

Learner-Based and Learner-Context-Based Factors in Lexical Transfer: An Analysis of the Influence of Dongxiang and Chinese on Learners' English as a Third Language

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Abstract

Language transfer refers to the application of previous language knowledge to the target language learning. Using questionnaires, this paper investigates the lexical transferring behaviors of 230 Dongxiang-Chinese bilingual and monolingual students who are in the early stage of learning English vocabulary. The results display that Chinese predominates the transference, while bilinguals' Dongxiang Language is described as a barrier during the process of English learning. To show the individual-level differences, several learner-based factors: age, linguistic background, social background, cognitive level, emotion, and learning attitude are also confirmed, which appear to promote or inhibit this transferring behavior. The experiment data suggest that there are two different types of the factors mentioned above, which depend on whether they are affected by context-based factors---learner-based factors and learner-context-based factors. The paper also concludes with suggestions to teachers and policymakers in Dongxiang area for the modification of current teaching methods based on the quantitative analysis of surveys.

Keywords: Dongxiang, Chinese, English, Lexical Transfer, Language Acquisition, Learner-Based Factors

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Introduction

The globalized world has led to multilingual societies where learning a foreign language is becoming a very common practice. In this process, the influence of a person's knowledge of the native language on the acquisition of another language, termed 'language transfer,' has received scant attention in the research literature. The effect of language transfer on proficiency and school achievements is firstly studied and well characterized---Numerous experiments have proved that on the one hand, non-native speakers' mapping between their mother tongue and the target language may be helpful; On the other hand, the role of the first language (L1) in a second language (L2) context is negative when assumed similarities conflict with an objective difference (Jarvis, 2010). As the last two decades have seen a growing trend towards multilingualism, there is also need to consider the ways of multilinguals' acquisition of subsequent languages beyond L2, where transferring is more complicated. Many articles focus on the advantages and disadvantages that bilinguals have over monolinguals when acquiring an additional language and it has been proved that bilinguals are more experienced language learners than monolinguals.

However, there is a relative paucity of well-controlled studies that seek to identify factors influencing language transfer in the process of language acquisition beside the number of the acquired languages. The relative importance of them is much more puzzling and controversial. Also, the experimental subjects are always college students or adults who have learned the target language for a long time. In light of these, the case of Dongxiang bilingual students is analyzed, of which the age range is 9-18. The purpose of this paper is to investigate their cross-linguistic transfer and the influences of various factors, aiming to provide suggestions for dual language education.

Specifically, the following issues will be discussed:

- What are the roles of Chinese (L2) & Dongxiang (L1) as sources of language transfer in English (L3)?
- To what extent cognitive factor affect transfer?
- To what extent emotional factor affect transfer?

To address the questions above, this investigation uses interview data from 60 L3 learners of English in primary and middle schools in Dongxiang Autonomous District, compared to a control group of monolingual students. Given that they are both low beginning-level language learners, the paper decides to choose the vocabulary transfer (more clearly, the transfer of content words) as a starting point for investigating.

The overall structure of the study takes the form of seven sections. Section 1 begins by laying out the value and necessity of studying language transfer, and looks at the target of this paper. The second section gives a brief introduction to the social and linguistic backgrounds of Dongxiang ethnicity. In the next section, a systematic review of existing research and methods is provided. Section 4 presents the detailed method that will be used in conducting the study. §5 analyses the data gathered and addresses each of the research questions in turn. The discussion based on the results is included in section 6. The final section gives a brief summary and critique of the findings.

Social and Linguistic Backgrounds in Dongxiang Autonomous County

Dongxiang is an ethnic minority that lives mainly in Dongxiang Autonomous County, Linxia Hui Autonomous Prefecture, Gansu province in northwest China. For most of them, the mother tongue is Dongxiang language (L1), which is only used in the family¹. However, the vast majority of the Dongxiang are bilinguals. Investigations have reported the proportion of Chinese-speaking Dongxiang people is more than 95% (Ren, et.al, 2015; Zhang, et.al, 2017). Possible reasons for this include (i) a native language without written scripts²; (ii) a lot of economic trade and cultural exchanges with Han nationality; (iii) present bilingual education policy.

