The Types of Adposition and Their Conjunctive Use in Chinese Minority Languages

Yan Shang

Chinese Studies and Exchange Department, Shanghai International Studies University, Shanghai, China

Abstract—From the perspective of linguistic typology, this paper investigates and analyzes the types of adposition in 38 minority languages and their conjunctive use with location words, attempts to summarize the relationship between the basic word order, the types of adposition, and the word order between adposition and location words in different languages. Then, it seeks the motives that restrict the types of adposition and their conjunctive word order, and finally analyzes the external motives of the combination of such circumpositions (Prep + Noun + Location Words) in Chinese.

Index Terms—adposition, location word, word order, universal, circumposition

I. INTRODUCTION

The total number of languages in China is about 130. This article focuses on Chinese and its surrounding minority languages. From the perspective of language family, these languages belong to the five major language families: Altaic, Sino-Tibetan, Austroasiatic, Austronesian, and Indo-European. Among them, the Sino-Tibetan language family has many branches and the largest scale. In "The Languages of China", the Sino-Tibetan language family is divided into four language families covering nearly 76 languages, namely they are Chinese, the Tibeto-Burman language family, the Kra-Dai language family and the Hmong-Mien language family (Sun & Hu, 2009). This paper selects two or three languages that are relatively well studied in each language family as the research objects. On the basis of 38 kinds of minority language materials in China, combined with typological research, it focuses on examining the relationship among basic word order, types of adposition, and conjunctive word order of adpositions and location words. In order to find out the universals and differences between them and Chinese in terms of adposition, and analyze and explain the universals, so as to deepen the understanding of adposition and their conjunctive use in the academic circles. Minority corpora involved in this chapter, if the source is not indicated, are all taken from the "Chinese Minority Language Brief Records" and "The Languages of China".

II. SINO-TIBETAN CHINESE FAMILY

Mandarin Chinese is actually a language of mixed word order, and it is a language in which prepositions, postpositions, and circumpositions coexist in the parameter of the adposition type. E.g:

(1)挂了把雨伞在门口。（preposition: 把）

(2)床上躺着一个人。（postposition: 上）

(3)留了个纸条在桌子上。（circumposition: 在…上）

Strictly speaking, circumposition is a form of adposition acollocations, which is a syntactic format in which the preposition and the postposition are paired, and the dominant element is sandwiched in the middle. According to the different parts of the latter term, the circumpositions in Mandarin can be roughly divided into five categories:

a) Preposition + NP+ locative word, for example: 在…上/之下/以前;

b) Preposition + NP + post noun, for example: 在/当+…+时;

c) Preposition + NP + post verb, for example: 对…来说;

d) Preposition + NP + post adverb, for example: 和…一般;

e) Preposition + NP + post particle, for example: 像…似的;

It can be seen that in Chinese, when prepositions and location words are used together, they appear in the form of circumposition (preposition + noun + location words=Pre+N+LW), with the biggest amount and the highest frequency of use, and are more typical circumposition. Moreover, when the introductory element is a common noun, the use of the latter location words is syntactically mandatory, which is a must following form and belongs to the grammatical category. Even if the use of some location words does not play a role in strictly distinguishing semantics, it is syntactically indispensable. For example: "放在地上/下", from a semantic point of view, the difference between "shang 上"or "xia 下"is not very big, but it cannot be omitted as "放在地", and it is not syntactically valid after omission. The main reason is that the location word "shang 上/xia 下"has a high degree of grammaticalization, and its function is more like a function word, which plays a grammatical role.

III. SINO-TIBETAN TIBETO-BURMAN

In the Tibeto-Burman of Sino-Tibetan language family, we have selected Cangluo Mamba and Tibetan from the Tibetan branch, Yi and Bai from the Yi branch, Jingpo and Dulong from the Jingpo branch, Achang from the Burmese branch, and Qiang from the Qiang branch as the object of investigation. The basic word order of those Tibeto-Burman languages is relatively consistent, all of which are SOV-type languages, except Bai. The adposition types of the Tibeto-Burman are mainly postpositions. Cangluomenba, Tibetan, Yi, Jingpo, Dulong, Achang and Qiang all use postpositions to introduce indirect arguments for verbs.

These postpositions have the following common features: In terms of phonetics, phonetic forms are relatively stable and independent, rather than morphological changes attached to notional words. Semantically they only express grammatical meanings, not real lexical meanings. Syntactic positions are generally placed after notional words, phrases or sentences and cannot be used alone. The grammatical function is mainly to indicate what kind of sentence components the preceding notional words serve in the sentence, and to assist the sentence components before and after it to form various structural relationships. E.g:

(4) 仓洛门巴语 Cangluo Mamba (postposition "kaʌ")
tɕaŋʌ　jorʌtoŋ꜒ kaʌ　tɕʻio꜒　wa　tɕa꜒
我　　村名　后介　住　　助动
（我住在月尔东村）

(5) 藏语 Tibetan (postposition "nɛ" is placed after the noun to indicate the source of the action.)
ŋa^{12}　　am55 to^{53}　nɛ　joŋ^{14} pa　jĩ^{14}
我　安多　　从　来
(我从安多来)

(6) 景颇语 Jingpo (postposition "thaʔ^{31}")
kǎ^{31} ʒap^{31}　thaʔ^{31}　　phun^{55} kɹau^{33}　lton^{31} sai^{33}
火架　　　在　柴　烤　放　语尾助词
（柴烤枣火塘架上了。）

(7) 独龙语 Dulong (postposition "dəʌ")
nuŋ꜒ ŋwaꜙ　goŋ꜒ dəʌ　ɕin꜒ kai꜒.
牛　　　山坡　在　草　吃
　（牛在山坡上吃草）

(8) 彝语 Yi (postposition "ta�劃")
tshŋꟳ　oꜙdzoꟳ　taꟳ　laꟳ
他　西昌̓　从　来
他从西昌来。

(9) 阿昌语 Achang (postposition "aʔʌ从")
aʔʌ nək꜒　aʔʌ　xai꜒ xuʔʌ teꟳ
去年　从　现在　到
（从去年到现在）

