University of Glasgow

Yang, Qian (2024) *Scottish-Chinese students' language use in Chinese complementary school classroom: a translanguaging perspective.* PhD thesis.

https://theses.gla.ac.uk/84440/

Copyright and moral rights for this work are retained by the author

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge

This work cannot be reproduced or quoted extensively from without first obtaining permission from the author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given

Enlighten: Theses
https://theses.gla.ac.uk/
research-enlighten@glasgow.ac.uk

University of Glasgow

College of Social Sciences

Scottish-Chinese students' language use in Chinese complementary school classroom: A translanguaging perspective

Qian Yang

Submitted in fulfillment of the requirements for the

Degree of Doctor of Philosophy (PhD)

School of Education

College of Social Sciences

University of Glasgow

July 2023

Abstract

This thesis presents a case study on a Chinese complementary school in Scotland. With the aim of exploring the language use in the Chinese class and viewing the language in bilingual class as complex and dynamic, the study adopted two lenses, the perspectives of translanguaging and language ecology, to gain a more holistic understanding of students' languaging practices in the Chinese classes. The two concepts afford their implications and work together to underpin my research theoretically. To capture bilingual practices in the classes, the one-semester fieldwork for the study was conducted from September 2019 using multiple research methods, which includes: phase one, classroom observations with only field notes applied; phase two, audio-recorded classroom observations, semi-structured individual and group interviews, and the collection of documentation (student works) and photographs. Next, several approaches and perspectives were utilized in the procedure of data analysis, namely: thematic analysis; theoretically informed analysis, and moment analysis (Li, 2011).

The research findings provide rich and detailed insights by firstly unwrapping the overall relations of classroom language use, which refers to the general language use across key students, teachers, peers and language forms in the class. Then, by stepping into multifaceted states of classroom engagement, such as in literacy events, casual conversations, and cultural learning events, the research shows how translanguaging and language ecology facilitate bilingual's language use in the Chinese classes. The main findings are: (1) translanguaging as 'the communicative norm of multilingual communities' is prevalent in the Chinese classes; (2) translanguaging, as moving beyond the linguistic mode, includes all modes of meaning-making and the ways in which students flow/move between them. In particular, the findings offer insights into Chinese literacy learning, Chinese culture learning and classical Chinese learning, including: (1) translanguaging facilitates Chinese literacy learning by allowing students to make use of prior knowledge to support learning new knowledge; (2) translanguaging

facilitates students' culture learning by bringing the outside world of the classroom (e.g., prior knowledge, previous experiences) to engage in the current learning; (3) students critically and creatively draw resources in the Chinese classes in order to make sense of classical Chinese language. Meanwhile, meaning-making is not the end of language learning, and resources or strategies may not always be drawn in the learning process. Therefore, the study discussed this point from the perspective of language ecology and pointed out norms and suggestions for learning with culture and classical Chinese.

This thesis makes valuable theoretical and practical contributions to the field of language learning, bilingual education and translanguaging in particular. Theoretically, a proposed conceptual framework contributes to presenting the relations among language users, languages, language ecology and translanguaging in the Chinese learning context. The constructed relationship between translanguaging and language ecology is regarded as an innovative contribution in my study. On a pragmatic level, the practices, suggestions, reflections from students in terms of enhancing Chinese language and culture learning, and Chinese class experience provide stakeholders with insights into how students can be better supported in Chinese language and culture learning.

Table of contents

List of tables

List of figures

List of Picture

Acknowledgement

I would like to express my deepest gratitude to the many people who have supported and assisted me throughout my doctoral journey. First and foremost, I am immensely thankful to my two supervisors, Dr. Julie McAdam and Dr. Lavinia Hirsu. Their continuous guidance, support, and encouragement have enriched my academic experience at the University of Glasgow, providing me with valuable knowledge and personal growth. I fondly recall the discussions with Julie during my first year, where we discussed the understanding of the sentences in the article and she helped me how to read effectively. I also cherish the moments with Lavinia, where she advised me on improving my academic writing as a non-native English speaker. Their patience and kindness have made my doctoral experience rewarding and nurturing, and I am grateful for their willingness to lead, assist, and guide me, helping me evolve from a less confident doctoral candidate to the self-assured individual I am today.

Furthermore, I extend my appreciation to Dr. Alan Britton for leading me into the realm of doctoral studies. Although he did not serve as my supervisor during my second year, his past assistance, influence, and encouragement have left an indelible impact on me, and I am genuinely thankful for his contributions.

I also wish to express my heartfelt thanks to every colleague I encountered during this doctoral journey. Studying at the University of Glasgow alongside all of you has been a delightful and fortunate experience. The moments we shared, whether unwinding in Kelvingrove Park, diligently working in St Andrew's building, searching for resources in the library, or participating in seminars on campus, will remain among the most cherished memories of my life.

I am grateful to myself for staying resolute and persevering despite facing various physical challenges throughout this journey. My heartfelt appreciation goes out to my family for their unwavering support and assistance during this eventful phase of my life. I extend my thanks to my little boy for his innocent and endearing smile,

which provided instant relief to the weariness of thesis writing. This thesis is dedicated to him.

In conclusion, I am humbled by the collective contribution of all the people mentioned above and countless others who have played a part in my academic and personal growth. Your encouragement and support have been invaluable to me, and I extend my heartfelt gratitude to each one of you.

Author’s declaration

I declare that, except where explicit reference is made to the contribution of others, that this dissertation is the result of my own work and has not been submitted for any other degree at the University of Glasgow or any other institution.

Printed Name: Qian Yang

Signature:

Abbreviations

One language only: OLON

One language at a time: OLAT

Translanguaging: TL

L1: First langauge

L2: Second language

L3: Third language

CLT: Communicative Language Teaching

GTM: Grammar Translation Method

ESL: English as Second Language

EFL: English as Foreign Language

GCSE: General Certificate of Secondary Education

SQA: Scottish Qualifications Authority

GCE: General Certificate of Education

CSOL: Chinese for Speaker of Other Languages

Text in { } indicates non-verbal actions by the teacher or students.

Text in brackets [ ] and italicized indicates English translation of Chinese.

Teacher: T

Students: Ss

Key participant Chen: Chen

Key participant Lin: Lin

Key participant Yu: Yu

Key participant Cai: Cai

Key participant Wei: Wei

Unidentified student: S1, S2 etc.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

Globalization, immigration, and the burgeoning internationalization have led people to become multilingual and multicultural. By viewing multilingualism "not simply as a product of migration" (Li, 2016a, p.1) but as the language practices that occur along with social interactions and bring social meanings in the social environment (García, 2011), this study investigates the local multilingual practices of students and teachers in a complementary school in Scotland. Complementary schools are deemed as multilingual educational spaces that promote language and culture among immigrant children (Creese and Blackledge, 2010; Francis, Archer and Mau, 2010). To explore the language practices in such an educational institution, where multilingualism and multiculturalism are evident in language and culture learning, I adopt the lens of translanguaging and language ecology. This lens examines how language practices occurred in class and were engaged by bilingual learners. Through focusing on the actual use of more than one societally named language, semiotic resources employed in the language practices, and looking at the factors that influence those language practices, a panoramic view of classroom language use is presented, with the critical interpretation of students' engagement in the language practices. This study is significant in terms of educational practices for overseas Chinese communities and contributes to the current debates about translanguaging.

This chapter begins with my personal rationale for studying this topic (section 1.2), outlining my experience as a teaching assistant in a Chinese complementary school in Scotland, which signposted my research focus on immigrant children's language learning. Next, the research background of this study is provided (section 1.3), including the background of Scottish-Chinese learners, the history of Chinese complementary schools in the UK, and the classical Chinese learning in Chinese classes. Finally, the significance of the research and the proposed research

questions are presented (section 1.4), followed by an outline of the thesis structure (section 1.5).

1.2 Research rationale (and my personal rationale)

The rationale for conducting this research stems from two main aspects. Firstly, I was inspired by the literature on Chinese schools and heritage language learning. Existing literature (e.g., Archer, Francis and Mau, 2009; Francis, Archer and Mau, 2009; Wu, 2006; Li and Wu, 2009; Li, 2011) highlight that Chinese schools in different countries often share similar features such as limited time and resources, inadequate classroom facilities, a wide age range within a single class, absence of a standardized syllabus and teaching resources, mundane curricula, and voluntary teachers with limited training. Among these features, what interests me the most is how bilingual students interact in Chinese classrooms, especially how they use language to learn, negotiate, socialize, and express themselves within the special context of Chinese classrooms. Before moving to the second research rationale, I will clarify what I mean by the 'special context' of Chinese classrooms.

First, Chinese classroom involves both separate and flexible bilingualism. The educational language policy in Chinese complementary schools differs significantly from the mainstream schools (Wu, 2006). In Scottish mainstream schools, since 2012, a '1 + 2 Language Policy' (mother tongue + two foreign languages) has been supported by the Scottish Government (Valdera Gil and Crichton, 2020). The '1+2 Language Policy' stresses the language diversity of Scotland by including Scotland's own languages – Gaelic and Scots, community languages, and British Sign Language (Kanaki, 2019). This policy follows international trends in language education systems, introducing language learning in the early stages of primary school, and even pre-school (Kanaki, 2019). The Scottish Government is committed to creating the conditions in which every child will learn two languages in addition to their own mother tongue through this language policy (Scottish Government, 2012). Whereas, in Chinese complementary schools, according to Li and Wu (2009), One Language Only (OLON) or One Language at a Time (OLAT)

policy is widely encouraged and advocated. Creese and Blackledge (2011) argued that the practices under the OLON and OLAT can be named *separate bilingualism*, which is often informed by monoglossic bilingual ideologies, treating languages as separate and bound to nations (García, Zakharia and Otcu, 2013; Blackledge and Creese, 2010). However, a different position, named *flexible bilingualism*, is also prevailingly and is used in many Chinese classrooms to describe the flexible language preferences where "both teachers and students practice a flexible bilingualism in the course of which they call into play diverse sets of linguistic resources" (Creese and Blackledge, 2011, p.1197). In other words, both teachers and students use whatever resources fit them best to connect and communicate with each other in the classroom.

The debates between separate bilingualism and flexible bilingualism echo the discussion between 'dual language education' (Lindholm-Leary, 2001), 'additive bilingualism' (Lambert, 1974) and 'dynamic bilingualism' (García, 2011) in the bilingual education world. There are many supportive voices for separate bilingualism. For instance, communicative language teaching methodologies in both English as a second language and modern foreign language contexts have long argued that the best way to learn a language is to use the language (Creese and Blackledge, 2011). In addition, Jacobson and Faltis (1990, cited in Creese and Blackledge, 2010) suggested that maximum exposure to the target language, with strict separation of other languages, facilitates easier acquisition of a new linguistic system as students internalize the given lesson. These orthodoxies in language education endorse the practices of separate bilingualism in complementary school classrooms. However, Li and Wu (2009) doubted that the aim of many bilingual programs is to teach specific subjects or language knowledge to bilingual children, rather than encouraging their bilinguality. They also argued that under the OLON or OLAT policy or ideology, one of the consequences is the suppression of students' bilingualism in the classroom (Li and Wu, 2009).

Second, the 'special context' of Chinese class refers to its teaching environment. The 'quality' of teaching in Chinese schools has faced various criticisms and

concerns (Archer, Francis and Mau, 2009). One reason is that the teachers in Chinese schools are rarely formally trained or professionally accredited (Hancock, 2010). Most teachers are parents of Chinese origin (later referred to as parent teacher) or Chinese student volunteers from UK universities. Due to the lack of standardized teacher training programs and high turnover rates among instructors, pedagogical approaches in Chinese classes vary and largely depend on teachers' own ideologies.

Third, the traditional pedagogical approaches and techniques used within the Chinese schools have been criticizing as 'old-fashioned' (Hancock, 2012; Wang, 2014). These approaches typically involve memorizing and reciting texts from textbooks, disciplined self-study, frequent drilling, adherence to regular tests, and teacher-dominated didacticism. Such approaches are often perceived as "rigid and non-motivating" (Curdt-Christiansen, 2006, p.204). As a result, many students respond with silence in class or straightforwardly express their boredom (Francis, Archer and Mau, 2009).

To sum up, based on existing literature, the context of Chinese classrooms is characterized by separate or flexible bilingualism, non-uniform pedagogy, and traditional classroom practices that are often considered mundane and unstimulating.

On the other hand, how do bilingual students respond to the special context of Chinese class? Literature suggests that students utilize the discrepancies between their Chinese and English language proficiency and their teachers' language proficiency to their advantage in the classroom (Li and Wu, 2009), or follow the rules and norms to keep classroom tasks progressing (Creese and Blackledge, 2010). The literature has sparked my interest in exploring more about the learning phenomena in Chinese classes, particularly how students use bilingualism to scaffold their learning experiences within this unique classroom context. Therefore, when I contacted the school administrator of a Chinese complementary school in Scotland and heard the school was recruiting volunteer teaching

assistants, I decided to apply for this position while informing them of my future intention to conduct fieldwork. I was subsequently accepted as a teaching assistant initially and later as a substitute teacher for Chinese classes. My involvement in the school every Saturday allowed my knowledge of Chinese classes and Chinese language learning to expand, which greatly influenced my later research design.

Thus, my practical experience as a volunteer in the school further motivated me to conduct this research and strengthened my research design for understanding more about the Scottish-Chinese children with their Chinese language schooling. This volunteer experience was crucial in helping me connect, compare and construct an image of this group with their classroom learning at the primary stage. For example, I started by comparing my practical experience in Chinese classes with what the literature had reported, which allowed me to integrate my understanding of the literature with my hands-on experience in the Chinese school. I also compared the similarities and differences between the literature and school practices in terms of Chinese class learning and teaching, continually evolving my ideas on how to conduct a research case study in the Chinese school. Besides, students' language use in amusing, tense, and thoughtful moments in Chinese classrooms has also inspired me to consider how to combine my two research interests — language learning and Chinese schools — in one study. Thus, based on my primary knowledge and practical experiences, my research began to take shape.

1.3 Research background

1.3.1 Language use of Scottish Chinese immigrants

In Scotland, the first settled Chinese immigration emerged after the Second World War, and most of the Chinese were from Hong Kong and the New Territories (Bailey, Bowes and Sim, 1994). Over the course of decades living in Scotland, language usage within the Chinese community has shifted over three generations. The first

generation maintain a monolingual capacity; the second generation consider their heritage language as their first language and used English in certain socio-contexts simultaneously; the younger generation spend most of their time with English speakers in schools – with limited opportunities to use Chinese in both educational and social events in Scotland, English dominates their daily lives (Seawright, 2009). Therefore, maintaining immigrant Chinese children's mother tongue has become an intensifying problem. Consequently, Chinese complementary schools have been established to play a pivotal role in preserving the Chinese language and culture among the new generation growing up in a non-Chinese-speaking environment (Francis, Archer and Mau, 2009; Nordstrom, 2015).

1.3.2 Language use in the UK's Chinese complementary schools

Cantonese-, Hakka-, and Mandarin-speakers make up the major portion of overseas Chinese diasporas. Among several spoken Chinese varieties, Cantonese and Mandarin are the target taught languages in Chinese complementary schools. Chinese language classes are usually designed to teach both of them. Cantonese is a language prevalently used in Hong Kong, Macau, and Guangdong Province in the southeast of China. Meanwhile, Mandarin, also called 'Putonghua', is the official language in the Chinese Mainland and Taiwan.

A shift has been experienced by the above two languages for Chinese complementary schools to teach. According to the report from Francis *et al.* (2009), the post-war wave brought Chinese migration from Hong Kong to the UK in the 1950s and 1960s. Cantonese, as the dominant language mainly used by those immigrants, has largely affected the language teaching in Chinese complementary schools in the UK. The majority of schools mainly teach Cantonese and traditional Chinese characters at that time. However, along with the recent demographic changes in Chinese migration, globalization and the rising politico-economic power of the Chinese Mainland (Li and Zhu, 2010), Mandarin has begun to take over as the dominant language in Chinese complementary schools. Learning Mandarin is increasingly popular. According to Li and Zhu (2010), in Britain, all

Chinese complementary schools that traditionally taught Cantonese now offer Mandarin classes and simplified Chinese characters, yet none of the Mandarin schools taught Cantonese in the last ten years.

In order to foster the language development for the overseas Chinese community, languages are allowed to be used in ways appropriate to the school community (Creese *et al.*, 2008). For example, as mentioned earlier, complementary schools allow flexible bilingualism (Creese and Blackledge, 2011), or as Li and Wu (2009) reported, teachers and pupils in Chinese complementary schools regularly alternate between Chinese and English in practice, despite the Chinese-only policy emphasized in many schools. In addition, students are allowed to use language(s) in different configurations from their experiences in mainstream schools and/or daily life (Creese *et al.*, 2008). Accordingly, a variety of identity positions were constructed to those young people.

It is evident and understandable that Chinese complementary schools want to use community languages in their educational practices (Li and Wu, 2009) and transmit Chinese culture and identity to the younger generation. For instance, Li (2014b) revealed that, with regard to pedagogy and classroom management, schools prefer and insist on using community languages in this particular domain. But concerns have been raised simultaneously. The long-term consequence of such compartmentalization of community language, the practical difficulties in maintaining a strict 'no English' policy in schools (Li, 2014b), and the lack of well-recognized cultural identity may give rise to concerns about tension and challenges in the Chinese classroom. Over time, students are more likely to use their multilingual practices to contest and resist institutional ideologies (Heller and Martin-Jones, 2001).

1.3.3 Chinese complementary schools in the UK

There are many different types of complementary schools in the United Kingdom. According to Li's (2006) review of the historical developments of complementary

schools in the UK, complementary schools for immigrant and ethnic minority children in the UK consist of three broad groups: (1) in the late 1960s for children of Afro-Caribbean families as a means to tackle racism towards Black children and their under-achievement; (2) in the late 1970s and early 1980s, the Muslim communities of South Asian and African origins established a number of faith schools, especially for girls; and (3) a number of other immigrant communities, such as the Chinese, the Turkish, and the Greek communities, aimed to provide additional teaching of the community languages and cultures to their children (Li, 2006). Although the purposes of setting up those community schools are different according to each community, one unitary feature is to respond to the failure of the mainstream education system which has not met the needs of ethnic minority children and their communities (Li, 2006). Therefore, a significant number of schools were set up in England and Scotland for their UK-born generations to maintain their linguistic and cultural heritage. Chinese complementary schools are one type of those schools.

