Syntactic Change in Chinese: On Grammaticalization

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The process of grammaticalization cannot furnish the causes of syntactic change; it does not explain why a reanalysis intervenes. However, it may tell us what are the mechanisms of the changes.

This article presents four standard cases of grammaticalization of verbs into prepositions or particles; they concern (i) the disposal construction, (ii) the comparative construction, (iii) the dative construction and (iv) the construction with a perfective aspectual particle. It is shown that in all these cases, grammaticalization of verbs into prepositions/particles intervenes in serial verb constructions of the type "VI+NP1+V2 (+NP2)", as it was assumed some fifteen years ago. Those who criticized this point of view, arguing that the verbs which were supposed to become prepositions were not employed in serial verb construction, may not be right.

The processes of grammaticalization studied in this paper are mechanisms of internal change which have created very frequently employed constructions. They can thus account for the appearance of new grammatical markers without necessitating the awkward explanation relying on the external borrowing from foreign languages, or that on the process of single lexical replacement, which may both have contributed to the appearance of new lexical items but probably have not much influenced grammatical system of the Chinese language.

As the French linguist A. Meillet pointed out some seventy-five years ago, there are two major processes by which grammatical forms are set up: 1. analogy (a form appears by analogy with another form), 2. grammaticalization, which consists of a "translation from an autonomous word to an element which has a grammatical role" (p. 131).

Analogy has already been widely studied and it has been suggested that many syntactic reanalyses can be viewed as representing analogical extensions

of existing surface patterns (R. Anttila, 1977; D. W. Lightfoot, 1981). However, analogy does not represent a principle of grammatical change; "The fact that many reanalyses can be interpreted as analogical extensions does not make analogy a principle of change, least of all an explanatory principle" (D. W. Lightfoot, 1981, p. 225).

Grammaticalization, which has been largely neglected until recently, is not an explanatory process neither. It may tell us what are the *mechanisms* of the syntactic change but cannot furnish the *causes* of such a change; it does not explain why a reanalysis intervenes (cf. M. B. Harris, 1984).

Though the following study will frequently mention analogy, its main issue is grammaticalization, dealing with four processes of grammaticalization in Chinese, all of which occurred during the T'ang dynasty transforming verbs into prepositions or particles.

Since C. N. Li & S. A. Thompson (1974) have put forward the hypothesis that the grammaticalization of verbs becoming prepositions is done through serial verb constructions, i. e. 'V1 - NP1 - V2 - (NP2)' > 'Prep - NP1 - V - (NP2)', ¹ there has been a lot of disagreement, especially from J. H. - Y. Tai (1976), Huang Shuan-fan (1978), P. A. Bennett (1981) and Ch'en Ch'u-sheng (1983) who argue that there is no relationship between serial verb constructions and grammaticalization because the verbs which became prepositions were never employed, in Early or Late Archaic Chinese, in verbal expressions in series².

¹ This change through serial verb construction was already suggested in the late fifties by linguists like Chu Min-ch'e (1957) and Wang Li (1958), but they used the term hsu-hua 虛化 'bleaching' instead of grammaticalization.

² J. H.-Y. Tai (1976) says that "there were no source sentences available (with serial verb constructions) in Archaic Chinese to serve as inputs to the process of grammaticalization", but he does not totally reject the grammaticalization hypothesis since he admits: "The process of grammaticalization must have occurred after the word order shift and subsequent verb serialization". He hypothesizes the following developmental stages:

⁽a) NP-V-(NP)-Prep+NP-NP-Prep+NP-V-(NP)

⁽b) NP-Prep+NP-V-(NP)>NP-V1-NP-V2-(NP)

More recently, some linguists defend an anti-grammaticalization thesis and explain the origin of some prepositions by a single lexical replacement (Ch'en Ch'u-sheng, 1983; Huang Shuan-fan, 1986) or the origin of preverbal PP-structures by external borrowing from Altaic languages which have the S-O-V order (Hu Shuang-pao, 1986).

I would like to show that we have obvious cases of grammaticalization of verbs becoming prepositions or particles and that this process occurs in serial verb sentences, as C. N. Li & S. A. Thompson have hypothesized but without giving sufficient data to support their claim. The data presented here concern a) the disposal construction, b) the comparative construction, c) the dative construction and d) the aspectual particle *liao* \mathcal{T}^4 .

1. The disposal construction

What is called disposal construction in Chinese is the following structure: 'NPO+PA+NP1+VP' where NPO is the subject, PA a preposition which can be pa 把, chiang 將 or chuo 捉 in vernacular Medieval Chinese and which introduces the NP1-object.

We know that pa, jiang and chuo are also verbs meaning 'to take, to hold, to grasp'; they are verbs since Archaic Chinese. Some linguists (Chu Min-ch'e, 1957; Wang Li, 1958 and C. N. Li & S. A. Thompson, 1974) thus consider that accusative forms in PA came from the serial verb construction 'V1+O1+V2' where V1 can be pa, chiang or $chuo^5$. This is, I think, a correct direction to seek for the origin of PA.

³ J. H.-Y. Tai (1976) also admits that PP in Archaic Chinese shifted from the postverbal to the preverbal position through close and frequent contacts with Altaic languages in the north. But he does not reject the grammaticalization thesis (see footnote 2).

⁴ The constructions (a) and (b) have often been put forward to disprove C. N. Li & S. A. Thompson's thesis.

⁵ This chuo, as far as I know, is only attested as an accusative marker in Tun-huang's transformational texts (敦煌變文).

However, it is true, as P. A. Bennett (1981), Huang Shuan-fan (1978) and some others observe, that the verbs pa, chiang or chuo were not employed in Archaic Chinese in serial verb constructions⁶; but the considerable data available to us beginning in the Early Medieval period should con/vince us that these verbs were then used as V1 in 'V1+O+V2' structures. There were actually two serial verb constructions which first appeared in the Six Dynasties period and were still used during the T'ang times.

A. The first one is (S+V1+O1+V2 (+O2)) where O1 is the object of V1 and O2 the object of V2 (S is for subject). E.g.:

- 1. 於是卽將雌劍往見楚王(搜神記)
 thus-immediatly-take-female-sword-go-see-Chu-prince
 Thus, (he) immediatly took the female sword to go to see the Prince of
 Chu.
- 2. 恆將人代工(唐明皇:春晚宴兩相及禮官麗正殿學士探得風字) continuously-take-people-replace-work
 Continuously people have been taken to do (Nature's) work.
- 3. 詩句無人識應須把劍看(姚合詩) poem-there is not-people-know-must-take-sword-look

A good reason for this would be that the serial verb constructions did not really exist until the end of the Warring States period or even the beginning of the Han. We don't know exactly when the serial verb construction appeared. The pivotal construction 'V1+O1+V2 (+O2)'-where O1 is both the object of V1 and the subject of V2-is already present in Early Archaic Chinese (see Chang Chih-Ch'iang, 1987). The other serial verb constructions are attested much later. According to Yü Chih-hung (1984), the 'V1+O+V2' form dates from the beginning of the Han and comes from the 'V1+O1+V2+O2' structure by deleting the O2 when O1=O2. This 'V1+O1+V2+O2' structure was generated at the end of the Warring States period to replace the possible causative function of the verb in the 'V-O' phrase through a stage of coordinate VP forms like 'VP1+er | + VP2'. See also Li P'ing (1987) who dates the 'V1+O+V2' form during the Wei-Chin-Nan-Pei-ch'ao period. E. G. Pulleyblank (1987) gives some examples of serial verb construction in the Meng-tzu.

