

I . Introduction

There is a unique set of Mandarin Chinese verbs requiring two arguments, one at the canonical subject position and the other at the canonical topic position. The fact is illustrated by the following sentences.

- (1) a. *zeijian shi, ni zuozhu*
 this matter you make-master.
 ‘You’ll take charge of his matter.’
 b. **ni zuozhu zeijian shi*
 you make-master
 c. **ni zuozhu zeijian shi*
 you make-master this matter
- (2) a. *yuyanxue, ta nashou*
 linguistics s/he take-hand
 ‘S/He is good at linguistics.’
 b. **ta nashou*
 s/he take-hand
 c. **ta nashou yuyanxue*
 s/he take-hand linguistics

In both (1) and (2), the a. sentences are grammatical while the b. and c. sentences are not. The contrast between the a. sentences and b. sentences suggests that the NPs in topic positions in (1a) and (2a) are required arguments. The fact that a required argument is not allowed to occur in the canonical object position, as in (1c) and (2c), brings up the possibility that these predicates subcategorize for an argument at topic position. Several arguments can be posed for the status of these topics as subcategorized complements, the first is the definitive but not always reliable test of the complements’s being semantically required.¹ The second is the fact that this behavior syntactically subclassifies verbs. By definition, subcategorization frames are so-called because they further classify the category of verbs. In fact, it can be demonstrated that the observed phenomena exclusively involve and hence define a class of some twenty predicates in Mandarin Chinese.² /³ Furthermore,

1 Pollard and Sag (1987) describes this characteristic as ‘ontologically necessary.’

2 This fact also shows that they are not adjuncts, since occurrences of adjuncts are not dependent on the predicates.

the subclassification fact can be shown to be neither structurally nor semantically determined and has to be lexically dependent. If the topics involved are to be accounted for by the general syntactic operation of topicalization, then it should be independent of the predicates as long as they have two arguments.⁴ The fact that the phenomena in question is neither semantically nor pragmatically determined is illustrated by the minimal pair of *guomu* 'to browse' and *liulan* 'to browse.' Although both bisyllabic predicates have roughly equivalent meaning, *guomu* requires the instantiation of its GOAL as a topic while *liulan* requires the instantiation of an object.⁵ Third, semantically speaking, adjuncts, such as location and manner, are functors on the proposition. The topics in question are clearly arguments but not functor of the propositions and has to be a complement of the predicate. Last, syntactically, these topics' status as complements is strongly supported by the fact that the predicates impose selectional restrictions on the topic position.

- (3) a. Zhangsan de shi, ni zuozhu
Zhangsan DE matter you make-master
'You'll take charge of this matter of Zhangsan.'

3 Please refer to an extensive but surely incomplete list of the predicates and example sentences given in the appendix. The list is compiled with the help of Chang Li-Ping and Cheng Yahsai of the Chinese Knowledge Information Processing (CKIP) group at Academia Sinica. Chang also pointed out to me that (12) *fangshou* 'to let go of' and (15) *fangxin* 'not to worry about' may have to be excluded from the list. Since both predicates, though disallow post-verbal NP arguments like others, allow verbal complements at that position. This fact can be accounted for with the Functional Uncertainty mechanism (Kaplan and Zaenen in press, Huang and Chin 1989). I am tentatively retaining them in the list pending detailed account in the future.

4 This point follows naturally from the Functional Uncertainty account of long-distance dependencies recently proposed in Kaplan and Zaenen (in press).

5 This fact can be illustrated by the following pairs.

- i) a. *zhedian wenzhang, wo guomu-le*
this-CLASS article I browse-PERF
'I have browsed the article.'