The increasing demands for Chinese heritage language education correspond to the growth of the Chinese immigrant population. Chinese complementary schools, also known as heritage language schools, supplementary schools, and community language schools (Creese and Blackledge, 2011), have a long-standing presence in the UK (Francis, Archer and Mau, 2009). According to a 2012 report by Mr. Shanxiong Wu, the chairman of the UK Association for the Promotion of Chinese Education (UKAPCE), there were more than 130 Chinese schools in the UK, catering to 25,000 students (Wang, 2014). The UK Federation of Chinese Schools (UKFCS), another organization promoting Chinese language and culture, lists 34 member schools in Southern England, 33 registered member schools in Northern England and Wales, and 11 schools in Scotland and Northern Ireland (Ukfcs.info, 2018). The number of students in these member schools ranges from around 20 to over 200. While Scotland has a smaller number of Chinese schools compared to other regions in the UK, it has the largest number of Chinese students in the schools located in the central belt of Scotland.

Chinese complementary schools have their own distinct characteristics. Typically, these schools are located in major urban centers, and classes are run on weekends or during other times outside mainstream school hours. Many children have to travel for hours to attend these schools. The operation of these schools often receives sponsorships and other support from local Chinese businesses. Additionally, many schools use teaching materials provided by voluntary organizations or other educational agencies in the Chinese Mainland, Hong Kong and Taiwan (Li, 2014a). The teaching staff mainly consist of enthusiastic Chinese immigrant parents and university students. In fact, the establishment of Chinese complementary schools in the United Kingdom holds significant meaning for parents (Hancock, 2012), as Li (2014a, p.166) describes: “parents pay, parents govern and parents teach”. These kinds of features in schools represent parents’ attempts to organize classes themselves in order to maintain heritage languages (Creese *et al*. 2006), develop their children's literacy skills, and provide sheltered spaces for children to negotiate their evolving plural identities (Li and Wu, 2009).

Existing research explicitly records that Chinese complementary schools performs a wide range of functions for minority ethnic children. These include teaching the Chinese language (i.e. the teaching of ‘Mother Tongue’ and community languages) (Archer, Francis and Mau, 2009), cultural education (Francis, Archer and Mau, 2009), allowing them to negotiate multilingual and multicultural identities (Creese *et al.*, 2008), providing spaces for children to escape from racism (Creese *et al.*, 2006), and creating a social space for Chinese people in the UK to meet and interact, promoting their social networks (Wang, 2014). In sum, the language/culture acquisition and the social functions of Chinese complementary schools largely impact the construction of these children’s ethnic identities (Li and Zhu, 2010).

Yet, despite the diverse practices of complementary schools in both form and purpose, language teaching and learning are the first and foremost purposes of schools. Moreover, for the majority of students, acquiring Chinese language skills is their goal and mission in attending the schools (Francis, Archer and Mau, 2009).

Therefore, in order to support students' Chinese language learning, literacy teaching in ethnic languages is a key objective in schools (Li, 2014b).

The pedagogy of classroom teaching is largely decided by teachers' own pedagogical ideology; however, in general, it contains many didactic methods, such as dictation, written tests, memorizing and reciting Chinese text. Despite these methods being discussed as 'old-fashioned' (Francis, Archer and Mau, 2008), many students were reported to enjoy this 'holistic' and 'culture-rich' learning approach, in which teachers grounded language learning within aspects of Chinese culture, history and philosophy (Francis, Archer and Mau, 2009). In fact, Chinese language teaching and learning are related to Chinese culture transmission. In Chinese complementary schools, apart from academic support for language learning, traditional Chinese dance, arts and sports sessions are also provided before or after the language and literacy sessions to encourage immigrant children to learn about Chinese traditions and culture (Li, 2014a). Therefore, it is common to see that in many classes, Chinese teaching contains the conveying of Chinese history, folk tales and fables, songs and poems, among other cultural elements.

1.3.4 Classical Chinese learning in the Chinese complementary classes

Serving the community, teaching and passing on the Chinese language, culture and heritage were the missions or goals claimed by most Chinese schools (Li and Wu, 2009; Creese and Blackledge, 2010; Archer, Francis and Mau, 2009). In addition, most parents expect their children to be able to read and write Chinese, utilize their bilingual abilities to enhance their future careers, and achieve social advancement (Li and Zhu, 2014). To reach such high aims, administrators and teachers in Chinese schools emphasize the importance of developing children's Chinese literacy skills, including classical Chinese.

In general, classical Chinese refers to the Chinese language that originated from the Spring, Autumn and Warring States period of China (722 BC – 481 BC). As the New Culture Movement developed (1915 – 1923), classical Chinese was replaced

by vernacular writing based on northern Mandarin. Classical Chinese learning is compulsory in education in the Chinese Mainland, Taiwan, and Hong Kong. Students are exposed to classical Chinese starting from the fifth and sixth grades of elementary school, with increasing emphasis thereafter.

Although classical Chinese is no longer used in daily life by Chinese people, many poems, classical works, and cultural references are still closely tied to classical Chinese. It is therefore required for students to have some knowledge of classical Chinese. For many Chinese immigrant families, poems, fables, and idioms are essential reading materials for children, accompanying them as they grow up. In Chinese schools, the teaching of classical Chinese is primarily driven by its role as a part of Chinese culture, which needs to be passed on to students to obtain knowledge in this area according to the syllabus. Therefore, textbooks for each grade typically include several poems, fables, or idioms written in classical Chinese.

Many existing studies on classical Chinese often focus on promoting its learning by combining or engaging with various methods for Chinese learners without specifically highlighting their ethnic background. For example, Wu and Chen (2018) investigated the teaching of classical Chinese using a combination of e-books, reciprocal teaching, and mind mapping, showing that the integration of e-books into the reading of classical Chinese texts helps learners enhance their reading comprehension and knowledge-sharing abilities. Wang (2016) developed a mobile-assisted learning system through the flipped classroom approach to support teenage learners' classical Chinese learning. In another study, Huwang (2021) proposed a concept mapping-based problem-posing approach to foster students' systematic thinking and develop their ability to express, appreciate, criticize, and reflect in classical Chinese courses. However, there is a need for further research focusing on how to provide learners with effective methods for understanding and memorizing classical Chinese, as well as how to promote a student-centered Chinese learning environment within the constraints of limited class time and large class sizes (Wang, 2016). In this sense, my research aims to contribute to the

empirical study in this research area, focusing specifically on Scottish-Chinese bilingual students in Chinese complementary schools. By adopting a translanguaging lens, I will contribute to exploring how these students' learning of classical Chinese can be promoted.

1.4 About this thesis

1.4.1 Research purposes and aims

This research aims to investigate students' language use in the Chinese classroom. Specifically, it will record language practices in the weekly Chinese class, adopting translanguaging and language ecology (Haugen, 1972; Garner, 2004) as the lens to examine the specific language practices that occur in the context of two Chinese complementary classes, and explore how students engage in those practices.

The first main purpose of this research is to understand how students utilized resources to participate in the Chinese classroom. According to Mazak and Herbas-Donoso (2015) and García (2011), students (and often teachers) use their entire linguistic repertoire strategically to teach and learn in bi- and multilingual environments. This literature provides me with the theoretical evidence to investigate bilingual learners' resource usage. Besides, I am particularly interested in bilingual students' creativity and criticality in classroom translanguaging practices (Li, 2011a). This interest stems from my volunteer experience in a Chinese school, where I witnessed students' ability of using multimodal resources to navigate between languages, to support their classroom learning (the creativity of students), as well as their courage to question the convention of traditional Chinese teaching and learning (the criticality of students). These language practices in the classroom align with what Li (2011a) argued about *creativity* and *criticality* that translanguaging space embraces, which will be further elaborated in section 2.2.3.

In addition, I view the learning space in the classroom as an ecology system. The ecology of classrooms is constructed by learners with various linguistic backgrounds, beliefs, immigration trajectories, learning motivations, experiences and knowledge acquired from learning other foreign languages and other knowledge (Wang, 2019), something that I will elaborate on in the finding chapter. In order to keep the cycle in this classroom ecology system, interactions among students are necessary. Therefore, the second main purpose of this study is to investigate how the classroom language eco-system works. This includes examining how languages flow among language users, how the influential factors impact the use of languages, and what new insights could implications of such language bring about language learning.

To sum up, by investigating how translanguaging and language ecological perspective could serve the Scottish-Chinese children's language learning, this study will:

(1) Encourage and help Chinese learners in developing the abilities of using their full linguistic and socio-cultural resources to engage in language practices and construct new knowledge by drawing on any available resources in their hands (Nordstrom, 2015).

(2) Address the long-term tension between the teacher and students regarding the ways of teaching and learning Chinese in the classroom. By exploring how translanguaging can facilitate classroom learning, this research has the potential to relieve the tension and provides an opportunity for students to express their own perceptions of Chinese classroom learning.

(3) Bring new insights to translanguaging and contribute to the literature of bilingual language learning. For example, my research will add to the empirical literature on how students could use translanguaging ideology to develop and support their Chinese language and culture learning. According to Fang, Zhang and Sah (2022), the effectiveness of translanguaging for teaching and learning has

been discussed and proven in the multi-bilingual education contexts. However, how translanguaging could facilitate learning should be further understood.

(4) Provide the stakeholders (including school, teachers, parents) and other language educators a reference to reflect upon and design appropriate pedagogical principles or approaches to optimize Scottish-Chinese students' Chinese learning. I believe this project will contribute to a better understanding of Scottish-Chinese bilingual learners' language knowledge and skills, as well as their perspectives on bilingual education, language learning, cultural tradition, and social relationship in Scotland. All of them will contribute to the advancement of bilingual education in Scotland.

1.4.2 Research questions

According to Hancock (2012), complementary school can be viewed as an ecology of practice where both teachers and students navigate prevailing pedagogical ideologies. My research interests are based on the idea of viewing the Chinese class as an ecology of practice, taking a socio-cultural orientation on translanguaging as everyday practice for bilinguals. It aims to explore the nature of language use in a Chinese complementary school in the central belt of Scotland, with a specific focus on Scottish-Chinese bilingual students' language use in Chinese complementary classes. This includes the discussion about what languaging practices occur in class, what resources and strategies students utilize to construct their participation in classroom languaging practice, and what they can achieve through these practices. Besides, I also keep asking about why these translanguaging practices occur in these two Chinese classes. This inquiry brings me to investigate translanguaging purposes for students and teachers. Furthermore, I will discuss the subsequent implications of using bilingualism and translanguaging ideology to influence and shape appropriate pedagogy for this ethnic group of Chinese students.

This research will employ a case study to address the following research questions:

The main research question is:

How are languages used by Chinese bilingual students in the Chinese classes?

Accordingly, two sub-research questions were developed from the main question:

1. What translanguaging practices, if any, occur in the classes, and why do they occur?

2. How do the students engage in classroom translanguaging, and what do they achieve through these translanguaging practices?

1.4.3 Research significance

The significance of this research can be identified from the following aspects: (1) In reviewing the extant Chinese complementary related literature, I found that Chinese complementary school literature primarily focuses on Chinese Americans, with limited systematic studies on biculturalism and bilingualism among Chinese in Scotland. While these studies provide a theoretical norm for comparison, there is a need for a wider range of empirical studies conducted under various cultural and social contexts. (2) In recent years, the importance of the educational and social role of complementary schools has been gradually acknowledged in both England (Hancock, 2012) and internationally (Brinton, Kagan and Bauckus, 2017). According to Wang (2014), it was not until recently that researchers started to look at the population and practice of Chinese complementary schooling in England (Francis, Archer and Mau, 2008; Francis, Archer and Mau, 2009; Wu, 2006; Li and Wu, 2009; Li and Zhu, 2010). These studies provide doors on issues such as language choice, transformative learning, the fusion of cultures of learning, dynamic literacy practices and children's identity formation. However, studies of the complementary schools in Scotland remain thin on the ground. Therefore, my research aims to contribute to the gap between the demand for focusing on this ethnic group's educational phenomena and the existing research conducted in this area. (3) Although existing literature has indicated the diverse benefits of

complementary schooling for minority ethnic children (Li and Zhu, 2014), little attention has been paid to the purposes of learning (Francis, Archer and May, 2009) and educational experiences (Archer, Francis and Mau, 2009) among the student populations. My research will emphasize the student's position and put them at the center of research, treat their voices as vital resources to learn and understand, and trust them as the authentic representatives of the educational issues. (4) By examining translanguaging, bilingualism ideology and practice as the pedagogy in Chinese complementary school, this research will enrich the discourse in bilingual education for minority ethnic groups.

1.5 Structure of the thesis

The remainder of this thesis will be divided into five chapters. Chapter Two contextualizes the key concepts of the research: translanguaging and bilingual education, with theoretical and empirical evidence. Through a critical review of the current literature on translanguaging in bilingual education and carefully looking at the relations between translanguaging and bilingualism, the identified research gap regarding research context and theoretical development is identified, and this will subsequently be used to refine the research scope.

Next, in Chapter Three, in order to have a clearer understanding of class language use, language ecology is introduced as a facilitating analytical tool, together with the translanguaging theory, these two concepts scaffold the conceptual framework for conducting this research and construct the scope of the notion of language ecology in my research context.

Chapter Four, which presents the research methodology, provides the rationale for this one-semester-long qualitative case study and discusses the data collection methods: audio-recorded classroom observations, field notes, semi-structured individual and group interviews, and the collection of documentation (students' works) and photographs. The chapter also explains the analytical procedures and discusses the ethical considerations.

Chapter Five outlines the findings of this research. A general picture of classroom language use was presented through displaying prominent relations among key students, teachers, peers, and languages forms. Followed by demonstrating the process of capturing translanguaging practices in my two researched classes, respectively, a summarized table including different event categories will record the occasions of doing classroom translanguaging. Finally, selected prominent translanguaging practice examples within different classroom events will be discussed in relation to my research questions.

The last chapter is the Discussion and Conclusion chapter, which synthesizes and conceptualizes the findings of the study, providing empirical, theoretical and methodological contributions to the literature on translanguaging, language learning, Chinese school and bilingual education. Practical implications for institutions, Chinese teachers, parents, and bilingual students will also be discussed. Finally, my personal reflections on my researcher development from the present study will be provided.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter will focus on reviewing the concept of translanguaging, which has gained significant recognition in the field of multilingualism over the past two decades (Prilutskaya, 2021). It will review relevant theoretical and empirical literature that informs this study, including various aspects of translanguaging in bilingual education (section 2.2) and translanguaging as a practical theory of language (2.3). Section 2.2 of this chapter includes: translanguaging as pedagogy (section 2.2.1), translanguaging as language practices (section 2.2.2), and translanguaging space in the Chinese class (section 2.2.3). Additionally, considering the relevance of translanguaging to other concepts of bilingualism and language pedagogical approaches in my research context, I will discuss the relationship between translanguaging and bilingualism (section 2.2.4), and translanguaging pedagogy together with Communicative Language Teaching, Grammar Translation Method in bilingual classroom contexts (section 2.2.5). Finally, my perspective of implementing translanguaging in this study is guided by Li's (2018, p.9) suggestion of "translanguaging as a practical theory of language". Therefore, section 2.3 presents two parts: the student-centered perspective (section 2.3.1) and functional perspective (section 2.3.2). This chapter aims to highlight how this research aligns with existing knowledge in the field of translanguaging, its contributions to understanding the topic, and the practical implications for data collection and analysis in ongoing research.

2.2 Translanguaging in bilingual education

Translanguaging has gained increasing prominence in the field of bi/multilingual and language education. In scholarly literature, the term is commonly used to describe both the complex and fluid bilingual pedagogical approaches and language practices (García and Lin, 2016). Recently, translanguaging has been

employed as an umbrella term "for various means of incorporating the entire linguistic repertoire of an individual language user to achieve communicative goals in varied communicative contexts and modalities" (Prilutskaya, 2021, p.2).

The term 'translanguaging' was initially coined in the 1980s by Cen Williams in Wales, where it was defined as "the planned and systematic use of two languages for teaching and learning inside the same lesson" (Williams, 1996, quoted in Lewis, Jones and Baker, 2012a, p.643). Specifically, Williams used this term to refer to the switching between input language (reading or listening) and output language (speaking or writing) as a pedagogy in bilingual classrooms. This was the original use of translanguaging, a pedagogical practice where students were asked to alternate languages for the purposes of reading and writing or for receptive or productive language use (García and Leiva, 2014).

Many scholars (e.g., Creese and Blackledge, 2015; García, 2009; Hornberger and Link, 2012; Lewis, Jones and Baker, 2012a) shared a common interest in translanguaging as a pedagogical practice. Over the years, ample studies have demonstrated that translanguaging can be an effective pedagogical practice in various educational settings, particularly where the language in school or the language-of-instruction is different from the languages of the learners (Li and Lin, 2019). Consequently, scholars in the United Kingdom and North America have popularized and extended this term from a pedagogical practice to both the complex and fluid language practices of bilinguals and the pedagogical approaches that leverage those practices (Arthur and Martin, 2006; Baker, 2001; Blackledge and Creese, 2010; Canagarajah, 2011a; Canagarajah, 2011b; Creese and Blackledge, 2010; García, 2009; García and Li, 2014; Hornberger and Link, 2012; Li, 2011b; Lewis, Jones and Baker, 2012a; Lewis, Jones and Baker, 2012b).

2.2.1 Translanguaging as pedagogy

Since Williams (1994) defined translanguaging as a language education pedagogy, the original discussion surrounding the topic of translanguaging has revolved

around its pedagogical implications. Translanguaging as a pedagogy aims to help bilingual students in building on language practices flexibly and developing new understandings and language practices, including “academic standard” practices (García and Li, 2014, p.92).

Translanguaging in language teaching has played an important role in enhancing the “normalization of bi-/multilingual practices and experiences” (Prada and Turnbull, 2018. p.18) as well as “creating spaces for multilingual interaction and stimulating new ways of using language critically, creatively, and accurately” (Prada and Turnbull, 2018. p.16) in the language classroom. Given the diversity of learners – “not only linguistically, but also socially, educationally, experience-wise, and so on” (García and Li, 2014, p.92) – in today's classrooms, translanguaging pedagogy provides teachers with a means of differentiating instruction to ensure that “all students are being cognitively, socially and creatively challenged, while receiving the appropriate linguistic input and producing the adequate linguistic output in meaningful interactions and collaborative dialogue” (García and Li, 2014, p.92). Thereby, translanguaging pedagogical strategies challenge bilingual teachers who often draw on monoglossic ideologies of language and bilingual instruction (García and Lin, 2016) and lead them to a change in their ways of teaching. For instance, Probyn (2019) explored how teachers in eight township and rural schools challenge prevailing post-colonial monolingual ideologies in classrooms by engaging with students’ linguistic resources to provide access to both scientific knowledge and English language learning.

