

DURATIONAL COMPLEMENTS AND VERB COPYING IN CHINESE

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ABSTRACT

The aim of this paper is two-fold. On the one hand, it attempts to present the syntax, semantics and pragmatics of durational complements within a unified framework. On the other, it tries to explain the cooccurrence of verb copying and durational phrases in terms of aspectual properties.

Durational phrases are not arguments of the predicates they modify. Rather they evidence three syntactic, semantic and pragmatic properties which are characteristic of measure phrases:

1. they can optionally be modified by *yǒu*,
2. they are not referential and cannot be preceded by *zhè* or *nà*,
3. they carry the most important information.

This is why we label them 'quantifiers'.

The study of the position and scope of negative and restrictive adverbs allows us to treat durational complements

1. as part of complex predicates,
2. as carriers of the most important information.

Finally, verb copying is not treated as a purely syntactic process, but as semantically conditioned. The more the predication refers to an activity, the more verb copying is needed. The more the predication indicates a bounded event, the less verb copying is found.

These last fifteen years the syntax and pragmatics of durational complements in Chinese have been widely studied, but their semantics has been somewhat neglected. In this paper I would like to present a relational analysis of such complements, i.e. an analysis which tries to relate the three above-mentioned aspects of the grammar of the language: syntax, semantics and pragmatics. What I will do here is sketch an analysis of such complements, rather than offer a complete picture of them.

I will first review the general characteristics of durational complements in Mandarin and then present some previous treatments of the question.

I. GENERAL CHARACTERISTICS OF DURATIONAL COMPLEMENTS IN MANDARIN

Durational adverbials can be separated into two classes: duration-dating adverbials and duration-measuring adverbials, as in (1) and (2).

- (1) *ta liang nian yiqian xue-guo hanyu*
 he two year before study-Asp. Chinese
 he studied Chinese two years ago
- (2) *ta xue hanyu xue-guo liang nian*
 he study Chinese study-Asp. two year
 he studied Chinese for two years

Dating adverbs are preverbal and answer questions marked by *shenme shihou* 'when?', whereas measuring adverbs are postverbal and answer questions marked by *duo jiu* 'how long?', as in (3) and (4).

- (3) *ta shenme shihou xue-guo hanyu?*
 he what? time study-Asp. Chinese
 when did he study Chinese?
- (4) *ta xue hanyu xue-guo duo jiu?*
 he study Chinese study-Asp. how much? long
 how long did he study Chinese?

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I should like to thank P. Li for organizing the Conference and inviting me to participate in it, as well as W. Paul, A. Peyraube, S. C. Yao and, especially, the anonymous referees for their useful suggestions.

In the translations of the examples I have used the following abbreviations:

Asp.: Aspect; *-le, -guo*

Cl.: Classifier; *ge,*

F.P.: Final Particle; *le, ma*

Neg.: Negation; *bu, mei*

Nr.: Nominalizer; *de*

Chinese traditional grammar has codified the word order difference between dating and measuring adverbs as the opposition between *zhuangyu* and *buyu*. The functional difference between *zhuangyu* and *buyu* has a correlate at the level of lexical categories. A (time) *zhuangyu* can be nominal or prepositional/postpositional, but a *buyu* can only be predicative: this can be seen in the way the *buyu* of (2) is questioned in (4). Thus, even though *liang nian* 'two years' looks like a Noun Phrase, it actually is not: it is a Predicative Phrase (Pred. P.). That *liang nian*—which is not in subject position—is a Pred. P. is confirmed by the fact that it can be preceded by *you* 'have'. In both (5) and (6) *you* 'have' functions as a Nominal Predicate marker. In (5) *you* 'have' precedes a durational *buyu*, in (6) it precedes a nominal predicate.