- ii) a. *zhēpián wénzhāng, wǒ liúlan-le*
this-CLASS article I browse-PERF
b. *wǒ liúlan-le zhēpián wénzhāng*
I browse-PERF this-CLASS article
'I have browsed the article.'
- b. *#Zhāngsān, nǐ zuòzhǔ*
Zhangsan you make-master
- c. *#shū, nǐ zuòzhǔ*
book you make-master
- (4) a. *xīyāngqí tā nàshǒu*
occidental-chess s/he take-hand
'S/He is good at playing chess.'
- b. *#mùbǎn, tā nàshǒu*
wood-board s/he take-hand
- c. *#Lǐsì, tā nàshǒu*
Lisi s/he take-hand

Form both (3) and (4), it is clear that the topic-position NPs are semantically selected and well-restricted by the predicates. For instance, the contrast between grammatical (2a) and (4a) and ungrammatical (4b) and (4c) illustrates that only NPs referring to a kind of technique or knowledge which can be mastered are allowed as topic arguments of *nàshǒu* 'to be good-at'. Such restrictions can only be attributed to the lexical predicate and cannot be attributed to any other syntactic element. Thus, any account of these topic NPs would have to take into consideration that they are semantically selected arguments of the predicates.

Before going into theoretical discussions, the use of the expression 'to subcategorize' should be clarified. My usage is in a sense theory-dependent. In Lexical-functional Grammar (LFG), verb subcategorize' should be clarified. My usage is cal functions and all required arguments are considered subcategorizable (Bresnan 1982b.288-292).⁶ This position is, of course, contrary to the 'strict subcategorization of the Government and Binding (GB) theory where only 'inner' arguments, typically post-verbal arguments in languages like English and Chinese, are subcategorizable.⁷ The critical difference between the two types of theories lies in that subjects are considered as 'outer' arguments and are not subcategorizable in GB while SUBJ functions are not treated differently from other grammatical functions in terms of subcategorization in LFG. Although I adopt the LFG position on subcategorization, our discussion applies to GB in terms of required arguments. In this paper, without attempting

definite resolution, I will first point out potential problems posed by topics as required arguments for two major linguistic theories : GB and Generalized Phrase Structure Grammar (GPSG). I
6 This position is also adopted in Head-driven Phrase Structure Grammar (HPSG, Pollard and Sag 1987), a direct descendent of GPSG.

7 It is worth pointing out that Ernst (1989) argues strongly, in GB terms, for the subcategorization of certain pre-verbal PPs in Mandarin Chinese.

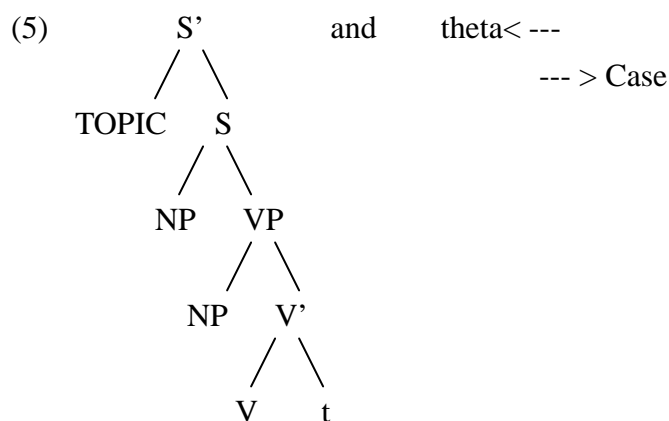
will then give a straightforward syntactic account of the data in LFG terms. The paper will end, however, in observation of problems and potential solutions this set of data pose for the Lexical Mapping Theory in LFG.

II. Challenges to Two Theories

.1 GB Account

GB differs from both GPSG and LFG in not being surface-based and in allowing different abstract levels, mediated by movements, to account for linguistic generalizations. In this theory, with multi-level derivations from deep-structure, a surface topic position is generally considered a landing site of movement unable to independently sanction occurrences of overt NPs. Recall that in GB an overt NP must receive both a theta-role and an abstract Case. An overt NP occurring in topic position thus must inherit both its theta-role and abstract Case through a chain from other governed positions.