Likewise, translanguaging pedagogy holds significance for bilingual learners. Recent studies reported how pedagogical translanguaging plays a key role in facilitating students’ language and content learning (e.g., Cenoz and Gorter, 2022; Fang, Zhang and Sah, 2022) and enhancing effective communication in bilingual contexts, where speakers are able to maximize their full linguistic repertoire (e.g., Tai and Wong, 2022; Liu and Fang, 2022). Besides, García (2009) proposed the social justice function of translanguaging in language-minoritized communities

(such as Spanish immigrants in the US society), demonstrating that translanguaging as a heteroglossic practice and pedagogy has the potential to empower language-minoritized students, liberating their voices from oppression and marginalization in mainstream society. García and Leiva (2014, p.199) explained that "translanguaging as pedagogy holds the promise of developing US Latinos who use their dynamic bilingualism in ways that would enable them to fully participate in US society, and meet the global, national, and social needs of a multilingual future". In other words, for language-minoritized communities, translanguaging gives them the confidence of living in the mainstream society where the dominated language is different from their heritage language. The echo of these claims is reflected in my research, where translanguaging helps students overcome oppressive feelings associated with the label of being a 'Chinese student' in wider society. I will unfold this point in section 5.7.5.

Similar statements have been made by Hornberger (2005) and Lopez (2008) to optimize the use of translanguaging pedagogy in bilingual contexts. They claimed that bi/multilinguals need to be allowed and enabled to draw upon their entire linguistic repertoire, rather than being inhibited by monolingual instructional assumptions. This viewpoint is consistent with the aim of translanguaging pedagogy, which seeks to activate students' multilingual repertoires within the learning environment.

Translanguaging as a pedagogy has been embraced by school instructors in bilingual language schools in the UK. Creese and Blackledge's (2010) empirical study on translanguaging pedagogy in complementary schools found that it allowed speakers to use languages "in a pedagogic context to make meaning, transmit information, and perform identities using the linguistic signs" (p.109) at speaker's disposal to connect with others in community engagement. This is somehow similar to the notion of *flexible bilingualism*, which I will introduce in section 2.2.4.

What's more, translanguaging is also a transformative pedagogy that goes beyond the boundaries of one or two autonomous languages, allowing bilingual language learners and language users "transforming language learning and language use into a lived experience" (Li and Ho, 2018, p.38). This perspective is also reflected in García and Li's (2014, p.93) explanation that the transformative power of translanguaging involves "leveraging, that is, deliberately and simultaneously merging students' repertoires of practice". In Chinese complementary classroom, this transforming power impacts "not only the subjectives of the pupils and the teachers but also social and cognitive structures" (Li, 2014b, p.159). In this thesis, I set out to demonstrate the transformative power of translanguaging in facilitating students' language learning and cultural immersion.

2.2.2 Translanguaging as language practices

In this study, apart from the pedagogical dimension, translanguaging is also observed and discussed by referring to the way that multiple discursive practices are used by bilinguals with their entire linguistic repertoire in class (García, 2009). Numerous works examine the implementation of translanguaging to describe activity and discourse in diverse multilingual settings (e.g., García, 2009; Creese and Blackledge, 2011; Li, 2014a; Mazak and Herbas-Donoso, 2015; Csillik and Golubeva, 2020; Liu and Fang, 2022). By making sense of translanguaging practices, scholars have referenced the concept of 'language practice' (e.g., Daniel and Pacheco, 2015; Ng and Lee, 2019; García and Li, 2014). This is the original concept that scaffolds my understanding of translanguaging, which I will explain in the following sections.

Most literature discussed languages practice from the perspective that language is a socially situated practice (Pennycook, 2010 and van Lier, 2004). Lang (2019) made a similar statement by saying that the notion of language practice regards language use as an important engagement in one of the central activities that organize social life. García and Li (2014, p.5) proposed "translanguaging as a way to capture the fluid language practices of bilinguals without giving up the social

construction of language and bilingualism under which speakers operate". Therefore, when focusing on language practices as the core of translanguaging activities, we should not neglect speakers' "beliefs, or feelings, about languages as used in their social worlds" (Kroskrity, 2004, p.498). This argument reminds me that when interpreting students' language use in the classroom language, we should consider the social meanings of utterance along with the speaker's personal feelings in the given speaking context.

The notion of 'activitity' embedded in *language practices* is also related to the notion of *languaging* in translanguaging. Becker (1991) adopted the term 'languaging' rather than 'language' to emphasize the "continual languaging, an activity of human beings in the world" (p. 34). In other words, this term regards language as a dynamic state rather than a static one, closely associated with human activities. Swain (2006) used the term 'languaging' to describe the cognitive process of negotiating and producing meaningful, comprehensible output as part of language learning, and as a "means to mediate cognition", and "a process of making meaning and shaping knowledge and experience through language" (p. 97). This argument aligned with the notion of language as "full linguistic performance" (Lado, 1979, quoted in Li, 2018, p.16). Both claims emphasized that languaging serves as a vehicle, through which learner utilize their entire linguistic repertoire to articulate and transform thinking into an artifactual form (Swain, 2006). Likewise, Ng and Lee (2019) suggested that the concept of translanguaging can be extended to include language practices involving different language features associated with individuals' history, culture, and experiences. Therefore, the above arguments affirmed the relations between language practices and language users themselves, highlighting that individuals' language ideology in the aspects of society, culture, and their own experiences can act on their language use.

Based on the above discussion, my understanding of translanguaging practice is constructed. In this research, I adopt García's (2009) notion of translanguaging practices, which described the language practices of bilinguals as examples of

translanguaging. This is because, by reviewing the literature on translanguaging practices, this notion corresponds with what I observed: the bilingual speakers moving fluidly among multiple languages, modalities and multisemiotics in their classroom interactions. Thereby, I use the term *translanguaging practices* to refer to any multi/bilingual language practices made by students and/or teachers to achieve their communicative goals, or strategically select linguistic and semiotic features from a meaning-making repertoire to serve learning purposes in the Chinese classroom.

Although the term 'translanguaging practices' is widely adopted in the multilingual context discourse (e.g., Adinolfi and Astruc, 2017; Ng and Lee, 2019; Lang, 2019), there are nuances in the describing of translanguaging. Thus, scholars employ different terms and phrases to emphasize specific features/natures/matters of translanguaging, for example, translanguaging instances (Tsuchiya, 2017; Gogonas and Christina, 2019) or translanguaging events (Mazak and Herbas-Donoso, 2015; Alvarez, 2017).

The term translanguaging instances is commonly used to refer to pedagogical and spontaneous translanguaging instances in the classroom (Zhang *et al.*, 2022). In Tsuchiya's (2017) study, this term is employed to describe the moment when individual translanguaged from one named language to another (e.g., from Japanese to English), and translanguaging instances include the instances of intra-sentential/inter-sentential translanguaging made by students in the classroom. In this sense, translanguaging instances can be understood as an occurrence that is encompassed in a translanguaging practice with the emphasis on the spur of the moment occurring in practice (Li, 2011a).

In contrast, translanguaging events emphasize the contexts that capture/analyze/understand translanguaging activities. According to Alvarez (2017), translanguaging events can be framed as a narrative unit of activity for analysis purposes, with a similar function of 'moment analysis' (Li, 2011a). In another study, Alvarez (2014) used the notion of contextual frame of

translanguaging events to situate literacy activities in an after-school homework assistance program. Specifically, he recorded translanguaging events as an analytical unit situated in local contexts where texts are integral to bilingual exchanges and collaborative interpretations. In this sense, translanguaging events were defined as "a multilingual collaborative practice shuttling between languages while responding to texts and situated in local contexts involving emergent bilinguals" (p. 329–330). Similarly, Li (2011a) argued, a translanguaging event encapsulates moments and contexts, providing a space to showcase the creativity and criticality of learners. Mazak and Herbas-Donoso (2015) defined translanguaging events as translanguaging in the context of classroom teaching, which contextualized moments where translanguaging occurred. In the data analysis of their study, Mazak and Herbas-Donoso (2015) included in these events field note excerpts and their corresponding artifacts, such as PowerPoint slides, and readings, to fully understand the context in which translanguaging occurred.

In summary, the terminology employed to describe translanguaging varies depending on authors' discipline and/or theoretical interests. If the analytical focus is on moment analysis, translanguaging instances or translanguaging moments might be a good choice. However, if the analytical consideration is about the context and/or an event with certain boundaries, translanguaging events could be an appropriate term. The choice of terminology reflects authors' epistemological stances. In my research, since I emphasize the notion of 'continual languaging', translanguaging practice is the term that I consider most appropriate to describe this language phenomenon. As Pennycook (2010) argued, 'practice' reflects an understanding of otherwise abstract phenomena in terms of *activity*. From this viewpoint, translanguaging practice can refer to the specific activity engaged in the way of translanguage (Lang, 2019).

2.2.3 Translanguaging space in the Chinese class

My initial idea of conceptualizing translanguaging is influenced by Li (2011a), who revived the term with the notion of 'translanguaging space', a social space for

multilingual language users. In this space, learners are able to bring "together different dimensions of their personal history, experience and environment, their attitude, belief and ideology, their cognitive and physical capacity into one coordinated and meaningful performance, and making it into a lived experience" (Li, 2011a, p.1223). According to Li (2011a), it is a space for the act of translanguaging and also a space that was created through translanguaging. What's more, this notion emphasizes human agency and their creative and critical moments of action. Therefore, it allows me to examine not only how language users deploy their semiotic resources to create the translanguaging space in Chinese classroom but also to investigate their creativity and criticality through creating this translanguaging space.

Li extensively used the concept of translanguaging space in his studies of multilingual minority ethnic learners in the UK society (e.g., Li, 2014a; Li, 2014b; Li, 2023). His understanding of translanguaging was based on the psycholinguistic notion of languaging, which focuses on the process of using language to acquire knowledge, make sense, articulate one's thoughts, and communicate about using language (Li, 2011a). Besides, Li adopted Becker's attempt which moves away from language as a noun to language as a verb, an ongoing process or languaging (Becker, 1991). Both García and Li (2014) argued that translanguaging involves not only going between different linguistic structures, systems, and modalities, such as speaking, writing, singing, listening, reading, and remembering, but also going beyond them. This argument is also closely related to the function of translanguaging space, as in this space multilinguals demonstrate the capacity of using multiple linguistic resources to form and transform their own lives (Li, 2011a). This full range of linguistic performances of language users were accentuated by García and Li (2014) in the translanguaging process, or 'linguistic repertoire', which is a term they often use, to portray the ability of language users to "break away from the conventional linguistic norms and rules accepted by homogeneous societies" (Csillik and Golubeva, 2020, p.16).

In his study focusing on British Chinese children in complementary school, Li (2011b) revealed that, in multilingual practices, translanguaging helps to highlight the creativity and criticality of multilingual children from minority ethnic backgrounds. He further explained that *creativity* refers to students' ability of "choosing between following and flouting the rules and norms of behavior" (p.374), while *criticality* refers *to* their ability to "use evidence appropriately, systematically, and insightfully to inform considered views of cultural, social, and linguistic phenomena, to question and problematize received wisdom, and to express views adequately through reasoned responses to situations" (p.374). Both creativity and criticality demonstrate how students are able to maximize and optimize their multilingual competence by drawing upon all the languages they know and their knowledge of the norms for using those languages in context (Li, 2011a) to navigate in the bilingual classroom.

The complementary school classroom provides a space for multilingual minority ethnic children to enact multilingual practices and express their multicompetence (Li, 2011a). In addition, it is the translanguaging space where new configurations of language knowledge, cultural values and identities are generated, and old understandings and structures are released (Li, 2014a). Likewise, Garica and Li (2014) added that in this space where new meanings are created, values and subjectivities are developed, and power relations are challenged. Thereby, learners are able to bring together their personal experiences, knowledge, ideology and resources to fulfill their learning and communicative purposes. In turn, their creative and critical potential developed in the translanguaging space enables them to have the transformative power to push and break "the boundaries between the conventional and the original, and the acceptable and the challenging" (Li, 2011a, p.1223). I regard these bidirectional relations between bilingual learners and translanguaging as the positive effect of creating a translanguaging space in the bilingual classroom. Moreover, translanguaging, as a beneficial practice, significantly facilitates students' communication and activities, empowering them to leverage, engage

and develop bilingualism in the class space. Therefore, I propose referring to the bilingual classroom as the translanguaging space. Further discussion about the relationship between translanguaging and bilingualism, as well as how I will conceptualize the bilingual classroom as a translanguaging space, can be found in the following section.

2.2.4 Translanguaging with bilingualism

There is no consensus on whether and to what extent translanguaging represents a new epistemological paradigm in regard to individual and societal bilingualism and multilingualism (Edwards, 2013). Scholars, such as Li (2016b), suggested that translanguaging is not some fancy post-modernist term intended to replace terms such as code-switching or language crossing when referring to multilingual behavior. In his view, although translanguaging challenges the code view of language and conventional approaches to multilingualism, it acknowledges the existence of named languages and emphasizes that languages are historically, politically, and ideologically defined entities. Rather, Mazzaferro (2018) regarded translanguaging as representing a new paradigm that mainly addresses the realities of twenty-first century bi/multilingualism.

There are different types of bilingual programs throughout the development of world bilingual education. For some dominant language speaking bilinguals, they advocate the *additive bilingualism* (Lambert, 1974), where individuals already have knowledge of one language and are learning another (Lightbown and Spada, 2006). García and Lin (2017, p.120) pointed out that this type of bilingualism connects two languages from the perspective of a monolingual norm: "… an additional second language was simply and separately added to a first". While, for minority language students, school tends to pursue *subtractive bilingualism* by taking away students' home language, and the second language is likely to replace the first language (Baker, 2001). This type of bilingualism reflects a sociopolitical viewpoint that assumes one language is more dominant and the other is less used.

In the second half of the twentieth century, along with the revival of ethnic groups and their appeals for civil rights (García and Lin, 2016), the development of bilingual education for language-minoritized people became necessary, especially for those who had experienced language shift and language loss due to monolingual education. For instance, the second generation of Chinese immigrants, who have gone through the transition from Chinese to English language, has experienced schooling education in the UK, which is dominated by English language, and gradually moved away from Chinese. In response to concerns about losing ethnic language among the younger generation, Chinese complementary schools were built. Thus, other types of bilingualism, such as flexible bilingualism and dynamic bilingualism, have been developed and were gradually advocated by educators in bilingual context classroom, especially in language complementary school.

In the linguistic complexity of the twenty-first century, bilingualism has evolved beyond the traditional linear models (e.g., subtractive bilingualism, additive bilingualism, recursive bilingualism). It is now viewed as a more dynamic process, drawing from the different contexts where it develops and functions (García, 2009). Among these types of bilingualism, García (2009) advocated for *dynamic bilingualism*. From a social interaction perspective, she explained that globalization calls for interactions among people, leading to increasing social activities and diverse social contexts, which is why dynamic bilingualism might better fit in the multilingual world. At the same time, the language practices of multilinguals have been demonstrating in a much more dynamic way and continuously adjusted to the multilingual and multimodal communicative act. In this research, these dynamic language practices under the bilingual background with multimodal interactive ways will be the main focus.

García continuously made the link between bilingualism and translanguaging. In her book *Bilingual education in the 21st century: A global perspective* (García, 2009), she reconceptualized translanguaging from the perspective of bilingual users themselves rather than language. She stated that “translanguagings are

multiple discursive practices in which bilinguals engage in order to make sense of their bilingual worlds" (García, 2009, p.45). This argument not only pointed out that translanguaging is the way bilinguals utilize their entire linguistic repertoire (García, 2009), but also implied the relations between the term bilingualism and translanguaging. García further highlighted the relations between translanguaging practices and bilingualism by arguing that translanguaging is an approach to bilingualism centered on the practices of bilinguals, which are easily observable (García, 2009). In many settings (e.g., individuals, communities, schools) in the world, translanguaging can be seen in the interactions between individuals with the same or different bilingual backgrounds, serving communicative purposes. Therefore, she added that translanguaging is the communicative norm in bilingual and multilingual communities (García, 2009).

According to García (2009), translanguaging could be seen as a manifestation of bilingualism. However, scholars disagreed with the claim that translanguaging is a new form of bilingualism or can replace the term bilingualism (Martínez, Hikida and Durán, 2015). They argued that translanguaging highlights "the dynamic and flexible ways in which bilinguals actually practice bilingualism" (p.27). In my viewpoint, I am not concerned with whether translanguaging could replace bilingualism or other terms. Instead, as bi/multilingualism transforms into a more dynamic process (García, 2009), translanguaging has been adopted to portray the complex language practices of bi/multilingual speakers. By exploring the relationship between bilingualism and translanguaging, I aim to gain a deeper understanding of the theoretical underpinnings of this research.

The two terms share some conceptual similarities. To put it further, firstly, translanguaging shares characteristics with dynamic and flexible bilingualism. Creese and Blackledge (2011, p.1197) used the term "flexible bilingualism" to refer to what García called 'translanguaging', which "normalizes bilingualism without diglossic functional separation" (García, 2007, p.xiii). The term captures the heteroglossic nature of communication in the language complementary schools (Creese and Blackledge, 2011). These two concepts highlighted the

dynamic and flexible ways in which bilinguals actually practice bilingualism (García, 2009). Makoe (2018) also agreed with emphasizing the attributes of dynamism of translanguaging. She mentioned that translanguaging broadens the research lens by functionally integrating different linguistic resources and types of communicative modes, allowing speakers to flexibly use these resources in various everyday contexts. García (2012, p.2) explained these discourse practices of bilinguals as "translanguaging as pedagogical strategies that use bilingualism as resource".

Secondly, both terms incorporate the language abilities of bi/multilingual speakers. Canagarajah (2011a, p.401) used translanguaging to describe "the ability of multilingual speakers to shuttle between languages, treating the diverse languages that form their repertoire as an integrated system". In this sense, it aligns with other scholars' emphasis that bilingualism showed one's language ability, such as how fluent a person could be in each language (Fielding, 2015; Baker, 2011).

