

Historical development of *ba* and *jiang* in the Tang Dynasty

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ABSTRACT

Based on evidence in Zen dialogues, Bianwen and Chuanqi texts in the Tang Dynasty (A.D. 618-907), and other sources from earlier and later periods, this article, after dismissing the common misconception that during Tang *ba* (把) was frequently used in the disposal and serial-verb constructions, proposes that the grammaticalization of the *jiang* (將) serial-verb construction was encouraged by *yi* (以), but *jiang*'s disposal characteristic was modeled after its passive counterpart *bei*, and that it is via the process of lexical replacement that *ba* replaced *jiang*'s prepositional functions in instrumental and disposal constructions. *Ba* later lost its instrumental function to *na* (拿). We thus resolve the debate between Huang (1986) and Bennett (1981). Moreover, from the recurring pattern of change in the historical development of *yi*, *jiang*, *ba*, and *na*, we observe two counteracting principles at work: functional refinement, which forces a one-to-one correspondence between a form and its function, and analogous development, which does just the opposite to create a one-to-many relationship.

Chinese linguists generally agree that historically *ba* and *jiang* functioned exclusively as verbs until the Tang Dynasty (A.D. 618-907), when they underwent syntactic change to function also as prepositions in the disposal and instrumental constructions (e.g., Bennett, 1981; Huang, 1986; Li & Thompson, 1974b; Wang Li, 1958).¹ The following examples of *ba* and *jiang* are from Wang (1958:410-413). Examples (1a) and (1b) illustrate their verbal usage in Archaic Chinese before the 1st century; (1c) and (1d) are examples of the disposal and instrumental usage, respectively, during Tang.

- (1) a. 無將大車
wu jiang da che.
don't take big wagon
Don't take the big wagon.

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b. 舜親把天之瑞令

Shun qin ba tian zhi rei ling.

Shun personally hold heaven POSS jade command

Shun personally held the heaven's command, a jade piece.

c. 將詩莫浪傳

jiang shi mo lang chuan.

JIANG poetry don't carelessly circulate

Don't circulate the poetry carelessly.

d. 把春償酒

ba chun chang jiu.

with spring pay wine

Pay for the wine with the season of spring.

In modern Mandarin Chinese, however, *ba* and *jiang* have lost their earlier verbal and instrumental functions almost entirely. In disposal constructions, *ba* is used primarily in speech, whereas *jiang* appears nearly exclusively in written texts (Sun & Givón, 1985).

Previously, it was assumed that the rise of *ba/jiang* as prepositions was via the grammaticalization (or reanalysis) of the verbal *ba/jiang* in a serial-verb construction (e.g., Bennett, 1981; Givón, 1975; Li & Thompson, 1974a, 1974b; and Wang Li, 1958).² The following example of a *ba* serial-verb sentence found in the Tang Dynasty is also due to Wang Li (1958:411).

(2) 兩鬢愁應白

Liang bin chou ying bai,

two side-burn melancholy should white

勞心把鏡看

laoxin ba jin kan.

worry hold mirror see

My two melancholy side-burns should have turned white, and I am afraid to hold the mirror to see them.

Note that the implied object of *kan* 'see' is the sideburns, not the mirror. The two coordinate verb phrases *ba jin* 'hold the mirror' and *kan* 'see' thus form a serial-verb construction. This conventional view of grammaticalization is depicted explicitly by Bennett (1981:67-68) as the following: the serial-verb construction (3a), reanalyzed to be (3b), the disposal construction where the implied object of *kan* 'see' is now reanalyzed to be *jin* 'mirror' the NP marked by *ba*, now a preposition.

(3) a. [_S [_{VP} [_V *ba* _V] [_{NP} *jin* _{NP}] _{VP}] [_{VP} [_V *kan* _V] _{VP}] _S]

b. [_S [_{VP} [_{PP} [_P *ba* _P] [_{NP} *jin* _{NP}] _{PP}] [_V *kan* _V] _{VP}] _S]

Many languages exhibit serial-verb constructions, such as Thai, Vietnamese, and a number of other South Asian languages, as do many West African languages (Gary & Keenan, 1977). The fact that the grammaticalization of verbs as prepositions and the correlated change from a serial-verb construction to a single VP are also observed in other languages (e.g., Niger-Congo languages; Givón, 1975) certainly adds credibility to this conventional view, which remained unchallenged until Huang (1986).

Based on the evidence that in the Zen dialogues of the Tang Dynasty (henceforth ZDT) *jiang* as a verb was frequently found in serial-verb constructions but *ba* appeared mostly in single-verb constructions, Huang (ibid.) instead suggested that whereas *jiang* may indeed have reanalyzed to become a preposition in a serial-verb construction, *ba* acquired its prepositional functions by lexically replacing *jiang*.