- (5) *ta xue hanyu xue-le you liang nian le*
 he study Chinese study-Asp. have two year F. P.
 he has been studying Chinese for two years

- (6) *ta hen you limao*
 he very have politeness
 he is very polite

Duration-dating and duration-measuring complements can be regarded as quantifiers (see Verkuyl, 1973). A dating adverbial functions like an existential quantifier, whereas a duration measuring *buyu* functions like a universal quantifier.

A duration-measuring complement locates an interval on the time-axis and bears on the whole utterance on which it is predicated. More precisely, the predication over which the durational complement quantifies holds true during the **whole interval** denoted by the *buyu*. As such, it is equivalent to a **universal** quantifier.

This time interval may or may not take boundaries, i.e. it can be bounded or unbounded (see Dahl, 1981). When it is predicated of an activity⁽¹⁾, this interval is continuous and no mention of any preceding state/event is made, as in (2) and (5). In (2) the activity has stopped before speech time (T'), whereas in (5) the activity is still going on at T'. In (7) below, this interval is preceded by a change of state: it is limited by an upper boundary and corresponds to completed action took place, which gave rise to a subsequent/resultant state.

(1) In the sense of Vendler (1967).

- (7) *men kai-le hao jiu le*
 door open-Asp. good long F.P.
 the door has been open for a long time

Schematically, the unbounded interval of (2) and (5) can be represented as (8), and the bounded interval of (7) as (9).

- (8) $\left. \begin{array}{c} | \\ | \\ \text{activity} \\ | \\ | \end{array} \right\}$
- (9) $\left. \begin{array}{c} \text{preceding} \\ \text{action} \end{array} \right\} \text{resultant state}$

Apart from the fact that there is a word order difference between dating and measuring adverbials, another syntactic characteristic differentiates those two types of complements, as is illustrated in (1) and (2) above. The cooccurrence of a transitive predicate—when by its object—with a duration-measuring adverb triggers verb copying, while this is not the case with dating adverbials. Thus, (1) and (2) both contain the same transitive predicate *xue* 'study' followed by its object N *hanyu* 'Chinese', but in (1) there is only one occurrence of *xue*, whereas there are two in (2). These two occurrences are not identical: only the second one bears the typical modifiers of verbs, i. e. aspectual suffixes, modal verbs, aspectual/restrictive adverbs. The description of this type of facts is fairly extensive in the literature—see, for instance Li and Thompson (1981)⁽²⁾.

(10) and (11) are two examples derived from (2) above: in (10) the second occurrence of *xue* 'study' is preceded by the restrictive adverb *zhi* 'only', and in (11) it is preceded by the modal verb *yao* 'want'.

- (10) *ta xue hanyu zhi xue-guo liang nian*
 he study Chinese only study-Asp. two year
 he studied Chinese for two years only

- (11) *ta xue hanyu yao xue liang nian*
 he study Chinese want study two year
 he wants to study Chinese for two years

Two main types of explanations have been offered to account for verb copying in Chinese. They can be classified as syntactic explanations, on the one hand, and as functional/pragmatic explanations, on the other.

As more work has been done on the syntax of Chinese than on its pragmatics, more syntactically detailed proposals than functional ones are,

(2) And also: Li (1975), Teng (1975), Huang J. (1982), Huang S. (1984), Tai (1985), Paul (1986), Ernst (1987), Tsao (1987).

of course, available. But, to my knowledge, no analysis has tried to relate the syntax of word order in sentences containing verb copying to the informational role played by word order.

In the following I will concentrate on measuring complements only. I will first review previous papers that deal with the pragmatics of word order in Chinese, and more specifically, with the functional explanation of verb copying. I agree with the general informational principles that have been proposed, but I believe that they need to be confirmed, independently, by syntactic tests so as to prove their validity.

II. THE FUNCTIONAL/PRAGMATIC ANALYSES OF VERB COPYING

The main descriptions of the function of verb copying in terms of informational principles that I know of are Ernst (1987) and Tsao (1987).

