

ON THE CONTROL STRUCTURE OF THE CHINESE VERB *DAYING*

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1. Introduction

Control refers to a relation of referential dependence between the controlled element (an unexpressed subject) and the controller (an expressed or unexpressed constituent). The referential properties of the controlled element are determined by those of the controller (see Bresnan 1982). In Chomsky's (1981) theory of control, it is generalized that (1) only subjects are controlled and (2) only non-finite clauses have controlled subjects. From this generalization, a number of different analyses have been derived. Some suggest that a configurational control theory is constructed on essentially the same notions on which binding theory is constructed in Chomsky (1981) (see Manzini, 1983). Others (e.g., Bresnan 1982) believe that functional and anaphoric control theory covers more data and more adequately than does the simple c-commanding analysis. Still others (e.g., Sag & Pollard 1991) argue that a principled explanation for the grammar of controlled complements in a language like English can be derived from the interaction of semantically based principles of controller assignment and the principles that determine the distribution of anorphors and pronominals. Huang (1987) proposed the Generalized Control Rule which basically follows the GB theory but slightly modifies it to account for the problem of empty categories in pro-drop languages, such as Chinese. All these different theories have one thing in common: they all recognize the fact that different predicates in a sentence may involve different control structures. In other words, the main clause predicate verb in a control sentence may be either subject-control or object-control. This paper intends to show that in Chinese, there exist a type of verbs which possess one phonological and morphological shape, but different semantic contents, and therefore have different control structures. I will first introduce the two types of verbs (subject-control and object-control) that are commonly found in Chinese, show the difference in their control structures, then show the double semantic contents of the type of verbs (represented by the verb *daying* 'promise') that show different control structures. I will provide my own analysis to explain the nature of such structural differences in control.

2. Control in Chinese

Languages, such as English, show distinct structural differences in terms of the relation of referential dependence between the matrix subject and the unexpressed subject of the embedded verb phrase complement. Compare the following sentences.

- (1) a. John tries to come here.
b. John promised (Lee) to come tomorrow.
- (2) a. John persuaded Lee to go.
b. John allowed Lee to come tomorrow.

It is clear that the unexpressed subject of the embedded VP in (1a) and (1b) is actually coreferential with the matrix subject of the sentence (it is *John* who intends to come here in (1a) and is coming tomorrow in (1b)), while the unexpressed subject of the embedded clause is controlled by the object *Lee* of the main clause in (2a) and (2b) (it is *Lee* who is supposed to go in (2a) and to come in (2b)). We can therefore conclude from the above examples that, in English, verbs such as *try* and *promise* are subject-control and verbs such as *persuade* and *allow* are object-control. Similarly, control verbs of different types are also found in Chinese, as shown in the examples below.

- (3) a. Zhang shefa lai zheli.
name try come here
'Zhang tries to come here.'

b. Zhang daying (Li) lai zheli
 name promise name come here
 'Zhang promised (Li) to come here.'

(4) a. Zhang shuofu Li lai zheli.
 name persuade name come here
 'Zhang persuaded Li to come here.'

b. Zhang yunxu Li lai zheli
 name allow name come here
 'Zhang allowed Li to come here.'

Apparently, the examples in (3) and (4) match exactly their English counterparts in (1) and (2) in terms of control structure. There is one interesting point about the Chinese verb *daying*, which is usually interpreted as "to promise" in the literature, in terms of Chinese control structure analysis (see Xu 1986, among others). In fact the verb *daying* has at least 2 related but different readings ("to promise" and "to allow"), each having its own particular structure. That is to say, the two verbs "promise" and "allow", which are different in their control structure, can be represented with one single verb *daying*. In daily speech, the verb *daying* seems to be used so freely that the referential dependence relation runs "out of control". Let us now have a closer look at the structure of *daying* in a sentence such as (5). Following Huang (1984), I use square brackets to mark the embedded clauses and use *e* to stand for the unexpressed subject of the embedded clause (empty category).

(5) Zhang daying Li [e mingtian lai]
 name promise name tomorrow come
 'Zhang promised Li to come tomorrow'.

The verb *daying* has the usual interpretation as "to promise". But the following examples show two different lexical expressions of the verb *daying* when different clauses are added to the same sentence.

(6) a. Zhang_i daying Li_j [e mingtian lai],
 name promise name tomorrow come
 keshi ta_i congbu shou yue
 but he never keep promise
 'Zhang_i promised Li_j to come tomorrow, but he_i never keeps his promise.'

b. Zhang_i daying Li_j [e mingtian lai],
 name allow name tomorrow come
 keshi ta_i jianchi yao jintian lai.
 but he insist want today come
 'Zhang_i allowed Li_j to come tomorrow, but he_i insists on coming today.'

The unexpressed subject (*e*) of the embedded clause, namely, the person who is supposed to come in (6a) is the matrix subject *Zhang*, but not the matrix object *Li* when the verb *daying* in the sentence has the reading of "promise". But the opposite is true in (6b) when *daying* has the reading of "allow". It is clear that there is difference between the two interpretations of the verb not only in meaning, but also in control structure. In English, the verb *promise* is subject-control while *allow* is an object-control verb. This is compatible with the two readings of the Chinese verb *daying*. The following discussion will show how the two interpretations of *daying* differ in the control structure.

Unlike English, Chinese does not have tense markers or subject-verb agreement in person and number. The language does not use verb affixes to signal the relation between the time of the occurrence of the situation and the time

the situation is mentioned in speech. Instead, Chinese uses aspectual markers to show different ways of viewing a situation. These aspectual elements include: the perfective *le*, indicating perfective aspect; the durative *zhe*, indicating continuous aspect; and the experiential *guo*, indicating past aspect (see Chao 1968, Li & Thompson 1981). Also, there are no overt markers for finite or non-finite clauses, such as *that* and *to* in English. However, a finite clause in Chinese may contain modal verbs, such as *neng* 'can', *hui* 'will' and *keyi* 'may', while a non-finite clause cannot. The following examples illustrate the two different types of clauses in both English and Chinese.

