

## Proxy categories in Phrase Structure Theory and the Chinese VP\*

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The present article discusses in detail the so-called *verb-copying construction* in Mandarin Chinese. Applying Nash & Rouveret's (1997, 2002) theory of *proxy categories*, we obtain an analysis which is completely different from the standard one (cf. Huang 1982) and which, as a consequence, proposes a new account of aspect in Chinese. The *ba*-construction is re-examined as well and *ba* is shown to be a higher (verbal) head rather than a preposition.

*Key words* : proxy category, verb-copying construction, *ba*-construction, aspect, Mandarin Chinese.

Dans le cadre de la théorie des *catégories proxy* développée par Nash & Rouveret (1997, 2002), nous proposons une nouvelle analyse de la *copie du verbe* qui s'oppose à celle couramment acceptée (cf. Huang 1982), et qui aboutit à une nouvelle approche de l'aspect en chinois. La construction en *ba* est également ré-examinée : *ba* s'avère être une tête supérieure plutôt qu'une préposition.

*Mots-clés* : catégorie proxy, copie du verbe, construction en *ba*, aspect, mandarin.

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## 1. INTRODUCTION

The present article discusses in detail the so-called *verb-copying construction* in Mandarin Chinese, where the first occurrence of the verb is followed by the object-DP and the second occurrence by an expression of duration or frequency. Applying Nash & Rouveret's (1997, 2002) theory of *proxy categories*, viz contentless functional heads created in the course of the derivation, we obtain an analysis which is completely different from the standard one (cf. Huang 1982) insofar as the first verb is shown not to be part of the VP, but to occupy a position above the lexical domain. En passant, we equally attempt to give a new account of aspect in Chinese.

In the light of this new analysis of the verb-copying construction, the *ba*-construction is re-examined, because at first sight the two constructions look deceptively similar. *Ba* is argued to be a higher verbal head taking a VP-complement whose specifier hosts the DP immediately following *ba*. Consequently, *ba* and the DP commonly called the *ba*-object do not even form a constituent, contrary to the claim made by the prepositional analysis of *ba*.

The article is organised as follows. Section 2 provides an overview of the relevant data and main generalisations concerning the verb-copying construction. Section 3 introduces Nash & Rouveret's (1997, 2002) theory of proxy categories and applies it to the verb-copying construction. The resulting new analysis will lead to a reconsideration of *Aspect* in Chinese, which will be shown to be merged "downstairs" in the lexical domain. Section 4 compares the verb-copying construction with the *ba*-construction and works out the crucial differences between the two constructions. Section 5 presents a summary of the main conclusions.

## 2. THE PHENOMENON OF VERB-COPYING IN MANDARIN CHINESE

After Huang's (1982) seminal work, which also discusses the verb-copying construction, the syntactic characteristics of this

rather pervasive phenomenon have received relatively little attention in theoretically oriented works on Chinese. On the other hand, numerous studies (cf. Chang 1991, Liu 1994, Xiang Kaixi 1997, Wang 1999 among others) have examined the semantics and pragmatics of this construction without, however, questioning the structural analysis proposed by Huang (1982).

### 2.1. Presentation of the data and the main generalisations

This section, based on work by Huang (1982, 1991, 1994), Jia Ying (1985), Mei Kuang (1986, 1988), Paris (1988, 1995) and Paul (1988, 1998), summarizes what is generally known about the syntactic characteristics of the verb-copying construction.

A transitive verb cannot be followed by both its (non-specific/indefinite) object and an expression of duration or frequency (henceforth abridged as *D/F-expression*) (cf. the (b) examples). Either the verb has to be copied (cf. the (a) examples) or the D/F-expression appears as a (pseudo-) modifier of the object (cf. the (c) examples). Note that in the verb-copying construction only the second occurrence of the verb can bear an aspectual suffix:

- (1a) Ta kan (\*-le) dianshi kan-le san-ge xiaoshi<sup>1</sup>  
 3SG watch-PERF television watch-PERF 3-CL hour
- (1b) \*Ta kan-le dianshi san-ge xiaoshi  
 3SG watch-PERF television 3-CL hour
- (1c) Ta kan-le [san-ge xiaoshi de dianshi]  
 3SG watch-PERF 3-CL hour SUB television  
 'He watched TV for three hours.'

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<sup>1</sup> The following abbreviations are used in glossing examples: CL classifier; DE particle introducing a postverbal manner adverb; EXP experiential aspect; NEG negation; PART sentence-final particle; PASS passive; PERF perfective aspect; PL plural (e.g. 3PL = 3rd person plural); SG singular; SUB subordinator.

- (2a) Wo deng (\*-le) xin deng-le bantian  
1SG wait-PERF letter wait-PERF long:time
- (2b) \*Wo deng-le xin bantian  
1SG wait-PERF letter long:time
- (2c) Wo deng-le [bantian de xin]  
1SG wait-PERF long:time SUB letter  
'I waited for mail a long time.'
- (3a) Wo qi (\*-guo) ma qi-guo liang-ci le  
1SG ride-EXP horse ride-EXP 2-time PART
- (3b) \*Wo qi-guo ma liang-ci le  
1SG ride-EXP horse 2-time PART
- (3c) Wo qi-guo [liang-ci ma] le  
1SG ride-EXP 2-time horse PART  
'I have ridden on a horse twice.'
- (4a) Ta qu (\*-le) xiangxia qu-le san-tang  
3SG go-PERF natal:village go-PERF 3-time
- (4b) \*Ta qu-le xiangxia san-tang  
3SG go-PERF natal:village 3-time
- (4c) Ta qu-le [san-tang xiangxia]  
3SG go-PERF 3-time natal:village  
'He has been home three times.'

Examples (1)-(4) illustrate the effects of Huang's (1982) *Phrase Structure Condition* (PSC)<sup>2</sup> for the VP: only one DP is

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<sup>2</sup> The PSC is defined by Huang (1982', 2.6) as follows:

"a) The internal structure of a phrase XP in Chinese is head-initial for the expansion of complements of X (X ≠ N), and head-final otherwise.

licensed in postverbal position (except in the case of double object verbs where both the direct and the indirect object follow the verb).

The verb-copying construction obeys the PSC because each (occurrence of the) verb is followed by only one DP: the first occurrence,  $V_1$ , takes the object, and the second occurrence of the verb,  $V_2$ , takes the D/F-expression. (Note, incidentally, that this order cannot be reversed, i.e. the sequence ' $V_1$  D/F-expression  $V_2$  object' is ill-formed.)

Similarly, in the (c)-sentences of examples (1)-(4), there is only one constituent in postverbal position, for the D/F-expression appears as a (pseudo-)modifier of the object NP, and this regardless of the semantics of the DP, i.e. regardless of whether it allows for real modification by a duration or frequency expression (cf. Chao 1968, 322-323; Huang 1984; for a detailed discussion of this very productive syntax/semantics mismatch, cf. Paul 1988, ch. 6; Huang 1991, 1994).