Tsao (1987) and Ernst (1987) both consider that the constituent that occupies the postverbal position in Chinese represents, in terms of informational content, the focus of the sentence. I do agree with such an analysis but would like to justify it syntactically.

The pairing of questions and answers enables us to determine **univocally** which part of the sentence carries the most important information. Thus, for example, (12) and (13) have identical syntactic structures—NP PP V NP—but according to the degree of determinacy of the object, it is EITHER the locative constituent OR the object that carries new information. This can be seen in the answers (14) and (15) to the questions (12) and (13).

(12) *ni zai tushuguan kan-le shu ma?*
 you at library look-Asp. book F. P.
 did you read books (study) in the library?

(13) *ni zai tushuguan kan-le hen duo shu ma?*
 you at library look-Asp. very much book F. P.
 did you read many books in the library?

(14) *mei you, wo zai jiaoshi li kan-le shu*
 neg. have I at classroom in look-Asp. book
 no, I read books (studied) in the classroom

(15) *mei you, wo zai tushuguan zhi kan-le yi xie shu*
 neg. have I at library only look-Asp. one few book
 no, (in the library) I only read a few books

(12) shows that even though *shu* 'book' is the postverbal constituent, such a constituent does NOT necessarily stand for the focus of the utterance. Hence the pairing of questions and answers is more accurate than a general

principle, such as Ernst's 'Chinese Information Principle', for instance. ("The ideal of Chinese is to keep the new, asserted information of each clause as focused as possible by isolating it after the verb", in Tsao (1987: 39).)

In my opinion it is only the pairing of questions and answers containing durational complements which can prove that durational complements do carry the most important information. The positive answer (17), which does not contain the durational complement, is ill-formed, contrary to (18), corresponding to the question (16).

- (16) *ta sao di sao-le san ge zhongtou ma?*
 he sweep floor sweep-Asp. three Cl. hour F.P.
 did he sweep (the floor) for three hours?
- (17) **shi, ta sao di (sao-le)*
 be he sweep floor (sweep-Asp.)
- (18) *shi, ta (sao di) sao-le san ge zhongtou*
 be he (sweep floor) sweep-Asp. three Cl. hour
 yes, he swept (the floor) for three hours

The fact that the durational complement does stand for the crucial information is proven by the way a yes/no question is formed. Syntactically, a verb phrase interrogation corresponds to a V—Neg.—V pattern, as opposed to a sentence final particle pattern, such as (16) above⁽³⁾. The neutral alternative form of the VP is not well accepted in presence of a durational complement, contrary to a *shi-bu-shi* pattern. Compare (19) and (20).

- (19) *??ta chi fan you mei you chi ban ge zhongtou?*⁽⁴⁾
 he eat rice have not have eat half Cl. hour
- (20) *ta chi fan shi bu shi chi ban ge zhongtou?*
 he eat rice be not be eat half Cl. hour
 didn't he eat for a half hour?

(19) is odd because two informational chunks stand in conflict. It is strange to assert that an event lasted for a certain period of time (i.e. *ta chi-le ban ge zhongtou* 'he ate for a half hour') and at the same time to ask

(3) See Li and Thompson (1979).

(4) Yao S. C. (p.c.) has pointed out to me that (19) is acceptable if the question is expanded into (i).

(i) *ta chi fan you mei you chi ban ge zhongtou name chang?*
 he eat rice have-Neg.-have eat half Cl. hour as long
 did he eat for as long as a half hour?

(i) proves that, under normal stress, the durational measuring complement IS the most important informational chunk.

whether this very event took place or not (*ta you mei you chi?* 'did he eat?'). A question marked by *shi* 'be' indicates what the scope of the question is: this is why it is the most natural way to question a durational complement, i.e. a constituent that carries the most important information.

In summary the test of pairing questions and answers do validate Ernst's (1987) and Tsao's (1987) general hypothesis on word order in Mandarin. A durational *buyu* is a postverbal constituent which, under normal stress, stands for the most important informational chunk of the utterance in which it is found.