In Dongxiang Autonomous District, the most common age range during which children are exposed to Chinese (L2) is elementary school because most of the courses such as mathematics, physics, and biology are taught in L2. Some children even master Chinese before attending school. Moreover, in recent years the Chinese government has also paid much attention to the importance of English (L3) education, offering English courses as the third language in the third year at primary school.

For trilinguals, their linguistic situations may differ depending on orders of acquiring language and linguistic environment. Cenoz (2000) summarized four possible chronological orders of L3 acquisition :

(1) L1, L2, L3

(2) L1 → L2 → L3

¹ Only a small number of Dongxiang families speak Chinese, mainly because intermingling with Hui and other ethnic groups who do not speak Dongxiang language.

² About 300 years ago, the Dongxiang began to use "Xiao Jing" to represent their language, which consists of some Arabic letters. Nevertheless, much "Xiao Jing" material is Chinese; even if it represents Dongxiang language, there is no fixed system. The number of people who can master "Xiao Jing" is also restricted because there is no way to receive education except in mosques. Thus, many researchers do not think Dongxiang language has a written script.

$$(3) L1 \rightarrow L2, L3 \quad (4)$$

$$L1, L2 \rightarrow L3$$

[Siguan & Mackey \(1987\)](#) proposed three contextual settings for

bilinguals to learn and use target language: home, community and classroom. Based on the two views, Dongxiang ethnicity's language background can be described as two modes. The first one is learning L1, L2 and L3 consecutively where L1 is naturally acquired at childhood and L2/L3 in interaction with teachers. The second mode directs to the small group placed within a bilingual environment and comes to know many details about L1 and L2 before entering elementary school. What they learn in the classroom is L3. For both of them, L2 is the most frequently used in the community affected by a broad range of interpersonal and social factors.

Literature Review

There is no consensus on the definition of transfer since the role of it is inconsistent in different frameworks of language acquisition theories. Therefore, this section first reviews various language acquisition theories to better understand their views towards language transfer. In 1940s and 1950s, behaviorism, regarding language learning as a process of stimuli- response, was one of the most influential theories. From this perspective, the differences between L1 and L2 were thought to predict difficulties in learning and learners' errors were the result of the interference of the mother tongue. This opinion was termed as Contrastive Analysis Hypothesis ([Lado, 1957](#)), which held the idea that the predictor of transferability was the typological or structural similarities and differences between L1 and L2.

In addition to it, other theories of SLA have been proposed to criticize behaviorism since 1970s. They could be subdivided into nativist, environmentalist and interactionist according to [Larsen-Freeman](#) and [Long \(1991\)](#). Nativist assumptions highlighted the importance of Chomsky's Universal Grammar and argued human beings are born with an innate ability to learn languages ([Ellis, 1997](#)). [Krashen \(1981, 1985\)](#) is also a supporter of nativist who held the view that input is the key factor and the comparison between input and output improves learners' proficiency. Behaviorist view of transfer was thus

challenged because nativist scholars believed children are able to construct an independent system of L2 without the assistance of L1. In other words, they claimed L1 and L2 acquisition proceed similarly and did not recognize the existence of language transfer, which was called Creative Construction Hypothesis (Dulay & Burt, 1974; Krashen, 1982).

The environmentalist theories (Schumann, 1978; Bury, 1987) are those claiming that social and psychological distances play a decisive role in language learning. That is, SLA, especially for immigrants, is an “integration with the target language group.” In a different linguistic environment, language transfer is described as speakers’ loss of language habits that a set of L1 constraints set on processing L2 grammar (Hancin, 1994).