When the object-DP is definite, verb copying is optional:

- (5a) Wo baifang-le Mali san-ge xiaoshi  
1SG visit-PERF Mary 3-CL hour
- (5b) Wo baifang Mali baifang-le san-ge xiaoshi  
1SG visit Mary visit-PERF 3-CL hour  
'I saw Mary for three hours.'
- (6a) Wo deng-le ta bantian  
1SG wait-PERF 3SG long:time
- (6b) Wo deng ta deng-le bantian  
1SG wait 3SG wait-PERF long:time  
'I waited for him a long time.'

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b) At SS, there is at most one substructure  $X^i$  of XP such that  $X^i$  is head-initial and lexically branching."

Apparent violations of the PSC as e.g. in sentences (5a)-(8a) below are accounted for by Huang (*ibid.*) in terms of reanalysis. Cf. Paul (1988, ch. 7) for a revision of the PSC.

- (7a) Wo kan-guo zhei-bu dianying wu-ci le  
1SG watch-EXP this-CL film 5-time PART
- (7b) Wo kan zhei-bu dianying kan-guo wu-ci le  
1SG watch this-CL film watch-EXP 5-time PART  
'I have seen this film five times.'
- (8a) Ta qu-le Shanghai ji-tang  
3SG go-PERF Shanghai several-time
- (8b) Ta qu Shanghai qu-le ji-tang  
3SG go Shanghai go-PERF several-time  
'He has been to Shanghai several times.'

There have been several attempts to account for this optionality (e.g. Huang 1991, 1994; Paris 1988, 1995).<sup>3</sup> We will,

<sup>3</sup> According to Huang (1991, 1994) a sentence like (5a) *Wo baifang-le Mali san-ge xiaoshi* 'I saw Mary for three hours' is reanalyzed as a double-object construction illustrated in (i):

- (i) Wo gei -le Mali (san-ben) shu  
1 give-PERF Mary 3 -CL book  
'I gave Mary (three) books.'

Given the interaction of the ranks in the thematic hierarchy and the positions available in the VP-shell (cf. Larson 1988), *Mali* is supposed to be on a par with the typically definite, human goal-DP and occupies the specifier position of the VP, whereas the D/F-expression is likened to the typically inanimate theme DP and appears as a complement to V. In the light of our analysis of the verb-copying construction to be proposed in section 3 below, it seems, however, evident that in (5a) the D/F-expression and the object-DP do not occur within the same projection. Furthermore, it is important to point out that verb copying in the presence of the so-called *de*-complement introducing a manner adverbial is always obligatory, regardless of the nature of the direct object and its resultant rank on the thematic hierarchy:

- (ii) Wo deng xin /Mali deng de hen bunaifan  
1SG wait letter/Mary wait DE very impatient  
'I waited for mail/ for Mary very impatiently.'
- (iii) \*Wo deng xin /Mali de hen bunaifan  
1SG wait letter/Mary DE very impatient

however, not discuss this problem here, and instead concentrate on providing an analysis for the verb-copying construction proper (abstracting away from the conditions giving rise to it). Likewise, we will not develop the idea that sentences involving the syntax/semantics mismatch (cf. (1c)-(4c)) might be considered more "economical" - because judged more "natural" - than the corresponding verb copying sentences (1a)-(4a). For these considerations lead to the much more general problem of how to explain the choice between different constructions with apparently identical meanings within the Minimalist Program (cf. Chomsky 1995, 2000) where optionality is precluded.

## 2.2. The distribution of adverbs

VP-level adverbs are not allowed in front of the first verb  $V_1$ , but they must precede the second verb  $V_2$ . Given the now standard assumption that this kind of adverbs indicates the left edge of the VP,  $V_1$  accordingly cannot be contained in the VP. Although the facts about the distribution of adverbs in the verb-copying construction (as well as those about the distribution of auxiliaries, cf. section 2.3. below) are well-known, the rather evident conclusion drawn here is different from the current analysis, where both  $V_1$  and  $V_2$  are assumed to be in the VP (cf. (20) below):

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Also, no syntax/semantics mismatch parallel to that illustrated in (1c)-(4c) is possible for the *de*-complement:

- (iv) \*Wo deng de [hen bunaifan de xin]  
 1SG wait DE very impatient SUB letter

This shows clearly that the current practice in the literature – with the exception of Tang (1992) - cannot be correct where without actually checking this assumption the analysis of verb copying with a D/F-expression is said to hold for verb copying with the *de*-complement as well. Besides, no satisfactory analysis has so far been proposed for *de*, a situation which is usually covered up by hyphenating it to the preceding verb. Though this may be argued to reflect the clitic nature of *de*, it is at the same time evident that *de* does not behave like a verbal suffix (cf. Mei Kuang 1988; Ernst 1995, note 9 for arguments against this idea). Given this uncertainty about *de*, we will limit our investigation to the verb-copying construction with D/F-expressions only.

- (9) Ta (\*renzhende) kan shu renzhende  
 3SG conscientiously read book conscientiously  
 read-PERF 3-CL hour  
 kan-le san-ge xiaoshi  
 'He conscientiously read for three hours.'
- (10) Wo (\*yijing) qi ma yijing qi-le haoji-ci le  
 1SG already ride horse already ride-PERF many-time PART  
 'I have ridden on a horse already many times.'
- (11) Ta shang-ge yue (\*zhi) xi gou zhi xi-le  
 3SG last-CL month only wash dog only wash-PERF  
 yi-ci le  
 1-time PART  
 'He washed the dog only once last month.'

Sentential adverbs - with the exception of bare NP-adverbs like e.g. *jintian* 'today'- can appear in both positions, where the pre-V<sub>2</sub> position seems to be the default case and where the different positions reflect differences in the scope of the adverb:

- (12a) (Ta jintian kan dianshi kan-le ban-ge xiaoshi)  
 3SG today watch TV watch-PERF half-CL hour  
 ta da dianhua ye da-le ban-ge xiaoshi  
 3SG strike phone also strike-PERF half-CL hour  
 '(Today he watched TV for half an hour and he phoned for half an hour, too.)'
- (12b) (Zhei-ge bangongshi dajia dou suibian yong dianhua)  
 this-CL office everybody all random use phone  
 ta ye da dianhua da-le bantian  
 3SG also strike phone strike-PERF long:time  
 '(In this office everybody phones as much as s/he wants);  
 and he phoned for quite a while, too.'

- (13) Ta zuotian/xingqiyi kan shu (\*zuot./xingq.)  
 3SG yesterday/Monday read book (yest./Monday)  
 kan-le san-ge xiaoshi  
 read-PERF 3-CL hour  
 'He read for three hours yesterday/on Monday.'

In (12a) and (12b), an appropriate context is provided in parentheses in order to highlight the part of the sentence that is in the scope of the adverb *ye* 'also', i.e. only (the verb and) the D/F-expression in (12a), but the entire proposition in (12b).

As for the markers of negation *bu* and *mei(-you)* (position-wise comparable to adverbs), their problematic behaviour in the verb-copying construction has been discussed extensively. The problem resides in the difficulty to obtain judgements for this kind of sentences, because it seems contradictory to first introduce an event (with the first verb plus object) and then to negate it (by negation in front of  $V_2$ ) in the same sentence. The acceptability improves when an explicit contrast is established which makes clear that the negation bears on the circumstances of the event rather than on the event itself:

- (14) Wo jintian (\*bing mei-you) chi fan bing mei-you  
 I today at:all NEG eat food at:all NEG  
 chi de hen bao  
 eat DE very full  
 'I have not eaten to my satisfaction at all today.'  
 (Mei 1986: 10)
- (15) Ta kan shu mei kan san-ge xiaoshi, zhi kan-le  
 he read book NEG read 3-CL hour only read-PERF  
 yi-ge xiaoshi  
 1-CL hour  
 'He hasn't read for three hours, but only for one hour.'  
 (Paul 1988: 20)

The important result is that in case negation is acceptable, *bu* and *mei* (*you*) have to precede  $V_2$  rather than  $V_1$  and therefore pattern with VP-level adverbs.