No one knows the poem, (one) should take the sword and read (it). This first construction has produced the instrumental form, e.g.:

4. 輕將玉板敲花片(張祐:公子行)

slight - PA - jade - piece - hit - flower - petale

(She) slightly hits the flower petales with a piece of jade.

- B. The second one is ${}^{\circ}S+V1+O+V2{}^{\circ}$ where O is the object of both V1 and V2, a situation made possible by the semantic nature of the V1 PA allowing its object to be affected by another action. E.g.:
- 5. 醉把茱萸仔細看(杜甫:九月藍田崔氏庄) drunk-take-dogwood-carefull-look Drunk, (he) took the dogwood and carefully looked at it.
- 6. 孫子將一鴨私用(張鸞:朝野僉載)
 Sunzi-take-one-duck-personal-use
 Sunzi took a duck for his personal use.
- 7. 五祖把艣自搖(六祖壇經・1) five-patriarch-take-oar-himself-set in motion The Fifth Patriarch took the oar and rowed all by himself.

This second construction is the origin of the disposal form, e.g.:

- 8. 獨把梁州凡幾拍(顧況:李湖州孺人彈筝歌)alone-PA-Liangzhou-tune-several-play(I will) play alone several times the Liangzhou tune.
- 9. 阿郎把數都計算 (變, p. 111)⁷
 Alang-PA-number-all-calculate
 Alang did all the calculations.
- 10. 閒常把琴弄(任華:寄杜拾遺) leisure-often-PA-lute-play In my spare time, I often play the lute.
- 11. 因便捉窠燒(變, p. 263)

⁷ 變 is used for Tun-huang pien-wen cht (1958).

on the same occasion-PA-nest burn
On the same occasion (they) burned the nests.

12. 捉妾陵持(變,p. 102)

PA-I-abuse

(He) abused me.

13. 問有將無對問無將有對(六祖壇經·10)

ask-there is-PA-there is not-answer-ask-there is not-PA-there is
-answer

(If he) asks there is, answer there is not; (if he) ask there is not, answer there is.

14. 世界似將紅錦展(變, p. 549)

world-be like-PA-red-brocarde-unroll

The world is like a red brocarde unrolled. 8

Thus, we have two diachronic changes:

- (i) 'V1 PA+O1+V2 (+O2)' > 'Prep PA+O1+V (+O2)': instrumental form
- (ii) 'V1 PA+O+V2' > 'Prep PA+O+V': accusative form.

These changes are due to a grammaticalization process. The verbs PA were stripped of their full meaning and became markers introducing either the instrumental or the accusative, probably because V2 was more essential than V1 in the serial verb construction, thus allowing the bleaching of V1. When the V1 was the main verb, it did not change into a preposition. We still have serial verb constructions with PA as V1 during the T'ang and up to Modern Chinese; the changes (i) and (ii) have not been obligatory E.g.:

⁸ For more examples of disposal structure, see A. Peyraube (1989). I notice that the first disposal sentences have final monosyllabic verbs (not even preceded by any adverbial). This invalidates the assumption made by Huang Shuan-fan (1984) that his surface structure condition (which predicts that the main verb may not be followed by more than one constituent) "has led to the development of accusative object markers" (p. 54).

15. 閑將酒壺出醉向人家歇(白居易詩)

leisure—take—wine—bottle—go out—drunk—to—other's place—rest (When I) have time, (I will) take out the wine bottle; (if) drunk, (I will) rest in other's place.

16. 將石返國(變)

take-stone-return-country

(He) took the stone and returned to the country. 9

The non-obligatory character of these diachronic changes is in accordance with P. Hopper's (1988) grammaticalization's two first heuristic principles representing universal diachronic tendencies and offering a discovery procedure by which changes can be described:

- -Layering: "Within a broad functional domain, new layers are continually emerging. As this happens, the old layers are not necessarily discarded, but may remain to coexist with and interact with the newer layers".
- -Divergence: "When a lexical form undergoes grammaticization to a clitic or affix, the original lexical form may remain as an autonomous element and undergo the same changes as ordinary lexical items".

An important question nevertheless remains: how can we be sure that a grammaticalization process has been effectively in process? How do we know that pa, chiang or chuo are no longer verbs but have become accusative markers? We do not have good syntactical or morphological devices to ensure us that the verbs PA are no longer full lexical verbs. We can only rely on semantics. It will be difficult to assume that the verbs PA are still verbs meaning 'to take hold of' in e.g. 8, 9, 12 or 13. We can thus suppose that the grammaticalization process occurred around the 8th century or perhaps earlier as we can find such an e.g. in a Sui Buddhist scripture:

⁹ These examples are cited by Chu Min-ch'e (1957) without any further reference.

17. 時諸比丘將此白佛 (佛本行集經·15)

that time-plural-monk-PA-this-tell-buddha

At that time, the monks narrate this to the Buddha.

The use of a verb 'take' as an instrumental marker is quite easy to imagine (cf. L. Hyman, 1975). As for the development of 'take' into an object-marker, it is also common, particularly in West African languages of the Benue-Kwa group, where preverbal object markers have developed from the verb 'take' in the context of the serial verb construction (see C. Lord, 1982).

Let us look more closely at the second change (ii) which produced the accusative form. Actually, it is not so different from the first one (i) which produced the instrumental form. In the case of the first structure (i), O2 is sometimes absent, especially when it is already mentioned in an earlier context; when it is present, it is always different from O1. In the case of the second structure (ii), there is usually no O2, but we can reconstruct one, which then must be identical to O1. This hypothesis of reconstructing a NP O2 has already been made by B. K. T'sou (1972) who thinks that we can reconstruct a NP *chuyu* 茱萸 after the V2 *K'an* 看 in e. g. 5 and that e. g. 5 comes from e. g. 18, after a deletion of the second NP identical to the first one:

18. 醉把茱萸仔細看茱萸

I think this hypothesis is a convincing one and I will give data to support it. The following examples involve a pronoun *chih* $\not \subset$ after the V2, *chih* being a pronoun coreferential to the O1:

19. 就將符依法命焚之(馮翊:桂花叢談)

then-take-amulet-according to-Doctrine-order-burn-it

He then took the amulets and burned them according to the order given by the Doctrine.