As for the interactionist theories (Hatch, 1978; Givon, 1984), scholars proposed that both innate and environmental factors should be invoked to explain language learning. The basic assumption is “one learns how to do conversation, one learns how to interact verbally, and out of this interaction syntactic structures are developed.” These researchers argued that transfer is a mental and a communicative process through which L2 learners develop their interlanguage skills by activating and using their previous linguistic knowledge (Faerch & Kasper, 1987).

Above theories actually can be regarded as different views which manifest different sides of language transfer. Behaviorist view emphasizes the impact of typological distance; Nativist view sees a close relationship between innate language ability and language transfer; environmentalist theories show the importance of linguistic environment. Thus, three factors that influence language transfer can be summarized as “language, speaker and setting”. In this view, a cognitive approach, which believes typological similarity or difference cannot on its own serve as a predicator for transfer, but interact with other factors, is proposed. It gives an important role to the learner as someone who makes a decision as to what should or should not be transferred to L2 learning (Gass & Mackey, 2000). For example, Kellerman (1977) puts forward the term “psychotypology” to refer to learners’ perception of language distance, which can be influenced by both linguistic and environmental variables. Therefore, language transfer is not only the impact of L1, but can also be reverse. This development in the study of language transfer marks a shift in the general focus from external factors to internal factors.

The situation becomes more complex when additional languages are involved. It has been agreed that TLA is more than a sub-domain of SLA because bilinguals are experienced learners with a high level of metalinguistic awareness. Cross-linguistic transfer in TLA is also different from SLA because it can be either

unidirectional or bidirectional. Due to the complexity, the possible roles of L1, L2 and L3 are still under discussion and the underlying mechanism is still controversial. Nevertheless, the review of the history of studies on language transfer shows that one appropriate approach to multilingual transfer is to identify the factors operative in cross-linguistic influence in general and to look specifically at their effect. Table 1 summarizes the results of papers on this topic (Murphy, 2003; Yi, 2012; Zhai, 2012):

Table 1

Different Views toward the Factors Influencing Language Transfer

	learner-based factors	context-based factors	language-based
	factors proficiency		
	target language exposure		language typology
Shirin	language mode	formality and task	frequency
	linguistic awareness		word class
	age		morphological transfer
	educational background		
Yi	psycholinguistic	sociolinguistic social-psychological	language distance
	personality development (proficiency)		markedness
	age		frequency
Zhai	educational	formality and task	frequency
	backgrounds language		language types morphology transfer
	consciousness		
	language-level		

It can be seen that transfer is generally considered as a cognitively complex mechanism involving many factors. Also, it is a dynamic process depending on the development of learner-based factors. However, few articles present these factors with empirical support and none of them compare the performance within bilingual groups varying in these factors. Based on the previous theories and research, the following sections aim to investigate Dongxiang-Chinese bilingual students' transfer, which may shed light on this question.

Method

Participants

A survey with two groups with 120 students in Daban Junior Highschool, Daban Town, Dongxiang Autonomous County and 110 students in Qinghua primary school, Lanzhou City, Gansu Province was conducted. These two schools were both established for minority students so the proportions of Dongxiang students were more than 50% and 10% respectively. In total, 230 questionnaires were given out and only the 224 questionnaires that were completely answered were used for the final analysis. After testing for reliability and validity, 218 questionnaires were usable and the rate was 97.3%. Based on the collected data, the age range of participants was from 9 to 18 (see Figure 1) and the male-to-female ratio was roughly equal, with female rates being slightly higher (see Figure 2). And their language background was 60 Dongxiang-Chinese bilinguals, 123 Chinese monolinguals and 34 Dongxiang monolinguals (See Table 2).