- (7) a1. John tries to come tomorrow.
 a2. *John tries he can come tomorrow.
- b1. Zhang shefa mingtian lai.
 name try tomorrow come
 'Zhang tries to come tomorrow'
 b2. *Zhang shefa mingtian neng/hui/ keyi lai.
 name try tomorrow can will may come
 'Zhang tries he can/will/may come tomorrow'

- (8) a. John_i thinks that he_{ij}/Lee can come tomorrow.
 b. Zhang_i renwei ta_{ij}/Li mingtian neng/hui/keyi lai.
 name think he name tomorrow can will may come
 'Zhang_i thinks that he_{ij}/Li can/will/may come tomorrow.'

Like English modals *can*, *will*, *may*, Chinese modals *neng*, *hui*, *keyi* can appear only in finite sentences. A further point that deserves our notice is that in a pro-drop language like Chinese, an empty category *can* appear in the subject position in a finite clause, which is not the case in English.

- (9) a. *John_i thinks that e_{ij} can come tomorrow.
 b. Zhang_i renwei e_{ij} mingtian neng/hui/ keyi lai.
 name think tomorrow can will may come
 'Zhang_i thinks that he_{ij} can/will/may come tomorrow.'

With these structural similarities and differences between English and Chinese in mind, we can now turn to examine the control structural difference between the two readings of the Chinese verb *daying*. I will show that when *daying* has the reading of "promise", the control structure of the verb has similar (as well as different) behaviors to its English counterpart *promise*, and it behaves very much like English *allow* when the verb *daying* has the equivalent reading.

3. Control Structure of *Daying* with the Reading of "Promise"

In many analyses (e.g., Manzini 1983, Radford 1988, Sag & Pollard 1991), the English verb *promise* is believed to be subject-control and take both finite and non-finite clauses as its sentential constituents, as shown in the following.

- (10) a. John promised Lee [IP. e to come tomorrow].
 b. John promised Lee [CP. that he will come tomorrow].

The Chinese verb *daying*, when it has the reading of “promise”, exhibits similar properties as its English counterpart. Consider the following Chinese sentences.

- (11) a. Zhang_i daying Li_j [e_i mingtian lai]
 name promise name tomorrow come
 ‘Zhang promised Li to come tomorrow.’
- b. Zhang_i daying Li_j [ta_i mingtian lai]
 name promise name he tomorrow come
 ‘Zhang promised Li that he will come tomorrow.’

Example (11a) shows that *daying* can take a non-finite clause (or a clause that looks like a non-finite clause because of the lack of complementizers, overt pronominals or modal verbs), and the unexpressed subject of the clause is controlled by the matrix subject. The predicate verb *daying* is, therefore, subject-control. *Daying* can also take an NP object that precedes the embedded clause, as shown in (11b). This NP object, however, cannot be the controller of the unexpressed subject of the embedded clause; when *daying* has the reading of “promise”, it is the matrix subject, the **promiser**, who is making the commitment that he/she is going to fulfill. The matrix object, the person(s) the commitment is made to, has no control over the realization of the commitment, and is therefore not the subject of the embedded “commitment clause”. Note that Chinese is a pro-drop language where a pronoun can be dropped from a clause when its reference is clear. If we drop the pronoun *ta* ‘he/she’ from (11b), the embedded clause will look the same as (11a), which is a typical IP corresponding to the English clause in (10a). Therefore, it is difficult to tell whether the embedded clauses in (11) are non-finite if they are pro-dropped.

It is important to make clear whether a clause is finite or non-finite, because it helps determine whether a NP is the object of the main clause or the subject of the embedded clause. One way to determine the finiteness of a clause is by checking whether it contains what Huang (1989) calls AUX elements. It is generalized in Huang (1989) that if the subject of a clause is obligatorily null, then the clause cannot contain an element of AUX (or INFL status including overt clausal subjects, aspectual markers or modal verbs). Huang further points out that in Chinese, a clause is finite if it contains any AUX. We are now faced with the question of whether clauses like those in (11) involve an obligatorily null subject. Recall that Chinese does not have overt markers for finite clauses, such as the complementizer *that* in English. With the English *that*, we can easily see whether an embedded clause is finite or non-finite. For example, verbs like *hope*, *think*, *believe* can naturally be followed by a finite clause headed by *that* (e.g., “*I hope/think/believe that he can do this*”). But it is not the case with verbs like *force*, *allow*, *forbid* (“**I forced/allowed/forbade (him) that he can do this*”). Many verbs take both finite and non-finite clauses, and *promise* is one (as shown in (10)). In Chinese, on the other hand, although there is no overt marker for finite or non-finite clauses and no overt AGR either, there are still ways to show the INFL features of a clause, such as the possibility of using a modal verb, as indicated in the previous section. If we assume that the addition of a modal verb, such as *neng* ‘can’, can test if a clause is finite or non-finite, we now use it to try the following sentences.

- (12) a1. Zhang, daying [e, mingtian lai]
 ‘Zhang promised to come tomorrow.’
- a2. Zhang, shefa [e, mingtian lai]
 ‘Zhang tries to come tomorrow.’
- b1. Zhang, daying [e, mingtian neng lai]
 ‘Zhang promises that he can come tomorrow.’
- b2. *Zhang, shefa [e, mingtian neng lai]
 ‘Zhang tries that he can come tomorrow.’