20. 船者乃將此蟾以油熬之(陸勛:志怪)

boat - the one who - then - take - that - toad - with - oil - fry - it

The boatman then took that toad and fried it.

- 21. 卽將梁元緯等罪人於眞墓前斬之訖 (變, p. 876)
 immediatly-take-Liang Yuan-wei-etc. -criminal-at-Chen-tombin front of-behead-they-finish
 Immediatly after having taken Liang Yuan-wei with the other criminals
 and beheaded them in front of Chen's tomb...
- 22. 汝將此人安徐殺之勿損皮肉 (佛說長阿含經・7)
 you-take-this-man-carefully-kill-him-negation-damage-skinflesh

Take this man and kill him without damaging his skin and flesh.

23. 還把身心細識之(變, p. 583)

still-take-body-mind-carefully-recognize-tem

(You) must take (your) body and (your) mind and carefully recognize them.

These examples show us that the hypothesis of reconstructing a NP (O2) after the verb V2 in the 'V1+O1+V2' construction is well justified. We don't have many such examples with a pronoun in O2 position, because in Chinese deleting a NP identical to another one is always preferable to pronominalizing it with a pronoun. Thus, instead of a pronominalization by a pronoun, what actually happened was the following synchronic derivation;

NPO+V1 PA+NP1+V2+NP2 \longrightarrow NPO+V1 PA+NP1+V2 by identity NP deletion when NP2=NP1¹⁰.

¹⁰ We have other examples of the serial verb construction 'V1+O1+V2+O2' where O1=O2 when the V1 position is not filled by a PA verb. E. g.:

⁽i) 攻秦信梁軍破之(史記: 趙世家) attack-Ch'in-Hsin Liang-army-defeat-it (He) attacked and defeated the army of Hsin Liang of Ch'in.

⁽ii) 擊李由軍破之(史記:曹相國世家) attack-Li Yu-army-defeat-it (He) attacked Li Yu's army and defeated it.For more details, see Li P'ing (1987).

After this synchronic derivation, the following diachronic change took place:

NPO + V1 PA + NP1 + V2 > NPO + Prep. BA + NP1 + V.

In conclusion, we admit that the PA-sentences are derived, in diachrony, from the serial verb construction 'V1+O+V2', where O is the object of both V1 and V2, by a grammaticalization process which converts V1 into a preposition (accusative marker). This input-structure 'V1+O+V2' is itself derived, in synchrony, from 'V1+O1+V2+O2', by deletion of the O2 when identical to O1.

Has analogy played a role in generating the disposal form? Possibly. As many observe (P. A. Bennett, 1981; A. Peyraube, 1988), i 以 was frequently used in Archaic Chinese to introduce the preverbal direct object of a double-object construction. There existed already a pattern 'Prep. + Direct Object + V + Indirect Object' which may have served as a model for the disposal construction involving PA. However, the first PA-sentences were obviously not double-object constructions (cf. Huang Shuan-fan, 1986; A. Peyraube, 1989) and the possibility for the i-construction to have served as a model for the PA-sentences is therefore slight. Moreover, the i-construction was already in disuse-or used only in the literary language-at the time when the PA-sentences (which belonged to the spoken language) arose. And we know that the distance to an established older construction must not be too great for it to serve as an analogical model for a younger one (cf. C. Lehmann, forthcoming). Anyway, if there has been such an analogical process, it may not be the source of the PA-construction (we did not have such a single lexical replacement: $i \bowtie > chiang/pa/chuo$) and it cannot explain the origin of PA, as Ch'en Ch'u-sheng (1983) supposes11.

Huang Shuan-fan (1986) has an interesting point of view. He does not support the i > PA lexical replacement thesis, but he also presents what he calls an 'anti-grammaticalization thesis' for the emergence of the PA-sentences, arguing that the *chiang*-sentence may have served as the guiding model for the devel-

Has external borrowing played any role in the appearance of the PA-sentence? Probably not. If the PA-disposal form is generated from PA-serial verb construction through a mechanism of grammaticalization, as I tried to explain earlier, there is no reason why the disposal form may be borrowed from some Altaic languages on which we know very little. The paralell drawn by Hu Shuang-pao (1986) between pa and hang π -another preverbal object marker—is interesting but concerns the Yuan language. By this time, pa/chiang had already been used for four centuries.

2. The comparative construction

The history of the comparative construction will provide us with another case of the grammaticalization process done through a serial verb construction.

In Late Archaic (Classical Chinese par excellence) and in Pre-Medieval Chinese (Han times), the comparative construction is 'X+Adjective+Comparative Morpheme +Y', where X and Y are the two terms of the comparison and where the adjective expresses the dimension of the comparison.

For the superior degree, the comparative morpheme is yu 於, e.g.:

24. 季氏富於周公(論語:先進)

Chi-family-rich-more than-Chou-Duke

The Chi family was richer than the Duke of Chou.

25. 冰水爲之而寒於水(荀子:勸學)

ice-water-made-it-and-cold-more than-water

Ice is made of water and colder than water.

For the degree of equality, the comparative morphemes are ju 如 or juo 若 and the degree of inferiority is expressed by negating the equal degree

⁽續)opment of the pa-sentence in its modern form, the mechanism of change being one of lexical replacement. He admits, however, that the chiang-disposal form itself comes from a chiang-serial construction through a grammaticalization process. For a discussion of this assumption, see A. Peyraube, 1989.

(the comparative morphemes are then usually preceded by the negation pu \nearrow). E.g.:

26. 君子之交淡若水小人之交甘若醴(莊子:山木)

gentleman-determinative particle-friendship-insipid-as-water-small-people-det. part. -friendship-rich-as-wine

Friendship between gentlemen is as insipid as water, friendship between small-minded people is as rich as wine.

27. 盡信書則不如無書(孟子:盡心・下)

totally-beleive-Book of History-then-negation-comparable-have not -Book of History

(If one) totally believes in the Book of History, it is better not to have it.

In Late Archaic and Han Chinese, there is also another comparative morpheme *pi* 比, but it is always a verb meaning 'to compare with' (or 'to be like', 'to imitate'). E.g.:

28. 夫世愚學之人比有術之士也猶蟻垤之比大陵也(韓非子:姦刼弑臣)

thus-world-stupid-study-det. part. -people-compare-have-knowledge-det. part. -scholar-particle-be like-anthill-particle-compare-big-mountain-particle

Thus (if one) compares, in this world, people of trivial learning with scholars of veritable knowledge, it is like comparing an anthill with a big mountain.

