what was explored in Koopman (1984), Li (1985, 1990), and Travis (1984). The adoption of Case and a directionality requirement on Case assignment derives (1) without stipulations. It also provides a solution to the challenge Chinese poses for studies of typological universals. Take Li's proposal, for instance. Chinese should not be a mystery because Chinese could be classified as an SOV language, except that objects that need to be assigned Case should occur on the right side of their Case assigners. This creates a mixture of OV and VO properties. The former include the prominent use of sentence-final particles, the ordering of modifiers preceding modifyees, nouns following their complements; and the latter, the word order of V/P + object. The postverbal phrase structure constraint in (1) is captured straightforwardly. Chinese therefore just demonstrates the interaction of universal principles and parameters. It is not beyond the realm of universal grammar that Chinese noun phrases have been consistently head-final, VO has been the dominant word order,⁴ and prepositions have existed in the language since Old Chinese (Paul 2015).

Li's Case approach to derive (1) makes clear predictions – only those receiving Case from Case assigners occur on their right; otherwise, a phrase should be head-final. Li (1985, 1990: chs. 2–6) examines in depth the constructions that seem to challenge this prediction and demonstrates how they are not problems under a modular approach fundamental to the theoretical framework of principles and parameters (Chomsky 1981).

The Case approach has generated many debates on its merits and challenges over the years. In addition, the grammatical theory keeps evolving. Even though it is still acceptable to many linguists to simply state that a

⁴ The order of OV exists only in special constructions, such as those involving topicalization, focalization, or the special marker *ba* 'handle, manage'.

language is head-final or head-initial (the head parameter) and the head position may vary across categories in a language (e.g., Huang 1994a; Paul 2015), there have been significant attempts to derive the head parameter through movement operations on a universal hierarchical structure. Representing such efforts are Kayne (1994) and Takano (1996). According to them, human languages have similar hierarchical structures and a universal algorithm maps the hierarchical structure to linear ordering. The mapping algorithm is built on the structural notion of asymmetric c-command – for any two elements A and B, if A asymmetrically c-commands B, then A precedes B. Kayne and Takano only differ in how a head of a phrase X is spelled out in relation to its sister YP: [_{XP} X YP]. Kayne spells out the head X first, and Takano the complement YP first. The former derives the Head-Complement word order (VO). The latter derives the Complement-Head word order (OV). Languages with different orders are derived via movements of Xs or YPs or both. Taking Takano's spell-out rules, Chinese would raise the V from its root V position to the small *v* position (or the highest layer of VP projections if Larson's (1988) split VP structure is adopted) (see, for instance, Huang 1994a; Tang 2015; Tang 邓思颖 2016). VSO languages would require V to move to an even higher position. A prepositional phrase would also require the raising of the P.⁵ A Chinese noun phrase is N-final, as no movement of N takes place. If Kayne's approach is adopted, different movements will be required. A question that should be raised in such accounts is why movement occurs at all, such as the raising of V or P. Chomsky (1995: ch. 4) proposes that V needs to move to *v* in order to assign accusative Case to its object. P can be analyzed in a similar manner, if split P structures are adopted. In other words, Case can continue to play a significant role in the account for phrase structures and linearization.⁶

In brief, Case helps provide answers to the challenges Chinese poses for word order universals. In the earlier accounts such as Li (1985, 1990), Case and other grammatical principles allow an essentially head-final Chinese language to obtain the head-initial word order in some cases. In the recent approaches to hierarchical structure mapped to linear ordering via specific spell-out algorithms, Case provides a motivation for V-to-*v* movement and similar ones (movement of certain heads).

A relevant long-running debate is on whether a subcategorized PP occurs postverbally. The default assumption in relevant works is that subcategorized complements of verbs are generated within VPs, which can be NP objects or subcategorized PPs. In a V-to-*v* raising analysis, unless

⁵ An alternative is to move the O (XP movement), not the head.