Examples in (12) show that the acceptability of the modal *neng* ‘can’ indicates that the clause in (a2) is non-finite. The clause in (a1) is ambiguous, in that it looks non-finite but can in fact be finite since a modal verb can be added within

the embedded clause as shown in (b1). The reason why an embedded clause in a Chinese sentence such as (a1) is problematic in terms of its finiteness is that there is no overt complementizer or AGR to distinguish the two types of clauses, and that Chinese allows a zero subject in a clause, which makes it difficult to tell if a clause is finite or non-finite. We shall now examine further examples to see how the two kinds of clauses are identical in Chinese by replacing the empty categories with pronominals or full NPs.

- (13) a. Zhang_i daying [ta_{ij} mingtian neng lai]
 'Zhang_i promised that he_{ij} can come tomorrow.'
- b. Zhang_i daying [Li_j mingtian neng lai]
 'Zhang_i promised that Li_j can come tomorrow.'

If a finite clause does not have a modal verb, AGR will usually assign case to the clausal subject in an English sentence (e.g., John says that he WILL come everyday vs. John says that he COMES everyday). But if we take the modals away from the above Chinese sentences in (13), the INFL status may not be clear.

- (14) a. Zhang_i daying [ta_{ij} mingtian lai]
 'Zhang_i promised that he_{ij} can come tomorrow.'
- b. Zhang_i daying [Li_j mingtian lai]
 'Zhang_i promised that Li_j will come tomorrow.'

Note that if we erase the square brackets, (14b) will be exactly the same with (11a).

- (15) Zhang_i daying Li_j mingtian lai
 'Zhang_i promised that Li_j will come tomorrow' (=14b)
 'Zhang_i promised Li_j to come tomorrow' (=11a)

Up to this point, we see that *daying* and *promise* are identical in that they both take finite or non-finite clauses. But a Chinese sentence like (15) can be very ambiguous as to whether *Li* is part of the matrix clause or part of the embedded clause. I believe that the difference between the two interpretations of the same sentence is clearly marked in the discourse situation, the speaker's phonological variation, as well as the concept of control structure in the speaker or the listener's lexicon. Phonologically, the location of a slight pause in the utterance of a sentence like (15) will help clarify if *Li* is part of the matrix clause or the embedded clause. In other words, a slight pause in normal speech usually separates the embedded clause from the main clause. The sentence would mean "Zhang promised Li to come tomorrow" if the pause is located immediately after *Li*, as in *Zhang daying Li (pause) mingtian lai*. Otherwise, the sentence would mean "Zhang promised that Li will come tomorrow", if the pause is right after *daying*, i.e., *Zhang daying (pause) Li mingtian lai*. From this point of view, I assume that the concept of control structure is deep in the lexicon of a Chinese speaker rather than on the surface structure of a sentence.

We now turn to compare other properties of *daying* and its English counterpart *promise*. In an English sentence like (16), the downstairs clause subject *he* is unbound and can refer freely to either the matrix subject *John*, the matrix object *Lee*, or someone that is not mentioned in the sentence.

- (16) John_i promised Lee_j that he_{ij/k} can come tomorrow.

But in the following Chinese sentence, the subject of the embedded clause is more likely to refer to either the matrix subject *Zhang* or someone not mentioned in the sentence, but is less likely the matrix object, as in (17).

- (17) Zhang_i daying Li_j [ta_{ij/k} mingtian neng lai]
 'Zhang_i promised Li_j that he_{ij/k} can come tomorrow'

Sag & Pollard (1991) assume that verbs like *promise* refer to an action of making a commitment, which involves a **committor** and a **commissee**. The action described by the VP in the embedded clause in a promise type sentence is usually completed by the committor or the person the committor has made a promise for, but not the commissee. This seems to be true for the sentences with embedded non-finite clauses in both English and Chinese.

(18) a. John promised Lee to give a reply before Wednesday.

b. Zhang daying Li xingqisan yiqian gei huixin.
 name promise name Wednesday before give reply
 'Zhang promise Li to give a reply before Wednesday'

In both sentences in (18) it is the matrix subject, the committor, who is going to give a reply, but not the matrix object, the commissee. Xu (1986) argues that in English, the controller of *promise* in sentences like (18a) is typically the matrix subject, but that such an obligatory relation does not hold in Chinese. In other words, the one giving a reply may well be someone other than the committor in a Chinese sentence like (18b). This statement suggests that *daying* and *promise* do not have the same property in terms of subject control. Xu's argument can easily be proven to be incorrect if we bear in mind that a Chinese clause without an overt pronominal in the subject position may be either a finite or a non-finite clause. Consider the following English sentence.

(19) John promised Lee [e to build him a house].

If we believe that the subject control relation in sentences like (19) is literally obligatory in English but not in Chinese (according to Xu), the builder of the house would be expected to be the matrix subject *John* only, no one else. This is not necessarily true because the construction activity may well be done by a third party on *John's* behalf. This is exactly the same situation as described in (18b). In this sense, *daying* and *promise* have the same control structure, since in sentences like *John promised Lee to leave early*, the controller is no one but the matrix subject in both English and Chinese. On the other hand, the controller of *e* in sentences like (19) (and its Chinese equivalent) is also the matrix subject, *John*, the representative of the action performer.

One possible difference between the control structures of *daying* and *promise* might arise in sentences with finite clauses. According to Chomsky's (1981) GB theory, the pronominal *ta* 'he/she' in the subject position of the embedded finite clause in (17) should be free in its governing domain. However, it seems that *ta* 'he' has a closer referential relation with the matrix subject *Zhang* than with the matrix object *Li*. A possible explanation to this difference is that the Chinese verb *daying* has more than one lexical expression and one expression may be intertwined with another, both semantically and structurally. As mentioned earlier, *daying* can express the meaning of "promise" and "allow". If the verb *daying* is used in a sentence like "Zhang *daying* Lee mingtan lai", then it can mean both "Zhang promised Li to come tomorrow" or "Zhang allowed Li to come tomorrow". The properties of the verb *daying* with the reading of "allow" will be discussed in a later section.