In this article, we attempt to identify the general linguistic factors that facilitated the historical changes of *ba*'s and *jiang*'s syntactic functions and thus in the process resolve this debate. Drawing on Huang's previous findings in ZDT and new evidence found in Chuanqi (CQ) and Bianwen (BW) (two literary genres during Tang) regarding the distribution of *ba*, *jiang*, and *yi* in verbal, instrumental, and disposal constructions, we are able to give a more convincing and comprehensive account of the syntactic changes of *ba* and *jiang*.³

We observe that there are two counteracting principles—functional refinement and analogous development—governing the changes of *ba* and *jiang*. The functional refinement thesis states that a linguistic form with multiple functions is likely to lose some of its functions. The thesis of analogous development further specifies that a linguistic form undergoing refinement is likely to be replaced by another form sharing one or more of its functions.

PRIMARY SOURCES

Whereas Zen dialogues are considered the main source of language materials of the southern region of the Tang Dynasty, CQ and BW serve well as linguistic data from the northern region of China of the same period.

The primary source of CQ material for this study is *Tangren Chuanqi Xiaoshuo* 'Chuanqi Stories by Tang Writers' (Wang Guo-Yuan, 1974). All stories in this anthology were written during the Tang period, ranging from the end of the 7th century to the 10th. The text consists of some 100,000 characters. The editor of the anthology made conscious efforts to trace the origin of the different versions of a story and select the one that is most reliably the original. *Dunhuang Bianwen Huilu* 'An Anthology of Dunhuang Bianwen' (Zhou, 1954) is the primary source for our BW data, which contain some 120,000 characters. As the BW materials were preserved in the Dunhuang caves and had not been discovered until the end of the 19th century, there is little question regarding the authenticity of the language used in the BW texts.

Chuanqi is an innovative literary form of short stories. In order to obtain promotions or recommendations for governmental positions, it was common for scholars and government officials to present their literary work to the relevant higher officials to demonstrate their talents. Because CQ is a rather unconstrained form of literature, poetry is often integrated within prose, descriptive as well as argumentative writing skills could be manifested at the same time, and knowledge of history and views on current events could be expressed subtly. Thus, many writers chose to include some CQ stories in their portfolio. Clearly, then, the CQ language is to a large extent literary because the purpose of CQ writing was to demonstrate the writer's literary skills. Moreover, the influential Guwen Movement during the Tang Dynasty – which promoted the use of the pre-Qin Archaic Chinese – has further distanced CQ from the contemporary spoken language.

Bianwen, on the other hand, is the recordings or scripts of Buddhistic or heroic stories that were delivered orally to audiences composed largely of common people. Most of the BW stories were recorded during the middle and late Tang periods, chiefly the 9th and 10th centuries. According to Mair (1983), the Bianwen texts, which he called Transformation Texts, were the first body of Chinese texts recorded in the vernacular. Note, however, the storytellers not only "talked story" but would sing parts of it as well. Thus, certain portions of a BW story may be in verse. At any rate, it can be easily established that the BW language reflects the spoken language of Tang much more faithfully than CQ.

LINGUISTIC FEATURES THAT DISTINGUISH CQ AND BW

We provide some of the linguistic features that more precisely enhance this distinction. First, in Table 1, we illustrate the number of occurrences of the different lexical items used to mark perfective aspect in BW and CQ.

The most frequently used lexical element to indicate the completion of an action or state in CQ is the sentence-final particle *yi* (已), which has existed in Chinese since the Early Archaic period. The innovative use of *liao* (了), which is very frequently seen in BW, is never found in our CQ texts. According to Shi (1989), which constitutes a careful study of the historical development of the modern aspect particle *le* (了), during the Tang period *liao*, as a phase complement and a sentential verb in a temporal clause, served as the forerunner of the particle *le*. By the 12th century, when *liao* appeared between the verb and its complement, it had reanalyzed to be more like *le*. The absence of *liao* thus clearly suggests the conservativeness of CQ language.

The distribution of various lexical elements in passive constructions in BW and CQ again leads to the same conclusion. In Table 2 we have incorporated the relevant data gathered from *Shishuo Xinyu* (Liu, 1931), which is an important source material for language used in northern China during the period immediately preceding Tang.

