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Research on the International Image of Hangzhou in the Pre-Asian Games Period: A Case Study on Linguistic Landscape of Liangzhu Area

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Abstract

In September 2022, Hangzhou will host the 19th Asian Games, which is another opportunity to facilitate Hangzhou's internationalization process. A quality linguistic landscape will be of great help for Hangzhou's internationalization and also serves as a must for foreigners in Hangzhou, so the linguistic landscape of Hangzhou in public services is a topic worth studying. In the "pre-Asian Games" period, the present author investigates the linguistic landscape of Liangzhu area in Hangzhou and tries to explore the communication of Hangzhou's external image. First, she does a literature review to further understand the global communication of city image and linguistic landscape. Second, in order to understand the foreigners' views of Hangzhou on its linguistic landscape, especially of Liangzhu area, the present author designs questionnaires, distributes them and conducts in-depth interviews by combining static and dynamic methods. Then, she analyzes the questionnaire and interview data and creates a corpus to extract the views of the interviewees of Hangzhou towards its linguistic landscape. Also, in order to analyze the translation mistakes of public signs in Liangzhu area and its surrounding areas, she conducts a fieldwork and uses professional OCR recognition software and CAT technology to extract, align, analyze, translate and revise the text, trying to figure out the causes of mistakes in various aspects and proposing corresponding countermeasures. Through a case study of the linguistic landscape of Liangzhu area in Hangzhou, the report aims to provide feasible suggestions for the 2022 Asian

Games, to offer advice for a better international image of Hangzhou, to contribute "Hangzhou wisdom" to other cities and to promote the international images communication of the surrounding areas.

Key words: Hangzhou; International image; Public Signs translation; Liangzhu; linguistic landscape

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1. INTRODUCTION

1.1 Research Background and Significance

1.1.1 Background

Enacted in 2018, Regulation of Hangzhou on Promoting Internationalization (hereinafter referred to as "the Regulation") clearly proposes to build Hangzhou into an "Internet+" center for innovation and entrepreneurship with global influence, a city for international conferences, a famous tourist center, and an important city for international exchange on Eastern culture. Article 31 of the Regulation stipulates: "Hotels, restaurants, entertainment venues, theaters, shopping malls, hospitals, stadiums (halls), convention centers, exhibition halls, airports, stations, docks, scenic tourist areas, museums, as well as roads and public toilets shall be equipped with corresponding public information signs in accordance with relevant provisions. Bilingual or multilingual signs shall comply with the relevant provisions of national and industry standards. International universal signs that already exist shall be applied to the use of international universal signs."

At the backdrop of economic globalization and political multi-polarity, China enjoys an increasing

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powerful comprehensive national strength and has a stronger desire to go global. Given that, a better international image matters. Hangzhou will host the 19th Asian Games in September 2022, which is another opportunity to accelerate its internationalization process. Correct, appropriate and quality public signs translations are indispensable for foreigners when they are working, living or travelling in China. After the implementation of *Guidelines for the Use of English in Public Service Areas*, Hangzhou, as the host city of the 19th Asian Games, shall pay special attention to its public signs translations especially in the pre-Asian Games period.

In addition, the 19th Asian Games will be a perfect stage for China to show the globe its comprehensive international status and to speak for the developing countries. For Hangzhou, the 19th Asian Games will not only play as an excellent opportunity to showcase Hangzhou's characteristics and promote its historical & cultural traditions, but also as a perfect arena to expound Eastern culture and reflect China's cultural confidence. Therefore, quality public signs translations of Hangzhou will undoubtedly promote its international image and enhance its cultural confidence.

Thirdly, Archaeological Ruins of Liangzhu City in Hangzhou has been included in the UNESCO World Heritage List since 2019, which not only means that the total amount of China's World Heritage Sites ranks the first in the world, but also that the Liangzhu civilization gains a worldwide recognition. No matter for Chinese or foreigners, the West Lake is always deemed as the symbol of Hangzhou, but now the Liangzhu Site offers another destination for visiting. Hence, the linguistic landscape and public signs translation in Liangzhu area matter in that they offer another source for foreigners to learn more about Liangzhu area, Hangzhou and China.

Last but not least, as Hangzhou is now stepping up its internationalization process, the "Hangzhou wisdom" can provide references for the further development of neighbouring cities. Besides, introductions of "Hangzhou story" are of great help for people in further understanding Hangzhou and China.

1.1.2 Significance

Accelerating Hangzhou's internationalization process. Taking the linguistic landscape in Liangzhu area as an example, the present author studies the public signs translation, analyzes the shortcomings, finds the causes, and puts forward suggestions for improvements. Public signs translations are essential in creating international city image and accelerating cultural exchanges. Quality public signs translations will definitely enhance Hangzhou's international image and improve its cultural soft power. Any lame, shoddy or erroneous translations of public signs may stir up negative effects on Hangzhou's international image. Give that, only standardized and authentic translations can accurately

convey its linguistic and cultural connotations, achieving the social purpose and function on standardization, beautification and edification, which are conducive to the Hangzhou's internationalization, construction and cultural outputting.

Making full use of the radiation and communication power of the 2022 Asian Games. Hangzhou will hold the 19th Asian Games in September 2022, which can offer another opportunity for China to prove its international status and to speak for the developing countries. Furthermore, for Hangzhou, the host city, the 2022 Asian Games plays as a perfect chance in leveling up internationalization by unveiling its uniqueness and outputting its culture and traditions. In the meantime, China's cultural confidence will be inevitably enhanced.