Since it will be difficult to argue for or against any particular deep-structure configuration without a set of well-articulated theoretical presuppositions, I will simply discuss possible alternatives based on some better-known theories of Case and theta-role assignments for Mandarin Chinese proposed in the field without going into details of the deep-structures involved. First, we will consider the position of Li (1985) that Case is assigned from left to right under the adjacency condition and theta-role is assigned from right to left. Under this assumption, we will have a deep-structure roughly equivalent to (5) for the sentences discussed.

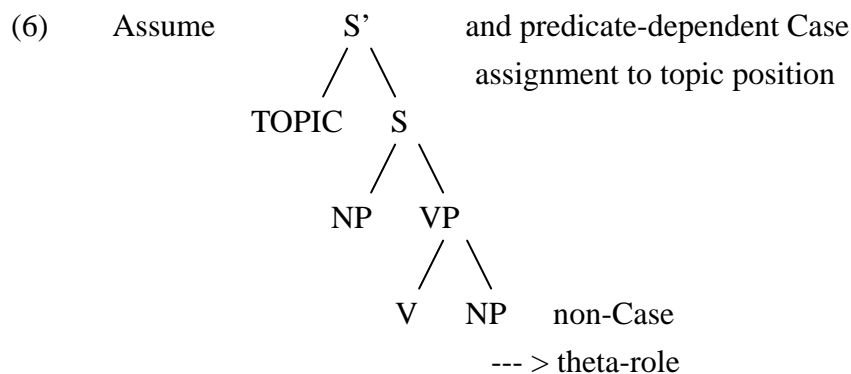


With the above assumption, all subcategorized arguments will occur pre-verbally at deep-structure. In transitive sentences with canonical word order the movement of the 'inner' argument to the post-verbal position at s-structure is motivated by the fact that it does not receive Case at its deep-structure position and the requirement of the Case Theory that all overt NPs should receive Case. Similarly, to account for the occurrences of required arguments at topic positions in this theory is to find motivations for its movement from deep-structure position. If the NP argument is moved directly from the pre-verbal theta-receiving position to the topic position, the sentence should be

ruled out for the NP lacks Case. If the NP receives Case through the mediation of movement to the canonical post-verbal position, two facts still remain unexplained. First, how to motivated the movement from the canonical object position to the topic position if the NP is already assigned both Case and theta-role? Second, if the overt NP at object position possesses both Case and theta-role, how would the theory rule it out? Thus we run into a dilemma with the assumption that a topic position is neither Case nor theta-role receiving position. It should also be noted that the above description applies regardless of one's theory of the directionality of Case and theta-role assignment. Postulating an NP position with both Case and theta-role assignment. Postulating an that position is , automatically deprives the motivation of the ultimate movement to the topic position. Not postulating such a position, on the other hand, wrongly predicts the unacceptability of the sentences in question since a topic position is not held to be either Case or theta-role receiving position. Thus the sentences in question pose serious problems to a GB theory with directionality of Case and theta-role assignments parametrically set.

Recall that J. Huang (1982) argues for base-generated topics. What if NPs can receive either Case or theta-role at their topic positions, assuming that there are proper assigners? The alternative that a (composite) theta-role is assigned to the topic position is unlikely since we have already shown that the occurrences of the topic NPs in question are dependent on the choices of the predicates and, more importantly, that the predicates semantically select the topics. In other words, the topic's receiving a composite theta-role from S is factually flawed.⁸ On the other hand the logical alternative of the predi-

cate assigning theta-role long-distancely is theoretically contrived. So it assigned at the topic position and is the (composite) Case is assigned at the topic position and is the primary motivation for movement to this position.