(10) 羌语 Qiang (postposition"so^{33} 比")
ŋa^{55} tha^{55} lə^{55}　so^{33}　a^{31} tə^{33}　bza^{31}
我　他　比　一点　大
（我比他大一点）

There are also location words in these languages, and location words are also quasi-function words, with more or less function words properties. A locative structure that expresses a place or time, often placed after other words or phrases. The use or not of location words depends on the constraints at the semantic level. It is not syntactically mandatory, it can be used or not, it belongs to the context category. The word order when adposition used together with location words are mainly: "Noun + Genitive Particle + (Location Words) + Postposition; Noun + Location Words + Postposition (N+LW+ Pos)". E.g:

(11)仓洛门巴语 Cangluo Mamba
u꜒ ŋuʌ ts'o꜒ naŋʌ ka ŋaʌ laʌ moʌ?
那　湖　里　后介 鱼　有　吗
（那个湖里有鱼吗？）

(12)藏语 Tibetan

ཁོང་གཉིས་སྟེག་ཙེའི་འོག་ནས་སྐེའུ་ཁུང་གི་ཕྱིར་ཕྱུངས།

[kʼɔŋ˞ɲiʼ ʐhəkˌzi jiꜛ ɳ̊əkˌ neꜛ kʼiuˌkʼɔŋˌ ki ɕiˑꜛ ɕioŋꜛ]
他们桌子 的下从 窗户 的 外 跳

他们从桌子上跳到窗户外。Example sentences from Basan（2011）

(13)彝语 Yi

oꞏꞁ taꞁ ɔꞁŋguꞁ liꞁ

下从　向上　去

（从下面向上去）

(14)景颇语 Jingpo

ma^{31}　　n^{55} ta^{51}　ko$ʔ^{55}$　　ŋa^{31} ma$ʔ^{31}$ ai^{33}

孩子　家　里　在　　（句尾）

孩子在家里。

(15)独龙语 Dulong

Tãkꞁ tsăŋꞁ　pǎŋꞁ dɔꝟ　nuꝟ tiꞁluŋꞁ　　suꝟ ɹɔŋꞁ

床铺　　　下　后介 酒 一罐　　（前加）搁

（床铺底下放着一罐子酒）

(16)阿昌语 Achang

Inꞁ teꝟ niꞁ saiʔꞁ

家　里 在 着

（在家里）

(17)羌语 Qiang

mə^{33} bʐa^{33} tɕi^{55}ko^{33} pə^{31}ti^{55} mi^{55} ʒ̩^{31}

人　大　家里　现在　不　在

（大人现在不在家里）

Different from the above Tibeto-Burman SOV word order, Bai language is a language with a mixed word order of SVO, SOV and OSV. It mainly uses prepositions. For example, the preposition "sa^{35} 从"is shown in the following example. Bai language has absorbed a large number of words from Chinese due to the long-term contacts with the Han nationality, and even had obvious changes in grammar. It is a language with many Chinese loanwords in the Tibeto-Burman language group.

(18) Bai　(preposition "sa^{35} 从")

pi^{55}si^{55} sa^{35} na^{21} tsho^{44} ɣɯ^{35}

风　从 南 吹　来

（风从南边吹来）

There are also location words in Bai language, such as"上 t$ð^{33}$ /下 ɣɛ^{33}/里 khɯ^{31} /外 ŋua^{44}". Prepositions and location words are used in the same way as in Chinese to form circumpositions , for example:

(19) ɕi^{55}vu^{33}　ji^{21} tsɯ^{31} khɯ^{31}　tɕɛ^{21}　　kho^{55} xɯ^{31}

新媳妇 个　站　在　院子　个　里

（新媳妇站在院子里）

The list of the types of adposition and their conjunctive types in the Tibeto-Burman languages is as follows:

TABLE 1

语系 Language family	语支 language branch	语言 language	语序 Word order	附置词类型 Adposition type	附与方连用语序 Conjunctive word order of adpositions and location words
藏缅语族 Sino-Tibetan Tibeto-Burman	藏语支 Tibetan branch	仓洛门巴语 Cangluo Mamba	SOV	postposition	名+方+后 N+LW+ Post
		藏语 Tibetan	SOV	postposition	名词+属格格助词+（方）+后置介词 N+ Genitive Particle + (LW) + Post
	彝语支 Yi branch	彝语 Yi	SOV	postposition	名+方+后 N+LW+ Post
		白语 Bai	SVO SOV OSV	pre post circum	前+名+方 Pre+N+LW
	景颇语支 Jingpo branch	景颇语 Jingpo	SOV	postposition	名+方+后 N+LW+Post
		独龙语 Dulong	SOV	postposition	名+方+后 N+LW+Post
	缅语支 Burmese branch	阿昌语 Achang	SOV	postposition	名+方+后 N+LW+Post
	羌语支 Qiang branch	羌语 Qiang	SOV	postposition	名+方+后 N+LW+Post

IV. KRA-DAI AND HMONG-MIEN LANGUAGES

The Kra-Dai language group and the Hmong-Mien language group belong to the Sino-Tibetan language family like Chinese. They also lack morphological changes. The main grammatical methods are the use of word order and function words. As an important type of function words, adpositions are very important for expressing the meaning of grammar. In this part of the Kra-Dai language family, we mainly use Zhuang, Thai, Bouyei and Dai from the Taiwanese branch; Shui, Dong, Mulao, Lajia and Maonan from the Dongshui branch; Li from the Li branch; And Gelao language of the Gelao branch as the object of investigation; the Hmong-Mien language family mainly takes the Miao language, Bunu language, She language and Mian language as the investigation object. These languages are all SVO-type languages with relatively fixed word order. Due to the difference in word order, these two language families are not exactly the same as Chinese in terms of adposition parameters. Chinese is actually a language of mixed word order, so it is also a language with coexisting prepositions, postpositions, and circumpositions, while the Kra-Dai language family and the Hmong-Mien language family belong to the comparative typical prepositional language.

Prepositions don't need to be used in conjunction with location words to introduce place arguments alone, for example: Thai "tha:ŋ^{33} (在…上)". Unlike Chinese in which prepositions can be omitted in most cases, prepositions in these two language families generally cannot be omitted.