I will now study some other semantic/syntactic properties of durational complements.

III. THE SEMANTICS AND SYNTAX OF DURATIONAL COMPLEMENTS

Another (very indirect) proof that the durational complement carries new information is the fact that it cannot be definite—hence it cannot be a topic. (22), which contains a deictic marker, cannot be generated from (21).

(21) *ta lai-le san tian le*
 he come-Asp. three day F.P.
 he has been here three days

(22) **ta lai-le nei san tian le*⁽⁵⁾
 he come-Asp. that three day F.P.

The impossibility of occurrence of a definite/deictic marker is also the trace of a syntactic/semantic property of a durational complement: it cannot be referential. This is proven by the fact that it cannot enter a frame such as (23).

(23) **zhei shi* _____
 this is _____

The fact that durational *buyu*⁽⁶⁾ cannot be referential proves that they are not arguments of the predicates they modify. Hence they are not selected by the verb they cooccur with: hence, in terms of the Government

(5) When a durational complement is preceded by a deictic marker, it necessarily is a dating adverbial—a *zhuangyu*—and not a *buyu*, as in (i).

(i) *ta nei san tian dao wo zher lai*
 he this three day to I here come
 he came to my place these three days

In (ii) below, due to Yao S. C., *nei san tian* is not a durational complement. It is an Object NP and, thus answers a *shenme* 'what?' question.

(ii) *ta langfei-le nei san tian*
 he waste-Asp. that three day
 he wasted those three days

(6) *buyu* should sometimes be read as singular, sometimes as plural. It is plural here.

and Binding theory of grammar, they do not have a thematic role and are not assigned an inherent Case⁽⁷⁾. This is why they do not share the syntactic characteristics of postverbal NP constituents, i.e. direct and indirect objects. A durational *buyu* can never be moved to preverbal position⁽⁸⁾ and can never be preceded in such a position by a prepositional phrase. Thus, for instance, (24) and (25) are ill-formed.

(24) **san tian, ta lai-le*
three day he come-Asp.

(25) **ta san tian lai-le*
he three day come-Asp.

So far I have characterized durational *buyu*

(i) in terms of their informational behavior—they are the most important informational chunks in the utterances where they occur—and

(ii) in terms of their syntactic/semantic role. But the characterizations I have proposed are negative. If durational *buyu* are not arguments of the main predicate what are they?

In section I above I have mentioned that durational *buyu* can be preceded by *you* 'have' and that this is a proof that they look like NPs but are, in fact, Predicative Phrases. To my knowledge, the syntactic behavior of durational measuring complements has not been related to that of other (syntactic) constituents of the grammar of Chinese, even though such complements do not seem to build a category of their own in the structure of the language. Durational *buyu* are Measure Phrases, hence **quantifiers**, which behave in exactly the same way as other MPs (Measure Phrases).

Quantificational MPs and durational MPs share three semantic/syntactic properties:

- (i) they are optionally preceded by *you* 'have',
- (ii) they cannot be modified by definite/deictic determiners,
- (iii) they represent the focus of the utterances in which they appear.

You 'have' optionally marks quantificational MPs and durational *buyu*, as in (26) and (27).

(26) *zhei ge ren (you) duo gao?*
this Cl. person (have) how much? high
how tall is that person?

(7) I will briefly come back to these syntactic properties in §IV. 2 below.

(8) Except under negation. This is due to the general principle that the surface word order of quantifiers in Chinese directly reflects their interpretation. See Tai (1973) and Teng (1983).

- (27) *ta zou-le (you) duo jiu le?*
 he leave-Asp. (have) how much? long F. P.
 how long has it been since he left?

Quantificational and durational MPs cannot be marked by deictic markers, as in (28) and (29).

