

Standard vs. sideward movement in verb copying*

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This paper examines three subtypes of the verb copying construction in Chinese. We begin by looking at Cheng's (2007) analysis of the resultative verb copying construction, according to which both standard movement and sideward movement are required to account for the verb copying construction (VCC). Cheng suggests that the same analysis can be applied to verb copying with non-resultative phrases; this paper explores this claim by examining in greater detail two other subtypes of the VCC (verb copying involving manner phrases and duration/frequency phrases), looking at some differences between VCCs containing indefinite NP objects and those containing definite NP objects. In the context of the definite/indefinite object asymmetry, we discuss whether both types of movement are in fact motivated; that is, we examine whether both standard and sideward movement are required for a unified analysis of all subtypes of the VCC in Chinese.

1. Introduction

In this paper, I will discuss three subtypes of the verb copying construction (VCC) in Chinese, providing support for Cheng's (2007) analysis of the VCC, according to which both standard movement and sideward movement are required to properly account for the three subtypes. I will begin by presenting Cheng's (2007) analysis of the VCC, and extend her account in greater detail to manner VCCs. Cheng proposes that verb copying involving indefinite NPs requires sideward movement. I suggest that a unified analysis should ideally capture the facts for all types of VCCs, and that looking at VCCs involving frequency/duration phrases (which crucially include aspectual marking) provides further evidence that both a standard and a sideward movement analysis are required to account for the lot of VCCs in Chinese. The layout of the paper is as follows. In section 1, I introduce the three subtypes of the VCC discussed in this paper. Section 2 presents Cheng's analysis of resultative VCCs. In section 3, I pursue Cheng's suggestion that the same analysis can be applied to manner VCCs, and suggest that sideward movement and standard movement cannot be distinguished by looking exclusively at

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manner VCCs. In section 4, I present data bearing on the final subtype of VCCs, those involving frequency and duration phrases, and discuss how these might help us to distinguish standard and sideward movement. Finally, section 5 summarizes and concludes the discussion.

2. Three subtypes of the VCC

In Mandarin Chinese, non-referential, generic activity readings are often achieved transitively:

- (1) Lisi zai chang ge
Lisi PROG sing song
'Lisi is singing'
- (2) John zai du shu
John PROG read book
'John is reading'

The verbs that appear with generic objects are generally the Chinese equivalents of unergative or optionally transitive verbs in English, e.g., *eat, read, sing, speak, write, drive, run, walk*, etc. These verbs appear syntactically transitive in Chinese, but the bare noun complement is semantically an implicit argument.¹ There is no specific song that is being sung in (1), nor is there a particular book that is being referenced in (2).

Manner phrases, which are preceded by a *de* particle, also follow the verb:

- (3) ta pao de hen kuai
he run DE very fast
'He runs very fast'
- (4) ta chang de hen hao
he sing DE very good
'He sings very well'

It is impossible to pronounce both an object NP and a *de*-manner phrase after the verb:

- (5) *ta pao bu de hen kuai
he run step DE very fast
'He runs very fast'

¹ When the NP object is definite, it is possible to have both the NP and the duration/frequency phrase immediately following the verb. This will be further discussed in section 4.

- (6) *ta chang ge de hen hao
 he sing song DE very good
 'He sings very well'

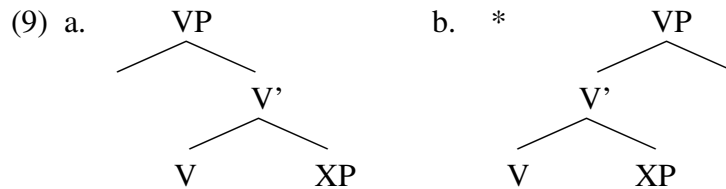
Yet another type of phrase that cannot immediately follow the verb in addition to an indefinite bare noun object is the duration phrase²:

- (7) ta du-le (*shu) san-ge xiaoshi
 he read-PERF book 3-CL hour
 'He read for three hours'

These restrictions are consistent with the general observation that in Chinese, only one constituent is pronounceable after the verb:

- (8) Phrase Structure Constraint (PSC) (Huang 1984)
 Within a given sentence in Chinese, the head (the verb or VP) may branch to the left only once, and only on the lowest level of expansion.

The PSC allows for the branching in (9a) but not in (9b) (Cheng, 2007:153):



Cheng (2007) points out that verb copying has often (though not necessarily correctly) been thought of as a strategy to avoid pronouncing two constituents after the verb. Verb copying generally arises when in addition to an object NP complement, the verb is also followed by a resultative phrase, manner phrase, duration phrase, or frequency phrase.