Disseminating the Liangzhu culture. Archaeological Ruins of Liangzhu City has been included in the UNESCO World Heritage List since July 6th, 2019. For both foreigners and Chinese, the popularity of Liangzhu city is yet a far cry from that of the West Lake. Therefore, the improvement of the linguistic landscape of Liangzhu area in Hangzhou is pivotal to the dissemination of Liangzhu culture.

Setting an example and providing references. In recent years, Hangzhou has been destinations for loads of international conferences, gathering hoards of elites and valuable information. The "Hangzhou wisdom" offers references for the development of neighbouring cities. Through hosting the Asian Games and the G20 Summit, Hangzhou successes in improving its city image and optimizing development strategies.

1.1.3 Innovation

The topic is up to date and of practical significance. In the pre-Asian Games period, Archaeological Ruins of Liangzhu City was included in the UNESCO World Heritage List in 2019. To date, there is few researches probing into the linguistic landscape in Liangzhu area. Therefore, the topic follows the trend and is of both theoretical and practical significance.

The research methodology is novel and holistic. From material collection, questionnaire, interview, date analysis, corpus building to corpus analyzing, the whole research is conducted through the combination of both static and dynamic methods, which are useful and indispensable in this cross-disciplinary research on city government.

The research combines traditional ways with advanced technological tools. Based on traditional research methods, this research makes full use of CAT and corpus retrieval tools in analysis. Under the guidance of eco-translatology, the present author sheds light on the practical values and the information transference.

1.2 Overview of Linguistic Landscape

Linguistic landscape refers to road signs, street signs, public information signs, warning signs and so on. In sociolinguistics, studies on "linguistic landscape" mainly

refer to the studies on public signs translations.

Landry and Bourhis (1997) initiate the concept "linguistic landscape", referring it to "the visibility and salience of languages on public and commercial signs in a given territory or region", which is the most commonly used definition among all other explanations. While Jaworski and Thurlow (2010) define "linguistic landscape" from the perspective of sociolinguistics by referring it to the interaction among language, visual activity, spatial practices and cultural dimensions, particularly the construction of spatial discourses mediated by texts and symbolic resources.

Compared to the overseas studies on linguistic landscape, the related domestic studies are at a starting point, with the scope and depth being insufficient. Domestic studies on linguistic landscape can be concluded into three aspects: translation and standardization of linguistic landscape, features of linguistic landscape

in certain industries as well as theory and research methodology of linguistic landscape studies. Among the above three aspects, most studies lay focuses on public signs translation, with only a small proportion of studies paying attention to the theoretical studies on linguistic landscape. In conclusion, domestic studies on linguistic landscape needs further attention and development.

Domestic studies on linguistic landscape begin later than foreign studies on linguistic landscape, but they are developing rapidly. Chinese scholars like Shang Guowen and Zhao Shouhui follow, collect and analyze the domestic studies on linguistic studies. However, the visual analysis of linguistic landscape research in China is limited to studies published between 2009 and 2019. While in 2020, CNKI (China National Knowledge Infrastructure) contained 124 relevant articles, accounting for nearly one-third of all articles on linguistic landscape.

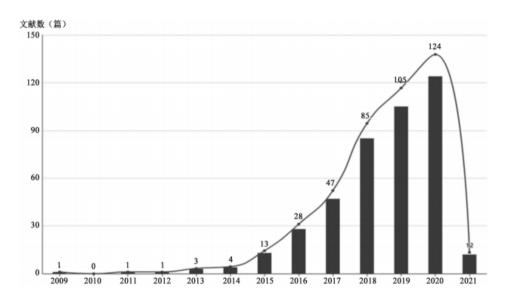


Figure 1 Literature Statistics for Domestic Studies on Linguistic Landscape in 2009-2021

As Figure 1 shows, domestic studies on linguistic landscape have mainly gone through three stages. The first stage stretches from 2009 to 2014, during which the linguistic landscape barely attracted attention from domestic scholars, and the number of published articles was less than 10 each year. In 2009, Sun Li (2009) first used the term "linguistic landscape". Shang Guowen and Zhao Shouhui (2014) discussed the analytical dimension and theoretical construction of linguistic landscape. Also, they shed light on different perspectives, theories and methods of linguistic landscape studies. The second phase covers the period from 2015 to 2018, during which domestic studies on linguistic landscape developed in a steady way, with the number of related annual publications increasing year by year. Shang Guowen (2016) states that language will provide a favourable analytical tool for certain language policy and planning studies. Besides, Shang included studies on linguistic landscape in the framework of second language teaching and learning studies in 2017. What's more, Issue 2 of *Chinese Journal of Language Policy and Planning* (2017) set up a seminar on linguistic landscape studies. The third phase ranges from 2019 to the present, during which a large number of related articles appear in China. And in this phase, domestic studies on linguistic landscape enter a prospering golden period. In the meantime, Chinese scholars turn their attentions to more advancing areas such as linguistic ecology and linguistic landscape in virtual spaces, with more theoretical framework and research methodologies being explored.