Another aspect of the comparison between the English verb *promise* and the Chinese verb *daying* involves passivization. In English, *promise* basically does not allow upstairs passivization if the sentence involves a control relation (see Bresnan 1982; Sag & Pollard 1991).

(20) a. John promised Lee to leave.

b. *Lee was promised by John to leave.

In Chinese, *Daying* "promise" does not allow passivization in the matrix clause either. The passive construction in Chinese is generally applied to sentences containing the passive marker *bei* with the following linear arrangement (see Li & Thompson 1981; Li 1990).

(21) NP1. bei (NP2) verb

The following examples show how (21) applies in Chinese passive sentences.

(22) a. Zhang bei pian le.
 name BEI cheat ASP
 'Zhang was cheated.'

b. Li bei Zhang da le.
 name BEI name beat ASP
 'Li was beaten by Zhang.'

There has been a lot of discussion in the literature about the nature of the Chinese passive marker *bei*. It is argued to be a verb, a co-verb, a passive morpheme, or a preposition (like the English preposition *by*, which I will temporarily use for illustration in the examples). The true syntactic properties of *bei* are not the major concern of this paper. What concerns us here is how the verb *daying* behaves in the passive construction with the reading of "promise". Consider the following Chinese examples.

(23) *Li bei (Zhang) *daying* [e mingtian lai]
 Li by (Zhang) promise tomorrow come
 'Li is promised (by Zhang) to come tomorrow.'

Example (23) shows that upstairs passivization does not form grammatical sentences with subject-control verbs such as *daying*, where the logical subject in the matrix clause cannot control the unexpressed subject of the downstairs clause. This is compatible with its English counterpart.

(24) *Lee is promised (by John) to come tomorrow.

However, a "promise" sentence with a finite clause allows upstairs passivization in English, but not in Chinese, as shown in the following pair of sentences.

(25) a. Kim_i was promised (by the doctor) [that he_i would be healthy by the game time on Sunday].

b. *Zhang bei Li *daying* [Wang mingtian hui lai].
 Zhang by Li promise Wang tomorrow will come
 'Zhang was promised by Li that Wang will come tomorrow.'

This is another contrast between the English *promise* and *daying* with the reading of "promise". Note here that the active version of (25b) would be grammatically perfect, but it is not the case in the passive form. I believe that this, again, has to do with the intertwining of the two readings of *daying*. "Promise" is usually understood as a volitional behaviour of making a commitment, and the "promiser" is more prominent semantically than the "promisee", who is usually optional in an active sentence. On the other hand, the action of "allow" is more or less decided by relevant conditions, and the "allowee" is always obligatory while the "allower" is optional (compare: *John is allowed to leave*, but **John is promised to leave*). Since *daying* in Chinese carries the meaning of both "promise" and "allow", a sentence like (25b) can be easily understood as "Zhang is allowed by Li ...". Since "allow" does not take finite clause as its complement, hence the ungrammaticality of (25b).

Although the "promise" type of sentences do not allow upstairs passivization if they contain non-finite clauses, as indicated in the above examples, downstairs passivization is often found in both English and Chinese. Note that in such sentences, the controller of the unexpressed downstairs clause subject is "shifted" from the logical subject to the

logical object of the matrix clause. This has been a longstanding problem in many analyses in English (e.g., Sag & Pollard 1991), and the Chinese *daying* seems to have the same problem of “shifts of controller”. Consider the following sentences.

(26) a. Kim promised Sandy to be allowed to come.

b. Kim promised Sandy to be invited by the host.

Although it is still in debate as to whether sentences like those in (26) are subject-control or object-control, or both, the following Chinese sentences with *daying* as “promise” are definitely object-control.

(27) a. Zhang_i daying Li_j [e_{*i/j} bu bei jingcha chufa]
Zhang promise Li not by police punish
'Zhang_i promised Li_j that he_{*i/j} will not be punished by police.'

b. *Zhang_i daying Li_j [e_{*i/j} bei laoshi piping]
Zhang promise Li by teacher criticise
'Zhang_i promised Li_j that he_{*i/j} will be criticised by the teacher.'

c. *Zhang_i daying Li_j [e_{*i/j} bei mama biaoyang]
Zhang promise Li by mother praise
'Zhang_i promised Li_j that he_{*i/j} will be praised by the mother.'

d. Zhang_i daying Li_j [ta_{*i/j} jiang bei mama biaoyang]
Zhang promise Li he shall by mother praise
'Zhang_i promised Li_j that he_{*i/j} will be praised by the mother.'

In these examples, it is interesting to find that passivization is allowed in the embedded non-finite clauses only in the negative form, but not in the positive form. This kind of behavior is not found in English sentences.

(28) a. John is promised (by Lee) to be allowed to leave by the boss.

b. John is promised (by Lee) not to be punished by the police.

I am not quite sure what causes such a difference, but it certainly has to do with the special feature that *daying* has the reading of both “promise” and “allow”.

Let us now turn to look at some other characteristics that *daying* shares with the English *promise*. In English, *promise* selects basically a clause through which to show the content of a commitment. Individual NPs may also be selected.

(29) a. He promised this.

b. John promised (Lee) a quick answer.

c. The father promised the child a gift.

Furthermore, these well-formed sentences can also be passivized.

(30) a. This is promised (by him).

b. A quick answer was promised (Lee) by John.

c. A gift was promised by the father.

d. The child was promised a gift by the father.

In Chinese, however, *daying* allows only a limited number of NPs as its object constituent, as shown in the following.