In an account sketched in (6), the theta-roles of the arguments occurring in topic position are assigned by their governing predicates at the post-verbal deep-structure position. This will

8 This, of course, also conflicts with the widely-held GB premise of theta-role assignment under subcategorization.

automatically account for the selectional restriction fact. The assumption that Case-assigning ability is an idiosyncratic lexical property of predicates is also well-accepted. Thus the fact that the predicates involved do not allow their arguments to occur post-verbally is also account for without further stipulation. One last step to complete the process of derivation would be to account for how the Np arguments receive Case from movement to topic positions. This critical assumption that NPs receive Case at topic positions, however, encounters theoretical difficulties. Since there are no local lexical governors c-commanding the topic position, a Case assigned to the topic position would have to be a structural Case. Hence, the prediction would be that topic positions are Case receiving positions in general. One immediate consequence would be that no object NPs of typical transitive verbs can be topicalized since they would bear two Cases, Restricting Case-assigning topic positions to sentences with the predicates involved is unattainable for the simple reason that Case is assumed to be a local property. Thus, the hypothesis that Case could be assign to topic positions results in another dilemma.

To sum up the brief discussion above, it should be reiterated that it is not intended to show that a GB account of the set of data is impossible. The discussion only serves to point out that the set of data poses serious challenges to the theory assuming some current theoretical hypotheses. A non-ad-hoc account of the data compatible with principles of Universal Grammar is eagerly anticipated.

.2 GPSG Account

GPSG (Gazdar et al. 1985) is a surface-based theory built on the extension of context-free grammars. It differs from GB in allowing neither abstract elements nor abstract levels. Hence the selectional restriction facts between the predicate and its argument at topic position would have to be accounted for directly. First, we need to explain how subcategorization is expressed in GPSG Take note that each category in GPSG is a feature-value bundle.⁹

(7) <verb, ... [SUBCAT n] ... >, abbreviated as V [n]

(8)a. VP[1] --> H1[1]

b. VP[2] --> H1[2], NP

c. VP[5] --> H1[5], NP, np

In GPSG, subcategorization is determined by a lexical head. And this property is represented with the SUBCAT feature, specified on each lexical category. The SUBCAT feature is given numerals as its values for notational convenience. What the

9 H stands for head.

feature does is selection g matching phrase structure (PS) rule with which the lexical predicate can expand. For instance, given the PS rules in (8), the value of the SUBCAT feature of an intransitive verb would be [1], to guarantee that it can only be expanded with no NP sister. Similarly, a typical transitive verb would be assigned the feature value pair [SUBCAT 2] (8b), and a typical double object verb would be assign the feature-value pair [SUBCAT 5] (8c). This treatment is not unlike the GB position of strict subcategorization where only sisters of lexical predicates are governed by subcategorization .¹⁰ Thus, with a strict defini-

tion of subcategorization, the fact that of topics as required arguments in Mandarin, in addition to subjects, cannot be captured in the standard theory of GPSG.

Recall that GPSG relies on the feature \pm SUBJ to distinguish a maximal projection of V with or without a subject (i. e. an S from a VP) and observe that all the predicates in question allow only two complements: a subject and a topic. It seems plausible to posit a feature \pm TOPIC and to capture the fact that the subcategorized complement can only occur as a topic by both a lexical immediate dominance (ID) rule (9) and a Linear Precedence (LP) statement (10) which is probably independently motivated.

(9) VP[44] --> H[44], NP[+TOP], NP[+SUBJ]

(10) [+TOP] < [+SUBJ] < [+V]

Assuming that the class of predicate in discussion are given the feature value of [SUBCAT 44], the data in question will be accounted for by the pair of ID/LP rules. The SUBCAT feature, of course, stipulates the ID rule to instantiate the predicates. The LP statement (10) is not unlikely the one given for Mandarin Chinese, since we need to stipulate that both topics and subjects linearly precede their verbal sisters. The fact that the left hand side VP in (9) is a conventional S is marked by the [+SUBJ] feature percolated up from one of its daughters.