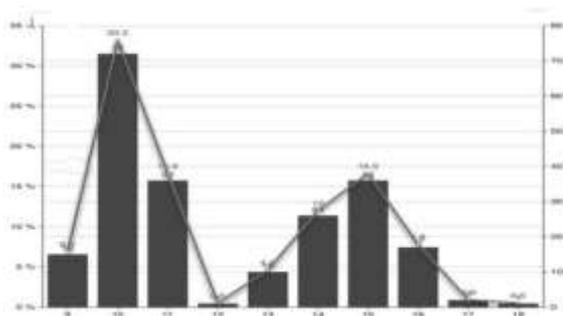


Figure 1. Gender Distribution of Participants.



Figure 2. Age range of participants.

Table 2

Language Backgrounds of Participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid None	1	.5	.5	.5
Dongxiang-Chinese	60	27.5	27.5	28.0
Dongxiang	123	56.4	56.4	84.4
Total	34	15.6	15.6	100.0
Total	218	100.0	100.0	

Design of Questionnaires

Specifically designed questionnaire was a subjective measure in this paper to quantify learners' transfer. The effects of various factors, including the interaction of factors, could also be simultaneously investigated in this way. The questionnaire consisted of a two-page form for Chinese monolingual students. And for participants speaking Dongxiang language, a parallel Dongxiang version with some modification was also available.

The questionnaire comprised three parts. In Part 1, subjects were asked to provide their basic information, such as their age, gender, native language, etc. Self-reported grades in English were also provided to measure their language proficiency of English. Part 2 surveyed subjects' behavior and perception of transfer during the learning process. Some questions such as "I think English verbs (do, go, etc.) are different from Chinese verbs" were set to evaluate students' metalinguistic awareness. Individual differences among participants were included in Part 3. In this part, two typical factors, learning attitudes and motivation, according to Neuner (2009), were investigated as a good representative of individual difference given the fact that it is a broad concept.

Results*Results of Language Transfer*

The second, sixth and tenth questions in the second part of the Chinese questionnaire reflect the differences between native Chinese speakers and Chinese-Dongxiang bilinguals when using Chinese as a source during English learning. This paper proposed to recalculate the original scores (score range 1 to 5) into a new -2 to 2 scoring format and the transferring behavior of learners who are able to speak Chinese was tested using a one- sample t-test.

Table 3

One-Sample Test for Chinese Transfer

One-Sample Statistics						
		N	Mean	Std. Deviation	Std. Error Mean	
v3ah1		177	.4350	2.68995	.20219	
One-Sample Test						
Test Value = 0						
		t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
				Mean Difference	Lower	Upper
v3ah1		2.152	176	.033	.43503	.8341

Based on the experiment, Chinese transfer was found significant at 0.05 level of significance since $t=2.152 > 0$ and $sig.=.033 < .05$ (see Table 3).

Dongxiang transfer of Dongxiang monolinguals and Dongxiang- Chinese bilinguals was also tested using the same approach. It could be analyzed that the transfer of Dongxiang Language was not significant for those learners mastering Dongxiang Language ($t=-14.873 < 0$, $sig.=.000$, see Table 4).

Table 4

One-Sample Test for Dongxiang Transfe

One-Sample Test						
		N	Mean	Std. Deviation	Std. Error Mean	
v3ad1		93	-3.5484	2.30083	.23859	
Test Value = 0						
		t	df	Sig. (2-tailed)	95% Confidence Interval of the Difference	
				Mean Difference	Lower	Upper
v3ad1		-14.873	92	.000	-3.54839	-3.0745

To show the different roles of Dongxiang language and Chinese in English learning, language transfer of Dongxiang-Chinese bilinguals was also investigated. After the recalculation, scores of Dongxiang transfer and Chinese transfer were obtained, respectively. And v3b was then calculated from the subtraction of the score of L1 from the score of L2. A one-sample t-test was used to compare the quantity of transfer between the two. And the data ($t=13.104$, $sig.=.000$) showed that L2 transfer was significantly higher than L1 transfer (see Table 5).