- (31) a. Zhang daying le (Li) zhejian shi.
Zhang promise ASP Li this Matter
'Zhang promised (Li) (to deal with) this matter.'
- b.?Zhang daying le Li yiliang qiche.
Zhang promise ASP Li one car
'Zhang promised Li a car.'
- c.*Zhang daying le Li yiwei hao laoshi.
Zhang promise ASP Li one good teacher
'Zhang promised Li a good teacher.'
- d. Zhejian shi bei Zhang daying xiale.
'This matter is promised by Zhang.'
- e.*Yiliang qiche bei Zhang daying xiale
'A car is promised by Zhang.'
- f.*Yiwei hao laoshi bei Zhang daying xiale.
'A good teacher is promised by Zhang.'

These examples suggest that *promise* in English selects a constituent which indicates an action to be taken on the promiser's part, as well as a state. A rare example would be a sentence like, "*I promise you good weather*". On the other hand, *daying* ('promise') selects mainly clauses and a limited number of NPs that usually indicate an event rather than a state. An NP, like *zhejian shi* 'this matter' in (30a), is selected by *daying* because the sentence actually means "Zhang promised TO DEAL WITH this matter". I therefore assume that the NPs selected by *daying* should be eventive in nature.

To summarize the main features of *daying* with the meaning of "promise", the Chinese verb *daying* selects both finite and non-finite clauses, is a subject-control verb, and allows downstairs passivization but not upstairs passivization in a negative context. These features of *daying* are basically compatible with its English counterpart *promise*. However, the two differ slightly in certain ways. The difference between CP and IP is not quite clear in some Chinese sentences because Chinese does not have overt clause markers, such as *to* and *that* in English. Furthermore, Chinese allows a zero pronoun in a clause subject position. This is why a sentence like (15) appears ambiguous. Also, the fact that *daying* has the reading of "allow", which is believed to be an object-control verb, influences the judgment of the real control structure of the verb in a sentence. We now compare the behavior of *daying* and its English equivalent *allow*.

4. Control Structure of *Daying* with the Reading of "Allow/Approve"

As mentioned earlier, apart from "promise", *daying* also has a dictionary interpretation of "to allow/approve" or "to reply". When *daying* has the meaning of "allow/approve", the control structure is different from when it means "promise". In English, *allow*, *persuade* etc. are categorized as object-control verbs for the obvious reason that they require PRO to refer back to the matrix clause object (see Radford 1988). For examples,

- (32) a. John_i persuaded Lee_j [_{e_{i,j}} to attend the party].
b. John_i allowed Lee_j [_{e_{i,j}} to leave the party early].
c.*John allowed [_e to come].
d.*John does not allow [_e to come].

When *daying* has the reading of “allow” the verb demonstrates similar characteristics as its English counterpart.

- (33) a. Zhang_i daying Li_j[e_{*ij} mingtian lai]
 Zhang allow Li tomorrow come
 ‘Zhang allowed Li to come tomorrow.’
- b. Zhang_i bu daying Li_j[e_{*ij} mingtian lai]
 Zhang NEG allow Li mingtian come
 ‘Zhang doesn’t allow Li to come tomorrow.’
- c. *Zhang daying [ec mingtian lai]
 ‘Zhang approved/allowed to come tomorrow.’
 (test: *Zhang daying lai, keshi mei lai.
 *‘Zhang allowed to come, but didn’t come.’
 But this sentence can mean: ‘Zhang promised to come, but didn’t’)
- d. *Zhang bu *daying* [ec mingtian lai]
 ‘Zhang doesn’t approve/allow to come tomorrow.’

Examples in (33) match those examples in (32) in that the predicate verb in these sentences requires an NP object, and the EC in the downstairs clause obligatorily refers to the matrix object but not the matrix subject. But when *daying* has the reading of “allow”, the sentence structure will change accordingly in terms of its grammaticality and, therefore, the control structure is different from that when *daying* has the reading of “promise”. This demonstrates the double feature of the verb *daying*.

Also, unlike *daying* (‘promise’), which takes non-finite as well as finite clauses, *daying* (‘allow’) does not seem to form a grammatical sentence if the sentence contains a downstairs finite clause. If such a “*daying*” sentence is grammatical, it must be of the “promise” type.

- (34) a. *Zhang_i daying Li_j [e_{ij} mingtian hui lai]
 ‘Zhang allowed Li that he_{ij} will come tomorrow.’ (= promise)
- b. *Zhang_i daying Li_j [ta_{ij/k} mingtian neng lai]
 ‘Zhang allowed Li that he_{ij/k} can come tomorrow.’ (= promise)
- c. *Zhang_i bu daying Li_j [ta_{ij/k} mingtian keyi lai]
 ‘Zhang allowed Li that he_{ij/k} can come tomorrow.’ (= promise)

These examples further show that *daying* represents two structurally different verbs.

Below, I briefly review the two Chinese negative particles *mei* and *bu*, which may help the analysis of the control structure of *daying*. In general, the difference between *mei* and *bu* is that *mei* negates the completion of an event, while *bu* provides a neutral negation.

- (35) a. Wo mei kai men
 I NEG open door
 ‘I didn’t open the door.’
- b. Ta mei shang xue
 he NEG ascend school
 ‘He didn’t go to school.’
- c. *Zhangsan mei zhidao zhejian shi

Zhangsan NEG know this matter
 ‘Zhangsan didn’t know about this matter.’

d. *Lisi mingtian mei shang xue.
 Lisi tomorrow NEG attend school
 ‘Li will not go to school tomorrow.’

Examples (35a) and (35b) show that *mei* negates the completion of the event *.kai men* ‘open the door’ and *.shang xue* ‘go to school’, hence the interpretation “...didn’t...”. Example (35c) contains the durative verb *zhidao* ‘know’, which cannot be negated by *mei*. The sentence is, therefore, ill-formed. *Shang xue* in (35d) is modified by *mingtian* ‘tomorrow’ and thus becomes a future event. The negative particle *mei* is not applicable in this sentence, and hence proves ungrammatical. However, all the sentences in (36) can be negated by *bu*, since it provides a neutral negation.