Thirdly, the function of the two terms not only includes the linguistic dimension but also incorporates the wider meanings of the social world. For Canagarajah (2011a, 2011b), translanguaging functions as a shuttle bus driven by multilingual speakers between the languages. Unlike code-switching, which tends to focus on linguistic movement from one language to another, translanguaging not only embodies language practices of bi/multilingual speakers such as code switching, code mixing and crossing (García, 2009), but also forms the speakers' repertoire as an integrated system (García and Li, 2014). That's to say, translanguaging breaks the boundaries between linguistic features of languages, including the wide-ranging scope from a way of "shifting the lens from cross-linguistic influence" to how bi/multilinguals "intermingle linguistic features that have hereto been administratively or linguistically assigned to particular language or language variety" (García, 2009, p.51). Mazzaferro (2018) also argued that translanguaging practices demonstrate bilingual speakers' transformative ability related to linguistic structures and show how they act on their identities, ideologies and the

social world in which they lived. The above arguments affirm that the function of translanguaging can not only act on the linguistic dimension, but also go beyond it to form a unique repertoire of the language user. In this sense, translanguaging shares similar features with *functional bilingualism*. According to Baker (2011), the notion of functional bilingualism looking at an individual's ability to use language not only depends on the master of linguistic skill or language proficiency but also on the "language production across an encyclopedia of everyday events" (Baker, 2011, p.15). Thereby, in my research, I intend to combine the functional idea from both bilingualism and translanguaging, adopting the concept of translanguaging as an approach/lens to examine not only how multi-bilingual learners manipulate between languages but also language use in their everyday practices. This also reflects my epistemological stance towards how I plan to utilize these two concepts in this research (for more information regarding my stance, see section 3.3).

2.2.5 Communicative Language Teaching, Grammar Translation Method and translanguaging pedagogy in bilingual classroom contexts

Communicative Language Teaching (CLT) and Grammar Translation Method (GTM) are two approaches of teaching and learning second and foreign languages, both of which impact language teaching and learning activities in Chinese complementary school classes. In this section, I will discuss both approaches along with my focus on 'translanguaging pedagogy'.

CLT as a more recent approach to language teaching has garnered attention from many linguistics and researchers. In the *Dictionary of Language Teaching and Applied Linguistics*, Richards *et al.*(1992, p.65) defined CLT as "an approach to foreign or second language teaching which emphasizes that the goal of language learning is communicative competence". Today, CLT continues to be recognized globally as a broadly based approach to language teaching, which means it interweaves a cluster of principles and foundation stones of second language acquisition (Brown and Lee, 2015). According to Richards and Rodgers

(2001, p.155), CLT aims to “make communicative competence the goal of language teaching” and “ develop procedures for the teaching of the four language skills that acknowledge the interdependence of language and communication”. In general, CLT is a pedagogical approach which goes beyond teaching grammatical rules of the target language; it extends to the social, cultural, and pragmatic features of language, aiming to develop students’ linguistic fluency, not just accuracy (Brown and Lee, 2015).

In contrast, a classic teaching method that serves as an alternative to CLT is known as the Grammar Translation Method (GTM). Grammar Translation is “a way of studying the language that approaches the language first through detailed analysis of its grammar rules, followed by application of this knowledge to the task of translating sentences and texts into and out of the target language” (Richards and Rodgers, 2001, p.5). In this sense, sentence becomes the basic unit of teaching and language practice. Therefore, most of the lessons designed for a GTM class are devoted to accomplish sentence translation tasks (Richards and Rodgers, 2001). With this method, learning grammatical rules, memorizing vocabulary, translating texts, and written exercises become the main focuses of GTM classes (Khan, Mansoor and Manzoor, 2016).

Although GTM has been criticized by scholars (e.g. Newson, 1998) for not promoting fluency and communicative language use, it is still adopted by some language teachers. According to Richards and Rodgers (2014), the essential aim of GTM is grammatical competence, and accordingly, the core of GTM is grammar translation, an approach focusing on analyzing a language (Yuzlu and Dikilitas, 2022). For a long time, grammar translation has been prevalent as a means of studying a foreign or second language (García, Aponte and Le, 2019). The use of grammar translation for educational purposes has remained active throughout the centuries due to its advantages in language learning, such as facilitating understanding of abstract words and complicated structures, and saving time in explaining vocabulary items (Khan and Mansoor, 2016).

The more recent trend of translanguaging pedagogy has become increasingly prominent in bilingual and multilingual programs within language-minoritized communities (García and Kleyn, 2016). The term 'translanguaging' was proposed to be introduced in translation studies and become an object of study in its own right (Laviosa, 2018). The roles of translation and translanguaging differ in language learning; specifically, they are epistemologically distinct from each other (García, Aponte and Le, 2019). Translation upholds the distinction between different named languages and enables communication between speakers of different named languages, preserving each language and culture intact (García, Aponte and Le, 2019). Furthermore, as Mignolo (2000) argued, translation attempts to erase the differences that exist in the colonial experience of language-minoritized students. Learners are urged to focus more on the grammatical approach, which emphasizes the rules and structure of the language (García, 2009). In contrast, the concept of translanguaging, as advocated by García (2009), suggests that bilingualism in the twenty-first century must be more than the knowledge of two languages (García, 2009). Therefore, translanguaging advocates that bilingual speakers draw from a unified linguistic repertoire to create meaning for themselves. In this sense, translanguaging deems every utterance spoken by bilinguals as meaningful, valuing their experiences as useful resources that are intertwined with culture and the world as a whole, undergoing continuous transformation (Laviosa, 2018).

However, the pedagogies for language learning, translanguaging and translation are not fully opposing each other. Rather, they provide learners with a bilingual process to develop bilingualism and offer language educators opportunities to learn from each other under the current shift towards bi- and multilingualism. For instance, Laviosa (2018) suggests integrating translanguaging into translation pedagogy by sharing the knowledge and expertise gained in the theory and practice of teacher-directed translanguaging. Through this mutual exchange, pedagogies can bring together different approaches. Next, I will shift my discussion from GTM with translanguaging to focus on the relations between

translanguaging and CLT. This shift aims to construct a scope to clearly view the connection of these two concepts as pedagogical approaches in a bilingual teaching environment. Then I will depict how these two pedagogical approaches can complement each other, with a focus on how they can enhance students' communicative competence in the language teaching classes.

As the pedagogical approaches to language teaching, there is a link between translanguaging and CLT, each with its own characteristics. Firstly, translanguaging and CLT share some common features in language teaching. Both concepts are 'context-sensitive' (Aoyama, 2020). According to Duff (2014), CLT reflects diverse teaching contexts, emphasizing the particularity of teaching sites. Likewise, translanguaging emphasizes context as vital for analyzing translanguaging practices (García *et al.*, 2017). In addition, both CLT and translanguaging emphasize the core position of learners in language learning. Thamarana (2015) argued that learners develop communicative competence by using the target language in a meaningful way. By making language relevant to the world rather than merely the classroom, learners are able to acquire the skills which they need quickly and agreeably. Similarly, as I discussed before in section 2.2.4, translanguaging centralizes the bilingual users, empowering them as language users who decide how to use language, offering an inclusive and internal view of learners with a unique linguistic repertoire rather than viewing them from the perspective of the language norm (García *et al.*, 2017).

Thirdly, translanguaging and CLT complement each other as pedagogical approaches in language education, shedding light on bilingual teaching and learning. It is common to find translanguaging being utilized in either informal conversation or in academic tasks in bilingual classes. As Aoyama(2020) suggested, students' translanguaging in a bilingual communicative space is natural and inevitable. It allows students to create a unique communication layer and leverage their communicative competence in multiple languages. The positive impact of translanguaging on enhancing the communicative competence of students is reported by researchers (e.g., Tumansery and Munden, 2020; Nkhi and Shange,

2024). In this sense, translanguaging can be utilized as a communicative strategy for bilingual speakers in CLT classes to articulate themselves using available resources from their language repertoire, promote students' participation in communicative activities, and support the achievement of CLT's goal of practicing learners' communicative competence.

In turn, the implementation of CLT pedagogy in bi- and multilingual classes can optimize students' bilingual learning experience and develop their competence in bilingualism. Since communicative teaching emphasizes "task-oriented, student-centered" language teaching practice, students may have many opportunities to comprehensively use languages and communicate (Thamarana, 2015, p.96), such as engaging in real-life situations and real communication in the class. In addition, CLT classes prioritize learner-centeredness, allowing students more time and opportunities to practice communicative skills, which teachers facilitate during the learning process. During communicative activities, students have the flexibility to draw upon their experiences, knowledge and ideas from their language repertoire to leverage translanguaging practices.

2.3 Translanguaging theory and practice underpinning my study

Translanguaging is an evolving concept and a continuous interdisciplinary paradigm (Mazzaferro, 2018). Understanding the complexity of multilingualism in the twenty-first century requires considering its epistemological, theoretical or methodological aspects. Li (2018) put forward the suggestion of theorizing translanguaging as a practical theory, particularly for multilingual language users, and as a comprehensive approach to understanding language, multilingualism and multilingual practice in the context of unprecedented mobility. Li (2018) emphasized that the main objective of a practical theory is 'interpretations', as it guides the research process throughout and helps to "observe, interpret, and understand other practices and phenomena" (p.11). Moreover, translanguaging as a practical theory of language offers me a better understanding of the language practices I am investigating and facilitates me to raise and construct the

theoretical questions in relation to the issues in linguistic science (Li, 2018). In the following sections, I will unfold the discussion about how translanguaging, as a practical theory as well as practice, informs my perspectives of conducting this research.

2.3.1 A student-centered perspective on translanguaging

My research acknowledges García's (2011) argument that language classrooms in the twenty-first century are transitioning from monolingualism towards translingualism. This shift encourages flexible and concurrent language use rather than keeping students' linguistic knowledge separate or treating prior languages as non-existent or solely negative influences.

Therefore, my research adopts a student-centered perspective, looking at translanguaging practice through the learners' beliefs about Chinese learning, Chinese class, and bilingual language use. This focus is similar to what was advocated by CLT, which concerns the unique individual needs of each student (Thamarana, 2015). Besides, according to García (2009), in order to further understand the notion of translanguaging, she suggested moving away from the perspective of language itself and viewing the examples of bilingual language practices from the perspective of the users themselves. She further explained that translanguaging should not be simply understood as bilingual language use or bilingual contact (García, 2009). This emphasis on language users as the core of understanding their language practices is shared by other scholars. Lewis, Jones and Baker (2012a), for instance, advocated for increasing understanding of students' activities in both languages as a way to understand their translanguaging. Li (2018) also argued that it is crucial to understand "... how language users orchestrate their diverse and multiple meaning- and sense-making resources in their everyday social life" (Li, 2018, p.27), which indicates that the users and their activities are the key objects in the understandings of translanguaging practices.

2.3.2 A functional perspective on translanguaging

Bilingual learners' dynamic and functional use of two separate distinct languages is also a focal point of my research on classroom language use. This aspect led me to consider the relations between languages and introduced another perspective: language ecology (I will introduce it in the next chapter in section 3.3). What's more, Li and Lin (2019, p.211) conceptualized translanguaging as "a practice that involves dynamic and functionally integrated use of different languages and language varieties... more importantly a process of knowledge construction that goes beyond language(s)". This argument is in line with my understanding of classroom bilingual use as one kind of bilingual practice, which is full of learners' strategic use of various resources, including language/linguistic resources, multimodal modes and semiotics.

However, the purposes of engaging in these translanguaging practices vary. By reviewing the existing research and considering my research interests in classroom language use, three main categories of purposes could be identified: (1) for effective communication; (2) for academics, including language and content learning; (3) for constructing knowledge. I will elaborate on each one below.

First, translanguaging concerns effective communication. Scholars have reported that translanguaging posits that bilinguals possess a linguistic repertoire from which they strategically select and exclude features to achieve communicative purposes and make sense of their worlds (García and Li, 2014; Velasco and García, 2014). Likewise, Blackledge and Creese (2014, p.145) depicted how translanguaging leads agencies of individuals engaging in "using, creating, and interpreting signs for communication". Therefore, although translanguaging invites language learners to include all their linguistic and semiotic resources in the meaning-making and sense-making process, it primarily promotes interaction, cooperation, and communication in the multi-bilingual classroom setting.

Second, translanguaging facilitates both language and content learning in bi-multilingual classroom settings. Fang, Zhang and Sah (2022) discussed how translanguaging has been applied in classroom settings to empower learning and

how various translanguaging strategies were utilized to challenge monolingual ideologies. These strategies include implementing pedagogical translanguaging to activate students' multilingual and multimodal repertoire, maximizing students' linguistic repertoire for language and content learning, and using translanguaging as a resource to enable students to freely move between languages and between the mode of speaking and writing, thus enabling them to genuinely engage in learning and problem solving (Li and Zhu, 2014).

Third, translanguaging is a meaningful process of knowledge construction. According to Riley (2011), teaching and learning are regarded as socialization processes involving the transmission and acquisition of knowledge, skills, social norms, and ideologies. Accordingly, knowledge construction in the classroom extends beyond language knowledge and encompasses broader knowledge (culture, ideology, literacy, etc.) developed through translanguaging. At this point, translanguaging helps language users make meaning, shape experiences, and gain understanding and knowledge by using two languages (Baker, 2011). Thereby, "both languages are used in a dynamically and functionally integrated manner to organize and mediate mental processes in understanding, speaking, literacy, and, not least, learning" (Lewis, Jones and Baker, 2012b, p.641).

In summary, viewing translanguaging as a practical theory and practice enlightens me from both student-centered and functional perspectives when interpreting classroom language use. With these perspectives, I am able to explore translanguaging in its classroom application, where languages are used in a flexible, dynamic and functional manner in order to enhance literacy in both or all languages (Lewis, Jones and Baker, 2012b), enable effective communication, and construct knowledge, ideology, and identity through the translanguaging process.

2.4 Chapter summary

This chapter provides a review of the current literature in the field of translanguaging, covering various aspects of the key concepts relevant to this study. It discusses the original usage of the term and its pedagogical implications, including its potential for facilitating classroom learning and teaching, as well as promoting social justice for language-minoritized students. It also examines empirical studies on translanguaging as a pedagogy in bilingual schools in the UK, highlighting how students and teachers strategically engage in translanguaging pedagogy during school and classroom activities. Given my own theoretical interest and epistemological stance, I adopt 'translanguaging practices' as my terminology in this research, providing the rationale for this choice, comparing it with other terms, and finally defining the translanguaging which fits in my research context. Since my research focuses on Chinese language classes, I borrow the term *translanguaging space* from Li (2011a), focusing on how this space allows both students and teachers to utilize their available resources and leverage their criticality and creativity to enact translanguaging. Furthermore, in discussing the relations between translanguaging and bilingualism, my aim is not to differentiate between these two terms. Rather, I emphasize the significance of both and reinforce my perception of making them become my major theoretical foundations for conducting this research. Besides, this chapter focuses on pedagogical approaches in bilingual teaching, thus providing a discussion of CLT and GTM alongside the recent translanguaging pedagogy, and aiming to review how different pedagogies could facilitate bilingual teaching and learning.

Finally, I consider translanguaging as a practical theory that guides the interpretation of language performance among Scottish-Chinese bilingual children in the classroom and scaffolds the research theoretically with the student-centered and functional perspectives.

In the next Chapter, I will introduce the language ecology perspective, which shapes my lens for exploring classroom language use and contributes to the overall analytical process of students' language use in this study.

CHAPTER THREE: THEORETICAL FRAMEWORK

3.1 Introduction

In order to study language use in the bilingual class context, it is important to consider various concepts that are embedded in this main topic, such as language ideology, classroom interaction, and language policy. However, the concept that is particularly crucial is language diversity, as it fits my research background of language use in bilingual classes and corresponds with the setting of bilingual teaching and learning. In my research, language diversity mainly refers to the use of English and Chinese languages in class. However, to address questions like how multiple languages (English, Chinese and others) work in one place, or in other words, how they interact with each other and the environment, the concept of language ecology needs to be introduced.

In this chapter, I will mainly discuss language ecology from both metaphorical and non-metaphorical perspectives. I will sequentially introduce the term's origin, its core elements, and provide a conceptual framework of language ecology to demonstrate my own ecological approach to studying Chinese classroom language. Finally, I will explore the relationship between language ecology and translanguaging, explaining how these two concepts can work together to underpin my research theoretically.

3.2 The language ecology perspective on classroom language use

In the middle of the 19th century, the term *Ecology* was coined by German biologist Ernst Haeckel (Eliasson, 2015). Since then, ecology as a scientific discipline has been established, referring to the study of the totality of an organism's relationships with all other organisms it comes into contact with. The development of ecology has evolved from its original focus on the study and management of the environment (ecosphere or biosphere) or specific ecosystems (van Lier, 2004) to a broader worldview that differs from the scientific or rational

one inherited from Descartes, who assumed that "it is the right and destiny of the human race to control and exploit the earth and all its inanimate and animate resources (the *anthropocentric* world view)" (van Lier, 2004, p.3). Instead, the ecological worldview regards "humans are a part of a greater natural order, or even a great living system" (van Lier, 2004, p.3).

In linguistics, the notion ecology of language or language ecology was introduced by American linguist Einar Haugen in the early 1970s. In his classic paper, Haugen (1972, p.325) suggested that "[l]anguage ecology may be defined as the study of interactions between any given language and its environment". He first introduced language ecology as a metaphor, but he also described it in a biological sense as a "science" (Haugen, 1972, p.327, 329). Although Haugen seemed to vacillate between regarding language ecology as a metaphor and a scientific discipline, the metaphor of language ecology has been widely adopted by scholars as a paradigm for studying the connections between languages and has been imaginatively linked to the concept of biodiversity, which is concerned with protecting and sustaining the diversity of life forms (Le Donne, 2018). Researchers, such as Creese and Blackledge (2010, p.104), claimed that the language ecology metaphor offered a way of "studying the interactional order to explore how social ideologies, particularly in relation to multilingualism, are created and implemented". Hornberger (2002, p.16) applied the ecological approach to multilingual language policies, noting that the language ecology metaphor "captures a set of ideological underpinnings for a multilingual language policy". He also highlighted how languages "live and evolve in an eco-system along with other languages" and how their speakers "interact with their sociopolitical, economic and cultural environments" (Hornberger, 2002, p.16).

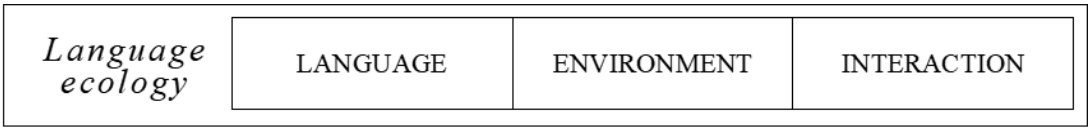
My understanding of Haugen's (1972) metaphorical description is built on Donne (2017, p.212), who compared languages to the whole species and portrayed their relations in the eco-system:

It shows languages as existing not in isolation but in their «environment», as part of an ecological system with all its interrelations and its forms of equilibrium, which may be stable or in danger of getting destabilized.