3. Cheng (2007): Verb copying with resultative phrases

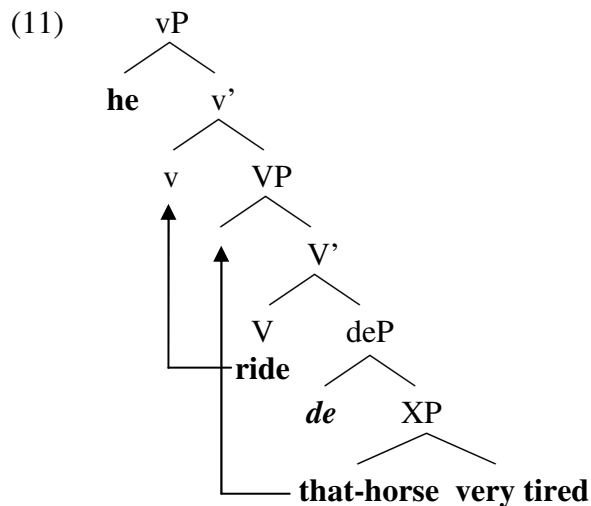
3.1. Resultative VCCs with definite NP objects

Let us begin by looking at resultative VCCs involving definite NP objects. Cheng observes that (10) is ambiguous between an 'object-result' reading and a 'subject-result' reading. She associates the two readings with different derivations.

² When the NP object is definite, it is possible to have both the NP and the duration/frequency phrase immediately following the verb. This will be further discussed in section 4.

- (10) ta qi nei-pi ma qi de hen lei
 he ride that-CLhorse ride DE very tired
 (a) ‘He rode the horse and the horse got very tired’ (object-result)
 (b) ‘He rode the horse and became tired as a result’ (subject-result)

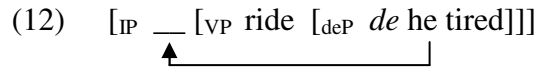
First, let us consider the ‘object-result’ reading of the sentence in (10), in which the object of *riding*, e.g., the horse, is the subject of the resultative small clause. The resulting reading is that it is the horse that was ridden that became tired as a result of the riding event. Cheng proposes the following derivation for (10a), represented in (11). The NP *that horse* starts off in the subject of the resultative small clause, and raises to the Specifier of VP.³ The verb *ride* raises from V to small *v*. Ordinarily, copy deletion of one of the verb copies (Nunes’ (2004) Chain Reduction) would have to occur in order to yield a linearizable structure; but in this case, fusion of V and the *de* particle results in two distinct copies of the verb. Both copies of the verb are thus able to be spelled out, yielding the surface form in (10).



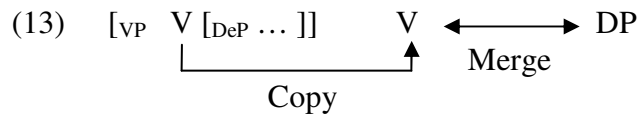
Now let us consider the ‘subject-result’ reading of (10), according to which it is the agent of *riding* that is tired as a result of the riding event. Cheng suggests that the subject NP *he* is first merged in the resultative *de*-clause; this is what yields the interpretation that it is the rider of the horse that is tired. The pronoun *he* then raises to subject position, e.g., the Specifier of IP. As for what happens to the NP object *that horse*, Cheng follows Hoekstra and Mulder (1990) in their suggestion that there is an

³ Cheng assumes that *that horse* moves to Spec,VP as would occur in the *ba*-construction; in other words, (6a) is equivalent to the *ba*-construction: *ta ba nei-pi ma qi de hen lei* ‘he *ba*-that-horse ride *de* very tired’.

ergativity shift in the case of resultatives; that is, a non-ergative verb can become ergative with the addition of a resultative clause.⁴ Extending this unaccusativity shift to the case in (10), she suggests that because the verb *ride* becomes unaccusative with the addition of the resultative clause, there is no vP layer, nor is there a SpecVP to host any object-like argument, e.g., *that horse*⁵:



Since the object NP cannot be generated in the Specifier of VP, we must appeal to sideward movement (Nunes, 2004) to generate the Verb-Object sequence (Cheng, 2007:160)⁶:



The verb *qi* ‘ride’ is morphologically fused with the *de* particle. This allows the spellout of the two non-identical copies of the verb, as in (14).⁷

⁴ In what follows, I will refer to this phenomenon as *unaccusativity shift*. According to Cheng, unaccusativity shift of the matrix verb is optional in the case of resultative *de*-clauses (Cheng 2007:163); when it does occur, a single noun phrase starts off as an internal argument, e.g., inside the resultative small clause, and ends up as the matrix subject (if there is no causer). For example, when the subject NP is base-generated in the resultative clause (as in (12)), unaccusativity shift may occur, in which case sideward movement is forced (in order to merge the object NP). For reasons of space, I leave aside a more detailed discussion of unaccusativity shift in Chinese; what is crucial here is that Cheng uses unaccusativity shift to force sideward movement in (14).