This verb pi in Archaic Chinese is never used in a serial verb construction. As Huang Shuan-fan (1978) points out, it is "a simple transitive verb taking a direct object". He thus uses the comparative construction to invalidate the C. N. Li & S. A. Thompson (1974) hypothesis that the essential pathway of the word order change S-V-O \rangle S-O-V has been the collapsing of complex serial verb constructions into simple sentences.

Without taking part in the debate on word order change in Chinese, I would like to show now that $pi \not\sqsubseteq$ has also been used as V1 in a 'V1+O1+

V2 (+O2)' serial verb construction and has been grammaticalized into a comparative marker (preposition).

During the Six Dynasties period, the comparative morpheme pi is still used as a simple transitive verb meaning 'to compare'; e.g.:

29. 干比使君(世說新語:品藻)

Wang-compare-you

(If one) compares Wang (Tun) to you...

30. 王夷甫以王東海比樂令(世說新語:品藻)

Wang I-fu-object marker-Wang Tung-hai-compare-Le Ling

Wang I-fu compares Wang Tung-hai to Le Ling.

However, we can also find the 'X+pi+Y+VP' form which does not exist in Late Archaic Chinese. After the second element of comparison, there is a VP which indicates the quality and the nature of the compared things. E. g.:

31. 周顗比臣有國士門風(世說新語:品藻)

Chou I-compare-me-have-statesman-family-behaviour

Chou I, compared to me, has more familial tradition of statesman.

32. 阿奴比丞相但有都長(世說新語:品藻)

Old chap-compare-Chancellor-only-have-endowment of elegance Old chap, compared to the Chancellor, (you) only have the greater endowment of elegance.

This structure 'X+pi+Y+VP' first appeared in Early Medieval Chinese. It has the form 'NPO+V1+NP1+V2+NP2' where V1 is pi 'to compare' and where NPO and NP1 are the two terms of the comparison. This is indeed a serial verb construction although the VP2 does not represent a real separate action, but gives, instead, the result of the comparison. It has probably been generated by analogy with other serial verb constructions which already existed at that time.

One question nonetheless persists: should we still consider *pi* as a verb or should we already analyze it as a preposition, as it is in Contemporary

Chinese? The translation of e.g. 31 by R.B. Mather (1976) indicates that he considers pi as a preposition since he translates it as "more than": "Chou I has more familial tradition of statesman than me". It is difficult to answer this question with absolutely convincing arguments in favour of one or the other solution. However, I conjecture that we are still dealing with a verb here, because the examples of 'V1 pi+O1+V2+O2' are still rare and the position of V2 is exclusively occupied by the verb you a 'to have'. We cannot find adjectives in this V2 position, as it is generally the case in Contemporary Chinese comparative constructions¹².

There are in fact two examples in the *Shih-chi* 史記 (1st century B. C.) where we have a 'V1 pi+O1+V2' form in which the V2 position is filled by an adjective, e. g.:

33. 故其比諸將最親(史記:樊噲列傳)

thus - he - compare - plural - general - most - close

Thus, compared to the other generals, he has the closest relationship (with Liu Pang)¹³.

34. 比九世亂,於是諸侯莫朝(史記:殷本紀)

compare-nine-dynasty-chaotic-thus-lords-negation-pay tribute Compared with the nine dynasties, it was more chaotic; the feudal lords Thus did not pay tribute.

However, these examples are rare and scattered. We don't usually find the verb pi used in a serial verb construction in Han times.

It is only in the T'ang period, around the 8th-9th centuries, i. e. in Late Medieval Chinese, that the V2 position of the 'V1+O1+V2+O2' (where V1 is the verb pi) can be filled regularly by a predicate adjective. E.g.:

In Contemporary Chinese, the VP in the comparative form ${}^{\prime}X+pi+Y+VP'$ is limited to scalar adjectives or to verbs which can be preceded by the adverb of quantity hen ${}^{\prime}R$ 'many', i. e. to adjectives and verbs which describe relative or quantifiable properties (cf. C. N. Li & S. A. Thompson, 1981; M.-C. Paris, 1986).

¹³ This example was provided to me by Liu Chien.

35. 若比李三獨自勝(白居易詩)

if-more than-Li San-still-myself-better

If I am still better than Li San...

36. 官職比君雖較小(白居易詩)

mandarin-function-more than-you-although-relatively-small-Though my function is lower than yours...

37. 色比瓊漿猶嫩(郞士元詩)

colour-more than-best wine-still-soft

The colour is still softer than the best of wine¹⁴.

We can notice that the adjectives in the VP position are always preceded by an adverbial.

Nothing can structurally differentiate these examples of Late Medieval Chinese from the usual comparative construction of Contemporary Chinese. Therefore, I have dated the grammaticalization of the verb pi 'to compare' into the preposition 'more than'¹⁵ in the mid-T'ang period, around the 8th century, and not in the 15th century, as C. N. Li & S. A. Thompson (1980) argue¹⁶.

Examples like 35-37 were still not very frequent during the T'ang period, but they became more and more numerous in the Sung and Yuan periods where the most frequent comparative form for the superior degree was X+pi+Y+VP'. E.g.:

38. 比李公佐等所述尤更詳細 (三朝北盟會編·107)

more than-Li Kung—tso-etc. -nominalizer-narrate-even-more-detailed

¹⁴ The e. g. 35-37 are adopted from Ota T. (1958, p. 176).

¹⁵ The glose 'more than' for yu in Archaic Chinese and for pi in Medieval Chinese is semantically preferable to 'compared to' or 'in relation to' for the simple reason that a comparison of inferiority, that is, one which expresses a 'less than' relationship does not use yu or pi. See C. N. Li & S. A. Thompson (1980).

¹⁶ See A. Peyraube (forthcoming).

(It is) even more detailed than the narrations of Li Kung-tso and the others.

- 39. (這橋) 比在前十分好(老乞大)
 (this-bridge)-more than-at-before-extremely-good
 (This bridge)...is much better than before.
- 40. 他和我近我和他親你比他疏(元刊雜劇三十種:疏者下船)
 he-and-I-close-I-and-he-dear-you-more than-he-distant
 He is close to me, and I am dear to him, you are more distant to him
 (than I am).

Thus, I think that C. N. Li & S. A. Thompson are correct when they speak of a grammaticalization process changing the verb *pi* 'to compare', after its meaning has been bleached, into a comparative marker, a preposition *pi* 'more than', and when they suppose that this process occurs in a serial verb construction. We have indeed the following diachronic change:

V1 pi+O1+VP2 > Prep. pi+O+VP(where the VP is mostly a predicatival adjective).