TABLE 1. *Perfective aspect markers in Bianwen and Chuanqi*

Lexical Item of Perfective Aspect	CQ	BW
Sentence-final <i>yi</i> (矣)	201	4
Postverbal <i>qi</i> (訖)	28	19
Postverbal <i>yi</i> (已)	10	8
Postverbal <i>bi</i> (畢)	13	0
Preverbal <i>yi</i> (已)	12	50
Postverbal <i>liao</i> (了)	0	46
Postverbal <i>yi-liao</i> (已了)	0	30
Postverbal <i>liao-bi</i> (了畢)	0	1
Postverbal <i>liao-shou</i> (了首)	0	1
Postverbal <i>liao-shou</i> (了手)	0	1
Postverbal <i>yi-qi</i> (已訖)	0	8
Postverbal <i>yi-jing</i> (已竟)	0	3
Postverbal <i>yi-bi</i> (已畢)	0	2

TABLE 2. *Passive constructions in Shishuo Xinyu, Chuanqi and Bianwen*

Lexical Item	Shishuo Xinyu	CQ	BW
<i>bei</i> (被)	27	7	43
<i>jian</i> (見)	12	16	0
<i>wei...suo</i> (為...所)	38	11	0

According to Wang Li's *Hanyu Shi Gao* 'History of the Chinese Language' (1958:422-426), the use of *bei* in passive constructions is more recent than that of *jian* and *wei...suo*. Since the Tang Dynasty, *bei* has become the only lexical element denoting passive voice in colloquial Mandarin. The frequent use of *jian* and *wei...suo* in CQ can therefore be attributed to

TABLE 3. *Functions of ba and jiang in Bianwen (BW) and Chuanqi (CQ)*

	<i>ba</i>		<i>jiang</i>	
	BW	CQ	BW	CQ
Verbal	19	5	39	6
Instrumental	2	1	30	5
Disposal	5	0	25	1

TABLE 4. *Verbal functions of ba and jiang in Bianwen (BW) and Chuanqi (CQ)*

	<i>ba</i>		<i>jiang</i>	
	BW	CQ	BW	CQ
Single verb	14	4	10	1
Serial verb	5	1	29	5

its imitation of Archaic Chinese. On the other hand, the almost exclusive use of *bei* in BW supports its colloquialism.

The most important innovation of the language in the Tang Dynasty is probably the development of *ba* and *jiang* in their instrumental and disposal constructions. Many Chinese linguists consider that it is during this period that Chinese started to shift from an SVO language to be SOV due to this reanalysis of verbal *ba* and *jiang* to become preverbal object markers (e.g., Li & Thompson, 1974b; Tai, 1976), although others disagree (e.g., Her, 1985-86, 1990; Light, 1979). In Table 3, we illustrate the distribution of the three different functions of *ba* and *jiang* in BW and CQ: verbal, instrumental, and disposal.

Notice first of all that in our CQ texts, the innovative use of *jiang* in a disposal construction is found only once and *ba* is used for its verbal function almost exclusively. However, disposal constructions, especially in the case of *jiang*, are frequent in the BW texts.

In the verbal usage of *ba/jiang*, they may appear either in a serial-verb or a single-verb construction. Table 4 indicates the number of occurrences of verbal *ba* and *jiang*.

Our observation therefore comports with Huang's finding that *jiang* was often used in serial-verb constructions, whereas *ba* most typically appeared in single-verb sentences during the Tang period. The following are some examples. The implications of this fact are discussed later.

- (4) a. 余時把著手子
yu shi ba zhe shouzi.
 I then hold PROG hand
 I then was holding (her) hand. (CQ, 30)
- b. 以手把胸
yi shou ba xiong.
 with hand hold chest
 (He) holds (his) chest with (his) hand. (BW, 376)
- c. 帝食桃，手把其核
di shi tao, shou ba qi he.
 emperor eat peach hand hold its pit
 The emperor ate the peach and held the pit in his hand. (BW, 382)
- d. 將天子命以總戎節
jiang tianzi ming yi zongrongjie.
 take emperor order give commander-in-chief
 (He) took the emperor's order to give to the commander-in-chief. (CQ, 135)
- e. 今將眷屬來瞻禮
jin jiang juanshu lai zhanli.
 now take family come pay respect
 Now I have taken my family to come to pay respect (to you). (BW, 68)
- f. 將父母到本家庭
jiang fumu dao ben jiating.
 take parents go original home
 (He) took (his) parents to go back to (their) hometown. (BW, 286)

We can therefore conclude that BW reflects the contemporary spoken language of the Tang Dynasty much more faithfully than CQ, which is heavily influenced by Archaic Chinese. This contrast between BW and CQ is conducive in the study of the historical development of *ba/jiang*, for BW provides the most reliable data of Tang vernacular, whereas CQ texts expose an earlier, more conservative style of Chinese.