Kra-Dai and Hmong-Mien languages also have location words, but the use of location words depends on the constraints at the semantic level, not at the syntactic level. It can be used or not, and it belongs to the category of context. E.g:

(20)水语：
thuŋ^3 tsɿ^3 ni^4 ho^4 ni^4 mai^4 tsa^5
通知   贴   于   棵   树   那
（通知贴在那棵树上）

Conjunctive word order of prepositions and location words, in the Kra-Dai language family Zhuang, Thai, Buyi, Dai, Dong, Lajia, Li, Gelao, Maonan, Shui, and Hmong-Mien languages The Bunu language usually appears in the form of "Preposition + Location Word + Noun", Prepositions with the meaning of "in, from, to" are generally used in conjunction with location words. E.g:

(21)壮语 Zhuang
fei^{33}ki^{33} ta^{55} kuɯn^{31} buɯn2$_4$ fa:t^{33} ɣoŋ^{31}tau^{55}
飞机   从   上   天   摔   下来
（飞机从天上摔下来）

(22)泰语 Thai
khau^{24} tshɔ:n^{41} tu:a^{33} ju:^{22} nai^{33} ba:n^{41} mai^{41} jɔ:m^{33} ɔ:k^{22}ma:^{33}
他   藏   自身   在   里   家   不   肯   出来
（他藏在屋里不出来）

(23)布依语 Bouyei
Ka:ʔ^8 zaŋ^6 tso^5 sa:ŋ^1 taŋ^5 vai^4 diau^1
独自   坐   在   上   凳   木   一
（独立坐在一张木凳子上）

(24)傣语 Dai
ŋuɯn^{41} sɘŋ^{35} ju^{35}tɘm^{11} sa:t^{35}
银子   藏   在   下   席子
（钱藏在席子下面）

(25)侗语 Dong
le^2 soŋ^5 ŋa:u^6 wu^1 ɕoŋ^2
书   放   在   上   桌子
（书放在桌子上）

(26)拉珈语 Lajia
nuŋ^{4}jei^4 at^7 ou^4 tsiẽ^1 pok^{8}ŋo:m^5
小孩   在   里   河   游水
（小孩在河里游泳）

(27)黎语 Li
na^1 la^2 tha^2 duɯ^3 fou^1 tshai^1
他   吃饭   在   下   树
（他在树下吃饭）

(28)仡佬语 Gelao
uɬ anɬ tsenʌ taiɬ taʌ tauɬ
他　在　下　　树　读书
（他在树下看书）

(29)毛南语 Maonan
ŋa:u6　　ʔju¹　pja¹
在　　　上　　山
（在山上）

(30)水语 Shui
kha:i⁵　kam¹　bja:n³ va:n³　ŋa:u⁶　ta⁵　　ta: ŋ2
篱笆　　围　　水獭 草鱼　在　中间　鱼池
（用篱笆把水獭和草鱼围在鱼池中间）

(31)苗瑶语族：布努语 Bunu
ni⁴ ntɬu⁷　ŋʈoŋ¹　jo⁸jau²　lo⁴
他 从　　里 学校　　　来
（他从学校来）

However, in the Miao, She and Mian languages of the Hmong-Mien language family, the combination of prepositions and location words is the same as that in Mandarin, in the form of circumposition (Preposition + NP + Location Words), for example:

(32)苗语 Miao
ta³⁵　tu³⁵　tu³³　ʈi⁴⁴　tɕo⁵⁵　ta⁵⁵　ki³⁵vɛ⁵⁵
拿　书　放　于　张　桌　上面
（把书放在桌子上）

(33)畲语 She 毛宗武；蒙朝吉（1986）
vaŋ⁶　kɣ⁶　kje⁶　khjaŋ² kɔ³　thi⁴　tɔŋ⁵
我　在　山　　上　头　种　树
（我在山上种树）

(34)勉语 Mian
nen² pjau³ jom¹ tɕi:m² tsa:ŋ⁶
他　家　在 山　　上
（他家在山上）

The list of the types of adposition and their conjunctive types in the Kra-Dai and Hmong-Mien languages is as follows:

TABLE 2

语系语族 language family	语支 language branch	语言 language	语序 Word order	附置词类型 Adposition type	附与方连用语序 Conjunctive word order of adpositions and location words
Kra-Dai 侗台语族	台语支 Taiwanese branch	壮语 Zhuang	SVO	Pre	前+方+名 Pre + LW+ N
		泰语 Thai	SVO	Pre	前+方+名 Pre + LW+ N
		布依语 Bouyei	SVO	Pre	前+方+名 Pre + LW+ N
		傣语 Dai	SVO	Pre	前+方+名 Pre + LW+ N
	侗水语支 Dongshui branch	水语 Shui	SVO	Pre	前+方+名 Pre + LW+ N
		侗语 Dong	SVO	Pre	前+方+名 Pre + LW+ N
		仫佬语 Mulao	SVO	Pre	前+方+名 Pre + LW+ N
		拉珈语 Lajia	SVO	Pre	前+方+名 Pre + LW+ N
		毛南语 Maonan	SVO	Pre	前+方+名 Pre + LW+ N
	黎语支 Li branch	黎语 Li	SVO	Pre	前+方+名 Pre + LW+ N
	仡央语支 Gelao branch	仡佬语 Gelao	SVO	Pre	前+方+名 Pre + LW+ N
苗瑶语族 Hmong-Mien		苗语 Miao	SVO	Pre	前+名+方 Pre+N+LW
		布努语 Bunu	SVO	Pre	前+方+名 Pre + LW+ N
		畲语 She	SVO	Pre	前+名+方 Pre+N+LW
		勉语 Mian	SVO	Pre	前+方+名 Pre+N+LW