This change naturally supposes that one must consider the comparative morpheme pi in Contemporary Chinese, used in such sentences as t'a pi wo kao 他比我高 'He is taller than me', is a preposition. Others may think that pi is still a verb ('compared to') which has never been grammaticalized into a preposition, for it kept some verbal characteristics. But I prefer to consider the history of this pi as a good case of the fourth heuristic principle which P. Hopper (1988) explains as follows:

Persistence: "When a form undergoes grammaticization from a lexical to a grammatical function, so long as it is grammatically viable some traces of its lexical meanings tend to adhere to it, and details of its lexical history may be reflected in constraints on its grammatical distribution".

No matter what is the case, if grammaticalization did occur, it took place in a serial verb construction.

3. The dative construction

The dative structures are the structures par excellence for which one could easily speak of lexical replacements. It has been assumed that from Archaic Chinese to Contemporary Chinese there have only been lexical replacements.

In Archaic Chinese, we had four fundamental structures:

- a) 'V+IO+DO' (IO=indirect object, DO=direct object)
- b) 'V+DO+Prep. yu 於+IO'
- c) 'Prep. i 以+DO+V (+Prep. yu 於)+IO'
- d) V + DO + IO'.

In Late Medieval Chinese and in Modern Chinese (up to the 18th century), we had the following five structures:

- e) V+IO+DO'
- f) 'V+DO+Prep. yu 與+IO'
- g) 'V+Prep. yu 與+IO+DO'
- h) 'Prep. yu 與+IO+V+DO'
- i) 'Prep. pa 把 (or chiang 將)+DO+V (+Prep. yu 與)+IO'.

Lastly, in Contemporary Chinese, we have the following five fundamental structures:

- i) 'V+IO+DO'
- k) 'V+DO+Prep. kei 給+IO'
- 1) 'V+Prep. kei 給+IO+DO'
- m) Prep. kei 給+IO+V+DO
- n) Prep. pa 把+DO+V+Prep. kei 給+IO'.

Thus, it has been supposed that the following changes from Archaic Chinese (AC) to Medieval Chinese (MC) and from Medieval Chinese to Contemporary Chinese (CC) occurred: disappearance of the 'V+DO+IO' form from AC to MC; lexical replacement, AC yu 於 >MC yu 與; lexical replacement, AC i 以 >MC pa 把 or chiang 將; moving of the PP 'yu 與+IO' to a position between the V and the DO in MC; moving of the same PP in preverbal position, also occurring in MC; lexical replacement, MC yu 與>CC

kei 給.

I would like to show now that things did not happen that way. Diachronic changes were much more complicated and there was an obvious case of grammaticalization and not only single lexical replacements.

As early as the Pre-Medieval (or Han) period, some changes occurred in the dative constructions. Under the Former Han, in addition to the four forms attested in Archaic Chinese, we also have a new structure: 'V1+V2+ IO+DO'. The verbs which can fit the V1 position are all verbs with the semantic feature [+give] (as 'offer', 'transmit', 'sell', 'distribute', etc.) and the V2 position is only occupied by three distinct verbs, namely pu $\mathfrak{P}_{\!\!\!\!1}$, $\mathfrak{P}_{\!\!\!\!1}$ and wei $\mathfrak{T}_{\!\!\!\!1}$ which all mean 'to give'. Thus, the V2 are neutral verbs 'to give' whereas the V1 are specific verbs [+give] (i. e. meaning to give in a certain manner or with a certain intention, etc.)¹⁷. Therefore, this construction is semantically redundant since the second verb (V2) repeats the meaning 'to give' which is already included in the first verb (V1). It seems we have here a case of what E. C. Traugott (1988) calls 'strengthening of informativeness' which may intervene at early stages of grammaticalization. Examples of the 'V1+V2+IO+DO' structure:

- 41. 而厚分與其女財 (史記:司馬相如列傳)
 and-generously-share-give-his-daughter-property
 And he generously gave a part of his property to his daughter.
- 42. 欲傳與公(史記:扁鵲倉公列傳) wish-transmit-give-you
 - (I) want to transmit (it) to you.
- 43. 分予文君僮百人(史記:司馬相如列傳)
 distribute-give-Wen-chun-slave-a hundred-people
 (He) distributed a hundred slaves to Wen-chun.
- 44. 式輒復分予弟者數矣(史記:平準書)

¹⁷ When wei 遺 is employed as V2 in the 'V1+V2+IO+DO' form, it has the general meaning of 'to give' (Cf. Tz'u yuan, 1983, IV, p. 3090).

Shih Che-again-share-give-young brother-the one who-many times -particle

Many times, Shih Che gave new parts to his younger brother.

45. 假予產業(史記:平準書)

lend-give-property

(One) lend (them) property.

46. 閒獻遺戎王(史記:貨殖列傳)
secretly-offer-give-Jung-king

(He) offered (it) secretly to the king of the Jung.

This construction 'V1+V2+IO+DO' appeared suddenly in the Chinese language¹⁸. It was undoubtely generated from 'V+IO+DO' because the two structures shared the same constraint, i. e. only verbs (+give) can be used in V1 for the 'V1+V2+IO+DO' form and in V for the 'V+IO+DO' form.

Some centuries later, under the Late Han, the structure 'V1+V2+IO+DO' spread considerably. We can find many examples of it in the Late Han Buddhist translations and in Chao Ch'i $\dot{\mathbb{B}}$ in the Late Han Meng-tzu. E.g.:

- 47. 比丘即以蜜餅授與人 (阿闍世王經・大正藏 626 號,15 本,p. 394)¹⁹
 monk-immediatly-object marker-sweet-cake-give-people
 The monk immediatly gave the sweet cakes to the people.
- 48. 以天下傳與人尙爲易也 (孟子正義, p. 23)

give-give-poor-desesperate-the one who

Give (donations) to the poor and the desesperate, the verb yu, which is present in many editions of the book, is absent in the most ancient one (ch'iang-tao 乾道, from the Sung). This may suggest that the word yu was added later (Cf. Han Fei tzu suo-yin 1982, p. 753).

19 For more examples, see A. Peyraube (1986) where all the 29 Late Han Buddhist texts chosen by E. Zurcher (1977) have been consulted.

¹⁸ We may have a few examples of the construction in Archaic Chinese, but they are isolated and scattered and often ambiguous. In the following e. g.: 施與貧困者 (韓非子 14, p. 753)

object marker-Empire-transmit-give-other-still-be-easy-particle Transmit the Empire to others is still easy²⁰.