Before we look into the debate between Huang and Bennett, we should first clarify a commonly held misconception. Both Huang's and our observations of the use of *ba* and *jiang* demonstrate that Li and Thompson's (1974b) claim that *ba* occurred frequently in serial-verb sentences in the Tang Dynasty is incorrect. Likewise, Wang Li's (1958:413) statement concerning the interchangeability of *ba* and *jiang* in the Tang Dynasty should also be taken with caution.

The use of *ba* in the disposal construction became more common after the middle and late periods of Tang. . . . However, *jiang* and *ba* seem to have the same

functions. Often in a pair of sentences in a verse, instrumental and disposal constructions are both used and the choice between *ba* and *jiang* is random. . . . It is the same way in *Shuihu*—in a single sentence both *ba* and *jiang* are used but the distinction between them is unclear. (Wang Li, 1958:413; translation mine)

All the examples that Wang Li used to reach the conclusion that in the Tang Dynasty the choice between *ba* and *jiang* in an instrumental or disposal construction was random are pairs of sentences, or couplets, from poetry. It is crucial to point out that it is a literary taboo in Chinese poetry writing to repeat the same word in corresponding lines within the same poem. Therefore, Wang Li's examples may well give the impression that in instrumental and disposal constructions the use of *ba* or *jiang* was random, whereas in Tang vernacular, as both Huang and we observed, *jiang* was definitely the preferred choice in both disposal and instrumental constructions. However, by the time of *Shuihu* 'All Men Are Brothers', a popular novel written several centuries later in the Yuan Dynasty and the Ming Dynasty, the use of *ba* in the disposal construction should have increased and therefore Wang Li's observation on the use of *ba* and *jiang* of that time should be correct. An empirical study will easily clarify this point.

GRAMMATICALIZATION VERSUS LEXICAL REPLACEMENT

We first summarize the relevant facts in the Tang Dynasty that we have established so far according to our BW and CQ data and then critically look at the debate between Huang and Bennett.

Relevant linguistic facts of the Tang Dynasty

1. *Bei* is the most dominant, if not exclusive, lexical element in the passive construction with strong disposal characteristics in the Tang Dynasty, but its passive use appeared long before Tang.
2. *Ba* and *jiang* are both used as verbs with a similar meaning of 'take' or 'hold'.
3. As a verb, *ba* is mostly used in single-verb sentences, but *jiang* is more frequently used in serial-verb sentences.
4. In instrumental and disposal constructions, *jiang* is the preferred choice, whereas *ba* is very infrequently used.
5. *Ba* and *jiang* had only verbal constructions before Tang.

In light of these relevant facts, we now discuss Huang's and Bennett's positions, which are summarized as follows:

Bennett's position

1. Both *ba* and *jiang* became prepositions through grammaticalization of their verbal usage in serial-verb constructions.
2. The *yi* (以) instrumental and disposal constructions may have served as the source, or trigger, for *ba* and *jiang*'s grammaticalization as prepositions.

Huang's position

1. *Jiang* became a preposition in instrumental and disposal constructions via grammaticalization.
2. *Jiang's* grammaticalization was triggered perhaps by the already disposal *bei* passive construction.
3. *Ba* became a preposition via the process of lexical replacement, replacing *jiang*.
4. Thus, *jiang*, not *yi*, triggered *ba's* analogous acquisition of its instrumental and disposal functions.

In terms of the development of *ba's* prepositional functions, Wang Li's (1958:413) position is similar to Bennett's: "The *ba* of prepositional function developed exactly from the gradual grammaticalization of the *ba* that has a concrete meaning of action (the meaning of 'taking')" (translation mine).

However, Huang (1986) rejected the notion that there was a parallel historical development between *ba* and *jiang* in the Tang Dynasty. His argument was based on text frequency. In ZDT, *ba's* primary function is a verb, and it only rarely functions as a preposition in either the instrumental or the disposal construction. *Jiang* appears much more frequently in both of the prepositional constructions. Clearly, then, *jiang* acquired the instrumental and disposal functions earlier than *ba*, and in the Tang Dynasty *jiang* had firmly established its instrumental and disposal functions, whereas it was just the beginning for prepositional *ba*. The statistics from BW and CQ, as presented in Table 3, certainly support Huang's argument.

Specifically, Huang suggested that the emergence of the *jiang* disposal construction was indeed through grammaticalization of its verbal construction, triggered by its passive counterpart *bei* sentences. The development of *ba* instrumental and disposal constructions was through the process of lexical replacement, triggered by the *jiang* instrumental and disposal constructions due to the resemblance of *ba's* and *jiang's* verbal meanings.