This description easily leads me into a world of complex web of relationships that exist among the environment, languages and their speakers (Wendel, 2005). Accordingly, instead of seeing "language as a structure of phonological, syntactic and lexical elements", from the ecological view, language is "a dynamic force which plays an important role in the interaction between cultures as well as between thought systems and the world" (Donne, 2017, p.214). In fact, the need for adopting a metaphorical description of language ecology is not only due to the term per se, which is borrowed from biology and used to study living beings. It is also because this metaphor offers me ways to look at language. As van Lier (2004) said, the ecological approach is neither a theory nor a method; it is a way of thinking and a way of acting.

In the next section, I followed the definition claimed by Haugen (1972) that ecology could be a useful metaphor by seeing it as three elements: (1) an organism, (2) its environment, and (3) the process that connects them (their interaction). By discussing each of the elements in sequence, I aim to construct my own ecological approach to learning the languages in Chinese class.

Figure 3.1 Central concepts in Haugen's language ecology



Above all, language ecology consists of three central elements: 'organism', 'environment', and 'interaction'. In Haugen's original formulation, he tied together the organism (that is, language) and the environment (i.e., the speech contexts) by means of interaction.

3.2.1 Organism

According to the interpretation from Haugen (1972), language corresponds to the organism. However, not only Haugen himself (1979) but also other scholars, such as Garner (2004, 2005), pointed out that more work was needed to draw completely convincing parallels between language and ecology. In his later paper, Haugen (1979) corrected his previous claims and pointed out that language is not an organism. Haugen explained that the relation of language to the surrounding world should be via its users; in other words, language needs actors. Likewise, van Lier (2004) describes the organism as a learner who can signal the action of inhibition or impulse to interact with the environment. In my research context, the organism refers to the ensemble of students, teacher, objects, and the language(s) used in the context. Besides, my idea towards this concept is to employ the relationship between a living organism and its natural environment as a helpful analogy to illustrate the relationship between language use and its speech environment. I will further elaborate on this point by incorporating it with the other two concepts: *environment* and *interaction* in the following sections 3.2.2 and 3.2.3.

3.2.2 Environment

Haugen (1972) suggested that the environment is not a metaphor; he explained, "the true environment of a language is the society that uses it as one of its codes" (p.325). Therefore, *environment* in language ecology can include two aspects: the psychological one and the sociological one. The psychological component refers to how language or languages exist in the mind of speakers and, specifically, how the speakers use language(s) to make sense of themselves and the world. In other words, the psychological component reveals how languages interact with each other in the speaker's mind. For example, an individual's mind can change their language use according to their psychological aspects, such as mood and beliefs. The sociological component is about how languages are situated in a social and natural environment, such as how the language is used among people in various speech contexts (e.g., community, school, home). In other words, it explores how languages interact with the society where they function as a medium of

communication (Haugen, 1972). Garner (2005) further illustrated that the sociological component includes an actual relationship between language and environment and contains the factors that can influence the social use of language, such as the time, the place, the speaker's social behavior, and the specific reasons for their language choices.

The discussion about what constitutes the true environment in language ecology has been ongoing. From Haugen's (1972) viewpoint, the physical environment as well as the psychological environment are easily discerned by people. However, Eliasson (2015) and Steffensen and Fill (2014) had different viewpoints. They believed there is indeterminacy about what exactly constitutes the ecological-linguistic environment. I agree with Haugen (1972) that the true environment of a language is determined by the people who use it in a communicative way. Therefore, understanding the language environment should not merely focus on each entity, such as the physical, sociological or psychological one, but should also involve other elements that constitute the relationships. For instance, the elements of organism and interaction in the language ecology should be considered. By saying that, I regard the language environment, organism (learner) and interactions as the trinity that closely links with each other and constitutes an integral part of language ecology.

To further explain the relationship between language and the physical, social and symbolic world, van Lier (2004) introduced the term *affordance*. He claimed, "the environment contains all physical, social and symbolic affordances that provide grounds for activity" (van Lier, 2004, p.5). The affordance is more like the relationship between an organism and the environment, and it refers to what is available to the organism (learner) to do something with or what will inhibit the action (van Lier, 2004).

In my research case, the environment can refer to the physical site of the classrooms. However, due to the objects around the learners, their physical world, and their social relations, the environment in my research is more than a physical

site, especially when trying to investigate questions such as where, when, and why a language is used or not. What's more, by answering these questions, the language ecological perspective allows me to seek the wider cultural and social environment (e.g., mainstream school, home, and community) that goes beyond the literal classroom site and relates to language use in the classroom. The above categories will be discussed in the findings chapter when looking at the influence on classroom language ecology.

3.2.3 Interaction

The third element that Haugen (1972) mentioned is *interaction*. My approach to understanding this term is based on both Haugen's (1972) metaphorical perspective of language with environment and Garner's (2004) non-metaphorical perspective, which included the elements of (1) holism, (2) dynamism, (3) situatedness when discerning the term *interaction*. I will explain this point below.

At first, the definition of "interactions" specifically refers to a relation between a given language and its environment (Haugen, 1972, p.325) or "the interaction of languages and their users" (p.329). However, the focus of this definition has experienced a range of shifts in the following manner (Eliasson, 2015, p.87):

INTERACTION→ INTERRELATION→ LANGUAGE IN RELATION

In his book, Haugen (1987, p.27) used the wording "language in relation to its human environment" to reveal the fact that language is not a biotic agent. As Eliasson (2015) later explained, although organism/human can interact with other organisms/humans, language is not directly transposed onto the connection between language and society. To further explain, both Eliasson (2015) and Haugen (1987) pointed out that agents are the core roles in ecological linguistics. This means that, due to the activities of agents, people are able to interact through language with others, such as with language forms in the minds of bi- and multilingual speakers or with the society that affords the communicative function (Haugen, 1972). These activities signify the value of languages and also bring

meanings via languages. Moreover, this viewpoint illustrates Haugen's epistemology about what language is. Here, he deemed that language depends on the agents' interaction with "human environment" (Haugen, 1987, p.27).

I agree with the above claims from Haugen (1987) and Eliasson (2015) that language is meaningful due to language agent's activity. However, there are some criticisms of Haugen's language ecology proposal, such as Garner (2005), who pointed out that there was a conceptual problem at the heart of Haugen's idea. On the one hand, it is a metaphorical entity of language-as-organism, and on the other hand, it is a literal environment-as-itself. Garner (2005) doubted how the interaction happened between a metaphorical entity and a real entity. To solve this conceptual confusion, in my research, the key point is to focus on the role of agent. As Haugen (1972, p.79) said, "the ecology of a language is determined primarily by the people who learn it, use it, and transmit it to others". In this research, in order to better fit the position of agent in the classroom language ecology, I borrow the notion of 'agency' in language learning from van Lier (2008a, p.1168):

> 1) Agency involves initiative or self-regulation by the learner (or group)
> 2) Agency is interdependent, that is, it mediates and is mediated by the sociocultural context
> 3) Agency includes an awareness of the responsibility for one's own actions vis-à-vis the environment, including affected others.

The above definition provides me with an approach that views the classroom interaction from the perspective of agency, highlighting the characteristics of initiative, interdependence, and responsibility of language learners. Besides, I agree with what van Lier (2008a, p.1163) accentuated that "agency is not simply an individual character trait or activity, but a contextually enacted way of being in the world". In my research context, the notion of agency is much closer to my intention to illustrate that language learning depends on the activity and the initiative of the learners, and they are significant for the successful language

learning (van Lier, 2008a). Therefore, here the term agent not only represents the mediated capacity of language learners to act languages in the classroom (Ahearn, 2001) but also emphasizes the agency of the agent on "action, interaction and affordances" (van Lier, 2008a, p.1163).

3.3 The conceptual framework of language ecology

I first developed my thinking based on Haugen's (1972) proposal, which declared that a language cannot be understood simply as a structural system independent of its speakers, culture and society. Then, in order to appropriately situate the interaction concept in the ecological view, I combined my understanding from two aspects. One is from Haugen's (1972) metaphorical perspective, which looks at the interaction between language as 'organism' and 'the environment that uses language', which emphasizes the environment, or context, or situation when using languages. As van Lier (2004, p.3) said, "since ecology studies organisms in their relations with the environment, ecology is a contextualized or situated form of research".

However, merely considering the contextualized environment is not adequate to have a fuller understanding of the *interrelation* of classroom language use. Therefore, I employed a non-metaphorical language ecology perspective, which Garner (2004, p.36) claimed as "the mutual relations of all the organisms", to complement and enhance my language ecological worldview. Here, the organism can include language forms, learners and any other factors that can influence the meaning of language or how languages are used. The mutual relations refer to the interplay of each organism. Therefore, according to Garner (2004), the ecology of language functions as a holistic mechanism, where languages are affecting and affected by languages forms, learners, and various factors. In addition, this point expands on Haugen's (1972) suggestion of studying the interaction between two entities (language and environment). To some extent, the above combined viewpoints enlighten me to seek a more expansive ecological approach to study the nature of the interaction (Garner, 2005).

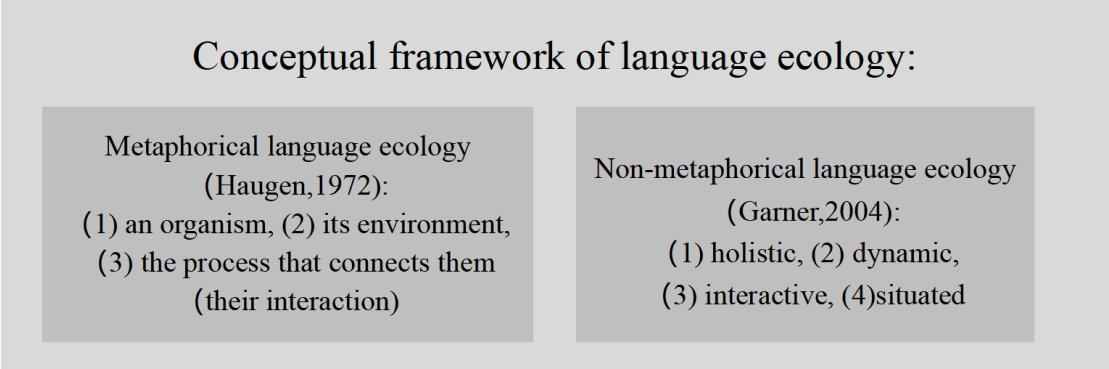
Language exists because people need to interact (Garner, 2004). This statement acknowledges that the nature of language is determined by interaction. Garner (2005) further added that language arises from the complex interaction of community, culture, and communication. Besides, it is worth emphasizing that interaction comprises much more than linguistic features. As Garner (2005) suggested, interpersonal interactions include language not only in linguistic aspect but also encompass non-linguistic elements, such as eye contact, facial expressions, gestures, as well as speakers' perceptions and assumptions, or the physical, social and cultural setting (Garner, 2005). Likewise, van Lier (2004) warned that merely studying the action of interaction might cause an incomplete understanding of how the interaction relates to the various systems that impinge upon it. He pointed out that in the case of language education, things are not always visible and audible in the interaction, and there might be numerous factors, such as personal, situational, cultural, and societal factors collectively and interdependently, which influence what happens within classrooms and schools. Moreover, those factors may nevertheless determine to a larger or lesser extent what is said and done among people. van Lier's (2004) viewpoint supported what Haugen (1987, p.27) said in his language ecology proposal, which is the interaction referring to "language in relation to its human environment".

In order to further understand the interactive mechanism of language ecology, I considered some other concepts that are deemed closely related to the term of interaction and characterize ecological thinking. They are: (1) *holism*, (2) *dynamism*, and (3) *situatedness* (Garner, 2004). From the epistemology of ecology, holism believes that the world can be properly understood through learning its complexity, diversity, and interrelationship, rather than focusing on entities in isolation (Garner, 2004). Dynamism deems every utterance in an important sense of unique and dynamic unpredictability (Garner, 2004). In addition, situatedness emphasizes the setting in which any phenomenon occurred (Garner, 2004). The setting can be a physical object, but it is not merely a physical location and situatedness. For example, it can be something intangible like ideas or feelings or

speakers. Situation is a meaningful part to understand the languaging practices, as Becker (1991, p232) said, “to separate languaging from the particularity of its context is to obscure its being”. Moreover, Garner (2004, p.42) emphasized, “the holistic, dynamic, and interactive focus of ecological thought means that we regard the situation as an integral part of the phenomenon we are studying”. The statement confirmed that the *situation* combined with *dynamism*, *interaction* and *holism*, contributes to the communicative mechanism and makes languages flow ecologically. In particular, as these concepts correspond to and improve Haugen’s (1972) proposal of three main parts – organism, environment, and interaction, this is the reason that I specifically introduced them in this section, with the aim to construct a deeper understanding of “language is interactive” (Garner, 2004, p.40).

Finally, I adopt the ecological approach by integrating both Haugen’s (1972) metaphorical language ecology and Garner’s (2004) non-metaphorical language ecology as my conceptual framework when studying classroom language (see Table 3.1 below). The reason to do so is that Haugen’s (1972) proposal influences my ecological thinking based on the three main parts of *organism*, *environment*, and *interaction*, which enlightens me about the main approach to investigating language use in the classroom. However, Garner’s (2004) idea adds more details about how to learn languages in relation to the environment from an ecological thinking perspective, and it emphasized the interrelationships of concepts when learning languages, which allows me to analyze the dynamic factors that impact on classroom language use. Therefore, both proposals are essential for me to view, analyze, and reflect on classroom language use, seeing languages as an integral part of the complex of students’ behavior, thinking, experiences, knowledge and including patterns that are learned through interaction within the classroom and from a wider environment that impacts on learners’ language use.

Table 3.1 Language ecology conceptual framework



Based on the conceptual framework of language ecology above, the scope of the notion of ecology that I am applying to the Chinese complementary school classroom is constructed. I will elaborate below on how this conceptual framework informs my thinking about instilling the language ecology concept in my research context.

Firstly, led by Haugen's (1972) metaphorical language ecology perspective, language use in the Chinese classroom is relevant to understanding the interaction between language users and the environment where languaging occurs. This lens is crucial as it allows me to step into an overall eco-system view of Chinese classroom language use. Accordingly, I am able to investigate dynamic classroom language use via learning about the general language use across language users and capturing the languaging practices brought about by their interaction.

As discussed earlier, the language environment can include many aspects of language users (e.g., psychology, sociology). The continuous investigation of the learning environment leads me to focus on how students and teachers use languages in a communicative way in Chinese classes. In other words, I highlight language users' agency and initiative during languaging activities. This focus echoes my first sub-research question, which places language users at the core of classroom interaction and observes how they interact with others.

The further exploration into the reasons, factors and implications behind languaging activities in Chinese classrooms; the resources and strategies used by language users in those activities are what my second sub-research question

requires. In order to address this research question, a deeper scope of Chinese classroom language use is uncovered under the guidance of Garner's (2014) non-metaphorical language ecology. Thus, the Chinese classroom language phenomenon is learned from a holistic lens by considering its complexity, diversity, and learners' interrelationship. Besides, as discussed earlier in chapter 2, bilingual language use in the 21st century is dynamic. According to Garner's *dynamism* notion, I acknowledge that the language use in the Chinese classroom is unpredictable, dynamic, intentional and spontaneous. Similar to the concept of *environment*, Garner employs *situatedness* to emphasize the importance of context where languaging occurs. Therefore, I treat the context as a vital aspect when analyzing how languaging practices happen. Finally, the above mentioned concepts are altogether relevant to understanding classroom interaction and language ecology, with their different emphases, respectively. More importantly, applying these concepts to the study of language use in Chinese classrooms enables me to integrate the concepts of language ecology and translanguaging in my research context. I will discuss this point next.

3.4 The relationship between language ecology and translanguaging

In my research, language ecology is a crucial thinking or approach that frames my view and assists me in data analysis. Most importantly, this concept is closely linked with a translanguaging perspective, as they both instruct and inform the fundamentals of this research. I will explain how they work together and how they influence my theoretical research development in the following sections.

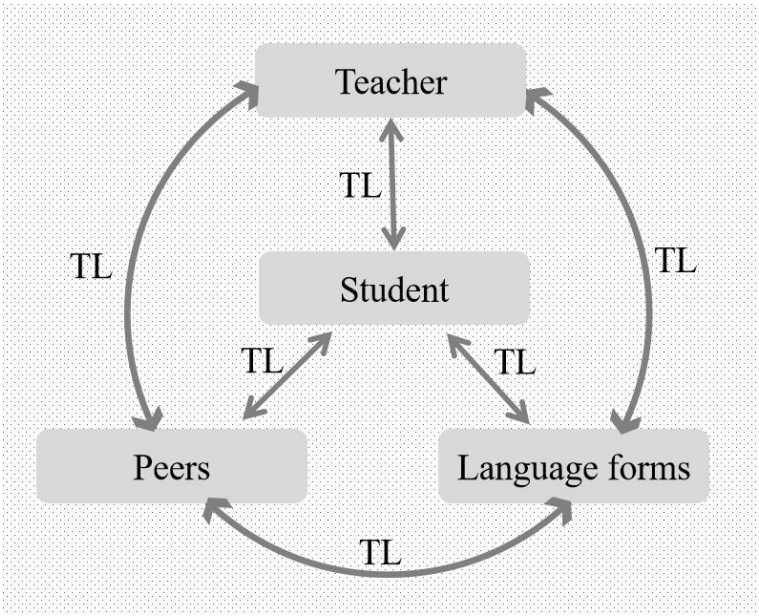
3.4.1 Language ecology is an umbrella concept for classroom translanguaging

Scholars (Creese and Martin, 2003; van Lier, 2008b) have adopted the concept of language ecology to describe the ideological and interactional affordances of linguistically diverse classrooms. In this case, the Chinese class in Scotland is a 'linguistically diverse classroom'. As established earlier, the key focus behind language ecology is "the study of interactions between any given language and its

environment" (Haugen, 1972, p.325), which means an ecological approach to language requires an exploration of the relationship of languages to each other and to the society where these languages exist (Cress and Marin, 2003). In this claim, two types of exploration are possible to engage with. One I defined as an internal perspective, which is from the interaction among language agents. The other I prefer to call an external perspective, which highlights the influences from the wider environment on people's language use in the classroom. I will elaborate on these points below.

From the internal perspective, observing the relationships between languages with each other, the languages are flexibly, variously, multimodally used by students and teachers for various purposes during their interaction. This phenomenon is what I refer to as *translanguaging*. In this sense, translanguaging can be embedded in the concept of language ecology, and it enhances languages flowing in an ecological way in the bilingual classroom (see Figure 3.2).

Figure 3.2 Bilingual classroom language ecology



The above figure portrays the collaboration between language ecology and translanguaging in a linguistically diverse class, specifically in the interaction among students, peers, teachers and language forms. The student agent is the

central focus of this study, while peers and the teachers represent other agents' relations with students. Besides, *languages form* as a separate entity affords the interaction between agents with multimodal language forms, such as non-verbal aspects and abiotic objects (i.e., classroom artifacts, learning materials).