V. AUSTROASIATIC LANGUAGES

There are many Austroasiatic languages, mainly distributed in Yunnan and Guangxi provinces of China, as well as Southeast Asia and South Asia. In this part, we select De'ang, Wa and Blang from the Wa-De'ang branch of the Mon-Khmer language family as the research objects. They are very similar to the Hmong-Mien and Kra-Dai languages of the Sino-Tibetan language family. In terms of syntactic form, De'ang and Blang are typical SVO-type languages. Word order and function words are also the main grammatical means, and they are also typical prepositional languages. The Wa language has both SVO and VSO word order, so the Wa language is farther away from the SOV language, showing more prominent VO language characteristics than the general SVO language. In these three languages, prepositions are used to introduce arguments, and they have the characteristics of putting core words before. For example: "于 ti" which means "object" in De'ang, " kuh[1] 从/from" in Brownian, and "khaiŋ 比"which means "comparison" in Wa are all typical prepositions and generally cannot be omitted. E.g:

(35)德昂语 De'ang
hɔiʔ dah ti di jɔʔ
已 说 于 他 了
（对他说了）
(36)布朗语 Blang
kuh[1] peiʔ[4] tɕiŋ[1] huik[2]
从 北京 来
（从北京来）
tiu[2] tɕom[2] kha4 van[1] ɔk[2]
走 向 东方
向东方走
(37)佤语 Wa
ŋi lhauŋ khaiŋ nɔh
老二 高 比 他
（老二比他高）

The word order when the preposition and the location word are used together is also "Preposition + Location Word + Noun". It is also generally a preposition that expresses the meaning of "in, from, to", and the word order of the phrase is generally distributed before and after the predicate verb, it acts as an adverbial or object of time, place, direction, etc. E.g:

(38)德昂语 De'ang
ʔo jɣʔ laʔ giaŋ rɔːt.
我 从 里 家 来
（我从家里来）

(39)佤语 Wa
（lai） tɕiɛ ʔɣʔ ʔot piaŋ phɯn.
（书）的 我 在 上 桌子
（我的（书）在桌子上）

(40)布朗语 Blang
kɛʔ² tah¹ man⁴ tɕɛiŋ² qhaʔ¹
他们 休息 在 边 路
（他们在路边休息）

The use of location words also depends on the constraints at the semantic level, not at the syntactic level. It can be used or not, and it belongs to the category of context. E.g:

(41)佤语
hɔik lih si ŋaiʔ khaiŋ gɔŋ
了 出 太阳 从 山
（太阳从山上出来了）

The list of the types of adposition and their conjunctive types in Austroasiatic languages is as follows:

TABLE 3

语系语族 language family	语支 language branch	语言 language	语序 word order	附置词类型 Adposition type	附与方连用语序 Conjunctive word order of adpositions and location words
南亚语系 Austroasiatic languages	孟高棉语族佤-德昂语支 Wa-De'ang branch of the Mon-Khmer language family	德昂语 De'ang	SVO	Pre	前+方+名 Pre + LW+ N
		佤语 Wa	SVO VSO	Pre	前+方+名 Pre + LW+ N
		布朗语 Blang	SVO	Pre	前+方+名 Pre + LW+ N

VI. ALTAIC LANGUAGES

All the languages of the Altaic family are agglutinative languages, and SOV is their basic word order, mainly distributed in the northern region of my country. In terms of language word formation, the main means of derivation of new words is to add additional components after the root of the word, and in terms of morphology, the main means of morphological change is to add grammatical adhesion components after the word stem. In this part, we select Mongolian in Mongolian language family, Uyghur language in Turkic language family, and Manchu in Manchu-Tungus language family as research samples. Both postpositions and adpositional suffixes exist in these three Altaic languages. E.g:

(42)蒙古语 Mongolian：后置介词 Post
Nar ã dʒuu jabăn
太阳 向着 走
（向着太阳走去）

(43)维吾尔语 Uyghur language：后置介词 Post
sɛn beripuniŋ bilɛn almaʃqin
你 去 他的 同 请你替换
（请你和他替换一下）

(44)满语 Manchu：后置介词 Post
oʂuʐu bo-j gədzə dən bandʑiχa.
玉米 房(领格) 像 高 长
（玉米长得像房一样高了）

(45)蒙古语 Mongolian：名词+附置后缀 N+ adpositional suffix
nɔmiĩ saŋ-g-aas dʒəəldʒ abs ã
图书 馆（离格） 借 要

（从图书馆借的）
(46)维吾尔语 Uyghur language：名词+附置后缀 N+ adpositional suffix
u yrymtʃi-dɛ   tuʁulup øskɛn
他 乌鲁木齐（在） 被生生长的
（他出生在乌鲁木齐）
(47)满语 Manchu：名词+附置后缀 N+ adpositional suffix
agəj bo-də jovme
哥哥 家（位格） 去
（往哥哥家去）

There are both similarities and differences between postpositions and adpositional suffixes. The similarity is mainly reflected in the word order, they both appear after the noun; they both can be used to introduce indirect arguments for verbs. The difference is that postpositions are independent words, always appearing after nouns, and their form and meaning are relatively independent. Adpositional suffixes are not independent words and have no independent form and meaning. Adpositional suffixes are formed by the further development of postpositions. Postpositions in Uyghur and Manchu often require the notional word in front of it to have a certain case suffix (nominative or genitive) or a sign with a suffix attached.

Location words also exist in these three languages, and they also have dual functions. On the one hand, they can be used independently, serving as sentence components and having all the variations of nouns, and they can also be used in conjunction with common nouns. On the other hand, when they are placed after other nominals, they indicate a certain grammatical meaning and mainly express the spatial relationship of things. The word order of adpositions and location words are: "noun + location words + adpositional suffix; noun + location words + postposition; noun + location word + subordinate personal sign + adpositional suffix". E.g:

(48)蒙古语 Mongolian：名词+方位词+附置后缀 N+LW+ adpositional suffix

词根	上	在上边	沿着上边	向上
dəə	dəər	dəətee	dəəguur	dəəʃ

(49)维吾尔语 Uyghur language：名词+方位词+从属性人称标志+附置后缀 N+LW+subordinate personal sign + adpositional suffix
iʃik   ald--i--da birqantʃɛ typ dɛrɛx   bar
门前面它的 在 若干   棵 树 有
（门前有几棵树）
(50)满语 Manchu：名词+方位词+附置后缀 N+LW+ adpositional suffix
ʂəujindʑin oje-də dʑaqa   ɕindaχa
收音机 上（位格） 东西放
（收音机上搁了东西）

The list of the types of adposition and their conjunctive types in Altaic languages is as follows:

TABLE 4

语系 language family	语族 language group	语言 language	语序 Word order	附置词类型 Adposition type	附与方连用语序 Conjunctive word order of adpositions and location words
阿尔泰 语系 Altaic languages	蒙古语族 Mongolian language family	蒙古语 Mongolian	SOV	adpositional suffix Post	名词+方位词+附置后缀 N+LW+ adpositional suffix
	突厥语族 Turkic language family	维吾尔语 Uyghur language	SOV	adpositional suffix Post	名词+方位词+从属性人称标志+附置后缀 N+LW++ subordinate personal sign + adpositional suffix
	满-通古斯语族 Manchu-Tungus language family	满语 Manchu	SOV	adpositional suffix Post	名词+方位词+附置后缀 N+LW+ adpositional suffix

VII. AUSTRONESIAN LANGUAGES

Among the minority languages in China, the languages belonging to the Austronesian language family are mainly distributed in Taiwan Province of China and are the languages of the Gaoshan nationality, including Ami, Thayer, Paiwan, Bunun, Tsou, etc. These languages belong to Indonesia language family. Most of the language features are adhesive, and the root plus affix and the overlap (or partial overlap) of the root are important means of word formation and configuration, so most of the commonly used words are disyllabic and polysyllabic. The word order of Austronesian languages is mostly VSO and VOS. Since in most Austronesian languages, there is a morphological echo between the verb and the subject, there is no difference in the placement of the subject either before or after. But the

verb comes first, which is the common practice of most Austronesian languages, so Taiwanese Austronesian is a more typical VO language. We selected Seediq and Bazehai from the Taiye branch of the Taiwanese branch; Tsou and Shah Rua from the Tsou branch; Ami and Bunun from the Paiwan branch; and the Yami language from the Bataan branch as the object of investigation.

Bazehai, Tsou, Shah Rua, Yami, Ami, and Bunun all use prepositions or adpositional prefixes. E.g:

(51)巴则海语 Bazehai：前置介词 preposition

Imini   ka   anu   naki
这   为   我的

(52)邹语 Tsou: 前置介词 preposition

Mo-ʔo   toiemoha   ta   pepe
助 我   住五年   助   天堂
（我在天堂住了五年）

(53)沙阿鲁阿语 Shah Rua:前置介词 preposition 例如：

Małukuva   ni   sakɨrału
游弋   助   河
（在河上游弋）

(54)布农语 Bunun：前置介词 preposition

i-łumah   在家

(55)雅美语 Yami：前置介词 preposition

akakan-an-ku   du   vahai
吃-LF-我   在   房子
（房子是我吃饭的地方）

Adpositional prefixes in Amis are used before nouns or noun phrases, and combined with them, they act as adverbs and predicates in sentences. When used as an adverbial, the position is not fixed, and it can be placed at the beginning of a sentence, in the middle of a sentence or at the end of a sentence.

(56)i   kilakilaŋan

在   树上

In addition to using prepositions, Austronesian languages also use verb stems and suffixes to denote places; and verb stems and prefixes to denote tools. Specifically, Bazehai, Seediq, Ami, Bunun, and Yami can also use verb stems with the suffix -an to indicate location; see the following examples:

(57)阿美语 Ami

Pi-adup-an   ni   aki   tu   fafuy   kuni   lutuk
Pi-打猎-处所焦点   领属格   aki   受格 猪   这（主格）   山
（这座山是 aki 猎山猪的地方）

(58)赛德克语 Seediq

Puray-an   ido   na   bubu(ka)   sapah   kiya
煮（处所）饭   属格   妈妈主格   房子   那
（妈妈在那间房间煮饭）

Ami and Bunun verb stems respectively add the prefix sa- /is- /ti- to indicate tools. Seediq verb stems are prefixed with su- to form nominal instrumental forms; Yami verb stems are prefixed with pan- to indicate tools. See the following examples:

(59)阿美语 Ami

Sa-ka-k<um>aen   ni   aki   tu   futing   kuni   alapit
工具焦点-KA-吃 领属格   aki   受格 鱼   这（主格）   筷子
（这筷子是 aki 要用来吃鱼的）

(60)赛德克语 Seediq

Su-keruc   siyang   na   bubu(ka)   yayu
工具格前缀 切   猪肉   属格   妈妈主格   小刀
（妈妈用小刀来切肉）

(61)雅美语 Yami

Ipangan   ya   am,   ya   ku   i-pan-rakat   su   kuis
刀子   这   呢   现在   我   i-IF-杀   受格   猪
（这把刀子是我用来杀猪的）

Austronesian languages also have location words, and the use of location words depends on semantic requirements rather than syntactic requirements. The word order of location words and prepositions also exhibits the same pattern as typical preposition languages, namely "Preposition + Location Word+ Noun". E.g:

(62)巴则海语 Bazehai

di　　babaw　xumak　adaN　a　　balan　m-a-uNazip　adus
在　　上面　　房子　　一双（L）　猫　　正咬（AF）　老鼠
（屋顶上有一只猫正在咬老鼠）

In Bunun, it is "Preposition + Location Affix + Noun", for example:

(63)i-ʃiałumah　在家里

i-ʃiałudum　在山上

The above two examples are formed when the preposition "i" is used with the locational affix "ʃia", and then attached to the noun "łumah/ łudum", which generally means the specific location "at home/on the mountain". The preposition "i" can also be used with the demonstrative pronoun "ʃian" to form an adposition structure, usually at the beginning of a sentence, then with the locational affix "ʃia", and finally with the noun that indicates a specific place. That is, "Preposition + Demonstrative Pronoun + Locational Affix + Noun", which semantically can express the exact location. E.g:

(64)i-ʃian ʃiałumah　在那家里

The list of the types of adposition and their conjunctive types in Austronesian family is as follows:

TABLE 5

语系语族 language family	语支 language branch	语言 language	语序 Word order	附置词类型 Adposition type	附与方连用语序 Conjunctive word order of adposition and location word
南岛语系 Austronesian family	台湾语支 泰耶尔分支 Taiye branch of the Taiwanese branch	赛德克语 Seediq	VOS	动词前后缀 verb prefix/ suffix	None
		巴则海语 Bazehai	VOS/ SVO	前置介词 Pre 动词后缀 verb suffix	Pre + LW+ N
	邹分支 Tsou branch	邹语 Tsou	VOS	前置介词 Pre 动词后缀 verb suffix	Pre + LW+ N
		沙阿鲁阿语 Shah Rua	VSO	前置介词 Pre	Pre + LW+ N
	排湾分支 Paiwan branch	阿美语 Ami	VOS	前置介词 Pre 动词前后缀 verb prefix/ suffix	Pre + LW+ N
		布农语 Bunun	VSO	前置介词 Pre 动词前后缀 verb prefix/ suffix	Pre + Location Affix + N
	巴丹语支 Bataan branch	雅美语 Yami	VSO	动词前后缀 verb prefix/ suffix 附置前缀 adpositional prefixes	None

VIII. INDO-EUROPEAN LANGUAGES

Our country's Tajik language belongs to the Pamir language branch of the eastern branch of the Iranian language family of the Indo-European language family. It is mainly distributed in Tashkurgan Tajik Autonomous County in the southwest of Xinjiang Uygur Autonomous Region, as well as some counties in Kashgar and Hotan regions. The word order of Tajik is SOV type. It is a language in which prepositions and postpositions coexist. Its nouns and pronouns can also become indirect arguments of verbs by adding adpositional suffixes after them. E.g:

(65)waz　tu-ri　　　gap　kan-am
我　　你（对格）　话　　做（单一词尾）
（我对你说话）

Tajik has a limited number of prepositions, which precede the word associated with it, and are all monosyllabic. Generally, it is often used in conjunction with nouns, pronouns, numerals, verb prototypes, gerunds, etc. to form adverbial phrases, which are mostly used to express the position, direction, method, state, etc. related to the action. For example: prepositions" tʃi(在…上) /az 从";

tʃi xuutur 在骆驼上 az maktab 从学校

It can be seen that these prepositions do not need to be used in conjunction with location words. Whether the use of location words depends on the constraints at the semantic level, not the syntactic level. It can be used or not, and it belongs to the category of context.

Tajik also has postpositions, but the number of postpositions is also very limited, which can be placed after nouns, pronouns, and verbs. Postpositions do not follow adjectives, adverbs and other modifying words. Generally, it can

express the relationship of position, mode, state, purpose, reason, limit, etc. Such as: avon"为" /qati"同、以"and so on. E.g:

Watan avon　祖国为　为了祖国

Wi qati　他同　同他

In this language, there are two word orders when location words and prepositions are used together: one is "Noun + Preposition + Location Word", for example:

(66) Srat-ef　　　　ar　darɯn

画像（复数）　在　里面

（在画像中）

The second is the same as in Chinese, which appears in the form of circumposition"Preposition + Noun + Location Word", for example:

(67) ar　wi　kəul　darɯn

在　那　湖　里面

（在那湖里面）

The list of the types of adposition and their conjunctive types in Indo-European is as follows:

<p style="text-align:center">TABLE 6</p>

语系语族 language family	语支 language branch	语言 language	语序 Word order	附置词类型 Adposition type	附与方连用语序 Conjunctive word order of adpositions and location words
印欧语系 Indo-European	伊朗语族东支的帕米尔语支 eastern branch of the Iranian language family	塔吉克语 Tajik	SOV	前置介词 Pre 后置词 Post 附置后缀 adpositional suffix	名+前+方 N+Pre+ LW 前+名+方 Pre+N+LW

IX. CORRESPONDENCE BETWEEN BASIC WORD ORDER AND TYPES OF ADPOSITIONS

Through the investigation of 38 languages in this paper, we find that the correspondence between the basic word order of the language and the types of adposition basically conforms to Greenberg's language universals. We slightly adjust GU3 and GU4 on the original basis as follows:

GU3: Languages in which the dominant word order is VSO, always use prepositions or adpositional prefixes.

GU4: Languages that take SOV as the regular word order, use postpositions or adpositional suffixes in most cases far exceeding random frequencies.

From the above language we can also see that compared with the SVO word order, the VSO and SOV word order is neat (or less liberal) and their correlation is relatively stable, and there is a clear tendency for the use of adpositions. SVO word order is relatively free and can tolerate too many exceptions.

<p style="text-align:center">TABLE 7
LIST OF BASIC WORD ORDERS AND TYPES OF ADPOSITION AND THEIR CONJUNCTIVE TYPES</p>

语序类型 word order	语系 language family	附置词类型 Adposition type	附置词连用类型 Conjunctive word order of adposition and location word
VSO	南岛语系 Austronesian family	前置介词 Pre 附置前缀 Adpositional prefix	前置介词+方位词+名词；Pre + LW+ N 前置介词+方位词缀+名词；Pre+ Location Affix + N
SVO	南亚语系 Austroasiatic family 侗台/苗瑶语族 Kra-Dai/ Hmong-Mien	前置介词 Pre	前置介词+方位词+名词:Pre + LW+ N 前置介词+名词+方位词；Pre+N + LW
SVO-SOV	汉语 Chinese	前置介词 Pre 后置词 Post 环置词 circumposition	前置介词+名词+方位词；Pre+N + LW 前置介词+名词+后置词；Pre+N+ Post
SOV	臧缅语族 Tibeto-Burman	后置词 Post 附置后缀 Adpositional suffix	名词+属格格助词+（方）+后置介词；N+Genitive Particle + LW + Post 名词+方位词+后置介词 N+LW+Post
SOV	阿尔泰语系 Altaic family	后置词 Post 附置后缀 Adpositional suffix	名词+方位词+附置后缀； N+LW+ adpositional suffix 名词+方位词+后置介词；N+LW+Post 方位词+从属性人称标志+附置后缀； N+LW +subordinate personal sign+ adpositional suffix
SOV	印欧语系 Indo-European	前置介词 pre 后置词 Post 环置词 circumposition	名词+前置介词+方位词；N+Pre+ LW 前置介词+名词+方位词；Pre+N + LW