⁵ Cheng notes however that it is possible to add a causative vP layer. Given this, unaccusativity shift can also occur in sentences that have an object-result reading, as seen below (Cheng’s (28)):

- (i) ta qi de ma hen lei
 he ride DE horse very tired
 ‘He rode the horse and as a result the horse is tired’

Cheng analyzes the verb in (i) as having undergone unaccusativity shift, with the single argument (*horse*) in the resultative clause; the matrix subject is interpreted as the causer argument.

⁶ For Cheng, sideward movement is triggered by the need to check a theta-feature, which if treated as a formal feature, satisfies the Last Resort condition on Copy.

⁷ Note that the following operations must be ordered: Copy > *de*-fusion > Spellout.

- (14) ta_i [[_{VP1} qi nei-pi ma] [_{VP2} qi de t_i hen lei]]
 he ride that-CL horse ride DE very tired
 ‘He rode the horse and became tired as a result’

To summarize, in accounting for the two readings in (10), Cheng appeals to standard movement of the verb to account for the object-result reading, and sideward movement of the verb to account for the subject-result reading. Crucially, both derivations yield the same surface form; fusion of one of the verb copies and the *de* particle results in two distinct verb copies in both cases. We thus get the surface VCC form in (10).

3.2. Resultative VCCs with indefinite NP objects

Now let us consider Cheng’s analysis of resultative VCCs involving indefinite objects. Note that these constructions are not ambiguous in the way that resultative VCCs with definite objects are. That is, the sentence in (15) only has the ‘subject-result’ reading (Cheng, 2007:159):

- (15) ta qi ma qi de hen lei
 he ride horse ride DE very tired
 ‘He got tired riding (a horse)’

In contrast to (10), (15) involves a bare noun as the object of the first verb, and the V-Obj combination yields an activity reading (Cheng, 2007:159). Cheng crucially assumes that due to the unaccusativity shift induced by the addition of the resultative clause, there is no Specifier of VP available to host the bare noun. The bare noun thus cannot occupy Specifier of VP, and only the subject-result reading (derived via sideward movement) is possible:

- (16) ta_i [[_{VP1} qi ma] [_{VP2} qi de t_i hen lei]]
 he ride horse ride DE very tired
 ‘He got tired riding (a horse)’

Briefly summarizing then, Cheng appeals to two different derivations in accounting for the different readings associated with resultative VCCs. In the case of VCCs containing definite NP objects, the object-result reading is derived via standard movement, while the subject-result reading is derived via sideward movement. In the case of resultative VCCs involving indefinite NP objects, only the subject-result reading is possible, and this is likewise derived via sideward movement.

3.3. Verb copying with manner phrases

Cheng also suggests that the same analysis can be applied to verb copying with manner phrases. As we saw in section 1, when we have both an object NP and a manner adverb following the verb, verb copying is obligatory, whether the object NP involved is definite or indefinite:

(17) ta du shu *(du) de hen kuai
 he read book read DE very fast
 'He reads very fast'

(18) ta du nei-ben shu *(du) de hen kuai
 he read that-CL book read DE very fast
 'He read(s) that book very fast'

Cheng adopts Huang's (1988) argument that the manner adverbial *de*-clause should be treated as a type of secondary predication, e.g., *very fast* in (19) is predicated not of the subject or object NP, but rather of the main predicate (the event or activity of reading the novel):

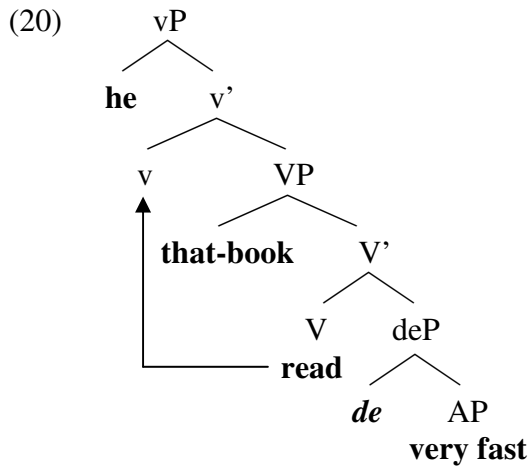
(19) [_{VP} novel read [*de* very fast]] (Cheng, 2007:166)

Since the manner *de*-clause is not an inner argument of the verb, it cannot trigger unaccusativity shift (Cheng, 2007:166). Moreover, the object *novel* cannot start off in the manner *de*-clause since the adverbial *very fast* is not predicated of it. Note that in Cheng's analysis, there is a crucial assumption that indefinite noun phrases cannot be merged in the Specifier of VP because the SpecVP position is reserved for specific, affected objects (Diesing, 1997, Marantz, 1993, cited by Cheng, 2007).