- (36) a. Wo bu kai men
 I NEG open door
 ‘I won’t open the door.’
- b. Ta bu shang xue
 he NEG ascend school
 ‘He doesn’t/won’t go to school.’
- c. Zhangsan bu zhidao zhejian shi
 Zhangsan NEG know this matter
 ‘Zhangsan doesn’t/didn’t know about this matter.’
- d. Lisi mingtian bu shang xue.
 Lisi tomorrow NEG attend school
 ‘Li will not go to school tomorrow.’

With a clear distinction between the two negative particles, we can easily tell that *mei daying* refers to “didn’t promise/allow” while *bu daying* means “doesn’t/didn’t promise/allow”.

As shown earlier in (23) and (24), *daying* generally does not allow upstairs passivization. But upstairs passivization is quite common in sentences where *daying* has the reading of “allow”. Furthermore, passivization of the embedded non-finite clauses is also allowed.

- (37) a. Li bei daying mingtian lai.
 Li by allow tomorrow come
 ‘Li was allowed to come tomorrow.’
 (test: Ruguo Li mei bei daying mingtian lai, wo mingtian ye bu lai.
 if Li NEG by allow tomorrow come I tomorrow also NEG come
 ‘If Li is not allowed to come tomorrow, I won’t come either.’)
- b. Bingren_i bei yisheng_j daying [e_i/_j chu yuan].
 patient by doctor allow go-out hospital
 ‘The patient is allowed by the doctor to leave the hospital.’
- c. Mama_i zhongyu daying haizi_j [e_i/_j bei ren daizou].
 mother finally allow child by man take-away
 ‘The mother finally allowed the child to be taken away.’

- d. Baogao ren daying zhetiao xiaoxi mingtian bei gongkai
report man allow this news tomorrow by publicize
'The reporter allowed this piece of news to be publicized
tomorrow.'
- e.*Baogao ren daying zhetiao xiaoxi mingtian hui bei gongkai
report man allow this news tomorrow will by to publicize
'The reporter allowed that this piece of news will be publicized
tomorrow.' (daying = 'promise')
- f. Zhetiao xiaoxi bei baogao ren daying mingtian bei gongkai
this news by report man allow tomorrow by publicize
'This piece of news is allowed by the reporter to be publicized
tomorrow.'
- g.*Zhetiao xiaoxi bei baogao ren daying mingtian hui bei gongkai
this news by report man allow tomorrow will by publicize
'This piece of news is allowed by the reporter that it can be
publicized tomorrow.'

These examples show that *daying* ('allow') allows passivization in both the matrix clause and the embedded clause, but it does not accept finite clauses as its complement as shown in (34) and (37e) and (37g). However, (37e) can be grammatical only when *daying* has the reading of "promise" (note that *daying* ('promise') takes finite clauses as its complement). (37g) is not grammatical in any case because *daying* ('promise') does not allow upstairs passivization, while *daying* ('allow') does not take embedded finite clauses. Since (37g) has both, it is ungrammatical.

We saw earlier that *daying* ('promise') more often selects a clause rather than an individual NP (with a limited number of exceptions. But *daying* ('allow') seems to allow any NP so long as it is semantically acceptable.

- (38) a. Zhang daying le [Li de yaoqiu]
'Zhang approved Li's request.'
- b. Li de yaoqiu bei (Zhang) daying le
'Li's request was approved (by Zhang).'
- c. A: Zhang daying Li de yaoqiu le ma?
'Has Zhang approved Li's request?'
B: Zhang daying le ec.
'Zhang has approved (it).'
- d. Ta bu daying zhege jihua.
he NEG allow this plan
'He does not approve this plan.'

From the examples in (38), we see that *daying* is closer to the English meaning *approve*. In English, we can have a sentence like (39).

- (39) They approved that the bridge will be built next year.

But the equivalent Chinese sentence with *daying* as its predicate verb will have the interpretation of, "They promised that ...".

- (40) Tamen daying zhezuo daqiao jiang zai mingnian bei jiancheng
 they DAYING this bridge will in next year by build-up
 ‘They promised/?approved that the bridge will be built up
 next year.’

Interestingly, (40) is questionable in that *daying* (‘allow/approve’) does not take finite clause. Also, from the point of semantics, a “promiser” is usually more positive than the “allower/approver” about the event of building the bridge. If a Chinese speaker’s real intention is “to allow/approve” in such a sentence, s/he would usually choose an unambiguous verb, such as *pizhun* ‘allow’ or *tongyi* ‘approve’, rather than *daying*, which has the reading of both “promise” and “allow/approve”. Therefore, I would suggest that *daying* is different from its English counterpart *promise* (as interpreted in the literature) both structurally and semantically.

To summarise the properties of *daying* (‘allow/promise’): *daying* (‘allow/approve’) selects object NPs and non-finite clauses only, it is object-control, and allows both upstairs and downstairs passivization. Note that although there are distinct differences in both meaning and structure between the two readings of *daying*, there are also similarities which makes it difficult to tell if *daying* in a sentence has the meaning of “promise” or “allow”. For example, both *dayings* select non-finite clauses and allow downstairs passivization. The fact that Chinese is a pro-drop language makes it difficult to judge if a clause is finite or non-finite.

5. Further Discussion

Since *daying* in Chinese exhibits two different sets of properties that bear different meanings, the question arises as to how to differentiate the two meanings of a speaker in a given *daying* sentence like (41), which is similar to (15a) but has a perfective marker *le*.