⁶ Such an approach, according to which a V raises to assign Case, might offer a clue to why SOV languages tend to have morphological case markers, as in Japanese (and the possibility that it is these morphological case markers that are responsible for Case assignment, rather than V or I).

more movement takes place and raises the PP inside a VP to outside the VP, it is expected that object NPs and subcategorized PPs should occur on the same side of V, both being contained in the VP, complement to *v*. However, the pure Case approach to word order as proposed in Li (1985, 1990) separates subcategorized PPs from object NPs – the former occur on the left of V, and the latter on the right. A prominent debate since the proposal of Li (1985) has been on whether a true subcategorized PP appears in the postverbal position. This is also related to the more general issue of exactly what constituents can occur postverbally in Chinese, which we turn to next.

22.2.2 Postverbal Structure Constraint and Head-Complement Order

According to Li's Case account, complement PPs are in the preverbal position because they are not assigned Case by V. In contrast, the V-raising approach as in Huang (1994b), Huang et al. (2009: ch. 5), Lin (2001), Sybesma (1999), and Tang (2001), among others, moves the V to the *v* position or the topmost position of the layers of VP projections. Then, complement PPs should occur postverbally. On the surface, we do see PP-like phrases in the postverbal position. The question is whether they are real PPs. Relevant cases are goal phrases headed by *dao* 'arrive, to' or *gei* 'give, to', and location phrases headed by *zai* '(be) at'. They can be complements to verbs with a goal/location theta role to assign. Typical verbs of these types are double object or dative verbs *gei* 'give', *song* 'give as a gift', *jiao* 'teach', movement verbs such as *qu* 'go', and placement verbs such as *fang* 'put'. For these verbs, we do see the possibility of *gei/dao/zai* phrases appearing postverbally. The question that Li (1985, 1990) raises was whether these are true PPs or they are just like postverbal purposive VPs, such as *mai shu song ta* 'buy books to give (to) him'. That is, *mai/song shu gei ta* 'buy/give books *gei* him' might have the same structure as *mai shu song ta* 'buy books to give (to) him (as a gift)'. Typical arguments for a real complement PP postverbally are based on the prohibition against P-stranding – the object of the postverbal *dao/gei/zai* phrases cannot be moved or be empty. However, whether or not an object can be empty/moved may be due to a variety of factors. What Li suggests is that the two phrases *song shu gei ta* 'give book *gei* him' and *mai shu song ta* 'buy book to give (to) him' do not seem to behave differently (see Li 1990: ch. 3 for details); therefore, for the same reason that *song* is a verb (and *song* never functions as a preposition), *gei* can be analyzed as a verb. Moreover, the accounts claiming the existence of postverbal PPs do not answer the question why these apparent PPs have the verbal meaning, rather than the P meaning, a major point in Li's arguments for analyzing the postverbal P as V. For instance, the *dao* phrase before *qu* 'go' in (2a) below can simply express a goal phrase; but the one after *qu* in (2b) must mean 'arrive':

- (2) a. 他到学校去了。
 ta_dao_xuexiao_qu_le.
 he_to_school_go_LE
 He went to school.
- b. 他去到学校了。
 ta_qu-dao_xuexiao_le.
 he_go-arrive_school_LE
 He went and arrived at school.

The requirement of a verbal meaning also captures the contrast between the possibility of an English sentence like (3a–b) below and the unacceptability of the Chinese counterpart. An English verb *teach* is subcategorized for a goal phrase; but a Chinese postverbal *gei* phrase must have the verbal transaction meaning of ‘give’.

- (3) a. He teaches computer games to kids.
 b. He taught French to that class.
- (4) a. *他教法文给那个班。
 ta_jiao_fawen_gei_na-ge_ban.
 he_teach_French_to_that-cl_class
 He taught French to that class.
- b. *他教电脑游戏给孩子。
 ta_jiao_diannao_youxi_gei_haizi.
 he_teach_computer_game_to_kids
 He teaches computer games to kids.
- c. 他给那个班教法文。
 ta_gei_na-ge_ban_jiao_fawen.
 he_to_that-cl_class_teach_French
 He taught French to that class.
- d. 他给孩子教电脑游戏。
 ta_gei_haizi_jiao_diannao_youxi.
 he_to_kids_teach_computer_game
 He teaches computer games to kids.