Table 5

One-Sample Test for Comparing the Quantity of L1 and L2 transfer of Bilinguals

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
v3b	110	8.9636	7.17402	.68402

One-Sample Test						
Test Value = 0						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
v3b	13.104	109	.000	8.96364	7.6079	10.3193

Was the result permuted between urban and rural areas? The paper investigated two groups of students from different areas and schools (Tsinghua primary school and Daban middle school). Their Chinese and Dongxiang language transfer scores were tested by using an independent two-sample t-test.

Table 6

Independent Two-Sample Test to Compare L1/L2 Transfer of Bilingual Students from Different Areas

Group Statistics					
	Regions and Nationalities	N	Mean	Std. Deviation	Std. Error Mean
v3ah	Dongxiang (country)	88	-.4432	4.52543	.48241

	Dongxiang (city)	28	2.0357	4.85708	.91790					
v3ad	Dongxian g (country)	89	- 8.2022	6.32667	.67063					
	Dongxiang (city)	27	- 9.6296	5.38622	1.03658					
Independent Two-sample Test										
Levene's Test for Equality of Variances					t-test for Equality of Means					
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								lower	upper	
v3 ah	Equal variances assumed	.104	.747	-2.480	114	.015	-2.47890	.99941	-4.45873	-.49906
	Equal variances not assumed			-2.391	42.958	.021	-2.47890	1.03695	-4.57017	-.38763
v3 ad	Equal variances assumed	2.955	.088	1.061	114	.291	1.42738	1.34571	1.23846	4.09323
	Equal variances not assumed			1.156	49.745	.253	1.42738	1.23460	1.05270	3.90746

The Levenes Test for equality of areas variance for L1 transfer was not significant, $F = 2.955$, $sig.=.088$; For L2 transfer, the result of Levene Test was $F=.104$, $sig.= .747$, which illustrated Chinese transfer of urban students was significantly higher than that of students coming from rural areas.

In the following, Dongxiang-Chinese bilinguals' L2 transfer was also compared with that of Han students who can only speak Chinese. The results of the independent two-sample t-test were shown in Table 7.

Table 7

Independent Two-Sample Test to Compare Chinese Transfer between Bilingual and Chinese Monolingual Students

Group Statistics					
	Native Language	N	Mean	Std. Deviation	Std. Error Mean
Score of L2 transfer	>= 2.00	90	-.1778	4.43575	.46757
	< 2.00	113	.9469	5.09524	.47932

Independent Two-sample Test

Levene's Test for Equality of Variances				t-test for Equality of Mean						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
	Equal variances assumed	2.537	.113	-1.653	201	.100	-1.12468	.68019	-2.46590	.21654
Score of L2 transfer	Equal variances not assumed			-1.680	199.378	.095	-1.12468	.66960	-2.44509	.19573

The Levene Test for equality of variable linguistic backgrounds revealed obvious differences because $F=2.573$ and $Sig.=.113$. That is, Chinese students' Chinese transfer was higher than bilingual students whose L2 was Chinese.

Findings of Cognitive Factors

Some questions such as “dog, go in English are similar to Chinese or Dongxiang

language” were included in the questionnaire to calculate different students' psychological language distances towards different languages, which was a dependent variable. Their native languages are used as an independent variable. The data in the table 8 showed that no significant difference for psychological distance exists in participants with different mother tongues (Chinese vs. Dongxiang Language).

Table 8

Independent Two-Sample Test to Compare Chinese Transfer between Bilingual and Chinese Monolingual Students

Group Statistics					
	Native Language	N	Mean	Std. Deviation	Std. Error Mean
Score of Psychological Distance	Chinese	120	8.8250	2.41376	.22035
	Dongxiang-Chinese	60	8.2833	2.26313	.29217

Independent Two-sample Test

		Levene's Test for		t-test for Equality of Mean						
		Equality of Variances								
Score of Psychological Distance		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Score of Psychological Distance	Equal variances assumed	.554	.458	1.449	178	.149	.54167	.37392	-.19623	.21654
	Equal variances not assumed			1.480	125.132	.141	.54167	.36594	-.18257	.19573

Findings of Emotional Factors

In this section, stepwise multiple linear regression analysis was employed to explore some personal determinants for language transfer. Model 1 used "score of Chinese transfer" as the dependent variable, "grades," "native language," "language attitude," and "learning motivation" as the independent variables; model 2 used "score of Dongxiang language transfer" as the dependent variable, "grade," "native language," "language attitude," and "learning motivation" as the independent variables.