According to what have been mentioned above, domestic studies on linguistic landscape show a positive trend in recent years. As globalization accelerates, competition between countries is becoming increasingly

fiercer. Cultural self-confidence and national self-assurance are becoming more and more important in evaluating the comprehensive national strengths. Therefore, the outputting of culture has become substantially important. As the capital city of Zhejiang Province in China, Hangzhou has hosted a series of international events, such as the G20 Summit in 2016. The upcoming 19th Asian Games welcome athletes, coaches, team leaders and tourists from all over the world. It makes the spread of Hangzhou's international image particularly essential. Given that, the study on its linguistic landscape is therefore a necessary step in the advancement of Hangzhou and China.

1.3 Research Design

1.3.1 Research Target

This research aims to study the linguistic landscape, especially the C-E translation of public signs in Liangzhu area. Besides, in order to collect and offer convincing statistics for further analysis, the present author conducts a questionnaire survey and interviews foreigners in Hangzhou to get to know their real attitudes towards Hangzhou's international image.

1.3.2 Research Procedure

- (1) Materials collection. The present author first goes through available articles both online and offline in advance to evaluate the feasibility, value and direction of the research.
- (2) Questionnaire. In accordance with the research aim, the present author designs the questionnaire. Then, she distributes, collects and analyzes the questionnaires.
- (3) Interview. In the interview stage, the present author first interviews 35 foreigners in Hangzhou to find out more about their views, opinions and suggestions on the public signs translation of Liangzhu area in Hangzhou. Then, she transcribes the interviews and self-builds a small "interview corpus".
- (4) The present author visits Archaeological Ruins of Liangzhu City and its surrounding areas, taking photos of some public signs translation and adopting professional OCR recognition software and CAT technology to extract, align, analyze, translate and proofread the text. Specific procedures are as follows:
 - Use Finereader to extract the texts.
 - Use Yicat to align the texts.
 - Create translation memories and term base on Excel.
- Compare and analyze the texts in both source and target languages through parallels corpus and the corpus retrieval tool --Wordsmith 7.0.
- Translate and proofread by using CAT like SDL Trados and MemoQ.
- (5) Statistic analysis. The present author gets to know the interviewees' opinions and suggestions on linguistic landscape of Liangzhu area by analyzing the questionnaires and interviews.

(6) Report writing. The present author writes the report based on all analysis and statistics.

1.3.3 Research Methodology

- (1) Literature collection method: In academic journals, monographs and writings research, translators should collect a wide range of materials such as treatises, papers and seminar proceedings related to the translation of public signs and conduct in-depth research. Mass media, newspapers, magazines, radio, television, the Internet and other publications often provide extremely valuable information on trends and developments in specific aspects (Lv Hefa, Jiang Lu, et al., 2011). The present author mainly collects a large amount of relevant articles from the Internet and determines the direction of the research by close reading.
- (2) Corpus analysis method: The research is accurate, objective and scientific, with data collected through fieldwork. Then, the present author transcribes the interviews to self-build a small corpus. Also, the analysis is conducted with the help of software such as SPSS and Wordsmith.
- (3) Questionnaire and interview method: The present author designs and distributes a questionnaire in the early stage, and uses SPSS to analyze the data. In addition, 35 foreigners in Hangzhou are selected as interviewees.
- (4) Fieldwork method: Through fieldwork, data collection and interviews with people in the target language, macro and micro contextual information, public notices and public information service systems, and specific understanding of the culture and needs of the audience, a corpus is formed (Lv Hefa, Jiang Lu, et al., 2011). The present author visits Archaeological Ruins of Liangzhu City and its surrounding public areas for investigation, takes photographs of the public signs translation, and uses professional OCR recognition software and CAT technology to extract, align, analyze, translate and proofread the texts.

2. MACRO ANALYSIS

2.1 Global Analysis

Located in the Yangtze River Basin on the south-eastern coast of China, the Archaeological Ruins of Liangzhu reveals an early regional state with a unified belief system based on rice cultivation in Late Neolithic China. The property is composed of four area -- the Area of Yaoshan Site, the Area of High-dam at the Mouth of the Valley, the Area of Low-dam on the Plain and the Area of City Site. These ruins are an outstanding example of early urban civilization expressed in earthen monuments, urban planning, a water conservation system and a social hierarchy expressed in differentiated burials in cemeteries within the property. Liangzhu is a historic name. While whisking off the dust of 5000-year history and appreciating this ancient site, the cradle of early human

civilization, we can see fascinating waters, soft jade wares and glory of human wisdom. In 2019, Archaeological Ruins of Liangzhu City, located in the northwest of Zhejiang province, was put on the UNESCO World Heritage List as a cultural site.

In this context, the intermingling of languages and the collision of cultures will inevitably lead to an increasingly multilingual future for the Liangzhu region. As part of the regional linguistic life, the study of multilingual landscapes helps us to grasp the intrinsic links between economy, politics and culture, and to gain a clearer view of social, urban and national development trends.