Such contrasts indicate that a goal PP occurs postverbally in English, but not in Chinese, whose apparent postverbal goal PPs should be analyzed as VPs or clauses predicated of the object, just in the same way as how *wo mai shu song ta* ‘I bought books to give to him’ is analyzed.

A related question is whether the *gei* immediately following and combined with the verb is a P (indicating goal) or a verb (indicating (figurative) transaction of concrete or abstract objects), such as:

- (5) 我们应该教给孩子人生的道理。
 women_yinggai_jiao-gei_haizi_rensheng_de_daoli.
 we_should_teach-GEI_children_life_DE_way
 We should teach (and give) children ways of life.

A proper analysis depends on how acceptable the following sentence is:

- (6) 我们应该给孩子人生的道理。
 women_yinggai_gei_haizi_rensheng_de_daoli.
 we_will_GEI_children_life_DE_way
We will give children ways of life.

Native speakers do not seem to agree on the acceptability of (6): some accept it and others do not. Regardless of the V or P status of *gei* in (5), it is important to point out that, when it follows a verb immediately, it must be combined with it, forming a compound or complex verb, as indicated by the fact that the aspect marker *le* must follow *jiao-gei* in (5). The structure becomes [VP [V V-*gei*] + NP]. This indicates that the postverbal position does not have a true PP structurally.

- (7) *我们教了给孩子人生的道理。
 *women_jiao-le_gei_haizi_rensheng_de_daoli.
 we_teach-LE_GEI_children_life_DE_way

Briefly summarizing, it is cases like the ones discussed in this section, among others discussed in Li (1985, 1990), that make appealing a Case account for phrase structures and word order in Chinese. Under the more recent approach such as a universal base structure (either Kayne's or Takano's) with V-to-*v* raising applying to Chinese, one would have to look for alternatives to account for the ordering of [PP V NP], such as (4c–d). When a PP is a subcategorized complement, it should occur within VP for thematic reasons. Then, after V-to-*v* raising, the PP should occur to the right of the raised verb. This seems to force the adoption of a claim that a preverbal PP is not a subcategorized complement of the verb. Issues like this would lead to the question of what subcategorization properties Chinese verbs have. Interestingly, Chinese is notoriously difficult to define subcategorization requirements (see, for instance, Li 2014 and the many references cited there). The number and type of arguments occurring with verbs are more constrained by available positions than by the subcategorization requirements as seen in most other languages. Take English, for instance. A verb like *put* generally is understood as requiring three arguments – agent, theme, and location; *give*, agent, theme, and goal; *cut/drive/sell*, agent and theme, etc. Chinese, on the other hand, allows the so-called non-selected arguments, such as the ones below (Lin 2001):

- (8) a. 路上开着很多车子。
 lu-shang_kai-zhe_henduo_chezi.
 road-on_drive-ASP_many_car
On the road drive many cars=on the road are many cars driving.
- b. 他们只卖晚上。
 tamen_zhi_mai_wanshang.
 they_only_sell_evening
They only sell (stuff) in the evenings.

In other words, it would be difficult to count on our general understanding of the meanings of verbs or the comparison with similar verbs in other languages to determine the subcategorization requirements of verbs. That is, it is difficult to decisively claim that a PP must be subcategorized for by a verb. The indeterminacy of subcategorization actually is also the assumption in Li's analysis of the apparent postverbal subcategorized PPs as verb phrases versus some preverbal PPs as subcategorized phrases – when a subcategorized PP occurs preverbally, it is a subcategorized complement of the verb. When the apparent PP occurs postverbally, it is actually a VP, which may be interpreted as a purposive clause. Regardless, the lack of consistent subcategorization requirements for every verb makes it possible to claim that the preverbal PP is not a subcategorized complement but is simply an adjunct modifying the following verb phrase. It would be useful to have syntactic tests distinguishing a preverbal PP as a subcategorized complement or an adjunct phrase modifying the following VP. Unfortunately, it is not easy to identify appropriate tests. Overt movement out of such phrases is not possible anyway, because a P does not allow its object to be null or extracted and the Left Branch Condition (Ross 1967) prohibits extraction from the left branch of a tree structure. A preverbal PP is headed by a P and is a left branch. Another option is to use ellipsis tests. Unfortunately, the facts and relevant accounts are not deterministic in this regard. The issue will require further explorations.