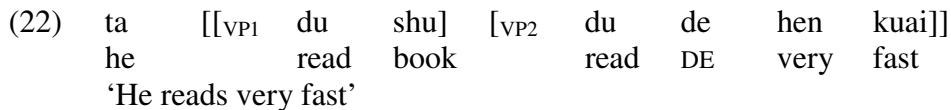
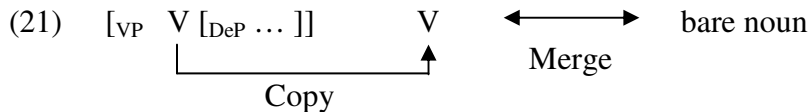
Cheng does not discuss manner VCCs at length, but suggests that: (i) manner VCCs involving definite NP objects are derived via standard movement; (ii) manner VCCs with indefinite NP objects are derived via sideward movement. In the next section, we will turn to a more detailed examination of how Cheng's proposed analysis of manner VCCs can be carried out, and discuss whether both standard and sideward movement are necessary to account for manner VCCs.

4. Definites and indefinites in manner VCCs

First, consider manner VCCs with definite NP objects. These are analyzed as involving standard movement of the verb. As suggested by Cheng, fusion occurs between V and the *de* particle, and both copies of the verb are spelled out, giving us the surface string in (18).



Now consider manner VCCs with indefinite NP objects. The verb first merges with the *de*-manner phrase; it then copies to check the θ -feature of *book*, as in (21), giving us the surface form in (22):



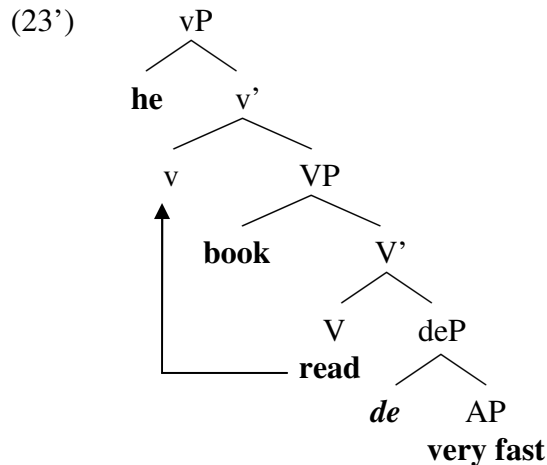
Fusion occurs between the verb in VP2 and the *de* morpheme, resulting in the spellout of two distinct verb copies, giving us the surface string in (17).

A fair objection at this point in the discussion is to question whether sideward movement is actually necessary to analyze manner VCCs at all. Given that there is no unaccusativity shift involved in manner VCCs, it appears that the only thing stopping us from adopting a single unified analysis for manner VCCs with definites and those with indefinites is the assumption that the Spec,VP position cannot host non-specific, non-affected indefinite objects. Whether we adopt standard or sideward movement, there is fusion of one of the verb copies and the *de* particle, such that both verb copies are spelled out. This accounts for the apparent 'obligatoriness' of verb copying regardless of whether the NP object is definite or indefinite. In other words, a standard movement analysis can just as well take care of the sentence in (17).

To pursue this particular line of reasoning, it is crucial that we dispense with the assumption that indefinite objects cannot occupy SpecVP; once we are rid of this assumption, nothing stops us from adopting the exact same analysis for manner VCCs with definites and indefinites. First, the verb merges with the manner adverbial. The

bare noun is then merged into the SpecVP position. The verb then raises to little *v*. Fusion between V and the *de* particle results in two distinct copies of the verb, and both copies are spelled out, giving us the surface form for (17), repeated below as (23):

- (23) ta du shu du de hen kuai
 he read book read DE very fast
 'He reads very fast'



In other words, barring the assumption that indefinites cannot occupy SpecVP, we do not need two separate analyses to account for manner VCCs.

Before we abandon the sideward movement analysis however, we ought to consider the goal of our present study of VCCs in Chinese. An overarching consideration in our exploration of the VCC is that we ideally want a unified analysis for all three subtypes of the VCC. If we restrict ourselves to the analysis of manner VCCs, it is nearly impossible to distinguish between standard and sideward movement analyses; there is only one interpretation involved, and verb copying is obligatory whether the NP object is definite or indefinite. Crucially, morphological fusion between V and the *de* particle obliterates any insight into whether the indefinite manner VCCs are derived via standard or sideward movement. Given our desire to articulate a unified account of all three kinds of VCCs in Chinese, we cannot restrict ourselves by looking only at one subtype of the VCC, particularly given the confound caused by morphological fusion.

Before we abandon the hypothesis that both standard and sideward movement are necessary to account for VCCs (particularly manner VCCs), we ought to consider a third subtype of the VCC. Duration/frequency VCCs will be particularly insightful because like resultative VCCs, they *do* exhibit an asymmetry between definite and indefinite objects.