At that time, the verb yu 與 was almost always found in V2. There was, under the Late Han, a kind of lexical unification of all the V2 into the sole yu 與. This lexical unification process is confirmed by a comparative study of the 'V1+V2+IO+DO' forms in Shih chi (Former Han) and in Han shu (Late Han). If we admit that the Han shu is posterior to the Shih chi, we can conclude that this lexical unification process already began under the Late Han. The sentences 43-45 (from the Shih chi) became, in the Han shu, as follows:

- 49. 分與文君僮百人(漢書:司馬相如傳第二)
- 50. 式輒復分與弟者數矣(漢書:公孫弘卜式兒寬傳)
- 51. 假與產業(漢書:食貨上)

Under the Six Dynasties period, the 'V1+V2+IO+DO' structure became widespread, e. g.:

52. 時方給與姜維鎧仗

time-only then-provide-give-Chiang Wei-armor
Only at that time did he provide Chiang Wei with an armor²¹.

53. 將一大牛肥盛有力賣與此城中人(生經・大正藏 154 號,3本,p. 98) take-one-big-ox-fat-powerful-have-strength-sell-give-thiscity-inside-people

Take one big, fat, powerful and vigourous ox and sell it to the people of this town.

In these examples, is yu still a verb 'to give' or a marker which introduces the IO, a preposition like yu was k in Archaic Chinese? Do we still have two actions (one expressed by V1 and the other expressed by V2) or only

²⁰ The reference is made from the Taipei's Chung-hua shu-chu edition (1957). The original sentence in *Meng-tzu* is 以天下與人易 (滕文公上).

²¹ This example is adopted from Ushijima T. (1971, p. 29) which did not give the reference.

one action (expressed by V1)? It is not easy to answer this question. I think, nonetheless, that yu 與 is still a verb during the Six Dynasties period, the main reason being that the process of lexical unification of the V2 into yu 與 is not yet completed. We have still some e.g. of wei in $V2^{22}$.

Another interesting fact happened under the Six Dynasties period: the emergence of a new dative structure: $V1+DO+V2+IO^{23}$. Filling the V2 position, we have yu 與 or wei 遺, as for the 'V1+V2+IO+DO' structure. E.g.:

- 54. 阮家既嫁醜女與卿(世說新語:樓逸)
 - Juan family since marry ugly girl give you

Since Juan's family gave to you in marriage a girl (so) ugly...

55. 時跋跋提國湀獅子兒兩頭與乾陀羅王(洛陽伽藍記:城北)

that time-Bactria-Kingdom-offer-lion-cub-two-classifier-give-Gandhara-king

At that time, the kingdom of Bactria offered two lion cubs to the king of Gandhara.

56. 送一船米遺之(世說新語:方正)

offer-one-boat-rice-give-him

(He) offered him a boat of rice.

It has been supposed that the 'V1+DO+yu 與+IO' comes from the Archaic Chinese form 'V+DO+yu 於+DO' by a lexical replacement which changes yu 於 into yu 與. But such a solution would imply that the two yu are prepo-

教與羣下(三國志: 蜀書、董劉馬陳董呂傳第九) teach-give-inferior

Teach the inferior.

23 I found only one example of such a construction in a Late Han Buddhist text: 護國與叔 (大安般守意紅・大正藏 602 號, 15 本, p. 163)

concede-kingdom-give-Uncle

Concede the kingdom to Uncle.

²² I found only one example which may contradict the hypothesis that yu 與 is still a verb with its full lexical meaning:

sitions. We have good reasons to think that yu 與 is still a verb until the T'ang dynasty, for it can be followed, in some cases, by the preposition yu 於, as in:

57. 二分留與於慈母(變文, p. 756)

two-part-leave-give-to kind-mother

(Mulian) left the two parts to his kind mother.

I would like to propose another origin of the structure 'V1+DO+V2+IO' which seems more plausible. 'V1+DO+V2+IO' comes from 'V1+V2+IO+DO' by moving the constituent 'V2+IO' after the DO, probably by analogy with the 'V1+O1+V2+O2' serial verb construction which is already attested. Hu Chu-an (1960) admits the contrary and posits the following diachronic change: 'V1+DO+V2+IO' > 'V1+V2+IO+DO'. But this is unlikely because, as I have already pointed out, the 'V1+V2 yu+IO+DO' structure existed many centuries before the 'V1+DO+V2 yu+IO'. It is of course impossible to derive diachronically a structure A from a structure B which is posterior to A.

Thus, I propose the following diachronic change:

V1+V2+IO+DO' V1+DO+V2+IO' around the 4th-5th centuries²⁴.

Under the T'ang times, the process of lexical unification of the V2 into yu 與, which began under the Late Han, was completed:

$$V1 + \left\{ \begin{array}{c} V2 \\ 與 \\ \mathbb{P} \\ \mathbb{g} \end{array} \right\} \rightarrow V1 + \left\{ \begin{array}{c} V2 \\ \mathbb{P} \\ \mathbb{P} \end{array} \right\}$$

The V2 position is therefore always filled by the sole verb yu \mathfrak{P} . The reasons of such a lexical unification are not very clear. However, on may think that \mathfrak{P} imposed itself because it was the most common verb employed in V2 position and the most frequently used verb expressing the meaning 'to give'. We have here a good example of the third heuristic provided by P.

²⁴ This derivation is limited for the cases when V1 is a verb (+give). Cf. A. Peyraube (1988) for the reasons of this limitation.

Hopper (1988) formulated as follows: Specialization. "Within a functional domain, at one stage a variety of forms with different semantic nuances may be possible; as grammaticization takes place, this variety of formal choice narrows and the smaller number of forms selected assume more general grammatical meanings".

The two structures 'V1+yu 與+IO+DO' and 'V1+DO+yu 與+IO' are still largely employed in the T'ang and Sung periods. E.g.:

- 58. 遂度與天使弓箭 (變文, p. 205) then-pass-to-imperial-envoy-bow-arrow (He) then passed the bow and the arrows to the imperial envoy.
- 59. 說與他道 (朱子語類 11·讀書法下, p. 304)²⁵ speak-to-him-dao
 He spoke of dao to him.
- 60. 此說某不欲說與人(朱子語類 114, 訓門人二, p. 4401) this-word-I-negation-want-say-to-other I don't want to say these words to other people.
- 61. 意欲寄書與人 (變文, p. 137) desire-wish-send-letter-to-somebody (My) desire is to send letters to somebody.
- 62. 天使我送苽一雙與汝來 (變文, p. 867)
 Heaven-send-me-offer-ku-one-pair-to-you-directional verb
 Heaven sends me to offer you two ku.

I have admitted that under the Six Dynasties period the structures 'V+yu 與+IO+DO' and 'V+DO+yu 與+DO' were still serial verb constructions, mainly because the process of lexical unification was not yet achieved. Beginning in the T'ang this process is completed and it is no longer obvious that yu 與 is still a verb meaning 'to give', as the e.g. 58-62 indicate. It can as well be the dative preposition 'to'.