The research mainly covers three areas: historical and

cultural areas, modern commercial areas and residential areas. The historical and cultural area mainly refers to Liangzhu Museum. The modern commercial area mainly includes AEON Shopping Center. And the residential areas refer to Chunmy Resort and Meilizhou Park. To collect valuable materials for further analysis, the present author took pictures of public signs translation in above mentioned areas. Finally, she took 601 photos in total, including 450 photos of Liangzhu Museum, 48 photos of Meilizhou Park, 41 photos of Chunmy Resort, 40 photos of AEON Shopping Center and 22 photos of road signs. The details are stated below:

Table 1 Language Type of Public Signs in Liangzhu Area

Area	Chinese Only	English Only	In Both Chinese and English	In Chinese, English, Japanese and Korean	Total
Liangzhu museum 106 7		333	4	450	
Meilizhou park	18	0	28	2	48
Chunmy resort	20	2	17	2	41
AEON shopping center	12	2	24	2	40
Road signs	5	0	11	6	22
Total	161	11	413	16	601

Table 2 Language Type Proportion of Public Signs in Liangzhu Area

Language type	Chinese only	English only	In both Chinese and English	In Chinese, English, Japanese and Korean	Total
Proportion	26.79%	1.83%	68.72%	2.66%	100%

As we can see from Table 1, the public signs of the Liangzhu area are mainly presented in four types: Chinese only, English only, in both Chinese and English and in Chinese, English, Japanese and Korean, with the third one (in both Chinese and English) being the majority. From Table 2, it can be seen that the public signs in Chinese only account for 26.79% of all the samples, and those in English only account for 1.83%. Public signs in both Chinese and English dominate, accounting for 68.72%, while those in Chinese, English, Japanese and Korean take up only 2.66% of all the samples.

2.2 Questionnaire & Interview Analysis

This research adopts both the static and dynamic methods regarding different situations. A questionnaire survey themed on "Views on International Image of Hangzhou" is done among foreigners in Hangzhou. Finally, a total of 100 questionnaires were distributed, with 93 of them being valuable. The majority of the 35 interviewees are foreign students aging 20-30 and have been in Hangzhou for at least 1 year. Given that, they are perfect for this questionnaire and interview. The results of major questions go as follows:

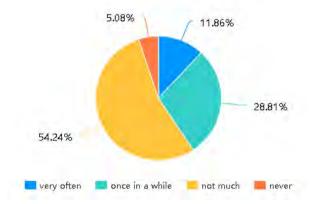


Figure 1 Frequency of Noticing Mistakes in Public Signs Translation in Hangzhou

According to the statistic, we can conclude that over half of the interviewees believe that there are few translation mistakes in Hangzhou's public signs translation. Besides, 28.81% of the interviewees say that they find errors in public signs translation once in a while. However, there are still 5.08% of the interviewees say that they notice translation mistakes very often. Therefore, there is still much room for improvements for Hangzhou's public signs translation.

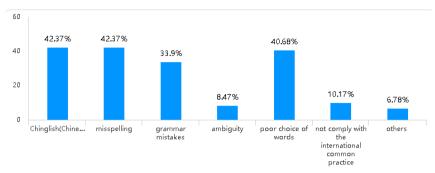


Figure 2 Mistake Type of Public Signs Translation in Hangzhou

As can be seen from the answers of this question, Chinglish and misspelling are two major mistake types that can be noticed in the public signs translation in Hangzhou. In addition, the choice of vocabulary needs to be improved.

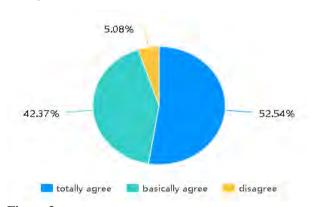


Figure 3
Answers to "Whether mistakes in public signs translation will undermine Hangzhou's international image"

From the answers we can learn that 50.85% of the interviewees tend to attribute the translation mistakes to poor English of translators. Apart from that, many interviewees think that the lack of cultural awareness of

From the answers to this question, we can clearly see that more than half of the interviewees in Hangzhou fully agree with the view that Hangzhou's international image is positively correlated with the quality of its public signs translation. Therefore, if Hangzhou wants a better international image, it has to improve its public signs translation.

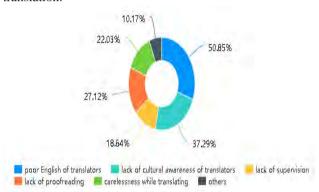


Figure 4 Answers to "Reasons That Contribute to Mistakes in Public Signs Translation in Hangzhou"

translators can be seen as a major reason. Also, lack of proofreading and supervision also lead to mistakes in public signs translation.

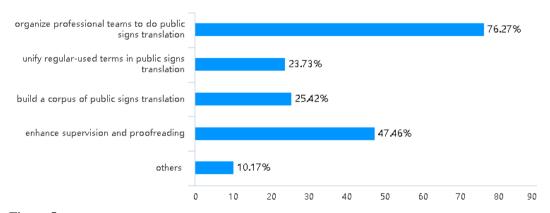


Figure 5 Suggestions on Bettering Hangzhou's Public Signs Translation

From the answers to this question we can conclude that most of the interviewees prefer to organize professional

teams to do public signs translation. Also, there are almost half of the interviewees suggest that Hangzhou

should improve the quality of public signs translation by enhancing supervision and proofreading. What's more, building a corpus of public signs translation is also regarded as an appropriate method. Besides, a minority of foreigners put forward their own views, including but not limited to seeking help from native speakers.