In addition, from an external ecological perspective, social and cultural factors can interact with the classroom language use (Garner, 2005). Creese and Martin (2003) suggested that an ecological approach explores the relationship between languages and each other and to the society. Therefore, factors embedded in the wider society, such as geographical, socio-economic and cultural conditions in which speakers of a given language exist, are meaningful towards the exploration of language ecology. Ricento (2000, p.208) once posed the question, "Why do individuals opt to use (or cease to use) particular languages and varieties for specified functions in different domains..."? He argued that answering this question requires linking patterns of language use in particular contexts, such as at the societal level. This argument is similar to what Eliasson (2015) claimed that languages are inseparably tangled with their respective historical, social, political and cultural contexts in which they are used. In other words, understanding one's language usage should consider influential factors from these contexts.

Therefore, in the above Figure 3.2, the dots scattered throughout represent the factors from various contexts that influence translanguaging and classroom language ecology. In addition, translanguaging, as indicated by the abbreviation 'TL' in the above figure, is the connection that enables each agent (students, peers, teachers) and languages forms to interact with each other in such a linguistically diverse class. All these elements contribute to the construction of the bilingual classroom language ecology. Creese and Martin (2003, 2008) also described classrooms as ecological microsystems.

3.4.2 Language ecology offers theoretical evidence of doing translanguaging

With the exception of practical implication of translanguaging and language ecology in bilingual language use, these two concepts also influenced my research consideration theoretically. Initially, I used translanguaging as the theory to explain the discursive language practices in the bilingual class. However, as my research progressed to the data analysis stage, the concept of language ecology emerged as another heuristic concept that provided me with conceptual inspiration to re-examine my theoretical foundation. I questioned myself why I needed to employ this concept when I already had translanguaging as the fundamental theory in my research. This question not only led me to explore the role of each concept in my research, as discussed in the above section, but also made me contemplate the relationship between translanguaging and language ecology.

To some extent, both concepts offer similar theoretical explanations of classroom language use by emphasizing the effects of variables on individual's language use. However, the two concepts approach the phenomenon of language use from different perspectives. First, language ecology, through its discussion of the interaction between organisms and the environment, reveals the relationships between languages and speech communities (Garner, 2004). Especially, it points out "how languages exist and evolve in the eco-system along with other languages" (Creese and Martin, 2003, p.3) and how language users interact with the environment, including the social and cultural environment. On the other hand, translanguaging describes language use by focusing on the notion of 'trans' and 'languaging', which involves transcending the boundaries between named languages and between language and other meaning and sense-making resources (Li, 2018). Besides, it is a dynamic process that allows language users to flexibly use languages and other semiotic resources in their linguistic performance.

For my research, the most valuable aspect of bringing together these two concepts into my study is that they form the whole theoretical underpinning that leads me to explore the comprehensive and complicated language phenomenon in the bilingual classroom. In addition, these two concepts complement each other. First,

language ecology affords the explanation for why translanguaging is needed in bilingual learning and teaching. Translanguaging actually facilitates languages to flow ecologically in the bilingual classroom and enables smooth interaction among learners, languages, and the environment. Besides, from an ecological viewpoint, new languages can develop alongside existing languages (van Lier, 2008b). This claim reflects that translanguaging supports the development of languages in an ecological way, prevents dominant languages from taking the place of indigenous or heritage languages, and promotes interaction and coexistence of old and new languages in social contexts (Mora, 2014). Therefore, the ecological perspective lightens the new implications of doing languages for bilingual learning and teaching.

3.5 Chapter summary

Language ecology as another important concept was discussed in this chapter. By adopting language ecology perspective on classroom language use, I aim to reveal the interactions among each agent (students, the teacher, peers), and between agents and languages forms. Therefore, I discussed the central concepts of Haugen's (1972) language ecology, concluding with my conceptual framework for studying language ecology in the Chinese class. Although both translanguaging and language ecology share some common theoretical evidence in explaining classroom language use, they have different theoretical focuses on doing languages. Moreover, both concepts underpin my exploration of classroom language use. Figure 3.2 'Bilingual classroom language ecology' serves as the best evidence to describe the relationships between language ecology and translanguaging, while also illustrating how language ecology and translanguaging work together in the Chinese class. In conclusion, language ecology and translanguaging are two enlightening perspectives and valuable heuristic thoughts in linguistics. They provide me with the theoretical underpinning of conducting this research and serve as the conceptual guideline for the data analysis in the next stage.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Research design

Most works dealing with research design employ a conception of design, "a plan or protocol for carrying out or accomplishing something (esp. a scientific experiment)" (Design, 1984, quoted in Maxwell, 2012. p.2). Similarly, Creswell (2013) stated that "research design means the plan for conducting the study" (p.44). It is recognized that the research design shapes the selection and use of specific methods and links them to the desired outcomes. The aim of a research design is to provide an appropriate framework for a study. According to Maxwell (2012), good qualitative research has five key components (*goals, conceptual framework, research questions, methods and validity)* to ensure a coherent and workable research framework. My research design has been inspired by Maxwell's framework, and my justification of how Maxwell's framework impacts my research design will be elaborated below. However, in order to fit the framework into my design, I prefer to use another term, trustworthiness, to replace validity.

First, by asking the reasons for conducting this study and what issues it wants to clarify, the research was set from a starting point (*goal*). Second, the theories, beliefs, personal experiences and previous research findings inform me to understand the objects and issues that I am studying with (conceptual framework). For instance, in Chapter 3, my conceptual framework is constructed by two major theories: translanguaging and language ecology, which guided me with the theoretical underpinning and assisted me to identify my research theoretical interests in the broad research area of classroom language use, Chinese school, bilingual education and heritage language learning. Third, the specific research questions drive me to a more explicit research direction by immersing me in a real research environment and continuously absorbing knowledge and improving understanding (research questions). Fourth, the methods derived from understanding the philosophical principles and theoretical assumptions of the

discipline lead me to further design how to conduct this research (Moon and Blackman, 2014) (methods). Fifth, I keep in mind to justify the trustworthiness of the research procedure, in my results and potential challenges to threaten or support the ideas about how things are going in this research (trustworthiness). Besides, I believe it is important to make an empirical research workable rather than drawing an overwhelming picture. Therefore, I continuously evaluated how the design was working during the research process, adjusted and changed it according to how it influenced and was influenced by the emerging factors in the research (Maxwell, 2012). In fact, the sections in this methodology chapter are all revolve around these five elements mentioned above.

4.2 Philosophy of doing this research

Much is made of the philosophical underpinnings of research and the relationship between methodologies and methods to provide researchers with a sense of stability and direction as they move towards understanding and elaborating the research process. It is also believed that only when the researcher has a sufficient understanding of the philosophical principles and the theoretical assumptions of the discipline, could social research be interpreted meaningfully and appropriately (Newing, 2010) and committed to the integrity and validity of research design (Moon and Blackman, 2014). Thus, understanding the principles of one's disciplinary base and the embedded assumptions is a prerequisite for all researchers when interpreting research from other disciplines (Moon and Blackman, 2014).

However, the design of research does not often begin with the question of what ontology or epistemology we will adopt. Rather, it is not uncommon for research to begin with a real-world issue, a problem to be solved, or a question to be answered. As Crotty (1998, p.2) suggested in developing a research proposal, there are two fundamental questions that researchers need to put considerable efforts into answering:

(1) What methodologies and methods will we be employed in the research we propose to do?

(2) How do we justify this choice and use of methodologies and methods?

The first question is closely related to the second, and the answer to it would gradually become clear along with the ongoing search for "justification" (Crotty, 1998, p.4). In addition, the answer to the second question lies in the purpose of the research, or in other words, in the inquiry to answer the research questions. This justification of methodology and methods makes assumptions about the reality we bring to the work, about the knowledge we believe our research will produce, and about an approach that seeks to answer "how we know what we know" (Crotty, 1998, p.4).

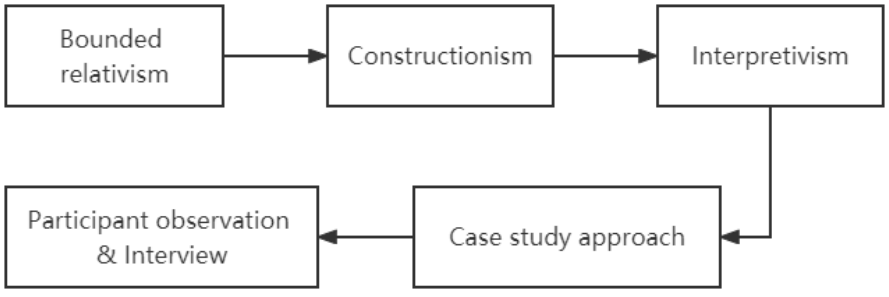
With the above two questions in mind, I have adopted Moon and Blackman's (2014) suggestion that the main question to explore from a philosophical perspective is to understand "what we can legitimately acquire knowledge about and how we acquire that knowledge" (p.1168). In other words, this question calls for two main branches of philosophy in social research: ontology and epistemology. In general, these two philosophical terms represent two types of concerns in both natural and social sciences: What exists in the human world that we can acquire knowledge about (referred to as *ontology*)? How do we create knowledge (i.e., *epistemology*)? (Crotty, 1998; Moon and Blackman, 2014). Ontology and epistemology are closely related (Crotty, 1998) and play two important roles in guiding research. For me, it is beneficial to consider and articulate these two philosophical orientations in order to justify methodology and guide research practices (Butler-Kisber, 2018).

Besides, there is another fundamental and even abstract question that philosophy seeks to answer: "what is the relationship of thinking to being" (Moon and Blackman, 2014, p.1173). Answering this question has helped me to constitute my own theoretical worldview or philosophical perspective, which is important to form beliefs to which I adhere and guide my research actions (Spirkin, 1983; Guba,

1990). Accordingly, it also reveals the assumptions that I can bring to my research and lead to the choice of methods (Crotty, 1998). Creswell (2014) and Hesse-Biber and Leavy (2010) said that researchers need to articulate their worldviews at the beginning of their projects because these worldviews can serve as a guide to make coherent, ethical and theoretically informed decisions at each stage of the research process, which includes the research approaches and specific methods of data collection and analysis. Therefore, how researchers frame research and choose methods to demonstrate a version of their worldview, in other words, would represent their ontology, epistemology and theoretical perspective.

Thus, by tracing back to the starting point of doing this research, continuously reviewing the research questions, and making reflections on each step of the research progress and the researcher's own experience, this research constitutes its own philosophical stance model with each informing the next in Figure 4.1. I will explain why I adopted this structure and explain each approach discourse sequentially in the following sections.

Figure 4.1 The "scaffolding" structure of philosophical discourse of social science in this study



4.2.1 Bounded relativism

Relativist ontology holds that reality is constructed in the human mind and that there is no one reality. Instead, reality is based on the relativeness of everyone who has experienced it at a particular time and place (Moon and Blackman, 2014). Bounded relativism shares the belief with relativism that there are multiple

realities. However, bounded relativism holds that “one shared reality exists within a bounded group (e.g., cultural), but across groups different realities exist” (Moon and Blackman, 2014, p.1170). The context of this study is the Chinese complementary school in Scotland, and the participants are second-generation immigrants of Scottish-Chinese students and their Chinese teachers. These factors lead the participants in the study to a group with a certain cultural feature – Chinese community in Scotland. Besides, the researcher herself is a Chinese student at a UK university with years of volunteer teaching experience in the Chinese complementary school. This means that as a research interpreter, I also bring a ‘reality’ that is essentially based on my identity – a Chinese-English bilingual learner. The reality may be different when others interpret this research case. Meanwhile, by investigating students’ bilingual experiences in the Chinese language class, I admit that the reality of students’ experiences is not static and unique, but can be dynamic, multiple and constructed by individual students with their own discourse, and/or by different teachers’ orientations in the class, as well as by myself as the researcher’s interpretation in it. As a result, all of the above factors lend the reality of this research with its boundary to look at and interpret. Moreover, bounded relativism provides the space and rationale for participants, myself as a researcher, and this study to construct knowledge. I will elaborate on this point in the following section.

4.2.2 Constructivism

Epistemological issues usually tend to emerge along with ontological issues (Crotty, 1998). Among a number of epistemologies, constructivism is most consistent with the beliefs of this research because it emphasizes that meaning emerges in and from people's activity with realities (Crotty, 1998). Constructionist epistemology deems that knowledge is constructed by human beings as they engage with and interpret the world (Moon and Blackman, 2014). That is, according to this epistemological position, research knowledge is constructed through multiple layers of interaction.

To be more specific, first of all, I assume that the participants involved in this study could construct knowledge in different ways, such as through the teaching methods, including the observations and interviews to express their opinions, and through the interaction of the participants in the classroom to make meanings. Besides, from the perspective of the researcher herself, I can construct ideas and viewpoints about the research in many ways, such as literature search, selections, defense of opinions (Mogashoa, 2014), and interpretation of data. From the constructivist perspective, knowledge is not in the content but in the activity of the person in the content domain (Mogashoa, 2014). This perspective emphasized the position of people in the process of knowledge construction.

Second, constructivism is a theory of knowledge (Mogashoa, 2014). It can be understood from Bodner's (1986) argument that knowledge is the result of a lifelong constructive process in which people try to organize, construct, and reconstruct their experiences based on the existing schemes of thought, and gradually modify and expand these schemes. Acknowledging this proposition, in this research, I constantly generate meanings and understandings from ongoing interactions with my experiences, ideas and hypotheses, and through the knowledge I have gained, I am modifying and updating the research proposal and the fieldwork I am conducting. Later, when the constructivist view is applied to data interpretation, two situations may arise when working with data. One is that my perceptions can be adjusted to fit the concepts that have already been assembled. The other is that my experiences may not fit the ideas from the data. To deal with this, Bodner (1986) suggested that researchers can adapt the existing concepts to fit with the sensory data perceived by the author. As a result, the knowledge of research is in a constant constructive process (Mogashoa, 2014). Besides, Bodner (1986) also mentioned that the only thing that matters is whether the knowledge constructed from the information works satisfactorily in the context. This point reminds me that as a researcher, it is important to pick up, identify, and adjust the appropriate knowledge to work with my research case.

4.2.3 Interpretivism

According to Moon and Blackman (2014), since epistemology is about beliefs around knowledge, it can be considered as a set of assumptions that guide the approach to conducting research. Among many different schools of thought that reflect particular worldviews, such as positivism, interpretivism, critical theory, feminism, and pragmatism (Crotty, 1998), an interpretivist worldview was adopted for this study as a way of looking at the world and making sense of it (Crotty, 1998).

Interpretivism holds that truth and knowledge are at "contradistinction to positivism" (Moon and Blackman, 2014, p.1173) and seeks "culturally derived and historically situated interpretations of the social life-world" (Crotty, 1998, p.67). Therefore, rather than trying to establish laws or regularities to explain human behavior, an interpretivist approach seeks understanding by observing individual cases to track the development of a phenomenon (usually qualitatively) (Crotty, 1998). These ideas show that interpretivism is driven by an ontological position which believes that the nature of knowledge is subjective and an epistemological position which argues that knowledge is constructed by the human mind and emerges from the interaction between people and their world.

I have several considerations for choosing the interpretivist perspective. Firstly, from a macro perspective of conducting this research, the research aims to investigate individual's experiences and perceptions of language use. Therefore, the research was developed from the interplay between subjects (e.g., individual's language preference, different teachers' orientation, researcher's observation and interpretation) and object (e.g., named languages, Saturday Chinese class, Scottish-Chinese immigrant students in Scotland). This means that the research construction is based on the collective interaction among the researcher, participants and the researched context. Secondly, in terms of a micro perspective, the research questions aim to present and interpret students' language use in translanguaging practices, students' perceptions of translanguaging (moments), and the factors that influence their languaging experiences in the Chinese class. Obviously, to answer each question, it is

inseparable from the 'interpreting'. Thirdly, the relationship between the researcher and the knowledge prompts the interpretivist worldview. To understand the phenomenon of second-generation immigrant students' language experiences in Chinese school, I need to get close to the reality of the research context and participants. Through carefully selecting research methodology and research methods, I am able to construct knowledge from different realities and combine it with my own life and cultural experiences. In addition, this research process also reveals the constructivist stance of the researcher, which asserts that "knowledge is the construction of reality" (Mogashoa, 2014, p.53).

4.3 A qualitative research and case study approach

4.3.1 A qualitative research

There are three major research approaches distinguished by Creswell (2014): quantitative, qualitative, and mixed-methods. With the aim of understanding the social reality of individuals, groups and cultures, a qualitative approach was chosen to explore the behavior, perspectives, feelings and experiences of people (Flick, 2018). In addition, the qualitative approach is mostly used among interpretivist researchers.

According to Creswell (2014, p.4), "qualitative research begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning of individuals or groups ascribe to a social or human problem". The primary reason for conducting qualitative research in this study is to investigate bilingual students' language use in a Chinese complementary school. In order to explore and understand this problem, a complex and detailed understanding of the issue is required (Creswell and Poth, 2018). In this research case, it can be achieved by directly engaging with participants, such as observing their classroom activities, interviewing them, and analyzing their utterances.

4.3.2 A case study approach

Within the qualitative research community, there are many traditions for conducting research. Among them, the case study approach is a tradition well-suited for research in complex social environments, such as a school or a class. The reasoning behind the use of this approach will be outlined below.

Firstly, the choice of the case study approach is determined by the research context. The case is clearly identified and embedded in a Chinese classroom environment in a Chinese complementary school in Scotland, characterized by particularity and complexity (Thoms, 2015). Secondly, a case study approach provides a significant opportunity for this study to achieve its research aim through instrumental case studies. This type of case study focuses on research that is likely to be known in advance and designed around established theories or methods (Mills, Durepos and Wiebe, 2009). In this research, the purpose is to gain an in-depth understanding of Scottish-Chinese bilingual students' language use in a Chinese school. To accomplish this goal, the established language ecological perspectives and translanguaging lens around the case unit, the class, are combined with a conceptual framework (discussed in Chapter 2) to contribute to a deeper understanding of the researched phenomenon. Besides, multiple sources such as individual interviews, group interviews, and classroom observations were employed to collect data. The research purpose fits the purpose of case study, which is to "... probe deeply and to analyze intensively the multifarious phenomena that constitute the ... (case study) unit" (Cohen, Manion and Morrison, 2013). Thirdly, the cases described in this study have bounded systems. The cases are delimited by what the researcher defines as 'the case' (e.g., a school, an individual classroom or purposeful participants), by time (e.g., a school year, a school day or a class time), and by place (e.g., situated in the Chinese school, in the class of grade four and five). Such a "bounded system" allows for a rich, detailed, and in-depth exploration (Creswell, 1998). These characteristics make the case study an appropriate approach to address the research questions at hand.