²⁵ The reference is made to the Taipei's cheng-chung shu-chu edition (1962).

I therefore think that the grammaticalization process transforming the verb 'to give', after bleaching it, into the dative marker 'to' occurred some time during the T'ang dynasty. The following diachronic change happened:

 $yu (+V) \rangle yu (+Prep.)$ around the 8th century.

It is not easy to date precisely the grammaticalization. I think the grammaticalization did not occur before the 7th century because at that time the process of lexical unification was not yet completed. On the other hand, to be sure of the prepositional nature of yu 與, we can only rely on the semantic nature of the verb which co-occurs with yu. When such verbs are like shuo 說 'to speak', it is obvious that yu is no longer a verb and has already became a preposition. And I did not find instances of 'shuo+yu+IO+DO' or 'shuo+DO+yu+IO' before the 7th century²⁶. I think too that the grammaticalization process has been achieved before the 9th century, because at that time another new structure appeared: 'yu 與+IO+V+OD'. It is reasonable to assume that the moving of 'yu+IO' to a preverbal position intervened only when the 'yu+IO'—phrase was a PP, by analogy with the other PP which were already preverbal like the locative PP.

In conclusion, the history of the dative constructions provide another case of a grammaticalization process which converts a verb into a preposition through a serial verb construction. There is, however, a difference with the disposal construction and the comparative construction. For *chiang/pa* and *pi*, it is the first verb of the 'V1+O1+V2 (+O2)' which has been grammaticalized into a preposition, while for yu, it has been the V2 of both 'V1+V2+IO+DO' and 'V1+DO+V2+IO' forms.

4. The origin of the aspectual particle liao 7

The origin of the aspectual particle liao offers another case of the

²⁶ The only example dating from the Six Dynasties period which may indicate that yu \mathfrak{g}_{1} is already a preposition is the one cited in footnote 22. But it is isolated and can be treated as an exception.

grammaticalization process transforming a verb into a particle. The following part is mainly based on Mei Tsu-lin (1981), and also on Ts'ao Kuang-shun (1986), S. H. Cheung (1977) and Chao Chin-ming (1979).

- 63. 王飲酒畢…(世說新語:方正) king-drink-wine-finish After having finished drinking wine, the king...
- 64. 俱乞食訖… (增壹阿含經·大正藏 II, p. 637) all-beg-food-finish After they have all finished begging, ...
- 65. 佛說此經已··· (妙法蓮華經·大正藏 IX, p. 2)

 Buddha-recite-this-sutra-finish

 After the Buddha had recited this sutra...
- 66. 〔張季鷹〕作數曲竟…(世說新語:傷逝)

Chang Chi-ying-do-several-tune-finish

After (Chang Chi-ying) had finished several tunes...

It should be observed that the structure 'V1+O+V2' is here limited to be the first clause of a complex sentence. We never find it at the end of a sentence. The origin of the form can probably be dated at the end of the Han dynasty. No such form can be found in *Shih chi*, but it appeared several times in the Late Han Buddhist texts (see Ts'ao Kuang-shun, 1987).

These four V2 were still employed under the T'ang where they were obviously verbs since they could be preceded by an adverb as in:

67. 須達買園旣畢…(變文, p. 372)

Hsu Ta-buy-garden-as soon as-finish

As soon as Hsu Ta has finished buying the garden...

During the T'ang, another verb appeared to be able to fill the V2 position, and was more frequently used than the four other verbs: the verb *liao* I meaning also 'to finish', 'to accomplish'²⁷. E. g.:

68. 作此語了逐卽南行(變文,p.8)

do-this-word-finish-then-immediatly-south-move

After having said these words, he moved immediatly to the south.

69. 子胥解夢了… (變文, p. 26)

Tzu-hsu - explain - dream - finish

After having explained the dream, Tzu-hsu...

70. 拜舞旣了… (變文, p. 205)

worship-dance-as soon as-finish

As soon as (he) finished worshipping and dancing...

In this last example, there is an adverb between 'V1+O' and the V2 liao, which indicates that liao here must be considered as a verb.

Thus, in the T'ang period, particularly after the mid-T'ang, liao became predominant and replaced the other V2: pi, ch'i, i, and ching. The increasing importance of liao in V2 lead to an autonomy of the form which could therefore be used as a whole sentence or at the end of a sentence (cf. Ts'ao Kuang-shun, 1987). There was then a process of lexical unification, of the same nature as the one discussed for the dative construction:

$$\left(egin{array}{ccc} V & & & & & \\ pi & & & & & \\ ch'i & & & & \\ i & & \Box & & \\ ching & 竟 \\ liao & & \end{array}
ight) > \left\{egin{array}{c} V & & \\ liao & \end{array}
ight\}$$

²⁷ The 'V1+O+V2 *liao*' form can probably be dated in the Six Dynasties period. Ts'ao Kuang-shun (1987) found an example in *San kuo chih* 三國志. But the structure with *liao* was then very rare. More frequently we had 畢, 訖, 己 or 竟 in V2.

We have here a new illustration of the third heuristic principle proposed by P. A. Hopper (1988), i. e. 'specialization'. We can also notice that the same phenomenon appeared in Hindi. Before being grammaticalized into a perfective aspectual auxiliary, the verb *jaanaa* 'to go' was selected among half a dozen other 'vector verbs' (see P. Hook, 1974).

After this process of lexical unification has been achieved, there was a change of structure. The object has been moved behind the second verb:

V1+O+V2 liao > V1+V2 liao+O.

According to Wang Li (1958, p. 306) and Ota T. (1958, p. 226), this change occurred during the Wei-Chin Nan-Pei Ch'ao period, but Mei Tsu-lin (1981) thinks that it occurred under the T'ang, some time around the 10th century. Examples of the 'V1+V2 liao+O' structures are actually inexistent in the Shih-shuo hsin-yu and still not common in the Tun-huang pien-wen where only four instances have been found. E.g.:

- 71. 說了夫人及大王 (變文, p. 774) say-liao-Madam-and-Master(He) said it to Madam and the Master.
- 72. 見了師兄便入來 (變文, p. 396)

greet-liao-Master-older disciple-then-come in-directional verb (I'll) come in after having greeted my older brother (disciple of the Master).

Moreover, Mei Tsu-lin can only find two examples of 'V1+V2 liao+O' in the Tsu t'ang chi 祖堂集 (which can precisely be dated 952).

After the V2 liao has been moved before the object, we can conjecture that the verb liao has been divested of its full meaning 'to finish', 'to accomplish' and has been grammaticalized to become an aspectual particle expressing the accomplishment of the action described by the V1. This hypothesis of grammaticalization can be justified because when the 'V+liao +O' structure appeared, there is no longer any adverb which can precede liao, as it was the case when we had the 'V (+O)+liao' structure.