2.3 Corpus Analysis

After recognition, alignment, translation, proofreading and analysis of the photos and texts, the present author analyzes the corpus. And the result goes as follows:

	1				
	text file	Overall	良渚 1 芽	良渚 2 芽	良渚 3 芽
	file size	49,837	18,572	13,908	17,357
	tokens (running words) in text	6,960	2,443	1,865	2,652
	tokens used for word list	6,770	2,403	1,816	2,551
	sum of entries				
	types (distinct words)	1,463	873	566	501
	type/token ratio (TTR)	21.61	36.33	31.17	19.64
	standardised TTR	32.46	39.65	36.60	23.20
	STTR std.dev.	52.53	42.67		54.31
	STTR basis	1,000	1,000	1,000	1,000
me	an word length (in characters)	5.33	5.42	5.35	5.23
	word length std.dev.	2.61	2.60	2.81	2.46
	sentences	187	70	49	68
	mean (in words)	36.20	34.33	37.06	37.51
	std.dev.	68.00	87.36	40.23	61.74
	paragraphs	3	1	1	1
	mean (in words)	2,256.67	2,403.00	1,816.00	2,551.00
	std.dev.	388.74			
	headings				
	mean (in words)				
	std.dev.				
	sections	3	1	1	1
	mean (in words)	2,256.67	2,403.00	1,816.00	2,551.00
	std.dev.	388.74			
	numbers removed	190	40	49	101

Figure 6

1-letter words	80	33	26	21
2-letter words	802	265	242	295
3-letter words	1,054	364	345	345
4-letter words	1,404	424	272	708
5-letter words	673	265	209	199
6-letter words	750	261	178	311
7-letter words	646	279	153	214
8-letter words	665	248	167	250
9-letter words	443	142	112	189
10-letter words	175	69	56	50
11-letter words	118	41	46	31
12-letter words	97	34	38	25
13-letter words	20	6	7	7
14-letter words	28	11	13	4
15-letter words	4	1		3
16-letter words				
17-letter words				
18-letter words	1		1	
18-letter words	1		1	

Figure 7

After analyzing the translation corpus through Wordsmith 7.0, the present author draws conclusions according to the statistics. As we all know, the STTR reflects the lexical diversity of a text. If a text has a high STTR, it means that the text contains diversified words,

and it will be hard for readers to fully comprehend the text. From Figure 6, we can see that the STTR of the public signs translation of Liangzhu area is 32.46, which means the translation is plain and relatively easy for readers to understand. Also, the mean word length is 5.33. As Figure 7 shows, in general, the words used are mostly those with less than six letters, which are short and concise. Therefore the translations meet the public signs requirement of being simple and are appropriate for international communications and exchanges.

N	Word	Word Freq. % Te:		Texts	% ispersion Lemmas S	Set
1	THE	469	6.74	3	100.0(0.79	
2	OF	282	4.05	3	100.00 0.87	
3	#	190	2.73	3	100.00 0.75	
4	AND	188	2.70	3	100.00 0.87	
5	SITE	182	2.61	3	100.00 0.74	
6	JADE	171	2.46	3	100.00 0.58	
7	ZHEJIANG	170	2.44	3	100.00 0.71	
8	YUHANG	160	2.30	3	100.00 0.68	
9	UNEARTHED	159	2.28	3	100.00 0.70	
10	LIANGZHU	130	1.87	3	100.0(0.80	
11	FROM	122	1.75	3	100.00 0.53	
12	TOMB	106	1.52	3	100.00 0.48	
13	WITH	90	1.29	3	100.0(0.79	
14	POTTERY	70	1.01	3	100.00 0.39	
15	IN	68	0.98	3	100.00 0.79	
16	IS	64	0.92	3	100.00 0.76	
17	ТО	56	0.80	3	100.0(0.78	
18	CITY	54	0.78	3	100.0(0.60	
19	AT	52	0.75	3	100.0(0.61	
20	YAOSHAN	52	0.75	2	66.67 0.39	
21	CULTURE	49	0.70	3	100.0(0.56	
22	A	46	0.66	3	100.0(0.75	
23	FANSHAN	44	0.63	3	100.0(0.50	
24	ARE	30	0.43	3	100.0(0.70	
25	CIVILIZATION	28	0.40	3	100.0(0.70	
26	CONG	26	0.37	2	66.67 0.37	
27	ON	26	0.37	3	100.0(0.83	

Figure 8

<u>F</u> ile	<u>E</u> dit	⊻iew	<u>C</u> ompute	<u>S</u> ettings	<u>W</u> indows	<u>H</u> elp					
	N			Word	Freq.	%	Texts	% i	spersion	Lemmas	Set
	35			SYSTEM	23	0.33	3	100.00	0.70		
	36			HUMAN	22	0.32	3	100.00	0.57		
	37			SET	22	0.32	2	66.67	0.37		
	38		(SHAPED	22	0.32	2	66.67	0.45		
	39			WAS	21	0.30	3	100.00	0.66		
	40			WATER	21	0.30	3	100.00	0.50		
	41			AS	20	0.29	3	100.00	0.74		
	42			BY	20	0.29	3	100.00	0.83		
	43			IT	20	0.29	3	100.00	0.81		
	44			JADES	20	0.29	3	100.00	0.33		
	45			PALACE	20	0.29	2	66.67	0.40		
	46			CENTER	19	0.27	3	100.00	0.60		
	47		COL	LECTED	19	0.27	3	100.00	0.67		
	48		EX	HIBITION	19	0.27	2	66.67	0.27		
	49		P	ATTERN	19	0.27	3	100.00	0.76		
	50			STATE	19	0.27	3	100.00	0.59		
	51			THAT	19	0.27	3	100.00	0.74		
	52			TUBE	19	0.27	2	66.67	0.43		
	53			EARLY	18	0.26	3	100.00	0.74		
	54			STONE	18	0.26	2	66.67	0.36		
	55		BIAN	JIASHAN	17	0.24	3	100.00	0.53		
	56			FOR	17	0.24	2	66.67	0.73		
	57		ORN.	AMENTS	17	0.24	1	33.33	0.37		
	58			YUE	17	0.24	2	66.67	0.13		
	59			PLEASE	16	0.23	1	33.33	0.34		
	60			ROYAL	16	0.23	2	66.67	0.57		
	61			BEADS		0.22	1	33.33	0.26		

Figure 9

As Figure 8 and Figure 9 show, the frequency of words "THE" "OF" and "AND" are at the top 4. Besides, other functional words like "FROM" and "WITH" are also commonly used. Given that, we can conclude that functional words are indispensable in ensuring the cohesion of English texts.