Huang's rejection of Bennett's position that *ba* came to be a preposition via grammaticalization is justified for the following reasons. In ZDT, *ba* was seldom used in disposal or instrumental constructions, and as a verb *ba* most frequently appeared in single-verb sentences. The argumentation therefore goes like this: because *ba* primarily functioned as a verb in single-verb and not serial-verb sentences, it is highly unlikely that *ba* derived its instrumental and disposal use via the grammaticalization of its serial-verb construction. Our data from BW and CQ (Table 4) also confirm Huang's findings from ZDT. On the other hand, it can also be argued that because *jiang* as a verb is frequently used in serial-verb constructions and is also the preferred lexical element in instrumental as well as disposal constructions, as the ZDT and BW data show, it is reasonable to believe that the prepositional *jiang* came about via the grammaticalization of its serial-verb construction.

Having dismissed the grammaticalization thesis of the emergence of the *ba* disposal construction, Huang proposed that the process was instead one of lexical replacement. He argued that *jiang* later triggered *ba* to undergo

analogous development to pick up its instrumental and disposal functions and eventually replace *jiang*. Although the data in ZDT and BW provide direct evidence against the hypothesis that the modern *ba* disposal construction emerged from grammaticalization of its serial-verb construction in the Tang Dynasty, available evidence only indirectly supports Huang's lexical replacement hypothesis.

Furthermore, Huang's Position 2—that *bei* triggered the disposal characteristic of *jiang*—is not the only logical conclusion the relevant linguistic facts necessarily lead to. There is no reason to rule out the possibility that *yi* triggered the disposal construction of *jiang*. Yet, we agree that *yi* could not have triggered the emergency of disposal *ba* because, first, *ba* as a verb was hardly used in serial-verb construction, and second, *jiang* has to be a much more reasonable candidate, according to ZDT and BW data.

A crucial point to keep in mind is that it is quite impossible to prove what initiates a grammatical change, as Huang (1986:49) admitted, "Just what initiates the grammaticalization of the *jiang* serial sentences is of course unanswerable." Instead, the reasonable and constructive linguistic task is to analyze the environment where grammatical changes take place and reveal the general factors that facilitate or encourage change (Langacker, 1977). Therefore, we first look at *yi*'s functions more closely and then give a more balanced view on what facilitated the changes of *jiang* and *ba*.

THE HISTORICAL DEVELOPMENT OF *yi*, *jiang*, AND *ba*

Yi has existed ever since Archaic Chinese, and as many linguists have observed, other than being a verb, it also functioned as a preposition in the instrumental construction and the double-object construction marking the direct object (e.g., Bennett, 1981; Huang, 1986; Wang Li, 1958).⁴ In a VP where the direct object is obliquely marked by *yi*, the VP thus has the structure: [[P DO] V IO]. The following examples are from CQ and BW texts.

- (5) a. 以實告古生
yi shi gao Gusheng.
 YI truth tell Gusheng
 (He) told Gusheng the truth. (CQ, 171)
- b. 以金盒授之
yi jinhe shou zhi.
 YI gold box give him
 (He) gave him the gold box. (CQ, 262)
- c. 賜之以七寶百珍
ci zhi yi qi bao bai zhen.
 bestow him YI seven treasure hundred gem
 (He) bestowed a lot of treasure on him. (BW, 256)

It is important to note that marking the direct object in a double-object construction is certainly one instance of the disposal construction. For example:

- (6) a. 他把書給我
Ta ba shu gei wo.
 he BA book give me
 He gave me the book.
- b. 他把這消息告訴老師
Ta ba zhei xiaoxi gaosu laoshi.
 he BA this news tell teacher
 He told the teacher this news.

In *Shishuo Xinyu*, prepositional *yi* appeared in both the instrumental construction and the double-object construction. As mentioned, *Shishuo Xinyu* is an important literary source of the period immediately preceding Tang. Although correctly noticing the different characteristics between *yi* and *ba*, Huang surprisingly overlooked the striking similarities between *yi* and *jiang*. First, the primary use of *yi* as a verb in construction with *wei* (為) in either *yi...wei* 'take...to be' and *yiwei* 'consider, think' can be replaced with *jiang*. In our study of the BW texts, nine instances were found; for example:

- (7) a. 納他人閑詞，將為是實
na taren xianci, jiangwei shi shi.
 listen to other people gossip take be true
 (He) listened to other people's gossip and considered it to be true.
 (BW, 195)
- b. 母在世時修十善
mu zaishi shi xiu shi shan,
 mother alive when practice ten virtues
 將為死後得升天
jiangwei si hou de sheng tian.
 think death after can rise heaven
 When mother was alive, she practiced the ten virtues and thought that she could rise to heaven after death. (BW, 196)

Second, in BW and CQ, as Huang also noticed in ZDT, *yi* is used with higher frequency in the instrumental construction than *jiang*, which in turn greatly outnumbered *ba*. Table 5 clearly illustrates this fact. ZDT data are from Huang (1986:48).