We found that in languages with the same word order, such as Altaic and Austronesian languages, prepositions, adpositional prefixes and postpositions, adpositional suffixes exist at the same time. Academia agrees that adpositions (prepositions and postpositions) mostly come from nouns, verbs, adverbs and other parts of speech that are more real than them, mainly verbs. There are two main ways for verbs to evolve into adpositions in form: one is that the function of adpositions appears in the process of evolution, while the function of verbs remains, so there is a phenomenon that adpositions and verbs coexist. Another way is that after the function of adpositions appears, the function of verbs weakens or even disappears, and only the usage of adpositions exists. Adpositions may also be further virtualized into adpositional affixes,aspect markers, modal particles, etc. Therefore, it is a common path for the deepening of grammaticalization from adpositions to affixes. Adpositional affixes are the adpositions that have been morphologically integrated into the word, and are weakened adpositions. There are differences in the degree of grammaticalization and cohesion between the two. Adpositional suffix language is a postposition language with weak postposition and weak independence. Adpositional prefix language is a preposition language with weakened prepositions and weak independence. See the figure below:
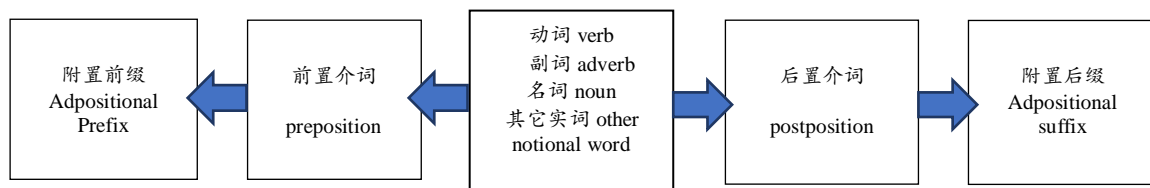

Figure 1 Adposition Grammaticalization Path Diagram

X. INTERPRETATION OF MOTIVES RESTRICTING THE CONJUNCTIVE USE OF ADPOSITION

The reason why the types of adpositions and their collocation types show a high degree of grammatical type universal among cross-language languages is mainly related to the following three points. First of all, it is related to the common cognitive thinking of human beings, that is, people's cognition of the same or similar social phenomena is similar, and the projection into the language will inevitably produce similar grammatical phenomena. This is a prerequisite for the ubiquity of adpositions. However, due to the difference of national culture and national cognitive mechanism, the word order of the adpositions and the word order of the adposition phrase show differences in the expression form.

The second is determined by the word order types of these languages, that is, there are grammatical types universal among these languages across language families, and they have the same or similar basic grammatical characteristics. Jin Lixin (2011) pointed out that the structural genes of a language will inevitably be reflected in all the structures of the language, maintaining its consistency in each structure. Therefore, the types of language adpositions in different word orders mainly depend on the requirements of language genes, and are also constrained by the relator principle. In the natural state, the noun role related to the verb in the VO language, according to the requirements of the VO gene, it should be behind the verb, forming a structure similar to: "V-N". In this potential structural formula, if a relator is to be added between V and N, and this relator is used to represent the syntactic and semantic role of N relative to the verb, the most appropriate position should be between V and N, This is the "V + relator + noun" structure. The linking term is located between the introduced noun and the modified verb, acting as a mediator and an adhesive. For example: English, French, Bouyei, etc., the pattern is "Verb + Preposition + Noun", the adposition phrase is after the verb, and the preposition is just centered. In the OV-type language, the best position for a relator is naturally between the object and the verb, that is "O+ relator +V". This relator is a postposition. For example, in Korean, Japanese, Tibeto-Burman, etc, the pattern is "Noun + Postposition + Verb", the postpositional phrase is before the verb, and the postposition is just in the middle. Therefore, the relator principle is completely in line with the principle of similarity. We can express this conditional relation in terms of a dispositional biconditional implication proposition:
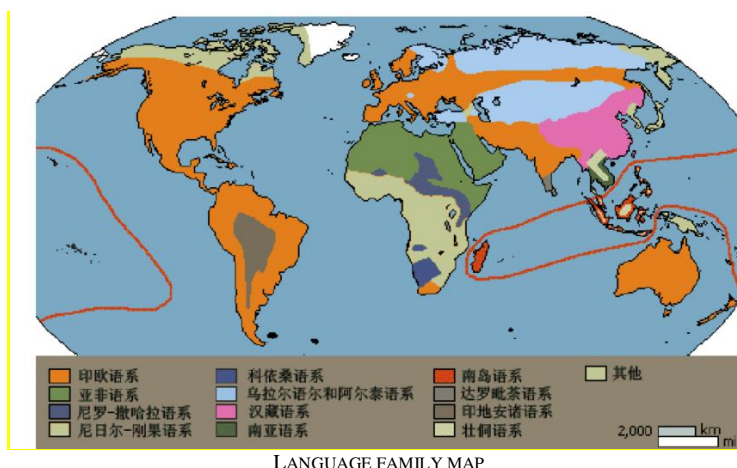
VO----preposition

OV----postposition

The VO-type languages tend to use prepositions, and the OV-type languages tend to use postpositions. Languages with mixed word order have two genes of VO and OV, and its manifestations also have the characteristics of two types of languages: prepositions, postpositions, and circumpositions.

In addition, the expressions of adpositions in a language have a consistent relationship with the position of verbs. The relationship between these positions is related to the source of the adpositions. In some languages, the adpositions are evolved from the verb (mainly the preposition), so the position of the verb and the position of the preposition are the same, it is very harmonious. But in some languages, adpositions are evolved from nouns (mainly postpositions), and such adpositions are slowly gaining some predicative properties. These adpositions evolved from nouns have the grammatical characteristics of predicate nouns (mainly used to mark the attributes of nouns, such as location, tool, time, object, etc.), so to some extent they also have the same grammatical properties as verbs. This is precisely the syntactic feature of adpositions as "quasi-verbs".