3. CASE ANALYSIS

3.1 The Guiding Theory

Eco-translatology, first proposed by Professor Hu Gengshen in 2001, studies translation from a new aspect, which is based on Darwin's Theory of Evolution with "survival of the fittest through natural selection" as the key point. The theory wins increasing attention and sheds light on the exploration of harmony between the translator and the Eco-environment. According to Professor Hu, the essence of eco-translatology is the concept called "adaptation and selection", which means translation is "a selection of the translator's adaptation to fit the translational Eco-environment". Also, Hu believes that under the guidance of eco-translatology, the translator has to adhere to multi-dimensional adaptive selection principle, which mainly refers to three dimensions, including linguistic, cultural and communicative dimensions (Hu Gengshen, 2008).

3.1.1 Linguistic Dimension

Adaptive transformation at linguistic dimension means that, during translation, the translator has to adapt and select specific linguistic forms in different levels and aspects (Hu Gengshen, 2008). When translating public signs, the translator has to first deal with the adaptive transformation at linguistic dimension of the source language into the translated language. In addition, the adaptation must be in accordance with the linguistic characteristics and habits of the target language, so that the target readers can understand the translation easily.

3.1.2 Cultural Dimension

Adaptation transformation at the cultural dimension refers to the situation in which the translator focuses not only on the different language systems but also on the interpretation and transmission of disparate cultural-loaded connotations in a proper way, so that misunderstandings can be avoided (Hu Gengshen, 2008). Nida (1993) once states that culture plays such an important role in language that no text can be fully understood without careful consideration of its cultural context. Hence, as texts output and convey the unique culture of the source language, adaptation transformation at the cultural dimension is highly required for public signs translation.

3.1.3 Communicative Dimension

In translation process, adaptive transformation at communicative dimension means that the translator pays attention to the realization of communicative intention. If the information losses communicative effects, it is totally nothing. As Hu Gengshen (2004: 138) says, the objective of adaptive transformation at the communicative dimension is to guarantee that the communicative intention of ST is completely and accurately transferred in TT. To some degree, public signs aim to show the features of a nation through communication. Therefore, the adaptive transformation at the communicative dimension is inevitable in public signs translation.

3.2 Case Analysis

In this part, the present author will analyze the mistakes in public signs translation in Liangzhu area from the taken pictures. The mistakes can be roughly categorized into seven types: discordance, inappropriate transliteration, misprinting, grammatical mistake, superficial understanding, chinglish and the miscellaneous. Also, there are some translation versions that worth appreciation.

3.2.1 Discordance



Figure 10



Figure 11



Figure 12

As Figure 10, 11 and 12 show, public signs translation in Liangzhu area use different ways in translating the word "路". In Figure 10, the translator makes adaptive transformation at linguistic dimension by transferring the word "路" into "road" into English and using transliteration in conveying the name of road. For example, "莫干山路" is translated as "Moganshan Road". It is an advisable way since it can express, clearly and concisely, both the road name and the location. In contrast, in Figure 11 and 12, the translator neglects the linguistic adaptation and directly adopts transliteration in transferring the word "路" by translating into "LU", which may cast obstacles for foreigners who are unfamiliar with Chinese.



Figure 13



Figure 14

According to Figure 13 and 3-5, the translators use disparate translation methods in transferring the name "美丽洲公园". In Figure 13, the translator translates the place name into "MEILIZHOU PARK", which clearly expresses the function with the Chinese pronunciation retained. While in Figure 14, the translator merely conveys the word into "the Beautiful Island Park". In comparison, the present author believes that the translation of Figure 13 is better since it not only maintains the features of Liangzhu area, but also clearly demonstrates the function. Besides,

it is more of a public signs translation by making adaptive transformation at linguistic dimension. On the contrary, the translation in Figure 14 will incur ambiguity since the letter "洲" here is not equivalent to the word "island" in English.



Figure 15



Figure 16



Figure 17

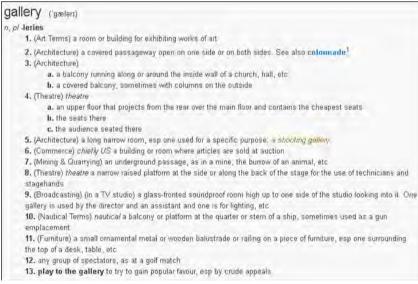


Figure 18

In Figure 15, the word "第一展厅", "第二展厅" and "第三展厅" are respectively translated into "Exhibition Hall 1", "Exhibition Hall 2" and "Exhibition Hall 3". While in Figure 16 and 17, the words "第一展厅" and "第三展厅" are translated into "GALLERY II" and "GALLERY III". According to The Free Dictionary, the word "exhibition hall" refers to a large hall for holding exhibitions. While the word "gallery" contains plenty of definitions (as Figure 18 shows). After comparing the definitions, the present author agrees that here the word "展厅" is better to be translated into "exhibition hall" since it is more equivalent to the source language and better demonstrates the adaptive transformation at cultural dimension.