### 2.3. The position of auxiliaries

The default position for auxiliaries is in front of  $V_2$ . For those auxiliaries which may also precede  $V_1$ , a difference in meaning ensues. In (19), for example, the auxiliary *yinggai* 'should' is acceptable before  $V_1$  in its epistemic interpretation 'be liable to' and may be used in a context where the person addressed is from Peking and can therefore be expected to have a good pronunciation of Mandarin Chinese:

- (16) Ta (\*neng lianxu) kan shu neng lianxu kan  
 he can continuous read book can continuous read  
 san-ge xiaoshi  
 3-CL hour  
 'He can read for three hours without a break.'
- (17) Ni (\*keyi) kan dianshi keyi kan ban-ge xiaoshi  
 you may watch television may watch half-CL hour  
 (duo le bu xing)  
 much PART NEG possible  
 'You may watch television for half an hour (but not more).'
- (18) Ta (?zuishao yao) kan dianshi  
 3SG at:least want watch TV  
 zuishao yao kan yi-ge xiaoshi  
 at:least want watch 1-CL hour  
 'He wants to watch TV for at least one hour.'
- (19) Ni (yinggai) fa yin yinggai fa-de hen qingchu  
 you should issue sound should issue-DE very clear  
 'You should (be liable to) pronounce clearly.'

To summarize, in the verb-copying construction only the second occurrence of the verb can be marked for aspect and be preceded by VP-level adverbs; likewise, the default position for auxiliaries is before  $V_2$  rather than before  $V_1$ . Furthermore, the order ' $V_1$  object-DP  $V_2$  D/F-expression' is rigid and cannot be inverted, in other words, it is excluded that  $V_1$  is followed by the D/F-expression and  $V_2$  by the object-DP.

### 3. A NEW ANALYSIS OF THE VERB-COPYING CONSTRUCTION

Given the distribution of VP-level adverbs and auxiliaries, it is evident that the first occurrence of the verb occupies a position above VP. The structure assigned so far to the verb-copying construction can therefore not be correct (cf. Huang 1982, 50):

- (20) Ta [<sub>VP</sub> [<sub>V1</sub>' kan dianshi] [<sub>V2</sub>' kan-le san-ge xiaoshi]]  
 he watch television watch-PERF 3-CL hour  
 'He watched TV for three hours.'

The structure in (20) obeys the PSC (cf. note 2) because  $V_2$ -bar is the head of the entire VP, insofar as only  $V_2$  behaves like a "real" verb and can be marked for aspect and be preceded by auxiliaries and VP-level adverbs. It is interesting to note that for Huang (1982) (as well as for Mei Kuang 1986, 1988, Paul 1988 and the few subsequent syntactic accounts)  $V_2$  is the copy, whereas  $V_1$  represents the "original" verb.

In the following, we will incorporate the generalisation discussed above that in fact  $V_2$  displays (most of the) verbal properties and provide a new analysis in the light of Nash & Rouveret's (1997, 2002) theory of proxy categories.

#### 3.1. The theory of proxy categories (Nash & Rouveret 1997, 2002)

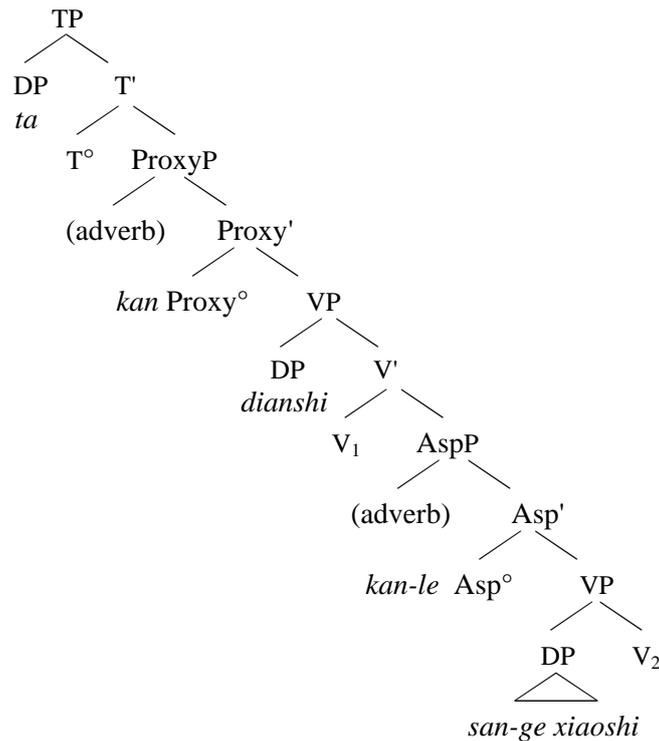
In order to account for linguistic variation, Nash & Rouveret (1997, 2002) propose several main innovations with respect to Chomsky's minimalist program (cf. Chomsky 1995,

2000). First, they postulate a new category of contentless functional categories, *proxy categories* or *proxies*, which are not included in the initial numeration, but which are created in the course of the syntactic computation. Secondly, formal features of functional heads (F-heads) can, and if unchecked, must move in overt syntax, i.e. they have to *fission*. The necessity for feature fission may arise because a functional head F can only be involved in a checking relation with one lexical element (a word or a phrase) in its checking domain FP (*Single Checking Hypothesis*), thus requiring an unchecked feature F to move in overt syntax to a new checking domain. A proxy category is precisely the host for such a fissioned feature in case there is no functional category available in the numeration which qualifies as an accessible head. A proxy category serves to create a new checking domain and to mediate the relation between a word or a phrase and a feature already present in the numeration. Several categories analysed so far in quite different ways turn out to be proxies: the initial head in VSO languages, the second position in V-2 languages, the head whose specifier is occupied by the subject in 'subject adverb verb' sequences in Western Romance, and of course the category *Agreement* wherever it occurs. This shows that proxies are quite a heterogeneous set of categories and cannot be equated with an all-purpose *Agreement*. Thirdly, *Tense* is not uniform across languages; though in all languages *Tense* has the scopal feature [D], it may lack the feature pertaining to the finiteness of a proposition, as is the case e.g. in Chinese. Last, but not least, the syntactic licensing of arguments in the lexical domain is not a different operation from licensing in the functional domain (i.e. checking) and subject to the same constraints.

The diagram in (21b) illustrates the analysis of the verb-copying construction based on Nash & Rouveret (1997) for sentence (1a) repeated here as (21a):

- (21a) Ta kan dianshi kan-le san-ge xiaoshi  
 3SG watch television watch-PERF 3-CL hour  
 'He watched TV for three hours.'