Another issue involves the co-occurrence of duration (D), frequency (F) phrases, and object NPs postverbally, illustrated below:

- (9) a. 我看了三次/三个小时那本书。
 wo_kan-le_san-ci/san-ge_xiaoshi_na-ben_shu.
 I_read-LEthree-times/three-CL_hour_that-CL_book
 I read that book three times/for three hours.
- b. 我看了那本书三次/三个小时。
 wo_kan-le_na-ben_shu_san-ci/san-ge_xiaoshi.
 I_read-LE_that-CL_book_three-times/three-CL_hour
 I read that book three times/for three hours.

Li's account is that duration, frequency phrases are also NPs and therefore receive Case from the verb in the postverbal position: a verb assigns an accusative Case,⁷ and a Case-marked phrase occurs postverbally. The co-occurrence of both an object NP and a duration/frequency phrase is not

⁷ Double object verbs can assign an additional dative Case, as normally the case across languages. Chinese also allows a malfactive structure, which involves either an applicative projection or layers of V projection, with the two NPs receiving Case from the applicative or the layers of V.

(i) 他吃了我三顿饭。
 ta_chi-le_wo_san-dun_fan.
 he_eat-LE_me_three-CL_meal
 He ate three meals on me (I was affected).

expected. Li (1985, 1987, 1990: ch. 1) suggested two alternative structures allowing the apparent postverbal co-occurrence of Case-assigned constituents. For the case in (9a), where the duration/frequency phrase occurs before the object NP, Li argues that such phrases are in the Specifier of NP position. Evidence includes the fact that the nominal modification marker *de* can occur: [V + D/F + *de* + Object]. Soh (1998) raises an objection and claims that, even though duration phrases can be followed by *de* and object NPs, frequency phrases cannot. Nonetheless, an online search did turn up examples like the following ones:

- (10) a. 跑了十几趟的医院⁸
 pao-le__shi-ji-tang__de__yiyuan
 run-LE__ten-plus-times__DE__hospital
 go to the hospital 10 plus times
- b. 经过几次的练习⁹
 jingguo__ji-ci__de__lianxi
 pass__several-times__DE__practice
 after several times of practice

Nonetheless, the availability of such examples from online search does not exclude the possibility that there could be individual variations in the use of *de* in [V + Frequency + *de* + Object].

As for (9b), Li (1987) suggests that, when D/F phrases follow objects, they are predicates taking the preceding [S + V + O] as sentential subjects: [[S + V + O]_{subject} + [D/F]_{predicate}]. Support comes from the fact that sentential adverbs such as ‘already’ can immediately precede the D/F phrase. However, Ernst (1987) shows that, even though Li’s (1987) structure [[S + V + O]_{subject} + [D/F]_{predicate}] is available, it is not the only option. The structure [S + [VP V + O + D/F]] should still be available because an adverb between the S and V can still scope over the D/F phrases, such as the one below, where the adverb *cai* scope over the duration phrase ‘three years’:

- (11) 他才住北京三年.
 ta__cai__zhu__zai__Beijing__san__nian.
 he__only__live__at__Beijing__three__year
 He has only lived in Beijing for three years.

Nonetheless, Ernst (1996) proposes that the notion of Case still is responsible for the occurrence of D/F phrases in the postverbal position. He shows that the only modification that Li needs to make is to allow a verb to assign more than one Case. The ability of a verb assigning Case simultaneously to objects and adjuncts (D/F phrases here) is clearly visible in

⁸ Source: <https://bit.ly/3GuTFP1>, accessed July 20, 2017.

⁹ Source: <https://bit.ly/3ou4ZuP>, accessed July 20, 2017.

many languages, according to Ernst (1996). For instance, Babby (1991) shows Russian verbs assign structural accusative Case to time adverbs, as well as to object NPs. Mitchell (1991) and Maling (1992) discuss cases from Finnish where duration NPs exhibit exactly the same case paradigm as direct objects. Maling (1989) shows that Korean duration adjuncts take accusative case in active sentences, but nominative case under certain structural conditions, such as in passives. Ernst (1996: 175) concludes, “There thus seems to be abundant evidence that adjunct NPs may be assigned structural Case, and that verbs may assign structural case to arguments and adjuncts simultaneously.”