5. Copying with duration/frequency phrases

Verb copying with duration/frequency phrases is optional when the object NP is definite, but obligatory when the object NP is indefinite:

(24)a. ta du-le nei-ben shu san ci
 he read-PERF that-CL book three times
 ‘He read that book three times’

b. ta du nei-ben shu du-le san ci
 he read that-CL book read-PERF three times
 ‘He read that book three times’

(25)a. *ta du-le shu san-ge xiaoshi
 he read-PERF book three-CL hours
 ‘He read for three hours’

b. ta du shu du-le san-ge xiaoshi
 he read book read-PERF three-CL hours
 ‘He read for three hours’

It is somewhat difficult to discuss duration/frequency VCCs without addressing the issue of aspect, since verbs in these constructions are typically marked for perfective aspect. This is likely because duration and frequency phrases tend to modify events that have taken place in the past. Duration phrases typically modify past atelic events that have already been terminated; frequency phrases typically modify past telic events that have already been terminated. In the next section, I briefly lay out my assumptions about perfective aspect and its interaction with duration/frequency phrases. Following this, we will look more closely at VCCs containing duration/frequency phrases.

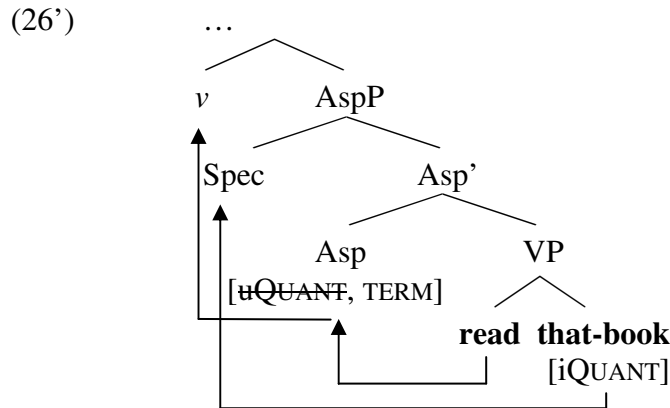
5.1. Duration/frequency phrases and aspect

Let us first consider a regular sentence with a definite NP and perfective aspect marking.

(26) ta du-le nei-ben shu
 he read-PERF that-CL book
 ‘He read that book’

We can represent the derivation for (26) as in (26’). *That book* can be considered a “bounded” argument, since it has an inherent endpoint. According to Ritter and Rosen (2001), a definite NP is associated with bounded event structure and carries an interpretable [QUANTIZATION] feature (essentially measuring out discrete, countable

events); it moves into the Specifier of AspP to check the Asp head's uninterpretable [QUANTIZATION] feature. Checking the [uQUANT] feature on Asp marks the event as bounded. I further assume that the Inner Aspect head in Chinese minimally bears a [TERMINATED] feature, e.g., when Aspect is projected, the verb must raise to Asp, and the event is marked as terminated before utterance time. The Asp head surfaces as the perfective marker *le*. The movement of the definite NP to Spec,AspP and of the verb to Asp thus gives us the surface form in (26), and the interpretation that the bounded reading event was terminated before utterance time.

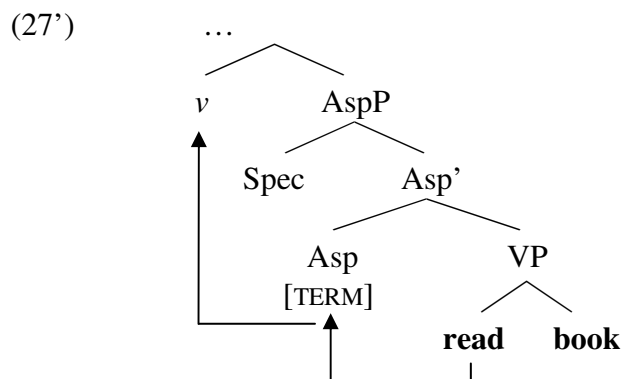


Next, let us consider what happens when the object NP is indefinite.

- (27) ta du-le shu
 he read-PERF book
 'He read (books)'

We can represent the derivation for (27) as in (27'). Here, I follow Ritter and Rosen's assumption that indefinite objects (such as the bare noun in Chinese) do not have a [QUANT] feature and remain in VP. We therefore have two kinds of event structure that can be associated with the perfective marker *le*; on the one hand, unbounded events can be marked with the perfective marker *le*, in which case the event is interpreted as unbounded and terminated before utterance time; on the other hand, bounded events can be marked with the perfective marker *le*, and the event is interpreted as bounded and terminated before utterance time. Crucially, the direct object and the verb together contribute to the interpretation of the event structure.