The sketched account, though seemingly plausible, has several inherent problems. First, take note that the account explicitly use the notion of Grammatical Function, Function, supposedly a non-primitive in GPSE. Second, it creates a sentence missing VP. In other words, the S generated by (9) will be headed by lexical verb, an anomaly though not theoretically unacceptable. Last but not the least is that the account creates the only instance of head-final construction headed by a lexical verb. Thus although a formally plausible account is given, it needs more independent-

10 Although Sells (1985:88) bring up the possibility of treating subjects as subcategorized in GPSG through the feature AGR, the possibility will not be pursued here for Gazdar et al. (1985) have explicitly defined subcategorization with the feature SUBCAT.

ly motivated answers to the theoretical questions entailed.

III. LFG Account of the Subcategorization Facts

LFG (Bresnan 1982a) is like GPSG in being both surface-based and unification –based. It differs from both of the theories discussed, however, in postulating grammatical functions (GF) as primitives. Thus the subcategorized information is lexically encoded in terms of GFs. The three entries in (11) represent the predicate-argument structures of the three classes of verbs corresponding to those given in GPSG terms in (8a-c).

- (11) a. ‘verb<(SUBJ)>’
b. ‘verb<(SUBJ)(OBJ)>’
c. ‘verb<(SUBJ)(OBJ)(OBJ2)>’

(11a) lexically encode the subcategorization information of a typical intransitive verb as requiring one SUBJ(ect) argument, (11b) a typical transitive verb as requiring one SUBJ argument and one OBJ(ect) argument, and (11c) a typical ditransitive verb as requiring one OBJ2 (second object) argument in addition to the SUBJ and OBJ arguments. Recall that GFs are primitives receiving language-dependent representations in LFG and that in Mandarin SUBJ will be roughly defined as a phrasal sister of a VP and a TOPIC a phrasal sister of an S, etc. The lexical predicate-argument structures such as given in (11) will be conditions on the surface representations of sentences headed by the predicates, such as in (12).

- (12) a. *feiji* *fei*
airplane fly
‘Airplanes fly.’
b. *xiaomao zhui* *xiaogou*
kitten chase puppy
‘A kitten is chasing a puppy.’
c. *Xiaomei gei* *Xiaoli yi-ge* *yangwawa*
Xiaomei give Xiaoli one-CLASS doll
‘Xiaomei gave Xiaoli a doll.’

Since TOPIC is a GF and since Bresnan (1982b:287) has proposed TOPIC as possibly one of the subcategorizable functions, the subcategorized TOPICs can be straightforwardly accounted for with the following lexical entry, exemplified with *zuozhu* ‘to take charge of.’

- (13) *zuozhu*, verb ↑ PRED = ‘ZUOZHU<(SUBJ) (TOPIC)>’

Together with the following annotated c-structure (PS) rules, lexical entries like (13) will correctly predict that the second complement of predicates like *zuozhu* can only occur pre-verbally before their subjects.

- b.
- | | |
|--------------------------------|---------------------------|
| S | - - - > |
| NP | VP |
| \uparrow SUBJ = \downarrow | \uparrow = \downarrow |

IV. Remaining Puzzles in LFG

A lexical Mapping for Mandarin Chinese is proposed in Huang (1989). The theory will be summarized in this section before discussion of implications of the existence of subcategorized TOPICs on the theory.

a. Thematic hierarchy:

b. Intrinsic Classification:

patientlike: -r or +o (dependent on the roles)

c. Morpholexical Rules (partial)

 $\langle \hat{e}, \dots \rangle$ $\langle \hat{e}, \dots, \text{domappl}.. \rangle \quad (\text{IC} = -r \text{ or } +o)$

ii. Applicative Ben/Mal: (+ effective)

< ê,>



< ê, .., ben/malappl..> (IC = -o)

iii. Theme suppression: (with attachment of *ba*-adjunct)