In short, we may conclude that, in principle, verbs in Chinese should be able to assign Case to D/F and object NPs simultaneously, just as verbs do in many other languages. However, other factors might also play a role, limiting the acceptability of co-occurring D/F and object NPs postverbally by different speakers. Some factors that have been mentioned in the literature are the referentiality of noun phrases (Huang 1994a), definiteness (Soh 1998), and prosody (Feng 2003). Going forward, it would be important to conduct some well-designed experimental studies to find out more clearly about fine-grained judgments of [V Object D/F] and [V D/F Object] separately by different speakers, with potentially correlated factors such as the referentiality or definiteness of object NPs and the length of syllables. Results from such experimental studies will better inform us of the properties for these constructions.

22.2.3 PPs within Noun Phrases

Another issue related to the distribution of PPs is the acceptability of a PP in the prenominal position. Compared to English, it is a mystery why Chinese does not allow typical PPs in the prenominal position modifying the noun phrase:

- (12) a. people from abroad
 b. 从国外*(来)的人
 cong_guowai *(lai) __de__ ren
 from_abroad_come __DE__ people
 people *(coming) from abroad
- (13) a. words to him
 b. 对他*(说)的话
 dui_ta *(shuo) __de__ hua
 to_him_say __DE__ word
 words *(said) to him

Such differences led Li (1985, 1990) to a Case account, specifically the Case Resistance Principle. The associative marker within noun phrases, *de*, is a Case marker and the prenominal position is a Case-marked position. A PP

headed by a P, which is a Case assigner, should not occur in a Case position. Apparent counterexamples against such an analysis are *dui* ‘to’ and *guanyu* ‘in regard to’ phrases, which were discussed in Li (2008), showing that they actually involve relative clauses, rather than a simple PP modifier. The details of Li (2008) will not be repeated here. I simply end this section with a note on cross-linguistic comparisons. Richard Larson (2018) discussed two kinds of PPs, one more nominal (akin to those with localizers in Chinese) and the other, true PPs. The former, but not the latter, can occur in Case positions. In addition to confirming the Case approach to the unacceptability of a prenominal PP with *de*, such work also bears on the issue of whether expressions with localizers in Chinese such as *zhuozi-shang* ‘table-top = on the table’ and *yizi-xia* ‘chair-under = under the chair’ are PPs or NPs. See recent debates on this issue in Huang et al. (2009: ch. 2), Paul (2015), and Wei and Li (2018).

22.2.4 Finite vs. Nonfinite Clauses

Whether Chinese, a language without much morphological marking, distinguishes finite and nonfinite clauses has been a topic of great interest for decades. Its relevance to the issue of abstract Case in Chinese concerns the distribution of lexical subjects. Huang (1982) and Li (1985, 1990) distinguish finite and nonfinite clauses in Chinese. Specifically, in addition to finite clauses, Chinese also allows control structures, and control structures generally have a null subject that is obligatorily controlled by (coindexed with) the higher subject. A finite clause allows a lexical subject, and a nonfinite control structure is a clause with PRO as subject. The PRO/lexical subject distinction is attributed to the Tense node present in finite clauses being able to assign Case to a noun phrase in its Specifier position and the absence of such a Tense node in a nonfinite control structure.

There are two issues involved in the debates. One is whether there is a finite vs. nonfinite distinction in Chinese, and, if the answer is affirmative, the ensuing question is what distinguishes these two types of clauses and what the subject of a nonfinite clause is.