The bare noun in (27) has no [QUANTIZATION] feature, e.g., is not inherently bounded, and thus does not participate in the interaction with aspect. The verb however raises to the Asp head to be marked as perfective, giving the interpretation that the reading event, though inherently unbounded and atelic, was terminated before utterance time.



Now let's see what happens when we consider both perfective aspect and duration/frequency phrases. Consider a bounded and unbounded event, both terminated before utterance time:

(28) *Bounded event, terminated before utterance time:*

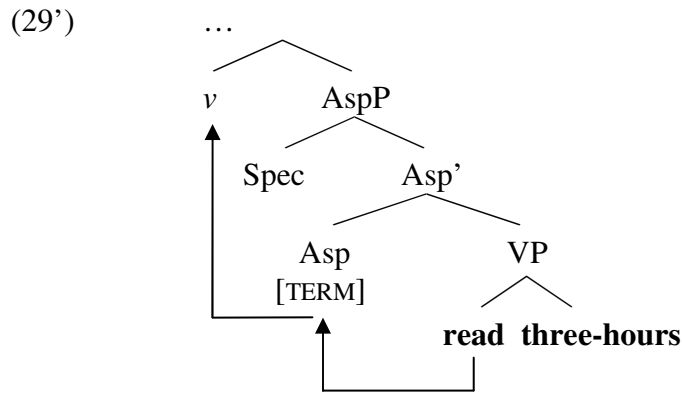
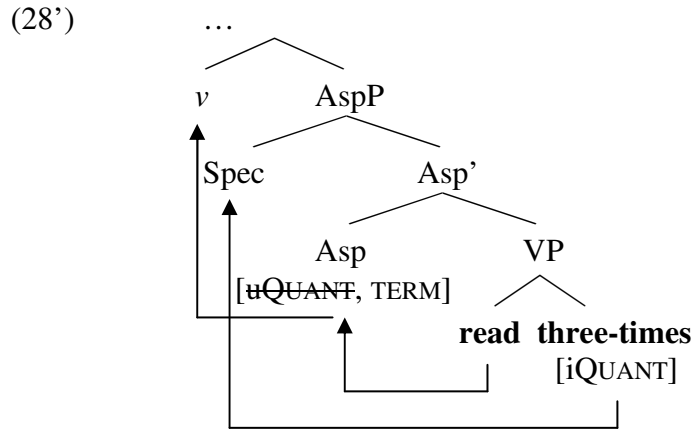
ta du-le san ci
 he read-PERF three times
 'He read (it) three times'

(29) *Unbounded event, terminated before utterance time:*

ta du-le san-ge xiaoshi
 he read-PERF three-CL hours
 'He read for three hours'

The boundedness of (28) is induced by the frequency phrase; that is, the event had an endpoint (which in fact occurred three times). The duration phrase in (29) does not induce such an endpoint; it only indicates that the reading event happened to last for three hours. In other words, frequency/duration phrases distinguish bounded and unbounded event readings just as definite/indefinite NPs do. Definite objects and frequency phrases measure out discrete, bounded events; in contrast, indefinite objects and duration phrases are associated with unbounded events. The frequency phrase carries an interpretable [iQUANT] feature, as its role is to count out discrete, bounded events; the duration phrase does not bear this feature. The corresponding structures for (28) and (29) are as follows⁸:

⁸ I have followed Huang (1991) in treating duration/frequency phrases as being merged within V', e.g., as sisters of V.



5.2. Frequency/duration VCCs

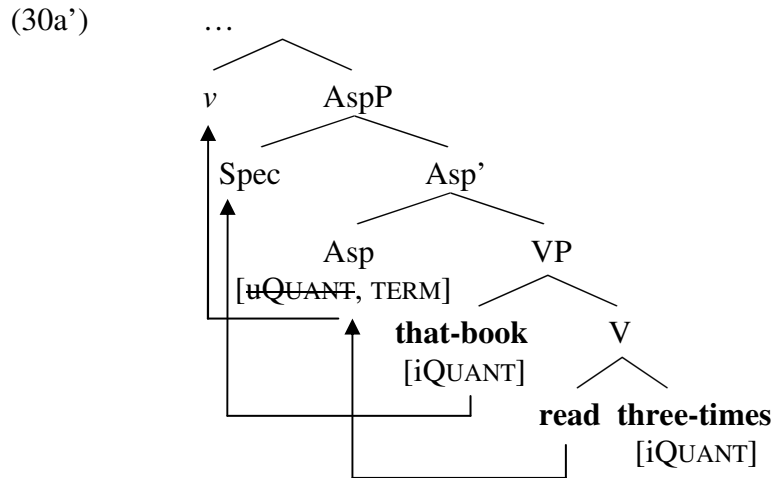
Now that we have laid out our assumptions about the interaction between aspect and NP objects on the one hand, and duration/frequency phrases on the other hand, let us turn to VCCs containing frequency phrases and definite object NPs. In the case of definite objects, copying is optional, as in (24), repeated below as (30):