3.2.2 Inappropriate Transliteration



Figure 19



Figure 20

Figure 19 was taken in Liangzhu Museum and Figure 20 was taken in Chunmy Resort. In these two parts, the translators merely use transliteration, which is not appropriate since the translations fail to convey the connotations of the ST, and the foreigners are unable to grasp the full understandings of the two public signs. After searching relevant information both online and offline, the present author finds that "良博课堂" mainly refers to a place of Liangzhu Museum, where the staff can exchange ideas or improve themselves by studying. Therefore, the present author believes that "ideas exchange room" is a better translation for "良博课堂". With regard to the word "棋牌乐" in Figure 20, in China, "棋牌" refers to a traditional game including Mahjong and Cards. So in order to introduce the Chinese culture, the present author tends to transfer the word into "Mahjong & Cards' Room" by making adaptive transformation at cultural dimension.

3.2.3 Misprinting



Figure 21

The picture was taken in Chunmy Resort. Here the word "examination" was misprinted as "examinayion". Though the misprinting will not cast obstacles in understanding for foreigners, it will still be a stain for Hangzhou's public signs translation in Liangzhu area. Given that, public signs translation in Liangzhu area still needs further proofreading and supervision.



Figure 22



Figure 23

Figure 22 was taken from a road sign outside Liangzhu Museum, and Figure 23 was taken in AEON Shopping Mall. In Figure 22, the word "industry" is obviously misprinted as "indstry". In Figure 23, the word "service center" is misprinted as "service senter". From these two examples, we can see that mistakes in typing will inevitably undermine the function of public signs translation. Therefore, the present author strongly holds that more proofreading and supervision shall be made.

3.2.4 Grammatical Mistake



Figure 24

The marked sentence in Figure 24 has obvious grammatical mistakes. According to the English grammar, the words that we commonly use to modify the degree of verbs are called adverbs. However, in this translation, the adjective "correct" is used to modify the verb "use", which violates the English grammatical rules. Besides, the latter part of the sentence "improper use of danger" is also strange. Considering the style and function of public signs translation, the present author considers that it is better to adopt adaptive transformation at communicative dimension and to translate the sentence as "Please use escalators in correct ways to avoid dangers". In this

way, the sentence will be not only concise, but also grammatically correct. Finally, it will provide a better international image of Hangzhou to foreign visitors.

3.2.5 Superficial Understanding



Figure 25

This photo was taken in Meilizhou Park. Here the sentence "水深危险,严禁下水" is a warning that tells the visitors to be far away from the deep water for security. The translator transfers the sentence into "DEEP WATER. NO WAERE", which mainly contains two errors. First, the word "WATER" is misspelled as "WAERE". Even the word is spelt correctly, the translation will be "DEEP WATER. NO WATER", which is even more confusing for foreigners. Secondly, in the translation process, the translator only adopts hard translation by transferring word by word, without analyzing the word class or the whole sentence meaning. To improve the translation, the present author provides another translation version: CAUTION! DEEP WATER! In this way, the warning tone is completely conveyed through only three words. In the meantime, the adaptive transformation at communicative dimension is achieved.



Figure 26

The photo was taken in GALLERY III of Liangzhu Museum. Here the translator fails to grasp the underlying meaning of the Chinese word "是". In common cases, the Chinese word "是" is equivalent to the English word "is".

Usually, if we say A is B, it means A=B. For example, the sentence "北京是中国的首都" can be translated into "Beijing is the capital of China". But in Figure 26, "良渚文化玉器是史前玉器发展的高峰" can not be interpreted as "良渚文化玉器=史前玉器发展的高峰" since they are two different concepts. After further reading, we can figure out the word "是" here means "symbolize". In other words, the marked sentence should be understood as "良渚文化玉器体现了史前玉器发展的高峰". Therefore, the sentence is better to be transferred as "The Liangzhu Jade symbolizes the peak of prehistoric jades development", which fully demonstrates the connotations. Given that, during translation, the translator should avoid superficial understanding and translate texts after further analysis.

3.2.4 Chinglish



Figure 27

The photo was taken inside of AEON Shopping Center. Here the translator uses word for word translation and transfers the title "顾客意见公开栏" into "GONGKAILAN CUSTOMER OPINION", which reads chinglish and awkward. Sometimes, translation doesn't mean to transfer every single word of ST. The translator has to take the responsibility to delete unnecessary or redundant information after analysis. Here the word "公开栏" is unnecessary since the target readers can also get the meaning without the word. Hence, in order to make the translation more idiomatic and avoid being chinglish and redundant, the present author chooses to make adaptive transformation at communicative dimension and omits the word "公开栏" by translating the title into "CUSTOMER OPINION".



Figure 28

This example was taken from one of the road signs around Liangzhu Museum. Here, the translator adopts literal translation and transfers the word "参观区" into "Visit the area", which is chinglish and violates the linguistic habits of English since English tends to translate titles in nouns or noun phrases. Given that, the present author suggests to make adaptive transformation at linguistic dimension and translates it into "Visiting Area",

through which the foreigners are able to get the meaning quickly. Besides, the expression is obviously more idiomatic.