(21b)



First of all, the V-node is projected and the D/F-expression *san-ge xiaoshi* 'three hours' is inserted into SpecVP. Since besides subcategorized arguments, quantified expressions functioning as measure phrases for the predicate (cf. Chao 1968, Huang 1982') are the only other type allowed to be merged directly with the verb, it is plausible to consider D/F expressions as argument-like (also cf. section 3.2.1 below). Accordingly, the D/F-expression can check off the argumental feature of V. Nothing else can be checked in VP any more, due to the *Single Checking Hypothesis* (SCH) which states that a head (be it functional or lexical) can only be involved in a checking relation with one lexical element, X° or XP. Consequently, the categorial feature of V has to fission.

*Aspect* is projected and merged with *kan-le* 'watch-PERF', thereby checking off the categorial feature of  $\text{Asp}^\circ$  as well as the categorial feature fissioned from V. Note that while the SCH prevents a functional head F from entering into a checking relation with more than one lexical element, it does not exclude the case where a (complex) word, in this case *kan-le*, checks off more than one feature at a time. By the SCH, nothing else can be checked in  $\text{AspP}$ . Accordingly,  $\text{SpecAspP}$  is not a checking position and accessible to manner and other VP-level adverbs like *yijing* 'already', *zhi* 'only'.

The V-node is re-introduced<sup>4</sup> (equipped with both a categorial and an argumental feature). The object-DP *dianshi* 'film' is merged in its specifier position and thereby checks off the argumental feature of V. As for the categorial feature of V, it has to fission, no checking being possible any more within the projection of the re-introduced V.

Since Chinese lacks V→T movement and since there is no functional category available in the numeration to host this fissioned feature, a proxy category is projected.<sup>5</sup> A copy of the lexical verb *kan* 'to watch' is merged with this proxy head and checks off the categorial feature fissioned from the verb. Since the specifier position of this proxy position is no checking position, it is accessible to sentence-level adverbs like *jintian* 'today', *sandianzhong* 'at three o'clock' etc.

*Tense* is projected which in Chinese only has the feature [D], no feature related to finiteness.<sup>6</sup> [D] is checked off by merging

<sup>4</sup> This idea is due to Alain Rouveret.

<sup>5</sup> As will be discussed in more detail in section 3.2.2 below, the lack of V→T movement alone is not the decisive factor, but rather its combination with the argument-like behaviour of D/F-expressions and the projection of *Aspect* within the lexical domain.

For the current assumption that in Chinese the verb always remains in the VP-shell, cf. Huang (1991, 1994), Tang (1998), Tsai (1994). For exceptional V→T movement of the verb in gapping structures, cf. Paul (1999).

<sup>6</sup> The finiteness of a proposition in Chinese rather involves the entire sentence, in particular the category *Comp* (cf. Rouveret, class lectures 1998/99). We will not pursue this issue here, since there is still much uncertainty about the functional

the subject DP *ta* 'he' in SpecTP. Consequently, the subject-DP in SpecTP and the verb (adjoined to the proxy) are not in a spec - head relation and adverbs (located in SpecProxyP) can intervene between them (cf. examples (11), (12a), and (13) above).

Our analysis of the Chinese verb-copying construction in terms of Nash & Rouveret's theory shows that only the second verb occupies a position within the lexical domain comprising the nodes  $V_1 - Asp^\circ - V_2$  and accordingly only the second verb can be marked for aspect and be preceded by VP-level adverbs and auxiliaries. What had previously been analysed as the first V-bar (consisting of the first verb and the object-DP) is in fact not even a constituent.<sup>7</sup> Instead, the first verb is merged in the checking domain projected (above the lexical domain) by a proxy for the categorial feature of the re-introduced V. Furthermore, if we look closer at the information structuring in the verb-copying construction it seems possible to correlate the position of the first verb (as well as that of the object-DP via its thematic relation to the verb) with a particular informational content.

It is correct that the entire verb-copying sentence may constitute new information, i.e. it can serve as an answer to a

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architecture of the Chinese clause (once we abstract away from the numerous ad-hoc proposals where a new functional category is mechanically introduced for every grammatical item). For an overview of the diversity of functional categories postulated for Chinese, cf. Huang & Li (1996: 56ff.).

<sup>7</sup> Thomas Ernst (p.c.) suggested the following sentence type where the VP (*kan shu*) has apparently been moved to the sentence-initial topic position as a counter-argument against our claim that  $V_1$  and the object DP do not form a constituent in the verb-copying construction :

- (i) [Kan shu ]<sub>i</sub>, ta t<sub>i</sub> kan-le san-ge xiaoshi  
 read book 3SG read-PERF 3-CL hour  
 'As for reading, he has read three hours.'

It is, however, far from clear whether a derivation in terms of movement of the VP to the topic position should be assumed here. Since for DP-topics both movement and base-generation in the topic position are equally acknowledged to exist, we propose to consider the sentence-initial VP *kan shu* as an in-situ topic here. Under this analysis, the non-constituency of  $V_1$  and the object DP in the verb-copying construction has no bearing on the acceptability of a VP in the sentence-initial topic position.

question without any presupposition (cf. 22). If, however, the verb-copying sentence itself is questioned (cf. (23a)), the question bears in fact only on the AspP containing the D/F-expression, whereas  $V_1$  and the object-DP represent the presupposed information (cf. Paris 1988):

- (22a) Ni jintian zuo-le shenme?  
 2SG today do-PERF what  
 'What did you do today?'
- (22b) Wo kan dianshi kan-le zhengtian  
 1SG watch TV watch-PERF all:day  
 'I watched TV all day long.'
- (23a) Ta sao di sao-le san-ge zhongtou ma?  
 3SG sweep floor sweep-PERF 3-CL hour PART  
 'Did he sweep the floor for three hours?'
- (23b) (i) Shi, ta sao-le san-ge zhongtou (= Paris 1988, (16))  
 be 3SG sweep-PERF 3-CL hour  
 'Yes, he swept [the floor] for three hours.'  
 (ii) % Shi, ta sao di  
 be 3SG sweep floor  
 'Yes, he swept the floor.'

(Though grammatical in itself, (23bii) is inappropriate as an answer to (23a).)

In the light of these observations, one might speculate that the first verb (and the object-DP, by virtue of its thematic relation to the verb) form a kind of sentence-internal topic domain (which exists in addition to the sentence-external topic position to the left of the subject).<sup>8</sup> Let us add immediately that the function of topic is

<sup>8</sup> At first sight, our proposal might resemble that by Tsao (1987). However, Tsao does not only consider  $V_1$  and the object in the verb-copying construction as a (secondary) topic, but also the subject of the sentence (which is a "primary" topic for him). In fact, for Tsao (1987) the notion *topic* apparently applies to nearly every preverbal phrase (giving rise to a "tertiary" topic as well) and thereby makes it a vacuous term.

understood here as limiting "[...] the applicability of the main predication to a certain restricted domain" (Chafe 1976 : 50) rather than as stating what the sentence "is about"; for the latter characterization would not be appropriate for those cases where the entire verb-copying construction constitutes new information (as illustrated in the question ~ answer pair (22a)-(22b)).