(30)a. ta du-le nei-ben shu san ci
 he read-PERF that-CL book three times
 'He read that book three times'

b. ta du nei-ben shu du-le san ci
 he read that-CL book read-PERF three times
 'He read that book three times'

The (non-VCC) sentence in (30a) is taken care of quite straightforwardly, given our assumptions. The Asp head in (30a) has both a [TERMINATED] feature and an uninterpretable [uQUANT] feature; both the definite object *nei-ben shu* 'that book' and the

frequency phrase *three times* carry an interpretable [iQUANT] feature. Either one can check the [uQUANT] feature of the Asp head; under normal circumstances, the Asp head will simply probe for the closest [iQUANT]-bearing element, which is the definite NP object. The NP object thus raises to the Specifier of AspP, checking the [uQUANT] feature of the Asp head; the verb raises to Asp and *v*, yielding the surface string in (30a).



It is less obvious how to take care of (30b). Cheng suggests one possible solution by turning to another variant of D/F expressions, pointed out by Ernst (1987):

- (31) ta kan nei-ben shu you san ci le
 he read that-CL book have three times PRT
 'He has read that book three times'

According to Cheng (2007), if fusion occurs between the lower copy and a covert *you* 'have', the two verb copies will be distinct and both copies can be spelled out (cf. (30b)). If fusion does not occur, the two copies are the same, and only the highest copy is pronounced (cf. (30a)).⁹

Consider now VCCs containing duration phrases and indefinite NP objects. With indefinite objects, copying is obligatory, as in (25), repeated below as (32):

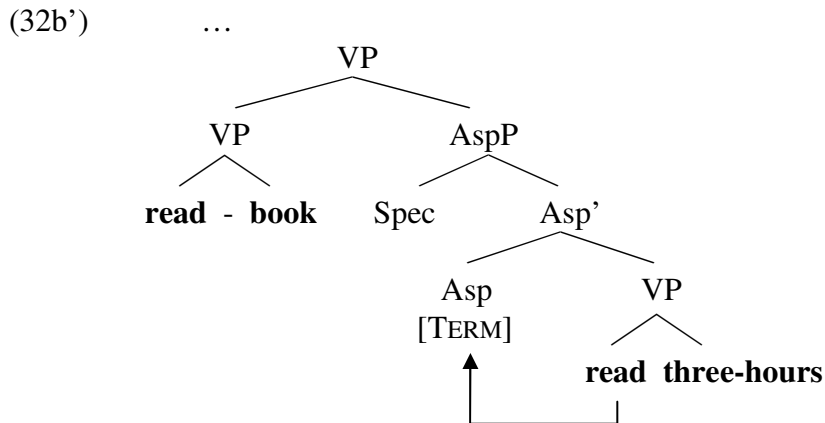
- (32)a. *ta du-le shu san-ge xiaoshi
 he read-PERF book three-CL hours
 'He read for three hours'

⁹ One has to wonder however why something that is *covert* (e.g., phonetically null) ought to affect the phonological output at all. I leave this issue aside for the time being.

- b. ta du shu du-le san-ge xiaoshi
 he read book read-PERF three-CL hours
 'He read for three hours'

If we treat indefinite objects exactly as we do definite objects, we incorrectly predict that a sentence like (32a) is grammatical. The indefinite object would start off in Spec,VP; neither it nor *three hours* would bear a [iQUANT] feature. The verb would raise to check the [TERMINATED] feature, and the sentence ought to be fine. However, this is not the case. The asymmetry between definite and indefinite objects (in the interpretation of event structure and in the optionality/obligatoriness of verb copying) seems to suggest that they are not to be treated identically. VPs containing a verb and bare noun seem to behave like compounds in Chinese, appearing similar to unergative verbs in English; perhaps we can think of the bare noun as an implicit argument that incorporates into the verb so that the compound behaves as a unit (generating an activity reading). Sideward movement generates the VP configuration containing the verb and the bare noun as sisters, feeding noun incorporation. If indefinite bare nouns must indeed be sisters to V, we have an independent reason to adopt the sideward movement approach. If sideward movement is forced, there is no optionality with respect to verb copying; in a sideward movement configuration, neither copy c-commands the other and both copies must be pronounced.

The derivation for (32b) could thus be represented as follows:



I have represented the VP containing the bare noun as disjoint from AspP and all the projections that AspP dominates. It is not a novel idea to have an aspectual projection intervening between two VP shells; for example, Travis (in press) distinguishes between Inner and Outer Aspect. The question is whether it makes sense for us to consider the VP with the bare noun as outside the scope of the aspect head. A discussion of this would take us beyond the scope of this paper; however, I suggest that such an idea is not inconceivable, in light of some evidence presented by Paul (2002) that it is the second VP

in a VCC that denotes an actual event structure.¹⁰ For example, Paul points out that it is the second VP in a VCC that is modified by VP-level adverbs and negation; moreover, only the second occurrence of the verb can be marked for aspect. According to Paul, it is the second VP that is the ‘real’ verbal predicate; the first VP is outside the realm of Inner Aspect and only contributes an activity or generic event reading. I leave this issue aside for now, though it certainly merits further research.