3.2.5 The Miscellaneous



Figure 29

The photo was taken in Chunmy Resort. Here the translator literally translates the road sign "童学童玩" into a word "children". Though it is concise enough and somewhat relevant, it might incur ambiguity. So after analysis, the present author offers another translation version: About Children. In this way, the translation will be both clear and equivalent to the original information.



Figure 30



Figure 31

According to the stipulations of *Guidelines for the Use of English in Public Service Areas*, "not..."or "noing" or "...not allowed" is used for mandatory warning. For non-mandatory warnings, "Please" is used as a euphemism. In addition, *the Guideline* stipulates that all letters of warnings must be capitalized. In accordance with the stipulations, the public sign in Figure 30 is better to be translated as "NOT PADDLE", "NO PADDLING" or "PADDLE IS NOT ALLOWED". Similarly, the sign

"请勿推挤" in Figure 31 is better to be transferred into "NO PUSHING", "PUSHING IS NOT ALLOWED" or "NOT PUSH". While for the sign "行李勿入", the translation "NO LUGGAGE" will be more concise and understandable.

3.2.6 Appreciation

In Liangzhu area, translations of jadeware and pottery worth appreciation. Liangzhu Museum introduces over 20 kinds of pottery in both Chinese and English. And following examples account for only a small proportion.



Figure 32



Figure 33



Figure 34



Figure 35

Figure 32, 33, 34 and 35 were all taken in Liangzhu Museum. In Figure 32, the word with Chinese characteristic "陶贯耳壶" is translated into "Pottery pot with long hollow ears". In Figure 33, the words "陶鼎" and "陶盉" are transferred as "Pottery tripod *ding*" and "Pottery spouted drinking vessel *he*". What's more, in Figure 34, the words "陶双鼻壶" and "陶高柄豆" are translated into "Pottery double-knobbed pot *hu*" and "Pottery tall pedestal plate *dou*". Besides, in Figure 35, the word "玉璧" is translated as "Jade disk *bi*". We can

see, all the names are translated through a combination of transliteration and annotation. In the meantime, the translators also make adaptive transformation at cultural dimension. In this way, the names of the jadeware and pottery, the pronunciations of certain Chinese words and the exact images of jadeware and pottery are all clearly and vividly expressed. Therefore, it is undoubtedly a kind of enjoyment when reading the translations.



Figure 36

The photo was taken inside of Liangzhu Museum. When translating the title "千年时空", the translator takes the following content into consideration, instead of merely adopting literal translation without considering the specific information. Finally, the translator concludes the following information and transfers the title into "Brief History of Liangzhu Archaeology" by using free translation. Therefore, when doing title translation, it is advisable for the translator to regard the following text and the title as a whole.

CONCLUSION

Considering the special period and the necessity of further improving Hangzhou's international image in the pre-Asian Games period, the present author provides suggestions, hoping to offer valuable references for Hangzhou's public signs translation.

Under the guidance of Eco-translatology, the report mainly lays the focus on analysis of the translation mistakes of public signs of Liangzhu area in Hangzhou. After analysis, the mistakes can be concluded into seven types: discordance, inappropriate transliteration, misprinting, grammatical mistake, superficial understanding, chinglish and the miscellaneous. Besides, there are also shinning points in Hangzhou's public signs translation for appreciation. Apart from that, combining the adaptive transformations on linguistic, cultural and communicative dimensions, the present author offers her advice on improvements and revisions for more natural translation versions.

According to the research, the present author puts forward following suggestions in bettering the linguistic landscape in Liangzhu area.

- (1) Update the public notification board regularly. Public notification board is one of the essential elements of linguistic landscape. The present author finds that in Liangzhu area, words on some public notification boards are blurred and some boards are worn out. So in order to better bring the function of public signs translation into actual play, the present author advises relevant authorities to update the public notification board on a regular basis.
- (2) Standardize the expression. From Figure 10, 11 and 12, we can see that in Liangzhu area, there are disparate translations for the same word. For example, the word "路" is translated into "LU", "Rd" or "Road". Similarly, the word "街" is transferred into "JIE", "Street" or "Str.". It may confuse the foreigners. So in order to make the translations clearer, the present author advises the authorities to standardize the expressions in a certain area according to relevant stipulations.
- (3) Enhance proofreading and supervision. From Figure 21, 22 and 23, we can see that misspelling and misprinting still happen frequently in the public signs translation in Liangzhu area, which may undermine the international image of Hangzhou. Therefore, it is high time that we ramp up efforts to proofread the translations.
- (4) Build a corpus for public signs translation. During the research, the present author finds that some words are translated into different versions, which may confuse the foreigners. In order to increase the translation efficiency and standardize the expression, the present author renders that a special corpus for public signs translation is a perfect choice. In this way, the translators can not only translate the public signs quickly, but also in good quality. Therefore, it will further step up the internationalization process of Hangzhou.
- (5) Leverage the human resources. In translation, it is advisable to make full use of human resources by enrolling foreigners with good Chinese language skills. To be specific, the present author advises relevant authorities to create a translation team, including both Chinese with good foreign language skills and foreigners with good Chinese language skills. In this way, the public signs translations will be more receptor oriented and idiomatic. Therefore, the international image of Hangzhou can be further improved.

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