### 3.2. Some basic properties of aspect in Chinese

In this section, we will provide evidence for our analysis of *Aspect* as a head to be merged "downstairs" in the lexical domain, more precisely between a higher and a lower verbal projection. Our account differs drastically from the two main proposals where *Aspect* is either considered a functional head equivalent to *Inflection* (hosting the subject in its specifier position) to be eventually lowered to the right of the verb (Cheng 1991) or a kind of auxiliary verb which functions as the (empty) head licensing the corresponding affix on the main verb (Ernst 1994). None of these is satisfactory.

#### 3.2.1. The status of the D/F-expression

The argument-like behaviour of a D/F-expression - though it is evidently not subcategorized for by the verb - has been a long-standing issue in Chinese linguistics. For as we have seen above (cf. (1)-(4)), a D/F-expression seems to "compete" with the object-DP for licensing by the verb, a situation which precisely gives rise to the verb-copying construction:

(24a) Ta kan dianshi kan-le san-ge xiaoshi  
 3SG watch television watch-PERF 3-CL hour  
 'He watched TV for three hours.'

(24b) \*Ta kan-le dianshi san-ge xiaoshi  
 3SG watch-PERF television 3-CL hour

The unacceptability of (1b) (repeated as (24b)) has been standardly explained in terms of Case Theory: since the D/F-expression as a DP needs Case, it cannot co-occur with the object-DP likewise requiring case, given that a verb in Chinese assigns one and only one Case. (cf. Li 1990; for a revised account in terms of multiple Case-assignment by V, cf. Ernst 1996).<sup>9</sup>

While we adopt Li's (1990) claim that all verbs can assign Case in Chinese, the theory of proxy categories allows us to interpret the ungrammaticality of (24b) in a somewhat different light i.e., without having recourse to unique case assignment by the verb. Since according to the SCH only one lexical expression can be licensed per checking domain, either the D/F-expression or the object-DP can be merged in the VP, but not both. Consequently, once the D/F expression is inserted in SpecVP to check off the argumental feature of V, nothing else can be checked any more and no further DP can be merged in the VP.

Unaccusative verbs (referred to by Li (1990: 146) as supporting her main claim that all verbs assign Case in Chinese) provide further evidence in favour of the SCH as the crucial factor rather than unique Case assignment, the SCH precluding any further checking by a second lexical element, X<sup>o</sup> or XP, within the same projection. For as in the case of transitive verbs discussed above, it is impossible to merge both the internal argument of the unaccusative verb and a D/F-expression in the VP. Instead, verb-copying is necessary:<sup>10</sup>

(25a) \*Zhei-ge wuzi fang-le jiu hen chang shijian  
 this-CL room put-PERF alcohol very long time

<sup>9</sup> Curiously enough, Ernst (1996) does not discuss the verb-copying construction at all. Li (1990) only examines it in connection with unaccusative verbs (cf. our discussion immediately below).

<sup>10</sup> Incidentally, as Li (1990 : 146-147) points out, unaccusative verbs in Chinese clearly invalidate Burzio's generalisation according to which a verb that lacks an external argument cannot assign accusative Case, as well as Belletti's (1988) claim that unaccusative verbs assign only oblique Case.

- (25b) Zhei-ge wuzi fang jiu fang-le hen chang shijian  
 this-CL room put alcohol put-PERF very long time  
 'In this room alcohol was stored for a very long time.'
- (26a) \*Xia-le yu wu-tian  
 fall-PERF rain 5-day
- (26b) Xia yu xia-le wu-tian  
 fall rain fall-PERF 5-day  
 'It rained for five days.'

Furthermore, if we now examine the distribution of adverbs and the compatibility with aspectual suffixes we obtain the same result as in the case of transitive verbs i.e., only the second occurrence of the verb can be marked for aspect and be modified by VP-level adverbs:

- (27) Zhei-ge wuzi fang(\*-le) jiu fang-le hen chang shijian  
 this-CL room put-PERF alcohol put-PERF very long time  
 'In this room alcohol was stored for a very long time.'
- (28) Jintian (\*zhi) xia yu zhi xia-le wu-fenzhong  
 today only fall rain only fall-PERF 5-minute  
 'It only rained for five minutes today.'
- (29) Wo jia (\*yijing) lai keren yijing lai-guo  
 1SG home already come guest already come-PERF  
 haoji-ci le  
 many-time PART  
 'There have already been guests at my home very often.'

Li's (1990) claim that all verbs in Chinese assign Case, or, put differently, that in Chinese the V-node has both a categorial as well as an argumental feature is furthermore substantiated by the

syntactic properties of scalar adjectives like *gao* '(to be) tall', *da* '(to be) old' etc.:<sup>11</sup>

(30) Ta bi ni gao liang-chi  
 3SG compared:with 2SG tall 2-foot  
 'He is two feet taller than you.'

(31) Wo bi ni da jiu-sui  
 1SG compared:with 2SG old 9-year  
 'I am nine years older than you.'

(32) Ta pang-le shi-bang  
 3SG fat-PERF 10-pound  
 'He gained ten pounds.'

As illustrated in (30)-(32), scalar adjectives can be followed by a quantified expression serving as a measure phrase which indicates the dimension of comparison ((30) and (31)) or the extent of change as in (32) (giving rise to a "process" reading 'to become fat'). This measure phrase occupies the same syntactic position as the D/F-expression (cf. examples (1a)-(4a) above) and has a similar semantic function.

### 3.2.2. The dissociation of *Aspect* and finiteness

*Aspect* in Chinese is not an indication of the finiteness of the verb, another argument for locating it inside the lexical domain.

Ernst (1994), for example, argues for finiteness as the feature of an always empty node *Inflection* above modals and aspect and treats aspect as a subclass of V. Audrey Li (1985, 41-51; 1990, 17-24) provides evidence for the possibility of a non-finite verb to be marked for aspect:

(33) Wo qing-le Zhangsan chi-guo fan le  
 1SG invite-PERF Zhangsan eat-EXP food PART  
 'I have invited Zhangsan for a meal.' (=Li 1985, (20))

<sup>11</sup> Li (1990) does not consider adjectives in her investigation.

- (34) Wo quan-le ta jie-guo yan  
 1SG persuade-PERF 3SG quit-EXP cigarette  
 'I have persuaded him to stop smoking.' (= Li 1985, (22))

(33) and (34) illustrate that in a control structure both the verb in the matrix clause and in the embedded non-finite clause can carry an aspectual suffix.

The dissociation of aspect and finiteness in Chinese is reflected in the architecture of the VP where the functional category *Aspect* is projected within the VP, more precisely between two verbal projections (cf. already Travis (1992) for such a proposal).<sup>12</sup> Since *Aspect* is merged downstairs in the lexical domain and the argumental feature of V is checked off by the D/F-expression, the V-node has to be re-introduced, Chinese lacking V→T movement. It is with respect to these correlated properties that Chinese differs drastically from Indo-European inflected languages (Alain Rouveret, p.c.).

This characterization of Chinese may also help us to understand why other languages do not have recourse to verb-copying, although they often treat D/F-expressions in the same way as objects

<sup>12</sup> Sybesma (1999, ch. 3) equally argues against perfective *-le* as a functional head and in favour of *-le* being located in the VP. However, his approach is completely different from the one proposed here. In particular, he claims that *-le* is a resultative predicate which heads a small clause (XP) containing another small clause (YP) with the (surface) object-DP as its subject and an empty predicate 'finished'. Accordingly, a sentence like (i) is assigned the structure in (ii):

(i) Zhangsan kan -le yi-ben shu (Sybesma 1999, (22a))  
 Zhangsan read-PERF 1 -CL book  
 'Zhangsan read a book.'