As stated above, a case study can be defined by what the author means by ‘the case’. Thus, the selectivity of the case is an essential step in a case study. In this study, the case selection needs to decide not only the number of cases but also whether to focus on the case unity of ‘a class’ or ‘a student’. The decision could be influenced by what I want to examine, how I examine, and what I would present in this research, including preconceptions, such as particularly examining the influences of the teacher's language ideology on students' classroom language use. Therefore, it is important to proceed with the case selection with rationale, which will be elaborated on next.

I first followed Yin's (2009) case classification of a single case study and multiple-case study. According to Yin (2018, p.47), there are four types of designs for case studies: single-case (holistic) designs, single-case (embedded) designs, multiple-case (holistic) designs, and multiple-case (embedded) designs. Each design has its advantages and disadvantages. For instance, Herriott and Firestone (1983) claimed that the evidence from multiple cases is more convincing compared to a single-case study. However, a single case can better represent the critical test of an important theory than a multiple-case design (Yin, 2017). This study aims to be a single case study based on Yin's (2017) suggestion that the distinction between *single*- and *multiple*-case studies should be made prior to data collection (Yin, 2017). The benefits of doing so ensured that the researcher had clarity when immersed in complicated fieldwork and could work effectively within a bounded data collection time. However, to make this decision, a logical selection process had to be undertaken, which will be outlined below.

Firstly, based on Yin’s (2017) suggestion, this research follows three rationales for single-case designs. The first one is having a critical case. A single-case approach is used in my research to determine whether the propositions of translanguaging theory truly existed and can be largely utilized in the Chinese complementary school, and to explore any alternative explanations of class language use that might arise. The second one is having a common case. My research aims to capture the phenomenon of students’ language use in the weekly language class. In this

manner, the class becomes the setting for learning about the complex and dynamic language use, where students and teachers can provide insights into the relationship between languages and language users. Moreover, the value of conducting a case study can be connected and adapted to a large number of heritage language learners. The third one is, from my own consideration, although my research was designed in two different classes, I did not treat them as two single cases. I regarded them as a single case that represents the general and typical teachers group (university student teacher-led and parent teacher-led) in the Chinese school. Therefore, to obtain critical results regarding my propositions of translanguaging and to conduct a rich and in-depth investigation within the researched context, I decided that a single-case approach is the best choice for analytic consideration.

In addition, considering the phenomenon being studied and the research questions, the definition of a single-case study is extended to an embedded single-case design. According to Yin (2009), embedded design studies concentrate on the analysis at a sub-unit level. In my study, I divided the class into case units with embedded elements, such as students and teachers. Each element is important to provide sub-unit data analysis, allowing for a deeper exploration of the cases instead of focusing on their representativeness. More importantly, the embedded design was selected to maintain the case study's focus, which is usually likely to shift in the holistic design (Yin, 2009).

By adopting the embedded case design, the case includes units of analysis at more than one level. Thus, analysis occurs at the whole case level (the first level) and at the sub-units of each case (the second level). For instance, the first level focuses on how general languages are used by students in the two classes, and the sub-units of analysis include systematic data from elements of each class, such as classroom observations, interviews with students and teachers, and document investigations of students. Meanwhile, it is worth mentioning that the category of sub-units of case should be related to research questions, and the aim of sub-units is to serve the main target of the study. As Yin (2017) emphasized, embedded case

design should avoid concentrating too much on the sub-units level and failing to return to the main 'case'.

After defining the study as an embedded single-case study, the next question regarding case selection is about the case unit. The case study was conducted in a selected Chinese school. According to my research design, the study included two classes with initial four key students. Initially, I considered exploring each student participant as a case unit, as I have highlighted in the introduction chapter that it is important to investigate the students who have been having a lasting and considerable influence on the body of literature in the research field of bilingualism or translanguaging (e.g., Creese and Blackledge, 2011; Li, 2011a; Li, 2011b; Hancock, 2012). However, as the research progressed and with primary data analysis, I abandoned my initial consideration and adjusted my plan to view each class as a case unit. This decision was made based on my theoretical interests, research questions, and research practicality, which will be elaborated on in the following section.

Firstly, I realized that the distinguished pedagogical approaches (i.e., CLT and GTM) from two classes had a large impact on students' language learning and classroom language use. This is a compelling phenomenon that will be further discussed in my research and can be considered as an important influential factor that might impact students' language use. Secondly, I found that focusing on each student participant as a case unit was not necessary for my findings. This is because, although each participant might bring different and critical languaging practices and engagements, it does not mean that I should present them individually. Language use at the individual level is not my research focus; instead, I aim to understand how their translanguaging practices occur in the language class and to explore the phenomenon of translanguaging practices in their language class. Thirdly, during my ongoing fieldwork, I also found that languaging practice was not something that could be done separately by individuals; instead, most of the time, these practices occurred through individuals constantly interacting with others, their environment, and various factors which are closely

related to their language use. Besides, each student has their ways, habits, ideas or strategies for languaging. Filtering them with themes is a more organized way for me to deal with multiple, rich, replicated, and diverse data, and this approach corresponds with my theoretical interest in looking at language ecology and translanguaging theory in the Chinese language classroom.

In summary, based on the classifications above, this case study is an embedded single-case study (Yin, 2017), which includes two classes as case units within one Chinese school located in Scotland.

4.4 Research selection plan

Qualitative research is a process of planning and discovery (Reybold, Lammert and Stribling, 2013). This claim reveals that research choices could be well thought out and designed into the research process, while also being spontaneous and provoked by the research environment (Reybold, Lammert and Stribling, 2013). Peshkin (2001) suggested that the choices made during the research process were the "selection and choice of what to perceive" (p. 251). His argument was confirmed by Brewer and Hunter (2006), who pointed out that each study's data-gathering techniques had its own "special demands' that lead 'practitioners to study selectively certain universes of persons and groups while putting others beyond their reach" (p. 98).

In fact, not only the data collection stage but also the process of doing research is full of choices regarding what to pursue and what to leave aside. Brewer and Hunter (2006, p.102) claimed, "if sampling is seen as a rational selection process that has implications for the truth claims of one's research, then sampling is going on all the time". Meanwhile, sample selection demonstrates a researcher's extension of theoretical and conceptual framework (Reybold, Lammert and Stribling, 2013), which impacts aspects such as my epistemology about how to perceive the research issue, who I perceive to be at the core of my research issue, and thereby what I hope/can learn from those whom I have identified as a

group/individual. Due to the influence of the research choices, it requires me to continuously plan and discover study parameters (e.g., research settings, participants, prominent classroom events, research processes). This is because "each research choice has the potential to reposition inquiry, to erase some possible options while creating others" (Reybold, Lammert and Stribling, 2013, p.700). Although choices in an evolving research might bring relative changes to the original research design, some basic elements are hard to change, such as school and participants decisions. These decisions were underpinned by research questions and conceptual framework that warranted the research settings and data collection approaches during the initial fieldwork stage.

Several factors supported my selection plan in this single-case study and made it purposeful rather than random (Miles, Huberman and Saldana, 2014). Qualitative research usually works with small samples and aims for an in-depth study (Miles, Huberman and Saldana, 2014). Likewise, Reybold, Lammert and Stribling (2013) pointed out that the rationale for selection in qualitative research is firmly established in the value of information-rich cases and in-depth understanding not available through random sampling. As the defining essence of my cases study is to focus on the unique context of a case with small samples of people (Miles, Huberman and Saldana, 2014), and the research calls for an in-depth study with rich and explanatory data, these factors required my study to use a more strategic and purposive way to select participants rather than elements of the population chosen at random (Guest, Namey and Mitchell, 2017). In addition, there is agreement among qualitative researchers that purposeful selection is the best strategy to obtain 'information-rich' cases that can provide in-depth insight into the subject of study (e.g., Creswell, 2007; Reybold, Lammert and Stribling, 2013; Freeman *et al.*, 2007).

Purposeful selection represents my epistemological stance. Freeman (2000) argued that purposeful selection is more than a technique to access data. After several layers of selection choices, the research became clearly framed around who and what matters as data. Therefore, I constructed versions of reality

grounded in those selections. For example, when intersecting participant selection with data analysis, the reality of the case was embedded in each of my choices: criteria of participant, inquiry methods, analysis technique, and so on. Due to the use of those choices and methods, the story of the participants could be learned and ultimately told in the research. As Reybold, Lammert and Stribling (2013, p. 700) said, "purposeful selection is a mechanism for making meaning, not just uncovering it".

Purposeful selection strategy had a significant impact on my data collection. To be more specific, it helped me select the case study institution, classes and participants. It prompted me to be mindful of possible intangibles (e.g., rapport, culture and social relationships between me and participants) that could influence the data collection process and also reminded me that the selection choices could influence the interpretation of the data by means of the purposeful choices that come into and affect my conception (Peshkin, 2000).

4.4.1 Research site selection

Given that this is a single-case study with the class as a case unit and that it happened within one Chinese school, the foremost thing was to look for a research site. According to the UK Federation of Chinese Schools (UKFCS), an association that promotes Chinese language and culture, there were 34 member schools in Southern England, 33 registered member schools in Northern England and Wales, 11 schools in Scotland and Northern Ireland (Ukfcs.info, 2018). To select one school from this large number of Chinese schools in the UK, a series of selective methods were utilized, and the rationales were based on the norm of setting case boundaries.

First of all, in light of my theoretical interest, the study aims to make a contribution to the emerging body of studies on the Chinese community's bilingualism in Scotland (Bell, 2011; Hancock, 2012; Hancock, 2014; Hancock, 2016). Second, the convenience method was utilized to facilitate the process of

selecting schools in Scotland (Creswell, 2014). The convenience method is purely based on the norm of availability (Mitchell and Jolley, 2013). It helped me to select samples by choosing schools that were conveniently located around my location (Edgar and Manz, 2017). During the process of school location selection, three convenience factors played important roles in influencing my choice: the time, budget, and accessibility of data collection (Yin, 2009; Cohen, Manion and Morrison, 2013; Miles, Huberman and Saldana, 2014). Given the time and cost constraints associated with such a project, I was inclined to select an institution that was geographically convenient for me.

The next step is to locate the site of the case institution, in other words, to select schools in Scotland. According to the registered schools list in the UKFCS (Ukfcs.info, 2018), there were four institutions that offered Chinese language learning for the Chinese immigrant population in Scotland. Based on the selection plan stated above, I selected a Chinese school based in a district where I lived as the most plausible research site.

The research site is a popular Chinese school in Scotland, which is an independent, non-political, non-religious, non-profit-making voluntary organization, and was also registered as a Scottish Charity. The school was founded in 1972 with a history of more than fifty years and is one of the largest Chinese schools in the UK, with more than 1200 students registered in the 2018-2019 session, as reported by the headteacher during the school opening ceremony. It is a typical Chinese school that plays a pivotal role in the transmission of the Chinese language and culture to students from multicultural and multilingual backgrounds (Francis, Archer and Mau, 2009; Nordstrom, 2015).

The Chinese school is located in the central belt of the city, and the venue and classroom facilities are hired from a local college. Therefore, a spacious canteen is available for students and staff to enjoy tea and coffee, and to purchase snacks and drinks during break time. Additionally, many classrooms equipped with various amenities are provided for use, along with a conference hall where staff can hold

meetings and discuss matters. An auditorium, capable of accommodating a large number of people, is available for holiday performances and annual graduation ceremonies. Besides, sports grounds, a fitness room, and a dance studio are provided for after-school activities. All of these amenities contribute to making the Chinese school more like a regular school environment.

The Chinese school aims for offering teaching and learning about Chinese language and culture. Therefore, it hold courses in both Chinese language (literacy) and traditional Chinese arts. The classes in the Chinese school generally include Chinese language classes and after-school activities. Chinese language classes are classified specifically as:

- Mandarin classes to children for junior (level 1 to 6); GCSE (General Certificate of Secondary Education) (level 7); AS and AS2 (levels 8-10); SQA (Scottish Qualifications Authority) Higher (level 11) and adults;

- Cantonese classes for junior (level 1 to 8); GCSE (level 9); GCE (General Certificate of Education) & SQA Higher (level 10); GCE A2 & SQA Advance Higher (level 11) and Cantonese adult classes;

- CSOL (Chinese for Speaker of Other Languages) for non-Chinese speakers.

Meanwhile, the after-school activities offer a variety of Chinese cultural activities for students to attend, aiming to promote cultural exchange and understanding. They offer courses in Arts and Crafts, Painting, Chinese Dance, Chinese Painting, Kung Fu, Table Tennis, Zither, and Public Speaking. These courses typically start on Saturday afternoons and run for one hour each. It is common to see students finish their language classes in the morning and then continue to attend the after-school activities in the afternoon.

Regarding Chinese language learning, the tradition lies in providing mother tongue teaching for overseas-born ethnic Chinese children with ages ranging from 6 years to 16 years. However, with the growing demand for Chinese learning, this Chinese

school now offers lessons in Mandarin and Cantonese of various levels for a wide range of age groups, including adults. The grade levels are mainly classified according to learners' age and their Chinese language proficiency. Therefore, the school has more than 70 classes, with the number of students ranging from 10 to 25 per class. Besides, many students start attending the Chinese school at a young age (around six years old) and continue until they complete SQA Higher, Advanced Higher, GCSE or Advanced level, often before the typical ages of 16 and 18.

In this school, different language departments have their specific curriculum, teaching and learning materials. For example, Mandarin classes adopt textbooks edited by Ji Nan University from the Chinese Mainland as their main teaching materials; Cantonese classes prefer a workbook named 'Wo Ai Xue Yu Wen' (meaning: 'I love to learn Chinese literacy'), which is edited according to the requirements of the Hong Kong Curriculum Development Council; The CSOL department uses the YCT standard course, produced by a Hong Kong educational organization, as their workbook. Besides, each grade has its unified monthly quiz, midterm and final exams. These factors make the Chinese school a dedicated institution for language learning. Therefore, as one of the most popular Chinese schools in the UK and a representative of what most Chinese schools in the UK offer, this Chinese school can be seen as standing for a population of cases much larger than the case itself (Seawright and Gerring, 2008).

4.4.2 Access and consent

Negotiating access to the research site and participants was an important procedure in my research. After deciding on the research site, I started to work in the Chinese School for one year, initially as a teaching assistant and later as a substitute teacher in Chinese class. The decision of working in the Chinese school had two layers of significance for me: it allowed me to better interact with the literature and practical schooling, and it also helped me further refine my research questions. During my involvement in the school every Saturday, I developed good communication with some teachers and students. This volunteer

teaching experience made it easier for me to access a sample of participants in the Chinese school.

The first step in gaining access was presenting a letter to the school's administrators to elaborate on my project including the research topic and aims, my plan and time, the schedule of fieldwork in the school, the school's rights during participating in my research, and also the potential benefits to the school. The document was written in both Simplified Chinese Characters and English. In addition, since the student participants fell into the 8 to 11 years old age group, representing intermediate and advanced learners in the school, the school administrator suggested that I should also obtain consent from the students' director, as she was in charge of the students and teachers' administration work. Finally, in early February 2019, I obtained oral consent from the vice-principal and the relevant director of students, and then received formal written permission with signature on the 2nd of March 2019. The success of negotiating with school administrators was largely due to the trust and rapport established with the school during the past year.

4.4.3 Teacher participants selection

In this procedure, purposive sampling was applied. As Ritchie and Lewis (2003) suggested, purposive sampling refers to a sampling strategy by which the members of a sample are chosen with a specific 'purpose'. The purpose could be looking for samples that represent a type in relation to particular key criteria, namely the criterion sampling method (Guest, Namey and Mitchell, 2017). In this study, the criterion sampling strategy was employed in the selection of classes, teachers and student participants that met the predetermined criterion.

The rationale for class selection was closely related to teacher selection. I recognized from both practical and literature perspectives that, in the Chinese school, the teacher's group mainly consists of Chinese parents and Chinese students at UK universities (Archer, Francis and Mau, 2009). Therefore, the

research design deliberately involved teacher participants from these two categories. The purpose of this arrangement was to see if any comparative or similar findings can be generated in these different teacher identities' classes (Yin, 2009).

Besides, I selected my participants from Mandarin learning classes; therefore, they are Mandarin language learners and instructors. There are two reasons for this choice. First, based on my own experience, I am a Mandarin-English bilingual speaker whose education and personal development have largely been conducted in Mandarin. As a result, I can understand Mandarin proficiently. In contrast, I may not be as comfortable in and have ample knowledge and understanding of Cantonese language and its associated culture. Therefore, Mandarin is the language with which I can work comfortably, providing me with an entry point into the research field. Second, the largest group of students in this Chinese complementary schools is made up of Mandarin students. Given that the research on this group within Scottish society is still relatively scarce, I hope my research will contribute more empirical evidence in this area.

The selection process turned out to be more complicated than I originally expected. Therefore, more considerations had to be taken into account. Firstly, there was a time conflict between my planned fieldwork schedule and the school's agenda. Due to the required ethics application procedure taking two months and being approved on the 31st of May 2019, and the Chinese school closing for summer holidays until September, I had to wait for three months before starting the fieldwork at the beginning of the next academic year (September 2019). This arrangement was made to support my research sensibility to observe changes in students' behaviors or attitudes toward language use from the beginning to the end of the data collection session.

Secondly, the planned time for participant recruitment had to be changed due to the school's regulations. As a time-limited PhD research project, I wanted my work to be as effective as possible. Therefore, I planned to finish the negotiation with

the intended student and teacher participants during the three months' summer holiday, which means once the school re-opened in September, I could start my data collection. However, due to the quick personnel changes that the school encounters every semester and the school's regulations regarding classes changes, both the teacher and students had no idea about which classes they would be in. This meant that it was impossible for me to deal with the consent part of my project with teacher and student participants during the summer holiday. Nevertheless, I have spoken to several potential teacher participants in advance, and they all showed their willingness to get involved in the study, although they could not assure their attendance in September. The difficulty of not being able to launch the participant negotiation work in the summertime was due to the real situation of the Chinese school - being a charity institution with limited financial support, which resulted in a highly fluid and uncertain workforce.

To address this difficulty, I designed several backup plans in case any new circumstances would happen in September. In addition, as another role of myself was still a volunteer in the Chinese school at that time, I attended the pre-school meeting, which enabled me to be informed of the list of classes and teachers as early as possible. This step was important as it allowed me to contact potential teachers and obtain their consent a week in advance, ensuring that the fieldwork could start on time.