Table 9

Regression Analysis of Attitudes and Motivation Affecting L1/L2 Transfer

variables	Model 1		Model2	
	Regression	T	Regression	t
Intercept	-4.066	-1.722	-4.671	-1.043
Grades	-.024	-.076	.733	1.277
Native	-.563	-1.311	.555	.797
Language	.157	1.623	.192	1.069
Motivation	.069	1.426	-.243**	-2.898
R²	.057		.104	
Sample Size	194		113	

*p<0.1 ; **p<0.05 ; ***p<0.01

However, neither attitudes nor motivation had significant influences on L1 or L2 transfer, which implied there may exist a multicollinearity problem. To test the hypothesis, the paper considered using "learning motivation" as the dependent variable, "grade," "native language," and "language attitude" as the independent variables and conducted regression analysis again. The data were shown in Table 10.

Table 10

Regression Analysis of Factors Affecting Motivation

Variables	Model3	
	Regression Coefficient	t
Intercept	29.424***	10.902
Grades	.147	.318
Native Language	-.559	-.892
Language Attitude	.867***	6.765
R ²	.196	
Sample Size	206	

*p<0.1 ; **p<0.05 ; ***p<0.01

The result of regression analysis of model 3 confirmed that there is a significant correlation between "language attitude" and "learning motivation" at the .01. Therefore, these two were pooled together and used as one variable (emotional factor) to analyze its effect on language transfer. It could be observed that Chinese transfer increased with increase of this factor while Dongxiang language transfer decreased (shown as Table 11).

Table 11

Regression Analysis of Factors Affecting Language Transfer

Variables	Model4		Model5	
	Regression	T	Regression	t
Intercept	-4.012*	-1.703	-3.750	-.833
Grades	-.070	-.222	.556	.969
Native	-.521	-1.228	.590	.839
Emotional	.094**	2.769	-.129**	- 2.188
R ²	.055		.074	
Sample Size	194		113	

*p<0.1 ; **p<0.05 ; ***p<0.01

Discussion

This study examined language transfer trends of Dongxiang bilinguals. The key findings can be summarized in the following three points. First of all, the roles of Dongxiang language and Chinese are different in the two groups. (i) Chinese is the primary source of language transfer in English learning and Chinese transfer is more significant among Chinese than Dongxiang students. (ii) Dongxiang language transfer is not very significant for Dongxiang-Chinese bilingual students (iii) In Qinghua primary school, the frequency of transferring Chinese is obviously higher than that of rural areas (Daban Middle School), but there is no difference between them in view of Dongxiang language transfer. In other words, this survey shows that Chinese takes a dominant position during the learning process, while Dongxiang Language is described as countrified. The finding strongly supports “foreign language effect” (Selinker & Baumgartner, 1995; Williams & Hammarberg, 1998) which is based on the idea that there exist fundamental differences in the learning mechanism for L1 and L2 so bilinguals prefer to transfer L2 to learn another foreign language (L3). This pattern is in line with past research, but most of them overwhelmingly concentrate on the Indo-European family. For instance, Dewaele (1998) proved bilingual learners with Dutch and English as L1 and L2 are much more willing to use English as supplier during French learning. This can not only be viewed as an embodiment of foreign language effect but also the effect of language distance. However, Dongxiang language, Chinese and English are typologically distant languages and no significant difference in participants’ psycholinguistic distance is observed (see §5.2), whereby the problem is avoided and makes the theory more persuasive.