- (28) **zhei ge dongxi nei san chi gao*
 this Cl. thing that three foot high
- (29) **ta jiao hanyu nei si nian le*
 he teach Chinese that four year F. P.

Quantificational MPs and durational MPs, as I have already shown above, represent the crucial information of the utterances they are contained in. This can be seen in the contrast between the pairs of ill and well-formed questions (30)-(31) and (32)-(33).

- (30) **zhei ge dongxi (you) san cun gao bu gao?*
 this Cl. thing (have) three inch high Neg. high
- (31) *zhei ge dongxi you duo gao?*
 this Cl. thing have how much? high
 how high is that thing?
- (32) **ta lai mei lai (you) hao jiu le?*
 he come Neg. come (have) good long F. P.
- (33) *ta lai-le (you) duo jiu le?*
 he come-Asp. (have) how much long F. P.
 how long has it been since he came?

The fact that (30) is ill formed—i. e. the stative verb *gao* 'high' cannot be questioned—is equivalent to saying that *gao* 'high' is not the main predicate of (30). This is proven by the fact that when *gao* 'high' is the only, and hence the main predicate of a sentence, it takes a V—Neg.—V pattern when it is questioned, as in (34).

- (34) *zhei ge dongxi gao bu gao?*
 this Cl. thing high Neg. high
 is this thing high?

So far I have drawn an analogy between quantificational and durational MPs and I have demonstrated that quantificational MPs are main predicates in the sentences where they appear. Can the analogy between quantificational and durational MPs be carried all along? More precisely, are durational *buyu* the main predicates of the sentences where they occur? This poses the

problem of the syntactic structure of durational *buyu*.

In the following section I will first review some previous syntactic analyses of durational *buyu* and then present my own.

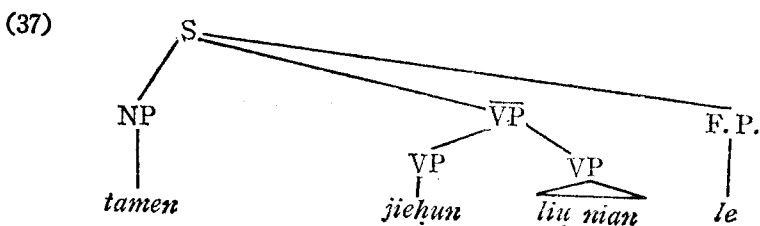
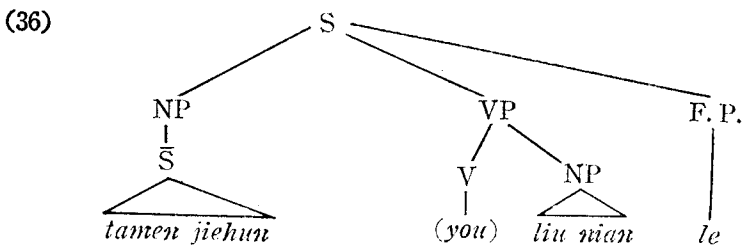
IV. THE SYNTACTIC ANALYSES OF DURATIONAL COMPLEMENTS

IV. 1 The syntactic structure of durational complements

To my knowledge, Tai (1973) and Teng (1975) are the first to have proposed that durational *buyu* are main predicates. Such an analysis has been adopted by Paris (1977) and partially by Paul (1986), among others. It has recently been challenged by Ernst (1987), and, indirectly, by Huang (1988). Even though Huang's analysis is devoted to degree *buyu*, one can think it can be extended to durational *buyu*.

The difference between the first and second type of analysis can very roughly be characterized as that between subordination and apposition. Under the main predicate type of analysis, the durational *buyu* dominates a subordinate sentence containing the lexical predicate over which the *buyu* quantifies. Under the complex predicate type of analysis, the durational *buyu* is a sister to the lexical predicate over which the *buyu* quantifies. Thus, (35) has two analyses; (36), if the *buyu* is considered to be a main predicate; (37), if the *buyu* is attached—as a sister node—to the lexical predicate *jiehun* 'marry'.