Two points are worth making here. First, the overwhelming preference for *yi* in the more conservative language of CQ in contrast with the decreasing usage of *yi* and increasing usage of the *jiang* instrumental construction in the

TABLE 5. *The distribution of instrumental ba, jiang, and yi in the Tang Dynasty*

	<i>ba</i>	<i>jiang</i>	<i>yi</i>
ZDT ^a	2	17	72
BW	2	30	43
CQ	1	5	165

^aZDT = Zen dialogues of the Tang Dynasty; BW = Bianwen; CQ = Chuanqi.

TABLE 6. *The distribution of disposal ba, jiang, and yi in the Tang Dynasty*

	<i>ba</i>	<i>jiang</i>	<i>yi</i>
BW ^a	5	25	3
CQ	0	1	17

^aBW = Bianwen; CQ = Chuanqi.

colloquial language of BW and ZDT suggests that the *jiang* was in the process of fully taking over *yi* during Tang. Second, *yi* must have served as the source, or model, of the grammaticalization of the *jiang* serial-verb construction to become the *jiang* instrumental construction because there is no other likely, appropriate candidate.⁵

Having established *yi* as the most likely trigger of *jiang*'s grammaticalization, we further examine *yi*'s and *jiang*'s relation in terms of their status as object markers. It should be easily established by now that the *jiang* disposal construction, as both Huang (1986) and Bennett (1981) asserted, also came about via the grammaticalization of its serial-verb construction. Thus, what we have is a "split" phenomenon of syntactic change. The grammaticalization of the *jiang* serial-verb construction split into two distinct grammatical functions: instrumental and disposal. This observation is more believable if we can demonstrate under what circumstances this split emerged. We have two hypotheses: (1) Bennett's hypothesis that *yi* served as the model of the emergence of the *jiang* disposal construction; (2) Huang's hypothesis that the *bei* passive construction triggered the emergence of the *jiang* disposal construction as its active counterpart. Table 6 shows the statistics of disposal sentences in our BW and CQ texts.

Again, *jiang* is the predominant choice in the colloquial language of BW, yet the preferred choice in the more conservative CQ is *yi*. This pattern between *yi* and *jiang* is very similar to what we observed in their instrumental construction. Furthermore, significantly more than a third of the 25 *jiang* disposal sentences are of double-object constructions. Here are some examples:

(8) a. 莫將天人與沙門

mo jiang tianren yu shamen.
 don't JIANG beauty give monk
 Do not give the monk these beauties. (BW, 78)

b. 張廷用其言，將石還國

Zhang Qian yong qi yan, jiang shi huan guo.
 Zhang Qian use his words JIANG stone return nation
 Zhang Qian listened to his advice and returned the gem stone to its nation.
 (BW, 382)

c. 更將珍寶獻慈尊

geng jiang zhenbao xian cizun.
 further JIANG treasure present Buddha
 Further, he presented the treasure to Buddha. (BW, 251)

Is it purely coincidental that many *jiang* disposal sentences are of double-object constructions? We favor Bennett's hypothesis over Huang's for the following reasons. First, *yi* and *jiang* had similar functions as verbs, which makes *yi* a better candidate than *bei* as the model for *jiang*'s change. Second, many *jiang* disposal sentences in BW are of the double-object construction, a construction where *yi* was commonly used before Tang. Third, the emergence of the *jiang* double-object construction was gradually replacing *yi*.

However, Huang's point that the *bei* construction may have contributed to expediting the development of disposal characteristics should not be dismissed. *Jiang* could not have acquired the semantic disposal characteristics from *yi* because *yi* never had such semantic characteristics. We therefore conjecture that while *jiang* in the serial-verb construction was undergoing the process of grammaticalization to become *jiang* instrumental and *jiang* double-object constructions, the semantic disposal characteristics of the *bei* construction may have served as the model for its active counterpart, the *jiang* disposal construction.

The following is a summary of our view on *ba/jiang*'s changes. *Yi* triggered *jiang* in the serial-verb construction to reanalyze as a preposition in the instrumental and double-object constructions, whereas *bei* provided the semantic model for the *jiang* disposal construction. In turn, *jiang* provided the model for *ba* to lexically replace all of its functions. Furthermore, we note that in modern Mandarin *ba*'s instrumental usage has been replaced by *na* (拿).