êtheme



∅

d. Default Classification

if loc[f], then loc: -r, else

ê: -r

elsewhere: +r

As is well-known, thematic roles do not have one-to-one correspondences to their grammatical function representations. Thus the Lexical Mapping Theory is making interesting predictions mapping thematic roles to GFs. The nucleus of the Lexical Mapping Theory is the lexical mapping principles assigning features to a thematic role depending on the thematic structures it occurs in. These features will in turn determine the grammatical function of the syntactic representation of the role. The general constraint on the lexical mapping principles is that they must be monotonic, i.e. no assignments of features may conflict with existing features. There are two stages of assignment of features interacting with morpholexical rules. The assignments are carried out by either *intrinsic* or *default* classifications. The intrinsic classification applies to the initial thematic structure. Intrinsic assignments are language-specific. In (15b), it is proposed for Mandarin Chinese that agentlike roles are assigned the value -o and patientlike roles either -r or +o. After intrinsic assignment, a thematic structure is subject to optional applications of morpholexical rules changing predicate-argument structures typically with accompanying morphological effects.¹²

The Lexical Mapping Theory stipulates that the intrinsic

11 Zaenen (in preparation) suggests that intrinsic assignment of features to thematic roles are determined by whether they are agentlike or patientlike. She proposes that in Dutch agentlike roles are assigned the feature value -o, and patientlike roles are assigned the feature value -r.

12 Within the Lexical Mapping Theory, morpholexical rules have the following functions: 1) introducing a new role, eg. applicative, 2) suppressing an existing role, eg. passive, and 3) establishing binding relation between roles.

assignment applies to the initial thematic structure and after each application of a morpholexical rule. However, the feature-value set of the thematic roles is not complete after the intrinsic assignments. After the completion of applications (or non-application) of morpholexical rule, the last step of feature assignment is carried by Default Classification. In default Classification, the notion of top thematic role (marked by \wedge) is crucial. The top thematic role in a thematic structure is defined as the thematic role highest on the thematic role hierarchy. Default classification assigns a feature value to the top thematic role and another feature to the other roles to complement the features they received through the applications of intrinsic classification. In (15d), it is postulated that, if present, focused location should be treated as the top role and assigned the feature $-r$ ¹³ Otherwise, the top thematic role on the hierarchy is assigned $-r$ and other roles assign $+r$. Last in thematic structure can be mapped to any predicate-argument structures of grammatical functions as long as the annotated classification of grammatical functions and with the well-formedness conditions, such as the Subject Constraint and the Function-argument Bi-uniqueness. Thus the Lexical Mapping Theory offers a rigorously formalism for determining, in terms of grammatical functions, the syntactic representations of thematic structures.

The fact that TOPICs, in addition to SUBJs, are subcategorized for by certain Mandarin predicates poses several interesting theoretical questions to the Lexical Mapping Theory. In this theory, the determination of GF representations of the predicate-argument structures relies crucially on the classification of GFs by two features, which are also used in classifying thematic roles. The two features, $\pm r$ (estricted) and $\pm o$ (bjective), exhaustively divide GFs into the four types of SUBJ ($-r$ & $-o$), OBJ ($-r$ & $+o$), OBJtheta ($+r$ & $+o$), and OBLtheta ($+r$ & $-o$). The subcategorized TOPICs, when occurring concurrently with subcategorized SUBJs, do not fall into this classification hence are not accounted for in the mapping process. Observing that in the set of data the TOPICs and the SUBJs cannot alternate with each other. In other words, a set of roles are always assigned to TOPICs but not SUBJs. Thus we are faced with the question of how to distinguish TOPIC from other GFs, especially SUBJs, in the Lexical Mapping Theory. To solve this problem, the thematic roles represented by the subcategorized TOPICs should be deter-

¹³ This postulation accounts for the Locative Inversion fact in Mandarin Chinese, such as i).

- i) Cunzili lai-le yi-ge yisheng
village-inside come-PERF one-CLASS doctor
'There came a doctor to the village.'

mined first.