- (35) *tamen jiehun liu nian le*
 they marry six year F.P.
 they have been married for six years



The position and the scope of adverbs⁽⁹⁾ militate in favor of a treatment of durational *buyu* as sister constituents to the lexical verb to which they are attached. In (38) below *yihan* 'regretful' is the main predicate of the sentential subject *ta zuotian cai lai* 'he came only yesterday' and the scope of the restrictive adverb *cai* 'only' is on its **left**; it is limited to the sentential subject. If (39), which is built on the same superficial syntactic pattern as (38), had the same deep syntactic structure as (38), one would expect that the scope properties of *cai* 'only' would be identical in the two sentences. But this is not the case. The scope of *cai* 'only' in (39) is on the **right**: it bears on the durational *buyu*. Hence we conclude that (38) and (39) do NOT have the same syntactic configuration and that the durational *buyu* in (39) does not function as a main predicate, contrarily to *yihan* 'regretful' in (38).

(38) *ta zuotian cai lai hen yihan*
 he yesterday only come very regretful
 it is a pity that he came only yesterday

(39) *ta zuotian cai deng-le ni yi ge zhongtou*
 he yesterday only wait-Asp. you ond Cl. hour
 yesterday he waited for you one hour only

Two other types of facts militate in favor of (37): the behavior (a) of rhetorical interrogation and (b) of negation.

(a) In (40) the negative constituent of a rhetorical question—i. e. *bu shi* in a *bu shi...ma?* 'isn't...?' construction—can appear in two different positions: either before the lexical verb *jiao* 'teach' or before the durational complement, as in (40) and (41).

(40) *ta jiao hanyu bu shi jiao-le san nian le ma?*
 he teach Chinese Neg. be teach-Asp. three year F. P. F. P.
 hasn't he taught Chinese for three years?

(41) *ta jiao hanyu jiao-le bu shi san nian le ma?*
 he teach Chinese teach-Asp. Neg. be three year F. P. F. P.
 hasn't he taught Chinese for three years?

(b) In (42) and (43) negation can appear either before the lexical predicate *guan* 'close' or before the durational *buyu duo jiu* 'much long'.

(42) *bowuguan de men guan-le mei duo jiu*
 museum Nr. door close-Asp. Neg. much long
 (the door of) the museum hasn't been closed for a long time

(9) In Paris (1979, Chap. I) I have used the same type of argumentation to show that degree complements are part of a complex Verb Phrase.

- (43) *bowuguan de men mei guau duo jiu (you dakai-le)*
 museum Nr. door Neg. close much long again open-Asp.
 (the door of) the museum hadn't been closed for a long time
 (and then opened again)

In summary the scopes of restrictive adverbs like *cai* 'only' and of negation indicate that sentences containing durational *buyu* are better analyzed with structure (37) than with (36).

So far I have dealt with the phrase structure of durational complements, but I haven't dealt with another syntactic characteristic that such complements present. In the first part above I have already mentioned that durational-measuring adverbs, contrary to dating adverbs, trigger verb copying when they are in cooccurrence with a transitive predicate. See (2) above, repeated here as (44).

- (44) *ta xue hanyu xue-guo liang nian*
 he study Chinese study-Asp. two year
 he studied Chinese for two years

I will now study the process of verb copying.

IV. 2 Durational complements and verb copying

The two main syntactic characterizations of verb copying that I know of have been presented by Huang (1982) and Mei (1986). Huang's proposal is known as the "Phrase Structure Constraint". Mei's analysis can sketchily be presented as a process of movement and lexicalization of the predicate *xue* 'study' in (44) into a second position, which takes all the adverbial modifications that are characteristic of full verbs, i. e. *xue-le* in (44). Besides the durational *buyu* is assigned Case by an Infl. node.