(ii) Zhangsan [<sub>VP</sub> kan [<sub>XP</sub> [<sub>X°</sub> le] [<sub>YP</sub> shu [<sub>YP</sub> Ø ]]] (ibid., (38))

"[...] *le* means 'realize' and [...] it has this meaning when it heads the XP, i.e., Realization *le*, in which case it predicates of a state which results from an activity, and what *le* expresses is that this state 'has realized' ". (Sybesma 1999 : 83-84)

"Finally, as far as the distribution of *le* is concerned, we conclude that it is explained quite straightforwardly once we assume that it comes from somewhere deep, and it only gets to matrix verb level by raising and incorporation." (ibid., p. 95)

(e.g. Russian, Finnish, Korean; cf. Ernst 1996). In other words, the crucial point is not the isolated fact that D/F-expressions need Case in Chinese. Rather, it is the conjunction of several properties which makes the recourse to verb copying necessary in Chinese.

### 3.3. Summary of the results obtained so far

Our analysis of the Chinese verb-copying construction in terms of Nash & Rouveret's theory demonstrates that what had previously been analysed as the first V-bar is in fact not even a constituent. Instead,  $V_1$  is a proxy category projected above the lexical domain and the object-DP is located in the specifier position of the VP below. *Aspect* is shown to be projected inside the lexical domain and accordingly has no bearing on finiteness. A D/F-expression – though not being subcategorized for – is directly merged with the verb (resulting in its postverbal position) because like the object it contributes to the event type of the entire VP. D/F-expressions are thus in sharp contrast to temporal adverbials of the type *jintian* 'today', *san-dianzhong* 'at three o'clock', *xia-ge xingqi* 'next week' etc. indicating the point of time at which the event takes place; pertaining to the entire sentence they are allowed in preverbal position only and barred from the postverbal position. This illustrates that the syntax/semantics correspondences in Chinese are rather neat, the pre- vs postverbal distribution of constituents providing a clue to what role they play with respect to the semantic composition of the event.

## 4. THE *ba*-CONSTRUCTION VS THE VERB-COPYING CONSTRUCTION

In the present section, we will compare the verb-copying construction to the *ba*-construction, because at first sight they look deceptively similar (compare e.g. (37a) with (37b)).

Since the *ba*-construction is one of the most extensively studied phenomena in Chinese linguistics, we will not even attempt to give an overview of the existing literature (cf. Mei 1978, 1980;

Huang 1982, 1983; Audrey Li 1990, Takahashi 1997, Sybesma 1999, Shen 2002 among others). What is important for our purpose here is that in the *ba*-construction, both the object-DP and the predicate are subject to constraints: the DP has to be definite or specific, and the predicate must possess a high degree of *Transitivity* (in the sense of Hopper & Thompson 1980) i.e., designate an event expressing a certain amount of impact on the object.<sup>13</sup> It is important to stress the fact that a definite/specific object-DP of a predicate with a high degree of *Transitivity* need not automatically appear preverbally introduced by *ba*, but can equally appear in postverbal position i.e., in the canonical object position.<sup>14</sup>

(35) Ta pian -le Lisi/ wo / ta-de pengyou  
3SG cheat-PERF Lisi/ 1SG/ 3SG-SUB friend

(36) Ta ba Lisi/ wo / ta-de pengyou pian-le  
3SG BA Lisi/ 1SG/ 3SG-SUB friend cheat-PERF  
'He cheated Lisi/me/his friends.'

Consequently, the *ba*-construction is not comparable to the obligatory *object shift* observed in e.g. Scandinavian languages where the object moves to SpecAgroP and where this object

<sup>13</sup> The requirement that the *ba*-object be sufficiently affected by the event is illustrated in the following minimal pair (taken from Li Linding 1987 : 31):

(i) Ta ba pengzi chai-le (ii) \*Ta ba pengzi da -le  
3SG BA hut tear:down-PERF 3SG BA hut build-PERF  
'He tore down the hut.' ('He built the hut.')

<sup>14</sup> For reasons of space, we will not discuss this optionality here. Suffice it to point out that the constraints holding in the *ba*-construction lead to the interpretation of bare NPs as definite when they occur in the preverbal position introduced by *ba*:

(i) Ta reng-le shu le  
3SG throw:away-PERF book PART  
'He threw a book/books away.'  
(ii) Ta ba shu reng-le  
3SG BA book throw:away-PERF  
'He threw the book(s) away.'

Also cf. example (i) in the preceding note.

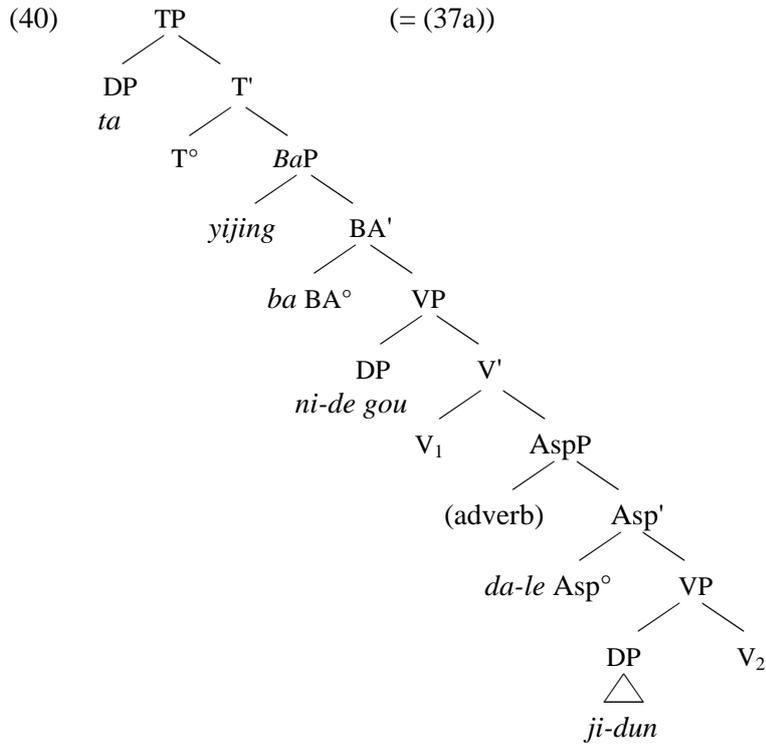
fronting is contingent on verb raising (cf. Holmberg 1986, Ferguson 1996 among others).