- (41) Zhang *daying* le Li mingtian lai.
 Zhang DAYING ASP Li tomorrow come.

I suggest a few possible tests that can help determine the lexical content and the control structure of *daying* in a certain sentence. The first is “topicalization”. One of the most striking features of Chinese sentence structure is that, in addition to the grammatical relations of “subject” and “direct object”, the description of Chinese must also include the element “topic”. The topic of a sentence is what the sentence is about and it always comes first in a sentence. For example, in a sentence like (42a), the topic can be either the subject or the object. The topicalized part of the sentence is what the sentence is mainly about and it must come first in the sentence, as shown in (42b) and (42c).

- (42) a. Wo gei le Zhangsan naben shu
 I give ASP Zhangsan that book
 ‘I gave Zhangsan that book.’
 b. Wo, [e gei le Zhangsan naben shu].
 ‘As for me, I gave Zhangsan that book.’
 c. Zhangsan, [wo gei le e naben shu].
 ‘As for Zhangsan, I gave him that book.’
 d. Naben shu, [wo gei le Zhangsan e].
 ‘As for that book, I gave it to Zhangsan.’

From (42) we can assume that any complete constituent of a sentence, or what the sentence is about, can occur at the beginning of a sentence as the sentence topic. We can use this feature to determine whether a clause is finite or non-finite. Recall that *daying* (‘promise’) takes both finite and non-finite clauses while *daying* (‘allow’) takes only non-finite clauses. Therefore, if we can find out that an embedded clause in a *daying* sentence is finite, the predicate

verb cannot have the reading of “allow”, and hence must be interpreted as “promise”. Let us see how (41) can be analyzed in order to see the real structure of the sentence.

- (43) a. Zhang *daying* le Li mingtian lai.
Zhang *Daying* ASP Li tomorrow come
- b. [NP. Li], Zhang *daying* le [e] [IP PRO mingtian lai]. (= allow)
'As for Li, Zhang has allowed him to come tomorrow.'
- c. [CP. pro Mingtian lai], Zhang *daying* le Li. (= promise)
'As for coming tomorrow, Zhang has promised Li.'
- d. [CP. Li mingtian lai], Zhang *daying* le. (= promise)
'As for Li's coming tomorrow, Zhang has promised.'

The sentence topic in (43b) is obviously an NP, and is therefore the object of the matrix predicate but not the subject of the downstairs clause. The subjectless clause is thus understood as a non-finite clause. One may argue here that the embedded clause in (43b) may well contain a modal verb (e.g., ‘*hui*’ will’) which is omitted, or a zero *pro*, rather than PRO, as the subject of the clause. In that case, the sentence may well be one with a finite clause and the predicate verb should thus have the reading of “promise”, not “allow”. Well, as we have seen in (42), the part of the sentence that can be topicalized must be a full grammatical constituent (e.g., subject, object, complement). If the object *Li* is topicalized, what is left in the sentence will be ungrammatical if the omitted modal *hui* ‘will’ is filled up and the zero pronoun is replaced by an overt *ta* ‘he/she’, as in the following.

- (44) *Li, Zhang *daying* ta mingtian hui lai.
'As for Li, Zhang promised that he will come tomorrow.'

This is because when *Li* is topicalized, the gap it left can only be filled by an anaphoric *PRO*, but not an overt *pro*. This explains why the embedded clause in (43b) is non-finite and the sentence has the reading of “to allow”. If we assume that the embedded clause does contain a zero *pro*, which can be replaced by an overt pronominal, the only correct topicalization form of the sentence to show that *ta* ‘he/she’ can refer freely would have to be something like (45) where an overt preposition *dui* ‘to’ is required.

- (45) Dui Li, Zhang *daying* ta mingtian hui lai
'To Li, Zhang has promised that he will come tomorrow.'

The topic of (43c) is obviously a finite sentential clause which is moved from the original complement position after the matrix predicate. An easy test to this would be to topicalize the downstairs clause from a sentence in which the predicate verb selects only a non-finite clause (e.g., a sentence like (7b-1) cannot be topicalized as (i) * [*e mingtian lai*], Zhang *shefa* ‘As for coming tomorrow, Zhang tried’). A sentence like, *zhang bi wo mingtian lai* ‘Zhang forced me to come tomorrow’, cannot be topicalized as * [*e mingtian lai*], Zhang *bi wo* ‘As for coming tomorrow, Zhang forced me’. Examples like these suggest that a non-finite clause cannot be topicalized in normal Chinese sentences. Therefore, I assume that the EC in the topic of (43c) is *pro* that refers freely, making the topic a finite clause. Since *daying* (‘allow’) does not take finite clauses, the interpretation of the verb in (43c) must be “promise”. We can also test the grammaticality of the sentence by adding an overt pronoun or a modal verb to the topic of (43c).

- (46) [Ta mingtian (hui) lai], Zhang *daying* le Li.
'As for his coming tomorrow, Zhang has promised Li.'

Example (43d) is structurally similar to (46) above in that the topic is a finite clause. For the same reason as (43c), *daying* in (43d) carries the meaning of “promise” but not “allow”. Using the above analysis we can predict that, if a *daying* sentence like (41) has the grammatical topicalization such as (43b), the predicate will be “to allow”.

Otherwise it will mean “to promise”, if the sentence can be grammatically topicalized in the pattern of (43c) and (43d).

Following Radford (1988), I propose another method, which I call “passivization method”, to test the different structure of *daying*. We have already discussed how to differentiate a finite clause from a non-finite one in a *daying* sentence. As mentioned earlier, the Chinese verb *daying* allows downstairs clause passivization both in the meaning of “promise” and “allow”. However, in sentences like (47) below, passivization does not create the same semantic content when *daying* has different readings.