I will not go into the details of either analysis because I think that they are factually incorrect. Ernst (1986) has given counter-examples to Huang's analysis and, in my opinion, one of the main drawbacks of Mei's analysis is his treatment of the durational *buyu* as having a Case. I have briefly mentioned above in examples (21)–(25) that durational *buyu* do not behave like arguments: they are not referential and cannot be heads of relative clauses. From (44), (45) cannot be generated.

- (45) **ta xue hanyu xue-le de liang nian...*
 he study Chinese study-Asp. Nr. two year...

IV. 3 Towards a relational analysis of verb copying

The point I would like to make here is that verb copying cannot be treated as a purely syntactic process and, more generally, that syntax is

not autonomous or independent from semantics. Verb copying is in two ways sensitive to semantics. On the one hand, it is sensitive to the **aspectual value** of the predicate over which the durational complement quantifies. On the other, it is sensitive to the **degree of definiteness of the object NP**. This last factor is actually dependent on the first. I will first study the relationship between verb copying and the aspectual value of the predicate and then the relationship between verb copying and the degree of definiteness of the direct object.

Jia (1985) has convincingly argued that verb copying is sensitive to the activity value of the predicate. Thus even though the two predicates of (46) and (48) are syntactically transitive and take their objects, in (46) verb copying is mandatory whereas it is impossible in (49). Compare (46) and (47) with (48) and (49).

- (46) *women deng gonggongqiche deng-le yi ge zhongtou le*
 we wait public-transportation wait-Asp. one Cl. hour F. P.
 we have been waiting for the bus for one hour
- (47) **women deng gonggongqiche yi ge zhongtou le*
 we wait public-transp. one Cl. hour F. P.
- (48) *wo mingbai zhei ge wenti yi ge xiaoshi le*
 I understand this Cl. question one Cl. hour F. P.
 I have understood that question for one hour
- (49) **wo mingbai zhei ge wenti mingbai-le yi ge xiaoshi le*
 I understand this Cl. question understand-Asp. one Cl. hour F. P.

When the duration measuring complement quantifies over an activity, i. e. **an unbounded predication, verb copying is mandatory** when the verb is followed by its object (see (47)). When the duration-measuring complement denotes a duration which corresponds to a state ensuing from a previous perfective action, i. e. **a bounded predication, then verb copying is impossible**, even when the verb cooccurs with its surface object (see (49)). The temporal structures of *deng* 'wait' and of *mingbai* 'understand' are different. *Deng* 'wait' refers to an activity: it is homogeneous, and involves no anticipated result. *Mingbai* 'understand', on the contrary, is directed toward attaining a goal or a limit at which the action exhausts itself (see Dahl, 1981). In (50) and (51) below the transitive verb *xiu* 'repair' is followed by its object *shuiguan* 'pipe'. In (50) the predication denotes an activity and the verb is copied. In (51) the verb *xiu* 'repair' is rendered telic by the adjunction of the resultative suffix *wan* 'finish': verb copying is not accepted.

(50) *ta xiu shuiguan yijing xiu-le yi ge zhongtou le*
 he repair pipe already repair-Asp. one Cl. hour F. P.
 he has already been repairing the pipe for one hour

(51) **ta xiuwan shuiguan yijing xiuwan-le yi*
 he repair-finish pipe already repair-finish-Asp. one
ge zhongtou le
 Cl. hour F. P.

Thus, verb copying is sensitive, NOT to the SYNTACTIC character of the verb, BUT to the ASPECTUAL structure of the (transitive) verb.

It is now well-known that the aspectual value of a predicate is a function of its **whole syntactic construction**, and not only of the semantics of the verb itself. Thus for instance, the fact that a transitive verb takes no object, or takes an indefinite object or a definite object as in (52)-(54) below changes. in each case, its aspectual interpretation (see Garey, 1957:107).