The debate on whether there is a finite vs. nonfinite distinction is long. In Huang’s and Li’s works, the finite/nonfinite distinction is made in terms of control: the subject of a nonfinite clause is a PRO, controlled by a higher subject. However, the syntactic nature of control and control structures having PRO as subject are questioned by Xu (1986), Y. Huang (1994), and Hu et al. (2001), among others. They argue that control is not a syntactic phenomenon, but is determined by the meaning of lexical items. The important empirical basis supporting their claim that control structures do not always have PRO as subject comes from examples like the following ones (cited in Grano 2017: 292; his (77a–b)):

- (14) a. 你最好设法[今天下午散了会以后你一个人来].
 ni_zuihao_shefa_[jintian_xiawu_san_le_hui_yihou_
 ni_yi-ge_ren_lai].
 you_best_try_today_afternoon_end_ASP_meeting_
 after_you_one-CL_person_come
 You had better try to come by yourself this afternoon after the meeting
 is over.
- b. 我打算[天黑以后我们一起去].
 wo_dasuan_[tian_hei_yihou_women_yiqi_qu].
 I_plan_sky_dark_after_we_together_go
 I plan that we go together after it gets dark. (Hu et al. 2001:
 1131–1132)

On the other hand, Zhang (2019) argues that Chinese clauses indeed should be syntactically distinguished between dependent and independent clauses. Dependent clauses require their subjects to be obligatorily controlled, regardless of whether the subject is a PRO or a lexical item. When it is a lexical item, it takes the form of a minimal pronoun (e.g., Kratzer 2009). Having a control structure containing an overt controllee in the subject position is well attested in other languages such as Hungarian (Szabolcsi 2009; see Zhang 2016 for other relevant references and languages). Grano (2017: 292) adds that

a popular idea about finiteness is that it has to do with a clause's ability to stand alone as a syntactically unembedded assertion. By definition, an obligatorily controlled clause cannot stand alone as an unembedded assertion, because resolving its subject requires that it be embedded. In that sense, this is an appropriate application of the notion of finiteness.

In other words, Chinese clauses make a finite/nonfinite distinction. The distinction can be cast in terms of the size of the complement selected by the embedding verb.

Huang (2017) distinguishes three different types of predicates – a type that selects a CP as a complement, a second type that selects a *WollP* (an IP without tense, hence no Case assigner for the embedded subject), and a third type that selects a *vP* (also no Case assigner for the subject). However, he notes that there are variations and some verbs may ambiguously select different complements. Nonetheless, we expect that, if a certain complement is selected, it should exhibit the properties of that complement. Indeed, this prediction can be put to the test; and the result supports the proposal that a lexical subject requires some licenser (a Case licenser), as the clause containing a lexical subject requires a larger projection (at least IP, if not CP). For instance, the lowering of the experiential aspect marker *guo* is available for a complement that is a *vP* (or a *WollP*). However, the addition of a lexical subject makes the lowering unacceptable (e.g., N. Huang 2015, 2018):

- (15) 李四没打算/准备 [去日本].
 Lisi_mei_dasuan/zhunbei_ [qu-guo_Riben].
 Lisi_not_have_plan/prepare_go-EXP_Japan
 Lisi has never planned/gotten ready to go to Japan.
 (Not #Lisi has not planned/gotten ready for the event that he has gone to Japan.)
- (16) 我没想要[吃过那么昂贵的水果].
 wo_mei_xiangyao_ [chi-guo_name_ anggui_de_shuiguo].
 I_not_have_want_eat-EXP_that_expensive_DE_fruit
 I have not wanted to eat fruits that expensive.
- (17) 张三知道[我吃过那种水果].
 Zhangsan_zhidao_ [wo_chi-guo_na-zhong_shuiguo].
 Zhangsan_know_I_eat-EXP_that-kind_fruit
 Zhangsan knows that I have eaten that kind of fruit.

The lowering is not possible when an embedded overt subject appears:

- (18) a. 李四没打算过三年内他自己一个人要去日本.
 Lisi_mei_dasuan-guo_san_nian_nei_ta_ziji_yi-ge_ren_
 yao_qu_riben.
 Lisi_not_have_plan-EXP_three_year_in_he_self_
 one-CL_person_want_go_Japan
 Lisi has not planned for him himself to go to Japan in three years.
- b. 李四没打算三年内他自己一个人要去过日本.
 Lisi_mei_dasuan_san_nian_nei_ta_ziji_yi-ge_ren_
 yao_gu-guo_riben.
 Lisi_not_have_plan_three_year_in_he_self_one-CL_
 person_want_go-EXP_Japan
 Lisi has not planned for him himself to have been to Japan in three years.
 (Not #Lisi has not planned for him himself to go to Japan in three years.)
- (19) a. 我没想要过我自己一个人吃那么昂贵的水果.
 wo_mei_xiangyao-guo_wo_ziji_yi-ge_ren_chi_name_
 anggui_de_shuiguo.
 I_not_have_want-EXP_I_self_one-CL_person_eat_
 that_expensive_DE_fruit
 I have not wanted for myself alone to eat fruit that expensive.
- b. 我没想要我自己一个人吃过那么昂贵的水果.
 wo_mei_xiangyao_wo_ziji_yi-ge_ren_chi-guo_name_
 anggui_de_shuiguo.
 I_not_have_want_I_self_one-CL_person_eat-EXP_
 that_expensive_DE_fruit
 I have not wanted for myself alone to have eaten fruit that expensive.
 (Not #I have not wanted for myself alone to eat fruit that expensive.)

In (19b) and (20b), the scope of *-guo* does not include the matrix verb, unlike (16)–(17).

In brief, complementation can be ambiguous, creating apparent counter-examples to the distinction of finite vs. nonfinite clauses. However, the two can be separated; and each has its structures, including the presence or absence of a licenser for an overt subject.

22.2.5 Case Status of Clauses

As noted, Case theory governs the distribution of NPs. The Case status of clauses is less clear. Pesetsky (1982) distinguishes NPs from clauses and claims that only the former need Case. Accordingly, the subcategorization properties of heads can be determined by the s-selection (semantic) properties of a head, coupled with the Case-assigning ability of the head. The c-selection (categorical) properties of a head can be derived from its semantic properties (s-selection) and the Case properties of the head (cf. Stowell 1981). Pesetsky observes the following contrast: clauses occur only in non-Case positions; NPs must appear in Case positions.

- (20) a. I am afraid *(of) it.
b. I am afraid (*of) that the weather won't be good.

In Chinese, Li (1985, 1990) and Tsai (1995) note that clauses seem to appear in Case positions and therefore claim that clauses in Chinese are Case-marked (Case-marked clauses, henceforth referred to as CC) when they are assigned thematic roles (appearing as objects of V, P or as subjects). Tsai (1995) therefore argues that both the notions of c-selection and s-selection are needed in grammar. However, Li (2008) notes that complement clauses do occur in non-Case-marked positions in Chinese (non-Case-marked clauses, abbreviated as non-CC), such as the complement position of verbs like *think*. Li (2013) shows that the apparent conflict between CC and non-CC can be resolved, because only clauses in Case positions behave like they are nominal expressions syntactically. That is, Chinese is not different from English regarding Case requirements on clauses and NPs. Due to lack of space, Li's (2013) arguments and empirical basis will not be repeated here. I would like to just point out the importance of having an analysis able to make testable predictions. After predictions are tested, an analysis can be proven to be correct or in need of revision or abandoned. In the process of testing predictions, interesting empirical generalizations can be discovered methodically. For instance, to understand why there seem to be conflicting requirements on the Case status of clauses, Li (2013) investigated in depth the distribution, movement, and conjunction properties of clauses in different contexts, which led to the discovery of systematic differences between two types of clauses according to their context. A well-defined theoretical framework gives maps to researchers to look for relevant evidence in the testing of predictions. This is how linguistics keeps evolving and developing and linguists continue to understand more and more about human languages.

22.3 Conclusion

This chapter reviews the advantages of adopting the notion of abstract Case in Chinese, a language without overt morphological case marking. It is possible that all the data mentioned here and the works cited can be described in different ways. However, if human languages share core properties and lexical items of different parts of speech occur in similar syntactic positions and exhibit similar syntactic behavior across languages, we would want to capture the similarities with the same mechanism. In addition, having clear hypotheses according to theories about human languages in general leads us to predictions, which in turn helps us uncover more interesting properties of human languages. An important mission of linguistic research is to identify the common properties of human languages. A unified framework with a well-defined set of mechanisms is an excellent tool to move toward the accomplishment of the mission.

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