- (47) a. Zhang *daying* yisheng mingtian jiancha bingren.
Zhang DAYING doctor tomorrow examine patient.

If you are uncertain whether the embedded clause in the sentence is finite or non-finite and, hence, cannot decide what reading *daying* has, just passivize the sentence. If the passivized sentence has the same semantic content as the unpassivized one, the matrix predicate *daying* should have the reading of “promise”. Otherwise, it has the reading of “allow”, as shown in the following.

- (48) a. Zhang *daying* [yisheng mingtian (hui) jiancha bingren].
Zhang promise doctor tomorrow will examine patient.
'Zhang promised that the doctor will examine the patient tomorrow.'

- b. Zhang *daying* bingren mingtian (hui) bei yisheng jiancha.
Zhang promise patient tomorrow will by doctor examine
'Zhang promised that the patient will be examined by the doctor tomorrow.' (equivalent to (48a) semantically)

- (49) a. Zhang *daying* yisheng [mingtian (*hui) jiancha bingren].
Zhang allow doctor tomorrow will examine patient.
'Zhang allowed the doctor to examine the patient tomorrow.'

- b. Zhang *daying* bingren mingtian (*hui) bei yisheng jiancha.
Zhang allow patient tomorrow will by doctor examine
'Zhang allowed the patient to be examined by the doctor tomorrow.' (not equivalent to (49a) semantically)

Note that the insertion of a modal verb (*hui* ‘will’) in (48) is acceptable but not in (49), which shows that the clauses in (48) are finite and *daying* means “promise”, but means “allow” in (49). This “passivization” method can help solve the finite/non-finite problem caused by the fact that Chinese does not have overt complementizers. It can also be used as a means to distinguish the two possible readings of *daying* in an ambiguous sentence like (47). That is to say, if the meaning of a *daying* sentence remains unchanged whether passivized or not, the predicate should have the “promise” reading, otherwise it means “allow”.

Another test that I propose involves the Chinese negative markers *bu* and *mei*. Recall that *bu* is a neutral negation form that can negate an event or a state either in the past, present, or future. *Mei*, on the other hand, negates only the completion of an event. In English, *promise* indicates the certainty of the **promiser** about something either in present, past, or in the future. But an **allower** always allows or does not allow something that is going to happen. Consider the following sentences.

- (50) a. John promised (Lee) to do this.
b. Lee promised that he didn't do this.

- (51) a. John allowed Lee to do this.
b. John didn't allow Lee to do this.

- c.*Lee allowed Tom to have done this
- d.*Lee allowed Tom not to have done this.

My assumption here is that in a promise-type sentence, the event of the embedded clause may happen after the event of “promising”, or, a “promise” can still be made after the promised event already took place (e.g., (50b)), and the **promiser** is responsible for the truth that he/she promises for. The sub-event in an allow-type sentence usually takes place under the condition that something has been “allowed”. In this sense, the action of “allow” logically precedes the event of whatever is allowed. Now, let us examine the following Chinese *daying* sentences with negative markers *mei* and *bu*.

(52) a. Zhang *daying* Li *zuo zhejian shi*.
Zhang DAYING Li do this event

- b. Zhang *daying* Li *bu zuo zhejian shi*.
'Zhang promised Li not to do this.'
- 'Zhang promised that Li does/will not do this.'

(Note: the difference between the two readings can be tested through “topicalization and “passivization” discussed above)

- c. Zhang *daying* Li *mei zuo zhejian shi*.
'Zhang promised that Li didn't do this.'

test:

A: Ni gan *daying* ta *mei zuo zhejian shi ma*?
you dare promise he NEG do this event Q
'Dare you promise that he didn't do this?'

B: Wo gan *daying* ta *mei zuo zhejian shi*.
'I dare promise that he didn't do this.'

- d. Zhang *daying* Li *bu zuo zhejian shi*
Zhang allow Li NEG do this event
'Zhang allowed Li not to do this.'

- e.*Zhang *daying* Li *mei zuo zhejian shi*
Zhang allow Li NEG do this event
'Zhang allowed Li not to have done this.'

In the above examples, *daying* ('promise') takes clauses with negative markers of both *mei* and *bu*, while *daying* ('allow') takes only *bu* in its embedded clause. This suggests that the Chinese *daying* is compatible with two of its English counterparts (“promise” and “allow”, respectively) in that the former can be followed by an event that may happen either before or after the event of “promise”, while the latter describes an event that can only take place after the event of “allow”. Therefore, to negate a *daying* sentence like (52a) by using *bu* and *mei* can help determine whether the sentence predicate has the reading of “promise” or “allow”.

In general, although a *daying* sentence can be ambiguous in terms of its control structure, because *daying* exhibits the properties of both a subject-control verb “promise” and an object-control verb “allow” in addition to the pro-drop factors in Chinese, there are still ways to differentiate the structural and semantic differences of a *daying* sentence. The tests conducted in this section, namely, “topicalization”, “passivization” and “negation”, are just a few examples among the several in different theories.

6. Summary

I have claimed that the Chinese verb *daying*, which is generally taken as the equivalent of the English “promise” in the literature of control discussion, has more than just one reading. These readings (e.g., “promise”, “allow”, etc.) are different not only in their lexical interpretation, but also in their control structure. That is, *daying* is both a subject-control verb (‘promise’) and an object-control verb (‘allow’). The fact that Chinese does not have overt markers for AGR or clause distinction (finite vs. non-finite), and that Chinese allows pronominals to drop, sometimes makes a sentence with *daying* as its matrix predicate ambiguous. However, such ambiguity can be clarified once we have a clear concept of the control nature of the different readings *daying* represents. A number of testing methods are proposed to distinguish different readings in a single sentence. One further point is that the intertwining of different readings is not totally “out of control”, so long as there are correct theories to predict it.

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