.1 Working Hypotheses

Some working hypotheses within the theory of Lexical Mapping will be introduced in this section. These working hypotheses, though answering some of the questions raised by the subcategorized TOPICS, do not yet constitute a full account of the facts. The first observation is that the subcategorized TOPICS seem to have the thematic roles of GOAL/PATIENT.

- (16) a. *zejian shi, ni zuozhu*
this mater you make-master
'You'll take charge of this matter.'
- b. *yuyanxue, ta nashou*
linguistics s/he take-master
'S/He is good at linguistics.'
- c. *zhepian wenzhang, wo guomu-le*
this-CLASS article I pass-eye-PERF
'I have browsed the article.'
- d. *ni xian zuo guan, wo wu-neng-wei-li*
you want make official I NEG-can-mark-force
'I cannot do anything to help you becoming a (government official).'

As illustrated by the sentences in (16), these sentences generally describe a situation where a (physical or mental) action being directed by the SUBJ arguments towards the TOPIC arguments. Thus it not unreasonable to assume without further argumentation that the subcategorized TOPICSs represent the roles of GOAL/PATIENT. According to the Lexical Mapping Theory of Mandarin Chinese in (15), proposed in Huang (1985) following Zaenen (in preparation), the assignment of features to thematic roles are determined by the Proto-agent and Proto-patient properties they possess. Intuitively, a GOAL/PATIENT role should have Proto-patient properties. However, the GOAL/PATIENT in question does not show any of them. It is neither in a change of state, nor incrementally nor causally affected by event, nor stationary relative to movement of Proto-agent.¹⁴ Furthermore, the verb, a tence of this role is independent of the action of the verb, a Proto-agent rather than Proto-patient property according to

Keenan (1984) and tentatively adopted in Dowty (1988). Thus, the fact suggests an explanation that these roles are not represented by OBJs because they lack Proto-patient properties and are

14 It could be argued that for predicates like *guomu* 'pass-eye, to browse,' the role be (mentally) stationary relative to the Proto-agent, since the mind of the Proto-agent has to be 'moving.' I will neither pursue nor refute the argument here since it hinges on still undefined metaphoric uses of the notion 'stationary.'

therefore non-objective. In terms of Lexical Mapping Theory, the lack of Patientlike properties and the presence of at least one agentlike properties induces the intrinsic assignment of the feature $-o$ to the role. This intrinsic assignment in turn predicts that this role will not be allowed to be represented by the objective roles. In Mandarin Chinese this effectively precludes the post-verbal occurrences of this role except when marked by preposition.

Second, referring to the sentences in (16) again, it can be observed that the thematic roles of the SUBJs seem to be AGENT in the sense that they are causers or controller of the actions denoted by the predicates. Furthermore, they possess the Proto-agent properties of having volition, being sentient etc. Hence they will be intrinsically assigned the feature $-o$ according to our Lexical Mapping Theory. And since they are the top thematic role. The two assignments together correctly predicts that they will be mapped to the syntactic representation of SUBJs.

Having tentatively identified the two thematic roles involved and the intrinsic assignment they receive, correctly predicting the mapping of roles to subcategorized TOPICSs and SUBJs remains problematic. Although the standard classification of SUBJ functions as $-r$ and $-o$ of Bresnan and Kanerva (1989) is well-supported, there does not seem to be a clear answer as to how a Subcategorized TOPIC function should be classified. The classification of being non-objective ($-o$) is theoretically sound because a TOPIC does not exhibit OBJ-like properties such as occurring post-verbally. It is also factually supported by the motivated assignment of $-o$ feature to the roles occurring in that position. The problem is a TOPIC function is not fully classified with the $-o$ feature. To fully specify the grammatical function under the current theory of Lexical Mapping, it will have to receive the classification of either $-r$ or $+r$. Either way seems to entail a dilemma, classifying TOPIC to the same type as SUBJ or OBL respectively. Assigning the $-r$ feature seems to be the greater of the two evils. On top of the fact that the

Lexical Mapping theory would then have to distinctively map two thematic roles to two classificatorily identical GFs, it could also be argued that the thematic role of involved is restricted to a subset of GOAL and therefore restricted. Assigning the +r follows from the current theory, as all non-top roles receive the +r assignment. It is also supported by the observed fact of the restriction on the kind of thematic roles involved. However, grouping TOPIC together with OBL is not a happy solution for the simple reason that there are no TOPIC-OBL alternations for the predicates involved, demonstrated in (17).