Thus, the following diachronic change occurred:

$$\left\{ \begin{array}{c} V \\ liao \end{array} \right\} > \left\{ \begin{array}{c} Aspectual \ particle \\ liao \end{array} \right\}$$

This change was made possible by the shifting of the verb *liao* from a postverbal position to a pre-verbal position. To explain this shift, Mei Tsu-lin (1981) mentions an analogical process: it was by analogy with the resultative constructions which had at that time two different forms ('V+O+R' and 'V+R+O') that the V2 *liao* could be shifted before the O, as it was in the 'V+O+R' structure, where the resultative complement R was also a verb expressing an accomplished aspect.

We can also mention another analogical process. According to Ts'ao Kuang-shun (1987), there was another form to express the perfective aspect during the T'ang: ' $V+ch'\ddot{u}eh$ 卻+O', where $ch'\ddot{u}eh$ seemed to be already a perfective marker, e.g.:

73. 漢帝不憶李將軍,楚王放卻屈大夫(李白)

Han - Emperor - negation - remember - Li - general - Ch'u - Prince - free - ch'ueh - Ch'ü - minister

The Han Emperor no longer remembers General Li and the Prince of Ch'u has given up Minister Ch'ü.

This form become very widespread after the mid-T'ang and two structures 'V+O+liao' and 'V+ch'üeh+O' were then employed²⁸. Thus, one can conjecture that the moving from 'V+O+liao' to 'V+liao+O' was also made possible by analogy with the 'V+ch'üeh+O' form.

But what I would above all like to show here, while looking back on the history of liao, is that we are dealing with another process of gram-

²⁸ Ts'ao Kuang-shun (1987) observes that in *Tsu tang chi* (952), *ch'üeh* is also exclusively used as an aspectual particle. It appears two hundred times and is used with more than seventy verbs. The origin of *ch'üeh* is also obviously verbal. *ch'üeh* signifies, after the T'ang, firstly *ch'ü* 去 'to go' and then *tiao* 掉 'to drop'.

maticalization which transforms a verb into an aspectual particle and that this process takes place again in serial verb constructions.

It is not very clear if this process of grammaticalization took place in the 'V1+O+V2 liao' serial verb construction, i. e. before the change of the word order, or in the 'V1+V2 liao+O' serial verb construction, after the word order change. Nonetheless, it seems to me preferable to consider it to have taken place after the word order change, especially if the word order change was pushed by analogy with the 'V-R-O' construction, where R is a resultative verb. The analogy with 'V+ $ch'\ddot{u}eh$ +O', where $ch'\ddot{u}eh$ is already an aspectual marker according to Ts'ao Kuang-shun (1987), could have then helped the grammaticalization process.

No matter what is the case, this process really did occur in a serial verb construction²⁹.

Conclusion

I have discussed four examples of grammaticalization which do show that this process is a vital mechanism of syntactic change in Chinese. Analogy also plays an important role. But the processes of analogy cannot be the origin of any intervention of reanalysis; they can, at the most, decide the form the change will take. Grammaticalization is a mechanism of change which usually leads to the creation of very productive constructions. It is unlikely, under such conditions, that the external borrowing from other languages, could be an important cause of syntactic changes, as M. Mithun & L. Campbell (1982) suppose. I will rather agree with D. Lightfoot (1981)

²⁹ This obviously supposes that one does not restrict the serial verb constructions to the sole 'V1 (NP1) V2 (NP2)' where each of the verbs V1 and V2 represents a separate action, as Huang Shuan-fan (1978) supposes. In the case of the aspectual construction, as in that of the comparative construction, the V2 expresses some result in relation to the V1.

b) who thinks that the resort to foreign influences as a cause of change often masks our ignorance in the real causes of diachronic changes.

The process of grammaticalization of verbs becoming prepositions or particles that I have mentionned has taken place in serial verb constructions, as it was assumed some fifteen years ago; those who criticized this point of view, arguing that the verbs which were supposed to become prepositions were not employed in serial verb constructions, may not be right. The source of their misunderstanding is probably that they did not look at the correct data, i.e. vernacular medieval texts. If we want to study the evolution of a syntactic structure, we have to give special attention to these texts and not to those written in Classical Chinese which have not undergone any fundamental changes since the 5th century B. C. and up to the 19th century A. D. When French linguists do research on French diachronic syntax, they do not compare Contemporary French and Latin.

The four cases of grammaticalization I have presented all occurred around the 8th to the 10th centuries. I think they must be inter-related. I am convinced that this coincidence in time is not merely an accident. There must have been a big radical change in the 8th-10th centuries Medieval Chinese which lead to a restructuration of the syntactic structure, perhaps a sudden mutation in terms of the catastrophy theory of R. Thom who believes that the "global evolution of a system is a succession of continuous evolutions, but they are often separated by sudden leaps (jumps) of a very different qualitative nature"³⁰.

As we do not know the causes of the grammaticalization, we do not know the causes of the mutation. But it would be too pessimistic to admit, with P. Postal (1968, p. 283), that "there is no more reason for languages to change than there is for automobiles to add fins one year and remove them the next, for jackets to have three buttons one year and two the next,

³⁰ See R. Thom (1983, p. 60). Usually, syntactic changes are said to be gradual, as J. H. Greenberg (1977) or S. Chung (1977) point out.

Syntactic Change in Chinese: On Grammaticalization

etc.". It would be better to continue to believe that a better knowledge of the facts will allow us to disclose the hidden determinism of phenomena which are apparently uncertain, bearing in mind the famous line of Einstein: "God did not play dice".

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摘 要

語法化(grammaticalization)的過程不能提供語法變化的原因,也不能解釋為 甚麼會有重新分析(reanalysis)的產生。不過,它可以告訴我們這些變化的規律性 (mechanisms)。

本論文討論四種典型的語法化例子,動詞通過語法化後變爲介詞或助詞。這四個例子涉及 1. 處置式,2. 比較句,3. 雙賓語結構,4. 完成貌句式。本文示出,在所有四個例子裏,動詞演化爲介詞或助詞的語法化都經由 "V1+NP1+V2(+NP2)"這種連動式(serial verb construction)而產生。這個假設在十五年前就被提出來而受到各種批評。批評這個假設的人認爲最後變爲介詞的動詞並非在連動式之中,這個說法不一定正確。

本論文所討論的語法化過程為內在變化 (internal change) 的規律性,這些規律性催生了常用的結構。而且語法化過程也可以澄清新的語法符號 (marker) 的出現,而毋需依賴外語影響 (external borrowing)、或單獨的詞滙代替 (lexical replacement) 等這類解釋,這些解釋對新的詞滙的出現可能有效,但是不大可能用於漢語的語法系統的演變。