Furthermore, the fact that Chinese is the official language in the classroom while Dongxiang language is only used at home may also be attributed to the participants’ willingness to Chinese because their English learning is under the guidance of teachers. It may also be concluded that more exposure of Chinese is possibly one of the explanations for Dongxiang learners’ preference considering the difference between cities and rural areas. Future explorations with larger and more balanced samples should be conducted to overcome the limitations that these two groups of students are of different age, family background and education level.

The second point is about metalinguistic awareness. It can be observed that all the survey respondents with different language backgrounds are not sensitive to the lexical differences between L1 and L3. That is, their capacity to focus on linguistic forms and to switch focus between form and meaning (Jessner, 2008), which is termed metalinguistic awareness, is limited. Multilinguals are expected to have a high level of it than monolinguals. Nonetheless, this described characteristic is not obvious in this study. This result is possibly owing to their L2 level---Bialystok

(1994) proposed that highly proficient bilinguals tend to have a higher level of metalinguistic awareness than less proficient bilinguals. Most of Dongxiang-Chinese bilingual students learn Chinese during school hours so they are not balanced bilinguals.

Thirdly, the relationship between language transfer and two individual factors, learning attitudes and will to learn English, which can enhance Chinese transfer but inhibit Dongxiang language transfer, is also shown in section 5.3. Lambert (1977) argued when both L1 and L2 and the culture associated with them are complementary, learners' development can benefit, which is called "additive bilingualism." On the contrary, if the target language threatens their native language, it often results in negative emotional feedback, which is called "subtractive bilingualism." It is also confirmed in this study of trilinguals---when a child is taught a more prestigious language, he must inhibit the transfer of minority language to reduce negative emotions. And the more he wants to improve his English, the more frequent the Chinese transfer is and vice versa. Occasionally, the social status of learners' linguistic backgrounds can impact the quantity of transfer by influencing their attitudes and motivation.

Conclusion

The present study sheds light on language transfer in participants with various language backgrounds. Generally speaking, in this study, all bilingual learners' languages, Dongxiang language and Chinese, both influence their English learning. However, each language serves a different role where L2 is a major supplier and L1 is regarded as a barrier. Since Dongxiang language, Chinese and English are typologically distant and participants are also not aware of the differences between them, language-based factors can be assumed to be negligible. And the preference of Chinese is thus attributed to L2 status, which is not only a contextual and social factor that gives priority to the dominant language rather than the weaker, but also a prior setting in innate mechanism for L3 acquisition called foreign language effect. In view of reality in transfer, one of the prospects of bilingual teaching mode is that the schools may develop a "trilingual schools", wherein, L1, L2 and L3 courses are taught simultaneously and appropriate support for minority language is provided in the education program.

According to this study, it is also concluded that L2 status play a role by acting on learners. Some individual factors such as attitudes and motivation are strongly influenced because of the weakness of Dongxiang language. Kasper and Faerch (1987) proposed three social-psychological factors, group solidarity, foreigner role, and marking origin, which can be better understood as a deepened discussion of micro-sociolinguistic perspective. And the personal factors above, which differ from objective data such as age, education background and so on, are a reflection

of these social-psychological factors. Given the complexity of individual factors, it may also be essential to make a distinction between two categories: learner-based factors and learner-context-based factors just as Kellerman's distinction of learner-language-based factor---psychological language distance.

De Angelis and Selinker (2001) argue that "a multilingual has unique linguistic configurations, often depending on individual history." The importance of individual differences is also confirmed in this paper. Further studies are needed to clarify the precise relationship between learner, context and language, which can widen the understanding of the process of language transfer. Furthermore, it is necessary to take into account that this study was carried out in participants with specific social and linguistic backgrounds. Thus, the future research should consider whether the findings can be generalized to all bilingual learners.

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