Let us now contrast the *ba*-construction and the verb-copying construction (for ease of comparison, a *ba*-construction containing a D/F-expression is chosen where possible):

- (37a) Ta [yijing ba ni-de gou da-le ji-dun]  
 3SG already BA 2SG-SUB dog beat-PERF several-time  
 'He has already beaten your dog several times.'
- (37b) Ta da gou [<sub>AspP</sub> yijing da-le ji-dun]  
 3SG beat dog already beat-PERF several-time  
 'He has already beaten dogs several times.'
- (38a) Ta neng lianxu ba zhe-zhong wenti xiang  
 3SG can continuous BA this-kind problem think  
 ji-ge xiaoshi  
 several-CL hour  
 'He can think about this kind of problem for hours without a break.'
- (38b) Ta (\*neng lianxu) kan shu neng lianxu kan  
 3SG can continuous read book can continuous read  
 san-ge xiaoshi  
 3 -CL hour  
 'He can read for three hours without a break.' (= (16))
- (39a) Ni keyi ba shu fang zai zher  
 2SG can BA book put at here  
 'You can put the book down here.'
- (39b) Ni (\*keyi) kan dianshi keyi kan ban-ge xiaoshi  
 you may watch television may watch half-CL hour  
 'You may watch television for half an hour.' (= (17))

The distribution of VP-level adverbs like *yijing* 'already' and of auxiliaries clearly indicates that unlike the first verb in the verb-copying construction, *ba* is merged within the VP, which obviously must be more complex than the VP in the verb-copying construction, precisely in order to host *ba*.

Concerning the analysis of the *ba*-construction illustrated in (40), we can see that up to the re-introduced V-node in whose specifier the object-DP *ni-de gou* 'your dog' is inserted, it displays the same architecture as the verb-copying construction (cf. (21b) above). In the next step, however, no proxy is projected to host the fissioned categorial feature of the (re-introduced) V, because a head is available in the numeration, namely  $BA^\circ$ . This head expresses something like agentive voice and is a lexical category bearing a categorial (verbal) feature as well as an argumental (agent-related) feature. While the categorial feature of  $BA^\circ$  is checked by adjoining the lexical item *ba*, its argumental feature cannot be checked off within that same domain, due to the SCH. It fissions onto *Tense* and – together with the [D] feature of *Tense* – is checked by merging the lexical subject-DP *ta* 'he' in SpecTP.



Unlike the first verb in the verb-copying construction, *ba* is not a proxy, i.e. it is not a contentless F-category, but an intrinsically contentful head with features of its own. What appears on the surface as the object of *ba* in fact occupies the specifier position of the complement VP of *ba*, viz *ba* and the following DP do not form a constituent.<sup>15</sup> This is a desired result, because the DP

<sup>15</sup> With respect to the non-constituency of *ba* and the object-DP, we obtain the same result as Takahashi (1997) who inspired our account. But the remainder of her analysis does not sustain a closer examination. For as we have demonstrated, *ba* occupies the highest position in the VP and manner adverbs are allowed following the *ba*-DP (cf. (46) below). In Takahashi's (1997) analysis (summarized in (i)), however, *ba*, which heads its own projection (with the object-DP in the

generally called "*ba*-object" is selected and assigned the role of patient by the VP, not by *ba*.

The analysis proposed here contrasts sharply with the widespread assumption that *ba* is a preposition (cf. e.g. Huang 1982, 1991, 1999; Li 1990 among others). However, besides the problem of how to reconcile the selectional relationship between the so-called *ba*-object and the following VP with a prepositional status of *ba* (giving rise to a structure like *Wo* [<sub>VP</sub> *yijing* [<sub>VP</sub> [<sub>PP</sub> *ba ni-de gou*] *da-le ji-dun*]] for (37a)) there also exists an array of syntactic and semantic phenomena incompatible with the prepositional status of *ba*.

First of all, unlike PPs, *ba* plus the following DP cannot be topicalized and is confined to the position below the subject; under the analysis of *ba* as a higher verbal head taking a VP-complement, this restriction obtains automatically:

- (41) Gei Mali, wo zuo -le hunduntang,  
for Mary, 1SG make-PERF wantan:soup  
gei Amei, wo zuo -le chaomian  
for Amei 1SG make-PERF fried:noodles  
'For Mary, I made wantan soup, for Amei, fried noodles.'
- (42) Gen Li laoshi, women shang shuxue  
with Li teacher 1PL attend mathematics  
gen Zhang laoshi, women shang wulixue  
with Zhang teacher 1PL attend physics  
'With teacher Li, we have mathematics lessons,  
with teacher Zhang, we have physics lessons.'

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specifier position of its VP-complement), moves to the head *Transitivity* (cf. Collins 1997: 15):

- (i) [<sub>TP</sub> Subject-DP [<sub>TRP</sub> *ba*<sub>i</sub> [<sub>BaP</sub> Object-DP *t*<sub>i</sub> [<sub>VP</sub> V ]]]]

There is simply no position for an adverb within TrP (equivalent to *vP*) and Collins (1997 : 37) excludes adjunction of an adverb to TrP itself. Accordingly, adverbs between the subject and the *ba*-phrase as well as manner adverbs following the *ba*-phrase would be wrongly ruled out. Furthermore, Takahashi regards the *ba*-construction as an instance of obligatory *object shift* which factually is not correct, as pointed out above (cf. (35)).

- (43) \*Ba shu , ni keyi fang zai zhuo-shang (cf. (39a))  
 BA book 2SG can put at table -top  
 ba dayi, ni keyi fang zai chuang-shang  
 BA coat 2SG can put at bed -top  
 ('The books, you can put on the table, the coat, you can put  
 on the bed.')

Second, it is possible to conjoin two occurrences of preverbal object plus VP under one *ba*:<sup>16</sup>

- (44) Ni zui hao ba [[Zhangsan jieshao gei Lisi]  
 2SG most good BA Zhangsan introduce to Lisi  
 [Wangwu jieshao gei Laoli]]  
 Wangwu introduce to Laoli  
 'You'd better introduce Zhangsan to Lisi,  
 and Wangwu to Laoli.'

While for *ba* as a higher head it does not make any difference whether its complement VP is a conjunction of two VPs or a single VP, the structure in (44) would be difficult to explain if *ba* and the immediately following DP formed a constituent, as the prepositional adjunct analysis of *ba* holds.

Last, but not least, we can now dispense with the stipulation that *ba* does not "count" for calculating scope relations nor for determining the controller of an empty category. This stipulation was necessary in order to allow for the DP preceded by *ba* to c-command elements contained in the VP below (cf. Huang 1983: 80, note 4), irrespectively of the PP-node dominating it. Likewise, in a structure like (45) where the *pro*-subject of *hen lei* 'to be tired' is controlled by *ma* 'horse' rather than by the matrix subject

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<sup>16</sup> This observation is inspired by Li (1990 : 189-190); our conclusion, however, is the exact opposite of hers, because Li analyses *ba* a preposition.

*Zhangsan*, only the DP following *ba* rather than the entire PP has to be taken into account:<sup>17</sup>

- (45) Zhangsan ba ma qi de hen lei (Huang 1992, (11))  
 Zhangsan BA horse ride DE very tired  
 'Zhangsan rode the horse tired.'