6. Conclusion

In this paper, we have looked at three subtypes of the VCC in Chinese. First, we considered resultative VCCs, for which we saw the usefulness of postulating two kinds of movement. As shown by Cheng (2007), a standard movement analysis allowed us to account for resultative VCCs containing definite objects, while a sideward movement analysis allowed us to account for resultative VCCs containing indefinite objects. The need for two distinct types of movement was further motivated by the fact that two distinct interpretations are possible with resultative VCCs, e.g., the subject-result reading, derived via standard movement, and the object-result reading, derived via sideward movement. Next, we looked at manner VCCs, which did not appear to distinguish between standard and sideward movement. I suggested that this was due to the additional confound that fusion results in obligatory “copying” whether the NP object is definite or indefinite. Because of fusion between the second verb copy and the *de* particle, two copies of the verb are always spelled out (Cheng, 2007); it is thus impossible to distinguish between manner VCCs containing definite objects and manner VCCs containing indefinite objects. We then moved onto the final subtype of VCCs in Chinese – those involving duration/frequency phrases. Here, we came full circle, as the asymmetry between definite objects and indefinite objects surfaced once again. Assuming that it is the second VP in a VCC that is the main verbal predicate, we see that a standard movement analysis accounts for the apparent optionality of copying in the case of definite NP objects, while a sideward movement analysis accounts for the apparent obligatoriness of copying in the case of indefinite NP objects. In arguing for a unified account, we thus find that both standard and sideward movement are necessary to account for the three subtypes of the VCC.

¹⁰ Paul (2002) proposes a theory of proxy categories to account for the verb copying construction, according to which the first occurrence of the verb occupies a position above VP. For reasons of space, I do not discuss her analysis of the VCC; however, her evidence for the hypothesis that it is the second VP that denotes an actual event structure can be nicely extended to our present discussion.

REFERENCES

- Cheng, Lisa L.-S. 2007. "Verb copying in Mandarin Chinese." In *The Copy Theory of Movement/Linguistics Today No. 107*, eds. Norbert Corver and Jairo Nunes, 151-174. Amsterdam: John Benjamins Publishers.
- Diesing, Molly. 1997. "Yiddish VP order and the typology of object movement in Germanic." *Natural Language and Linguistic Theory* 15:369-427.
- Ernst, Tom. 1987. "Duration adverbials and Chinese phrase structure." In *Journal of the Chinese Language Teachers Association* 12:1-11.
- Hale, Kenneth, and Samuel J. Keyser. 1993. "On argument structure and the lexical expression of syntactic relations." In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, eds. Kenneth Hale and Samuel J. Keyser, 51-109. Cambridge, Mass.: MIT Press.
- Hoekstra, Teun and René Mulder. 1990. "Unergatives as copular verbs; locational and existential predication." In *The Linguistic Review* 7:1-79.
- Huang, C.-T. James. 1991. "Verb movement, (in)definiteness, and the thematic hierarchy." In *Proceedings of the Second International Symposium on Chinese Languages and Linguistics*, eds. Paul J.-K. Li et al., 481-498.
- Huang, C.-T. James. 1984. "Phrase structure, lexical integrity, and Chinese compounds." In *Journal of Chinese Language Teachers Association* 19:53-78.
- Lin, Jonah Tzong-Hong. 2001. *Light Verb Syntax and the Theory of Phrase Structure*. Doctoral dissertation, University of California, Irvine.
- Marantz, Alec. 1993. Implications of asymmetries in double object constructions. In *Theoretical aspects of Bantu grammar 1*, ed. Sam A. Mchombo, 113-150. Stanford: CSLI Publications.
- Nunes, Jairo. 2004. *Linearization of Chains and Sideward Movement*. *Linguistic Inquiry Monograph* 43, ed. Samuel Jay Keyser. Cambridge: MIT Press.
- Paul, Waltraud. 2002. "Proxy categories in phrase structure theory and the Chinese VP." *Cahiers de Linguistique – Asie Orientale* 31(2):137-174. Paris: CRLAO-EHESS.
- Ritter, Elizabeth, and Sara Thomas Rosen. 2001. "The interpretive value of object splits." *Language Sciences* 23:425-451.
- Travis, Lisa de Mena. In prep. *Inner Aspect*. Kluwer Academic Publishers. Online at <http://ww.arts.mcgill.ca/programs/linguistics/faculty/travis/publications.htm>