LINGUISTIC FACTORS FACILITATING
ba/jiang'S CHANGES

From the circumstances under which *yi*, *jiang*, and *ba* underwent grammatical changes, we can generalize two factors, or principles, that seem to have facilitated these changes: functional refinement and analogous development.

Y.-C. Li (1980) proposed the thesis of refinement to account for the historical development of prepositions in Chinese. Specifically, he suggested that the universal archaic preposition *yu* (于) underwent the refinement process to have its many different functions systematically replaced by the proliferation of other newly appeared prepositions. Although Li was concerned with the refinement of the multiple semantic relations between *yu* and its object, his refinement thesis may be generalized as the following: if element *X* has multiple functions (e.g., *f*1, *f*2, and *f*3), then *X* is likely to undergo refinement to reduce the number of its functions by allowing other elements to replace or overtake some or all of its functions. We propose the term *functional refinement*. Although this refinement thesis might be generally applicable to all linguistic levels – phonological, morphological, syntactic, semantic, and discursal – here, we are mainly concerned with syntactic functions.

We further observe a more specific principle, the principle of *analogous development*, which specifies the kind of elements likely to replace the multiple functions of another element: if *X* and *Y* share certain functions (e.g., *f*1), then *Y* is more likely than other elements that share no functions with *X* to undergo analogous development to acquire some or all of *X*'s other functions (e.g., *f*2 and *f*3).

By the time of Tang, *yi*'s functions were many. Aside from being a verb, instrument marker, and object marker in double-object constructions, it also functioned interchangeably with the perfective adverb *yi* (已) (e.g., BW, 295). It also had the usage of a comitative preposition such as *yu* (與). The following is a perfect example:

- (9) a. 前 先 以 陛 下 結 良 緣
qianxian yi bixia jie liang yuan
 formerly with your Majesty formed good relation
 I have formerly had intimate relation with Your Majesty. (BW, 110)
- b. 前 先 與 陛 下 結 良 緣
qianxian yu bixia jie liang yuan
 formerly with your Majesty formed good relation
 I have formerly had intimate relation with Your Majesty. (BW, 114)

By the Tang Dynasty, *yi* therefore had become susceptible to functional refinement. The semantic as well as syntactic similarities between *yi* and *jiang* in their verbal functions, as shown in (7), encouraged *jiang*, but not *ba*, to undergo analogous development to acquire *yi*'s instrumental and double-object constructions through the grammaticalization of *jiang*'s own serial-verb construction. During Tang, we witness that *jiang* was winning the competition with *yi* in almost all of their functions. In modern Mandarin, *yi* has retained only the limited literary usage in the instrumental construction and the contracted verb *yiwei* 'consider'.

Once *jiang* had acquired *yi*'s multiple functions, it became a candidate for

functional refinement. Again due to the semantic and syntactic similarities that *ba* and *jiang* shared in their verbal usage meaning 'take' or 'hold', *ba* began to acquire *jiang*'s instrumental and disposal functions through a process of lexical replacement. As we can observe now in modern Mandarin, *jiang* has lost all of its functions in CQ and BW except its disposal function in written texts. Following this pattern, we believe it should be correct that in *Shuihu*, which reflects the language of the late Yuan and Ming Dynasties, *ba* and *jiang* are in full competition (Wang Li, 1958:413).

As *ba* finally replaced *jiang* in its disposal and instrumental constructions in spoken Chinese, it in turn underwent functional refinement and had its instrumental function taken over by the modern *na*, as it can be shown that in *Shuihu* *na* shared the verbal meaning of 'take, hold' with *ba*.⁶

Precisely as Langacker (1977:95) observed in studying historical changes in the Uto-Aztecan family of American Indian languages, one syntactic change often has the effect of creating circumstances that facilitate another. In the development of *yi*, *jiang*, *ba*, and *na*, we indeed find a recurring pattern of a "push/pull chain" phenomenon, to borrow terms from historical phonology.⁷ The following stages were overlapping and not discrete, as we have observed.

Stage 1: Between *yi* and *jiang*

- a. *Yi*'s functions were many and thus was likely to undergo refinement.
- b. *Jiang* shared some semantic and syntactic similarities with *yi* and was thus likely to undergo analogous development and pick up *yi*'s instrumental and double-object functions.

Stage 2: Between *jiang* and *ba*

- a. *Jiang*'s functions multiplied and thus became subject to functional refinement.
- b. *Ba* shared several of *jiang*'s semantic as well as syntactic functions as a verb and thus was likely to undergo analogous development to pick up *jiang*'s functions.