- (17) a. **ni ba/dui/gen zeijian shi zuozhu*
 you BA/DUI/GEN this matter make-master
 b. **wo ba/dui/gen zhepian wenzhang guomu-le*
 I BA/DUI/GEN this-CLASS article pass-eye-PERF

since TOPIC and OBL functions do not alternate with each other, even though assignment of the pair of two features seem to be well-motivated, a mapping theory should correctly predict which roles are mapped to TOPICs and which ones to OBLs. This difference is clearly not capturable with the two stipulated features of $\pm r$ and $\pm o$.

V. Conclusion: Remaining Puzzles

In this brief article, it has been shown that there are a set of Mandarin Chinese predicates which subcategorize for a TOPIC in addition to a SUBJ. It is suggested that accounting such predicates pose problems in current syntactic theories. Syntactically, LFG seems to offer a straightforward analysis without stipulation. The data, however, entail interesting puzzles for the Lexical Mapping Theory of Bresnan and Kanevra (1989). It is suggested that the thematic roles played by the subcategorized TOPICs are GOALs and the SUBJs AGENTs. Although the AGENTs could be correctly mapped to SUBJs with Lexical Mapping principles proposed in Huang (1989), mapping to TOPICS is problematic. To begin with, TOPIC has not been given a definitive classification for the mapping theory to work with. A brief survey of the related facts suggest that subcategorized TOPIC functions might be classified identically with OBL functions. Positing an *ad hoc* feature to differentiate TOPIC from OBL functions is no problem. The problem is to semantically and syntactically motivate and define the feature. Such an account must also capture how the GOALs represented by subcategorized TOPICs differ from other GOALs. Answers to important theoretical questions hinges on the a satisfactory account of the subcategorized TOPICs fact. The first is whether the quadruple classification of GFs is sufficient. The existence of subcategorized TOPICs points to a negative answer. The second and ensuing question is then how to revise the classification of the subcategorized GFs to account for the facts. Last, since the roles involved consist of a subset of GOAL roles, the third and potentially even further-reaching question is should Lexical Mapping be determined by classification of mediating thematic roles or directly by the features of the each role encoded in the conceptual Structure. Answers to all these questions awaits in-depth studies of the syntax and lexical semantics of the construction in question.

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語料:

Appendix I

Example Sentence [In Chinese Characters]

甲・四字成語爲謂語

1. 這件事 / 你想當官，我無能爲力。
2. 這種事 / 保你出獄，我愛莫能助。
3. 這種事 / 教洋人說國語，我一竅不通。
4. 這件事 / 張三結婚了，我半信半疑。
5. 這件事 / 申請進外交部 / 你們幾個人，我一視同仁。
6. 那件事 / 數學 / 用 ICG 剖析，我一知半解。
7. 這件事 / 李四誤了事，您高抬貴手。
8. 其他長於四字之成語: 不看僧而看佛面，睜一隻眼閉一隻眼。

乙・其他雙音節動詞

9. 婚姻的事，爸爸作主。
10. 你的好意，我心領了。
11. 吃飯睡覺，他最拿手 / 在行。
12. 張三的事，你不能放手。
13. 這件事，你 (定要) 出面。
14. 這篇文章，請你過目。
15. 文章的事，你放心。
- (Comp. a. 你放心讓他去上學吧! / 嗎?
b. 你別擔心文章的事)
16. 其他類似的動詞: 攪局、搗亂、