(52) *he played all day*

(53) *he played the violin*

(54) *he played a Beethoven sonata*

In (52) the verb takes no object and the predication is atelic or unbounded. In both (53) and (54) the verb takes an object, but the predication is atelic in (53) and telic in (54). A telic or bounded predication makes reference to a terminal point or a goal.

We have seen above that verb copying is sensitive to the aspectual structure of the predicates cooccurring with the durational complement (cf. (46), (48)). We have also seen that the **aspectual interpretation** of an utterance is a function of its **syntactic configuration**, and in particular of its **direct object** (cf. (51), (52)). This enables us to predict that verb copying will be sensitive to the type of relation which is established between the verb and its object: the more a predication corresponds to an activity, the more verb copying is mandatory; the more the predication is bounded, the more verb copying is not mandatory. A predication can be bounded

(i) because of the inherent semantics of the verb or

(ii) because the definite direct object transforms an atelic predication into a telic one.

If the above is true, then the facts described by Li and Thompson find a natural explanation. "Verb copying is usually not needed when the direct object is referential and animate or definite. Conversely, when verb copying occurs, the direct object is typically, though not necessarily, non-referential"

(1981: 447). Compare (55) with (56) and with (57)=(39).

(55) **ta zuotian deng-le yi ge pengyou liang ge zhongtou*
 he yesterday wait-Asp. one Cl. friend two Cl. hour

(56) *ta zuotian deng yi ge pengyou deng-le liang ge zhongtou*
 he yesterday wait one Cl. friend wait-Asp. two Cl. hour
 yesterday he waited for a friend for two hours

(57)=(39) *ta zuotian cai deng-le ni yi ge zhongtou*
 he yesterday only wait-Asp. you one Cl. hour
 yesterday he waited for you one hour only

In my opinion, it is NOT the properties of the **object as such** that condition or prevent the application of verb copying. It is the fact that the CHANGES in the degrees of DEEINITENESS of the OBJECT entail a corresponding CHANGE in the INTERPRATION of the predication. In (55) because the object is indefinite, the predication corresponds to that of an activity; hence verb copying is mandatory, as in (56). In (57), the presence of a definite object renders the predication telic.

V. CONCLUSION

In this paper I have tried to explain and predict the functioning of durational complements in Mandarin as well as the syntactic process which is related to it, namely verb copying.

I have tried to show that durational complements are quantifiers. They function exactly like ordinary Measure Phrases: they are not referential and constitute the new information of the utterance in which they are located. I have also tried to relate the syntax of verb copying to the interpretation of the durational complement, which itself is linked to the telic/atelic interpretation of the whole utterance.

In summary I believe that verb copying is not a blind syntactic process. It is dependent on the aspectual value of the predicate over which the durational complement universally quantifies. The more the predication is atelic, the more verb copying is mandatory. The more the predication is telic, the more verb copying is unattested. Linguistic facts in general, and the relationship between verb copying and durational complements in Mandarin in particular, are organized in a 'squish'-like fashion, rather than in a yes-or-no fashion.

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漢語動詞的重複與時間補語

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摘 要

本文有兩個宗旨，首先研究在統一結構中時間補語的句法、語意及語用特點。其次，嘗試從時態的特徵解釋動詞重複與時間補語的共存性。

時間補語並非其所修飾的謂語的論元 (argument)，更恰當地說，時間補語表達數量詞所具有的句法、語意和語用三方面特點：

1. 可被「有」修飾。
2. 既不能指示也不能被「這」和「那」修飾。
3. 傳達最重要的信息。

故應稱之為「定量詞」。

對否定副詞與限制副詞的位置和範圍的研究證明：

1. 時間補語屬於複雜謂語。
2. 傳達最重要的信息。

最後，我們歸納的結論是：動詞重複並非純屬於句法現象，而是從屬於語意。謂語動詞越是「進行」時態，動詞重複越容易出現。反之，越是「完成」時態，動詞重複越不容易出現。