Stage 3: Between *ba* and *na*

- a. *Ba*'s functions multiplied and thus in turn became a candidate of functional refinement.
- b. *Na* shared verbal meaning with *ba* and thus was a good candidate to replace *ba*'s instrumental function.

The counteractive nature of the two principles, functional refinement and analogous development, may account for this recurring pattern. The refinement process leads toward linguistic "transparency" (Langacker, 1977) by changing a one-to-many relation between an element and its functions to one-to-one. On the other hand, analogous development destroys a one-to-one relation by creating a one-to-many relation. The dynamic counteraction between these two factors at least partially explains why languages are constantly changing and yet in the long run they do not appear to decrease nor increase in overall complexity.

CONCLUSION

Based on findings in ZDT, BW, CQ, and other sources, we have established a more comprehensive and convincing account of the historical changes of *ba* and *jiang*. We contend that *jiang*'s grammaticalization of the serial-verb construction was encouraged by *yi*, but *jiang*'s disposal characteristic was modeled after its passive counterpart *bei*. It is via the process of lexical replacement that *ba* replaced *jiang*'s prepositional functions in instrumental and disposal constructions. *Ba* later lost its instrumental function to *na*.

From the recurring pattern of change in the historical development of *yi*, *jiang*, *ba*, and *na*, we have observed two counteracting principles at work: functional refinement, which forces a one-to-one correspondence between a form and its function; and analogous development, which does just the opposite to create a one-to-many relationship. These two factors, if proven to be more generally applicable to account for linguistic changes at other levels, could partially explain the constant, dynamic change of language.

NOTES

1. *Ba* and *jiang*, along with other similar lexical items that are homophones with verbs, when used as prepositions are sometimes inappropriately termed *co-verbs* in Chinese linguistics. See Li and Thompson (1974a) and Starosta (1985) for convincing arguments for analyzing them as prepositions.

See Li (1974) for a comprehensive, traditional account of the general properties of modern *ba/jiang* sentences, also known as *disposal* sentences. For instance:

Huli ba xiaoji chi le.
fox BA chick eat I.E
The fox ate the chick.

In general, when the preverbal [*ba* NP] phrase is identified as the object of the main verb of the same clause and the NP object is depicted as having been "disposed of" in a certain fashion, such a clause is considered to have the disposal construction. However, several recent studies (e.g., Chang, 1990; Her, 1985-86, 1990) have shown that in modern Mandarin [*ba/jiang* NP] should not be considered the direct object and that they are prepositions encoding an oblique grammatical function assigning the thematic role of Theme. However, because this more recent analysis is not essential to our discussion here, we maintain the conventional term *disposal* to refer to *ba/jiang*'s prepositional function when assigning the Theme role to its following NP and may still refer to this NP as the object of the main verb.

The term *instrumental construction* refers to the prepositional phrase [P NP] that encodes an oblique grammatical function assigning the thematic role of Instrument, for example, the prepositional phrase *na dao* 'with a knife' in the following sentence:

Lieren na dao shu le huli.
hunter with knife kill I.E fox
The hunter killed the fox with a knife.

2. *Reanalysis* is a familiar mechanism of linguistic change by now; a good working definition is given in Langacker (1977:58): "change in the structure of an expression or a class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation."
3. Throughout the article when *yi* is not glossed with a Chinese character, it always refers to (>X).

4. By *double-object construction*, we mean predicates that contain a direct object (DO) and an indirect object (IO), for instance,

Wo gei ni shu.
I give you book
I give you books.

5. We do not assert that grammatical changes necessarily follow models at all times or that spontaneous, abductive changes in Anderson's (1973) sense are not possible. We do assert that it is linguistically more interesting to fit an individual change into a generalization whenever appropriate.

6. According to Wang Li (1958:414), *na* took up the instrumental function in the Qing Dynasty. A closer study of the use of *ba* and *na* in that period and the immediately preceding period is necessary to fully validate our claim here.

7. We refer to two possible scenarios to account for the type of change depicted as follows:

Time	Form	Functions
P1:	X	f1, f2, f3
	Y	f1
P2:	X	f1
	Y	f1, f2, f3

X and Y are two different linguistic forms. P1 and P2 are two points of time in history, and *f_n* indicates the specific function a linguistic form has. One scenario can be described as a "push chain," where Y, due to the sharing of f1 with X, started analogous development to acquire f2 and f3 and thus "push" f2 and f3 out of X. The other scenario can be described as a "pull chain," where X was refining its multiple functions and the void left by X "pulled" Y to fill f2 and f3. However, we have no evidence whether any of the changes we have discussed in this article is a push chain, where the increased usage of new elements crowded out that of the old; or a pull chain, where the outgoing old elements solicited the incoming of the new.

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