Our approach thus joins the growing consensus that instead of being assigned prepositional status, *ba* is best analyzed as a higher head, either as a verb (Ross 1991, Sybesma 1999, Bender 2000) or as a functional category (Sybesma 1992, Takahashi 1997), though it differs from the above-mentioned studies in quite substantial details.<sup>18</sup>

From a semantic point of view, the AspP in (40) i.e., *da-le ji-dun* 'beat PERF several-time' consisting of the suffixed verb and the D/F-expression functions as a complex predicate with respect to *ni-de gou* 'your dog' as its patient. It still has to be worked out how to express this relation in Nash & Rouveret's framework. It might either be encoded in the feature make-up of the re-introduced V-node above AspP (perhaps in the form of an augmented argumental feature which at the same time captures the restrictions on the *ba*-DP) or it might be derived from the architecture of the entire VP, in

<sup>17</sup> "Assuming that a case-marker (like *ba*) does not increase the depth of embedding in phrase structure, a preverbal object is closer than a subject to the resultative clause." (Huang 1992 : 6)

<sup>18</sup> The analysis presented here is also supported by evidence from diachronic studies. In his work on diachronic reanalysis, Whitman (2000) argues that only the category label of an item changes, whereas the syntactic structure itself is left intact and the c-command relations between constituents are maintained (conservancy of structure). Given the fact that the source structure for the change of the verb *ba* 'hold, grasp' to a higher head looking like a preverbal object marker on the surface is of the object sharing type with *ba* as the main verb, the principle of conservancy of structure predicts that the categorial change *ba* has undergone cannot be one of V-to-P. For such a change would involve a major change in the hierarchical relations: the former main verb becomes an adjunct (PP) of the complement VP whose head then becomes a main verb. Instead, *ba* continues to select a VP as its complement. The main lexical change *ba* has undergone is that it no longer assigns a theta-role.

particular from the fact that everything including *ba* constitutes the lexical domain.

Nothing, in particular no adverb can intervene between *ba* and the object DP, because the specifier position of the re-introduced V-node is occupied by the object-DP itself. Adverbs can, however, be merged in the specifier positions of *BaP* and *AspP*, respectively, because these positions are no checking positions. For semantic reasons, only manner adverbs are allowed in *SpecAspP* and they have a strict ad-VP interpretation in this position, thus contrasting nicely with the interpretation of manner adverbs when preceding *ba* (cf. Tsai Mei-chih 1995: 166):<sup>19</sup>

- (46) Ta (henxinde) ba Zhangsan (henxinde) paoqi-le  
 3SG cruel-hearted BA Zhangsan cruel-hearted abandon-PERF  
 'She heartlessly left Zhangsan.' (Tsai Mei-chih 1995 : 166)

When the adverb *henxinde* is in front of *ba*, the subject *ta* 'she' is described as heartless in general, while the adverb in the immediately preverbal position expresses that only her act of leaving Zhangsan was heartless. Similarly, exclusively agent-oriented adverbial expressions like *yong gunzi* 'with a club' can only precede, but not follow *ba*:

- (47) Ta yong gunzi ba Lisi (\*yong gunzi) dashang-le  
 3SG with club BA Lisi with club hurt-PERF  
 'He hurt Lisi with a club.' (Tsai Mei-chih 1995 : 166)

To analyse the VP in the *ba*-construction as a kind of complex predicate goes back to Thompson (1973) and was brought

<sup>19</sup> For some speakers, adverbs like *zhi* 'only', *yijing* 'already' etc. are also acceptable immediately before the verb, provided an explicit contrast is established:

- (i) Ta ba gou zhi xi-le yi-ci, wo ye yao zai xi yi-ci  
 3SG BA dog only wash-PERF 1-time 1SG also want again wash 1-time  
 'He has washed the dog only once, I also want to wash it once.'

into a more general perspective by Huang (1982).<sup>20</sup> Both Huang (1982) and Thompson (1973) illustrate their analyses using complex predicates consisting of a verb plus its object (called *inner object* in contrast to the patient of the entire verb-object phrase i.e., the *outer object*) like e.g. *bo pi* 'to peel skin', *ti dong* 'to kick hole', *mian zhi* 'to avoid duty' = to dismiss', some of which are lexicalised:

- (48) Ta ba juzi bo-le pi  
 3SG BA tangerine peel-PERF skin  
 'He peeled the tangerine.'
- (49) Ta ba zhimen ti-le yi-ge dong  
 3SG BA paper:door kick-PERF 1-CL hole  
 'He kicked a hole in the paper door.'
- (50) Laoban ba ta mian-le zhi  
 boss BA 3SG avoid-PERF duty  
 'The boss dismissed him.'

What we propose is to extend this analysis to VPs made up of a verb and a D/F-expression. The analysis of the latter as complex predicates on a par with verb-object phrases like *ti dong* 'to kick hole', *bo pi* 'to peel skin' is confirmed by the possibility of passivizing the patient, exactly as observed in the case of V-O phrases:

- (51) Ni-de gou bei ta da-le ji-dun  
 2SG-SUB dog PASS 3SG hit-PERF several-time  
 'Your dog was several times beaten by him.'

<sup>20</sup> Thompson (1973) had in fact a more accurate knowledge of the data than quite a few researchers after her, who wrongly believe that this kind of *retained object construction* is only possible if the inner and the outer object are in a "part-whole" or a "possessee - possessor" relation (also cf. Paul 1988 for ample evidence against this misconception). As Thompson (1973 : 215) states: "It should be noted that structure (30) does not reveal a relationship between the 'inner' and the 'outer' object themselves, but rather between the 'outer object' and a 'complex verb'. This is because [...] there is no consistent relationship between the two objects in the various examples of retained object constructions."

- (52) Juzi bei ta bo-le pi le  
 Tangerine PASS 3SG peel-PERF skin PART  
 'The tangerine was peeled by him.'

(For a detailed analysis of complex predicates in the form of V-O phrases in Chinese, cf. Paul 1988.)

The discussion of the *ba*-construction has demonstrated that everything - including *ba* itself - is merged in the lexical domain. In contrast to the verb-copying construction, the *ba*-construction does not involve any proxy category; *ba* itself is a contentful lexical head.

## 5. CONCLUSION

Our re-examination of the verb-copying construction on the basis of Nash & Rouveret's (1997, 2002) theory of proxy categories has led us to equally reconsider the existing analyses of the *ba*-construction and aspect.

Taking the *Single Checking Hypothesis* as a starting point (by which the licensing of both the D/F-expression and the object-DP in the same projection is excluded), we have argued that the verb-copying construction cannot be reduced to a single property of Chinese (e.g. in the form of a Case requirement for D/F-expressions), but is rather due to the interaction of several defining characteristics of Chinese: the argument-like behaviour of D/F-expressions, the fact that *Aspect* is merged in the lexical domain and the lack of V→T movement. As a result, the first occurrence of the verb has been shown to be adjoined to a (verbal) proxy category above the lexical domain and not even to form a constituent with the object-DP.

Unlike the verb-copying construction, the *ba*-construction does not involve any proxy category. As evidenced by the distribution of adverbs and auxiliaries, *ba*, analysed as a lexical head expressing agentive voice, and its VP-complement constitute the lexical domain. The DP following *ba* and commonly referred to

as "*ba*-object" occupies the specifier position in the VP-complement of *ba*; this reflects the dependency of the DP on the complex predicate expressed by the verbal projection below *ba*.

Though several questions remain open for further research, it seems evident that Nash & Rouveret's (1997, 2000) theory of proxy categories allows us to understand the precise differences between the *ba*-construction and verb-copying, and also offers an analysis of these two constructions which relates them to the general properties of the grammar of Chinese.

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