XI. EXTERNAL MOTIVES OF COMBINATION OF CHINESE CIRCUMPOSITIONS

The evolution of language is not only related to the changes caused by the internal dynamics of the language itself, Jin Lixin (2016) believes that the external environment is the fundamental reason for screening species genes and promoting species evolution, and the same is true for the evolution of language. From the perspective of language external factors, the external motivation for the emergence of VO-OV mixed word order and adposition mixed type in Mandarin mainly involves three external factors: geographical location, ethnic migration and language contact. Let's take a look at the geographic location of Chinese first: (The picture is taken from the Internet)

LANGUAGE FAMILY MAP

From the map above, we can see that the northwestern, northern, and northeastern parts of Chinese border Altaic languages, and the entire Altaic languages are postpositions or adpositional suffix languages whose word order is SVO. The west and southwest borders of Chinese are complex and diverse Tibeto-Burman languages. Most of its languages are also SOV postposition languages. Most Tibeto-Burman language experts and Chinese scholars also believe that Chinese and Tibeto-Burman languages are distant relatives, and there is a vertical source-flow relationship. The shared features of the two originating from the same ancestral language would result in similar homology between Chinese and Tibeto-Burman. The southern neighbors of Chinese are the languages of the Hmong-Mien language family, the Kra-Dai language family, and the Austroasiatic language family. The Hmong-Mien language family belongs to the most northerly, and their languages are SVO preposition languages with relatively fixed word order. The Kra-Dai language family is in the middle, and the Austro-Asian language family is the most southern, and it is also a typical SVO preposition language. The southeast direction of Chinese is the Austronesian language family, and the basic word order of its language is generally VSO as the dominant word order, mainly using prepositions and adpositional prefixes.

In general, Chinese is in the middle of the north-south border area, with the OV-postposition type such as Altaic-Japanese-Korean in the north, and the VO-preposition type of the southern Sino-Tibetan language family, the Kra-Dai family, the Hmong-Mien family and the Austronesian language family in the southeast. Such a geographical location is also likely to make the contact intensity between Chinese and the surrounding minority languages more and more frequent, and the contact methods such as geographical contact, migration, cultural and economic exchanges are more and more diverse. Linguistic features will diffuse between the languages that come into contact with each other, and finally produce the contact results of changes in language structure and language functions at all levels of vocabulary, phonetics, and grammar.

Therefore, the suitable geographical location and frequent ethnic migration have resulted in long contacts and exchanges, resulting in mutual penetration and integration between Chinese and surrounding languages, making Chinese a language of mixed adposition types. This phenomenon is a product of language regional effects.

This regional effect is not an exception. Stilo (2006) pointed out that the phenomenon of mixed types of adposition in Ethiopian Semitic, Baltic languages and Middle Eastern Iranian languages is also a product of language regional effects like Chinese. This area can be divided into three types of adposition: north is a postposition type, south is a preposition type, and the north-south adjoining area is a mixed type of adposition.

The same language contact phenomenon occurs in Faroese and Cappadocian. Faroese is influenced by Danish and Cappadocian is influenced by Turkish. Faroese and Danish, Cappadocian and Turkish have been in contact for a long time, borrowing a large number of postpositions from each other's language, and slowly forming a preposition and postposition coexisting and collocating with each other. The circumposition appeared gradually. For example: Cappadocian circumposition case, see the following example:

(68) Phlo ï áCappadocian

so neklifa ombro at

at. the church front

'in front of the church'

(69) Mist íCappadocian

ap extes bæri (cf. Turkish beri)

from yesterday since

'since yesterday'

(70) Ulagh átsh Cappadocian

ap to sevdusi itʃin (cf. Turkish i ǵn)

from the love for

'because of love'

Faroese "fr á..av" and other circumpositions are borrowed from the Danish "fra...af " meaning "from...of ".

(71) as in han var syg fra ung af Lit.

he was sick from young of '

he was sick from young age on'.

  To sum up, we believe that the generation of circumposition is both a product of linguistic origin and a result of synergistic effects of linguistic contact and fusion.

REFERENCES

[1] Basan. (2011). *A contrastive study of locative phrases between Chinese and Tibetan* [published doctoral dissertation].Central China Normal University.

[2] Greenberg, J.H. (1966). Some universals of grammar with particular reference to the order of meaningful elements. In J.H. Greenberg(ed) *Universal of Language* (73–113). Cambridge: Mass. MIT Press.

[3] Greenberg, J.H. (1980). *Circumfixes and Typological Changes*. International conference on historical change, 233–241.

[4] Jin Lixin, &Yu Xiujin. (2012). Word order type of Mandarin Chinese revisited on pairs of grammatical elements correlated and uncorrelated with OV-VO. *Journal of Foreign Languages, 35(2),* 22–29.

[5] Jin Lixin. (2019). A typological perspective on word order in Mandarin Chinese. *Journal of PLA University of Foreign Language, 42*(4)*,* 145–159.

[6] Jin Lixin. (2006). Linguistic typology: a distinguished school in contemporary linguistics. *Journal of Foreign Languages, 5,* 33–41.

[7] Jin Lixin. (2011). *What Is Linguistic Typology*. Shanghai Foreign Language Education Press.

[8] Jin Lixin. (2012). Investigating the word order types of Mandarin from the related and unrelated parameters of OV-VO. *Foreign Language teaching and research, 44*(4)*,* 496–639.

[9] Jin Lixin. (2016). Typological evidence of mixed word order in Mandarin and its motivation. *Chinese Language Learning, 3,* 3–11.

[10] Liu Danqing. (2017). *Linguistic Typology*. Chinese and Western Books.

[11] Lu Bingfu, &Jin Lixin. (2016). *A Course in Linguistic Typology*. Beijing Peking University Press.

[12] Sun Hongkai. (2009). *Brief Chronicles of Chinese Minority Languages (Revised Edition. Volume 1)*. Beijing Ethnic Publishing House.

[13] Sun Hongkai, Hu Zengsheng, &Huang Xing. (2007). *The Languages of China*. Beijing Commercial Press.

[14] Stilo,D. (2006). Circumpositions as an areal response: The case study of the Iranian zone. In: Johanson/Bulut（eds.） *Turkic-Iranian contact areas. Historical and linguistic aspects.*

Yan Shang (b.1984) is a Ph.D. student in Shanghai International Studies University. Her research interests include typological linguistics and cognitive linguistics. Her publications include "The Study of the Potential Category in the Perspective of Typology" (2019). "A typological study of the category of inevitability"(2022)