According to the criteria of selecting teachers from a class with students aged 8 to 11 years old, one teacher with parent-teacher background, and the other teacher as a university student, I sent the ethics documents set, including a plain language statement and a consent form, to four potential teacher participants. One teacher was unsure of her teaching duration at the school, and another intended to change class to grade 2, which did not meet the criterion of investigating grades with 8 to 11 years old students. Finally, two teachers from class 4D and class 5D, respectively, consented to take part in this research.

4.4.4 Student participants selection

Getting consent not only includes accessing the research context but also the consent from participants. This issue was ongoing throughout the whole process of my data collection. When I started my data collection in class, I had obtained consent from the school and two classes' teachers. That is to say, the next foremost thing was getting consent from student participants and their parents, also recruiting key student participants in the two classes. Therefore, I issued plain language statement letters and consent forms to student participants and their parents according to my different fieldwork stages.

Fieldwork stage 1: Information letter and consent form (see the appendix 6) to all students' parents for the first stage's classroom observation with only field notes taken by the observer, and for the second stage's audio recorded classroom observation (in class 4D, four students out of 18 did not return the form, and two students' parents rejected, so these students' voice was deleted from the recording; in class 5D, three students out of 19 did not return the form, so their voice was also deleted from the recording).

Classroom observation with field notes and audio recording was employed as the central data collection mode in the fieldwork. Meanwhile, student participants are the main objectives of my research. Their stories were embedded in a matrix of data collection design. For instance, in the classroom observation, the practices of students' language use were observed, then those scenes became prompts to involve in the next individual and group interviews (the interview scheme was designed in a semi-structured way). Similarly, in the interview with teachers, the discussed themes were largely based on students' classroom language use from classroom observation and students' interviews. Therefore, student participants acted as a key part in the data collection mechanism.

The selection of student participants is a vital work of my fieldwork, and it happened at the beginning of the first fieldwork. The biggest challenge for students' recruitment is to ensure timely retrieval of the consent form from parents about their children's participation in the study. I adequately prepared to

deal with this issue.

I grasped the chance to explain the research to students' parents as much as possible. According to the University ethics procedures, it is important to obtain consent from parents for their children's participation. Thus, I used any chances when parents came to school to send or pick up children to assign and discuss the consent form and plain language statement with them. This process helped me shorten the process of passing the documents via student to parents, ensuring my information was accurately delivered to parents and explicitly explained when necessary. In addition, I had a direct chance to receive parents' feedback on this research project, which was important for me to understand or perceive the ethics of doing research with children. For example, a parent who signed 'no' on the consent form explained to me that he worried that his child's participation could not be supported fully when parents were absent during the classroom observation. This experience reminded me of the importance of giving emphasis to parents' right to accompany children in the next stage when recruiting key students. Most importantly, this procedure enabled me to build up a researcher-participant relationship with students' parents at the first time. At the later stage of this research, I could see how significant this relationship is and how it had an impact on the whole fieldwork. Finally, 30 students' parents in total from the two classes gave permission for their children's participation in both fieldwork stage 1 (classroom observation with only field notes taken) and fieldwork stage 2 (audio-recorded classroom observation).

Next, it was the recruitment for fieldwork stage 2.

Fieldwork stage 2: Information letter and consent forms (see the appendix 7)to both key student participants and their parents for the audio-recorded interviews and taking a copy of key students' documents, such as textbooks, exercise books, jotters, other reading writing or drawing materials and artifacts that students bring into the classroom during the study (all obtained).

According to the summary of ‘Fieldwork stage 2’ above, it is clear to see that the recruitment of key student participants is the core task in this fieldwork stage. The criteria for selecting students were based on students' engagement in classroom conversations during my observations. This is influenced by my research interest in this project, which I discussed in detail in the introduction chapter. As this recruitment process happened at the beginning of a new semester, the students were new to the class and not familiar with the classroom environment and/or teacher. Therefore, most of them were not active in class. This situation presented a challenge in applying the criteria of finding creative language users. Instead, I adjusted the criteria to students’ frequent or large bilingual language output during class time. This is decided by my research design, which looks through the lens of translanguaging that involved speaking, i.e., those language use practices had a spoken component (Mazak and Herbas-Donoso, 2015). In addition, I tried to find out potential student participants by not only observing their language use during class time but also during their break time. Finally, Yu, Wei, Lin, and Chen (all pseudonyms) were selected as the four key participants, and Cai was involved as the fifth key participant since the middle stage of class observation. The main reason for inviting Cai to the study was because one key student, Wei, spoke very few words in class after the first observation session. However, my research design required two key participants in one class. Meanwhile, Cai’s noticeable comments during the classroom observations caught my attention, and he also demonstrated openness and initiative to talk with me when I approached his class during the fieldwork. Therefore, I invited him as the fifth participant.

4.5 Data collection

My fieldwork in the Chinese school started at the beginning of September 2019. This was a long and complicated process that involved access, feasibility, trust, and relationships in the field. In this section, I present the procedure of my data collection, which constitutes two stages in semester-long fieldwork in the

researched school. The methods applied for data collection include audio-recorded classroom observations, field notes, semi-structured individual and group interviews, and the collection of documentation (student works) and photographs. I will start the section with a summarized table that displays the entire dataset I have collected from the research field.

Table 4.1 Summary of data

Fieldwork stage	Research methods	Type of data	Involved participants	Amount
Stage 1	Class-wide observation	Field notes	Two teachers with 30 students from two classes.	10 pages in the notebook with around 1000 words.
Stage 2	Audio-recorded classroom observation	Recordings of classroom observations; Field notes; Copy of key participants' textbooks, exercise books, jotters; photographs.	Two teachers with 30 students from two classes (five students as key participants).	35 hours of audio-recordings of classroom observation (7 hours for each key participant); 30 pages of field notes in the notebook; 10 copies of students' written or other classwork documents; 4 photographs.
	Semi-structured interviews	Recordings of interviews	Five key student participants	280 minutes in total

	Group interviews	Recordings of interviews; Students' drawing.	Five key student participants are divided into two groups (two of them are in one group, the other three students in another group).	125 minutes in total; 3 pieces of painting
	Semi-structured interviews	Recordings of interviews.	Two teachers	90 minutes in total

Two phases of fieldwork in the school

According to the data collection timetable, in this research, I scheduled two stages for the fieldwork, and both of them were conducted every Saturday in the Chinese school. The first stage is about a 2-week period of class-wide observation in the two classes. The second stage is another 11-week period during which I did classroom observations with audio recordings and semi-structured interviews. The five students (Yu, Wei, Cai, Lin, and Chen) were observed as key student participants during the classroom observations. Meanwhile, I conducted individual interviews with key students and teachers and group interviews with key students. Table 4.2 presents the exact time schedule of the 13-week fieldwork within the school. Following the table, I will talk about these two phases respectively with descriptive details.

Table 4.2 Time schedule of the 13-week fieldwork

Week	Classroom Observation (with field notes)	Classroom Observation (Audio Recording)	Individual Interview	Group Interview

1	Class 5D			
2	Class 4D			
3		Class 5D		
4		Class 4D		
5		Class 5D		
6		Class 4D		
7		Class 5D	Yu	
8		Class 4D	Lin	
9			Chen	
10			Wei	Lin+ Chen
11			Cai	Cai+ Wei+ Yu
12			Ms. Hong	
13			Ms. Xi	

4.5.1 Fieldwork stage 1

This stage has two aims: first, to understand the basic classroom teaching and learning phenomena in the Chinese classes, which includes the teachers' pedagogical approaches, students' language level/use, and the general interactions in these classes. Second, I wanted to identify key student participants and obtain consent from both students and their parents for the next stage. The past year's volunteer work in the school enabled me to acquire some knowledge of Chinese school in advance. I was familiar with the school environment and its history, knew some staff there, and was quite used to the school's weekly routine. Those experiences helped me to adapt to my working environment quickly. Thus, I could be more concentrated on data collection and quickly built up a trustful relationship with teachers and students in the researched classes, and these were important conditions for successful fieldwork.

Class-wide observation was the main research method employed in stage one. Field notes were the only method applied to record the observations. In each class, the observation lasted for two and a half hours. I focused on the construction and negotiation of language use and translanguaging moments as my particular key areas of focus while remaining reflexive and open to record any emerging themes related to children's bilingualism (García, 2009).

The two observation sessions took place in class 4D and class 5D. The teacher of class 4D, Ms. Hong (pseudonym), is a parent teacher who worked in the school for more than 10 years, while the teacher of class 5D is a University PhD student, Ms. Xi (pseudonym), who taught Chinese for the first time in this Chinese school. Both of them were identified by me as potential participants in the pre-school meeting. Ms. Hong was in the same grade teaching group with me, but we did not know each other before. After a short discussion in the teaching group meeting, I quickly learned about Ms. Hong's teaching background in this school and realized that she met my criteria for a teacher participant. Thus, I spoke to her about my research intention, and she showed interest when I sent the document of plain language statement and consent form to her. Likewise, I met Ms. Xi in the pre-school meeting. She was in the teaching group of intermediate and advanced learners. I learned about her identity as a University student through her talking in the meeting, and I decided to invite her to my project.

When I first arrived in both classes before the class started, I could feel the teachers' enthusiasm for my research fieldwork, and they positioned me as an academic researcher with professional knowledge. Due to my arrival in class being informed by teachers to students and their parents in advance, most of the students did not react with surprise when seeing me in the classes. However, I noticed there were some vigilant faces of students with a quick glance at me. Through a short discussion with teachers, I agreed to give the whole class a brief oral introduction about my project in the classes. This step was useful, as students asked me questions about my research, and through our communication, they were able to understand what I was going to do there, and vigilant faces were gradually gone thereafter. Then, I went back to my seat, sitting quietly in a corner at the back of the classroom, trying to minimize my disturbance during a normal class, and students' attention returned to the teacher who was in front of the classroom.

4.5.2 Fieldwork stage 2

In the second phase, the classroom observations were also the central technique and the key focus, but I conducted them differently from stage one. Firstly, field notes were applied with the designed observation schedule to specifically focus on the 'language use' of participants (see Appendix 1 for the general guidance for my classroom observation).

Besides, in this stage, audio recorders were used to record the utterances from either students or teachers in the classroom. The recording devices were placed on the class desks or attached to the clothes of key participants. The talk captured mainly came from key participants, their desk mates (usually one or two desk mates' utterances could be clearly recorded), the class teacher and some other non-identified students. Likewise, in the interview part, both key students and teacher participants took part in audio-recorded individual or group interviews. The copies of documents of key student participants, such as textbooks, exercise books, other reading materials, writing or drawing materials they brought into the classroom, have been collected during the classroom observation. These documents were collected to assist my interpretation of data analysis. In addition, the photographs have been taken in the two classrooms in such a way that the children would not be identified in the image (i.e., from behind). The photographic element was introduced as aide-memoirs for me of the classroom interactions and was also used as a prompt for student interviewees when they were recalling or reflecting during the interview.

In fieldwork stage two, three classroom observational sessions were designed for each class and were conducted once every two weeks. Through the warm-up of the first stage, students started to get used to my presence in their Saturday class. Sometimes, when I entered the class, they welcomed me with "老师，你来啦。" (Means: Teacher, you are here.), which made me feel like a familiar person to them. I was pleased with this relationship, as I always value my participants and wanted to create an easy and comfortable environment during the research. However, maintaining this harmony in data collection required not only using professional research knowledge but also other skills to handle various aspects of

the research (e.g., human relations skills, coordination capacity, and good communication between me and the participants and parents). For example, participants needed some time to get used to the recorder devices and the recording processes. Although I had confirmed with the key participants about the audio recording and obtained their approval before recording, they still felt uneasy about the recorder and were awkward at the start of the recorded session. In this case, I first showed my respect for their concern, explained and discussed with them openly, and restated the purpose of the audio recording, reassuring them that I would not criticize what they say and that their words would not be spread to other peers, teachers, and parents. 'So, be natural, not fake, right?' (Transcript from an observational note, said by one key student participant). 'Is it a social experiment?' (Transcript from observational notes, asked by another key student participant). Finally, after discussing with my student participants, I followed their suggestion to hide the recorder under a piece of A4 paper so that when other peers approached, the conversation would not be disturbed by seeing a recorder. This episode reminded me of the importance of showing full respect, careful listening, and open discussion when conducting research with children (Flewitt, 2005), and also deepened my understanding of constructing research with participants.

The classroom observation work was full of unpredictability. For example, one selected key student participant, Wei, was not able to provide me with audio data during the observation, as he remained silent most of the time, despite being excelling in his homework and Chinese language tests. However, the lack of audio data made it challenging to capture his oral language use. Although I could collect his language use from his written works, there seems to be very limited data. In the collected copies of documents of Wei, I did not find much useful information that I could use to analyze his bilingual language use. Therefore, after noticing this situation and discussing it with my supervisors, we agreed to keep Wei's data and simultaneously recruit another key student participant for the research. The observation work required me to be observant and sensitive to the momentary

actions of participants, to be prepared for unexpected moments during data collection, and to be able to swiftly adjust myself to meet any urgent constraints.

Another important data collection method, which was the focus of the second phase, was audio-recorded interviews, which included:

- Audio-recorded individual interviews with 5 key students
- Audio-recorded group interviews with 5 key students (two students as a group from class 4D; three students as a group from class 5D)
- Audio-recorded individual interviews with 2 teachers

Semi-structured interviews, as suggested by Blommaert and Dong (2010), contained a set of 'guide questions' (see Appendix 2, 3 and 4) that were applied to the design of semi-structured interviews, helping me stay focused on my research topic. Meanwhile, I also maintained some degree of flexibility during the interviews, as some unlisted entries in the 'guide questions' were relevant to phenomena observed in the classroom and contributed to my ongoing understanding of participants' motives, behavior, and performance. For example, in my semi-structured interviews, I prepared sets of prompt questions regarding students' class language use with my key student participants. In Cai, Yu and Lin's case, some of the designed prompt questions were developed into a set of sub-questions related to their reflections on attitudes toward learning in the Chinese school. This is because I have learned from the classroom observations that they often argued with teachers about Chinese class or Chinese learning and used the word 'boring' and 'difficult' during their argument. Therefore, this emerged phenomenon lightened my idea of involving factors such as students' attitude towards Chinese class to explore if this factor affects their language use and if it can be used as one of the lenses to interpret their classroom language use.

Interviewing the Chinese ethnic group in Scotland inevitably raises research issues around language use. My participants, the Chinese school teachers and students,

are bilingual Mandarin/English speakers. It is important to consider their language use habits and make them feel comfortable using languages during the interview. Therefore, before starting the interviews, I discussed with each participant their preferences for language use. As a result, most student participants chose the form of ‘mixed language’ which means freely using either Chinese or English in a conversation. Meanwhile, two teacher participants preferred to speak Chinese. In addition, as I am also a speaker of Chinese (Mandarin) and English, for my own language use, I also listened to the participants’ suggestions. A few student participants hoped for me to speak Chinese, but most of them preferred me to ‘mix Mandarin and English’, and all teacher participants preferred Chinese only.

The time and place for the semi-structured interviews varied based on the convenience of students and their parents. For instance, Yu, Cai, and Wei preferred to have interviews after class observations, while Chen and Lin preferred the time before class observations because they had other learning clubs to attend after the Chinese class. Likewise, Chen and Lin changed the interview venue from a classroom to the library's spacious hall and a cozy sofa in the corner of the corridor because they felt nervous about conducting interviews in the classroom environment. However, Yu, Cai and Wei liked to stay in the classroom for interviews, as they were familiar with that environment.

The interviews with teacher participants also depended on their convenience. Teachers were in the school every Saturday between 10 am to 1 pm, and most of the time, they had to use these hours for teaching work, even during break time. Although I have offered flexible time and places based on teachers' daily convenience to conduct interviews with them, they both preferred to talk with me at the school after finishing classwork. Besides, Ms. Hong had to take care of her younger son, who was also a student in the Chinese school, after her class teaching. Ms. Xi was busy catching up with her next art class. Due to these personal issues, I slightly adjusted the original plan, which intended to have a short conversation with the teacher every time after class observation, and instead focused on conducting one complete interview with them.

As mentioned above, the types of interviews included not only individual interviews but also group interviews. Group interviews were conducted only with key student participants in each class: Lin and Chen in class 4D, and Cai, Wei, and Yu in class 5D. Each group interview took place after the completion of the individual interviews.

The group interview method was utilized as an efficient resource and as a means of adding valuable insight to the interpretation of students' language use in the class (Frey and Fontana, 1991). Unlike students' individual interviews focusing on reactions, reflections, and interpretation of their own language use in the context of class, the group interview was designed with three notable purposes. First, the aim of the group interview was to gather students' comments on their creative or critical moments towards classroom language use, which were mostly captured from classroom observations. To accomplish this purpose, the group interview took advantage of group dynamics (e.g., interpersonal dynamics), providing the context for interviewees to stimulate new ideas and to identify language or symbols not previously acknowledged (Frey and Fontana, 1991). For instance, the interviewees discussed some questions by constructing viewpoints with peers (see excerpt 5.22 for an example) and to distinguish between shared and variable perspectives (Frey and Fontana, 1991).

Second, group interviews provided a supplement to the completed individual interviews in two aspects. One aspect was that the group interview technique could stimulate recall and opinion elaboration, giving both the interviewer and interviewees the opportunity to re-evaluate the previous statements that needed "amplification, qualification, amendment or contradiction" (Lofland and Lofland, 1984, cited in Frey and Fontana, 1991, p.179). From this perspective, group interview was a source of validation that brought me closer to reality by adding embellishing interpretive data. The other aspect was that, due to my data collection arrangement, students' individual interviews were conducted in the middle stage of classroom observations. This meant that some of the one-on-one interviews were completed before the entire classroom observation session. This

arrangement might result in insufficient observational data for some individual interviews. Therefore, if student participants produced any interesting or worth investigating topics based on their after-classroom observations, that information could not be applied in their individual interviews. However, the design of the group interview well filled in this gap by providing the chance to probe some questions that had been identified in their later classroom observations.

Third, the group interview used various creative data collection methods, such as picture and audio recording section, which created an easy and comfortable atmosphere during the interview. Moreover, when children sat together in the group interview, they became more relaxed and confident than when they were alone with me. As a result, they talked more and contributed rich data in this part.

4.6 Data analysis

4.6.1 Data analysis procedure

The primary function of data analysis is to summarize data and identify significant features and patterns that reveal the phenomena of concern. The data analysis should be closely associated with my research interests in language use and my research questions:

Main research question: How are languages used by Chinese bilingual students in the Chinese classes?

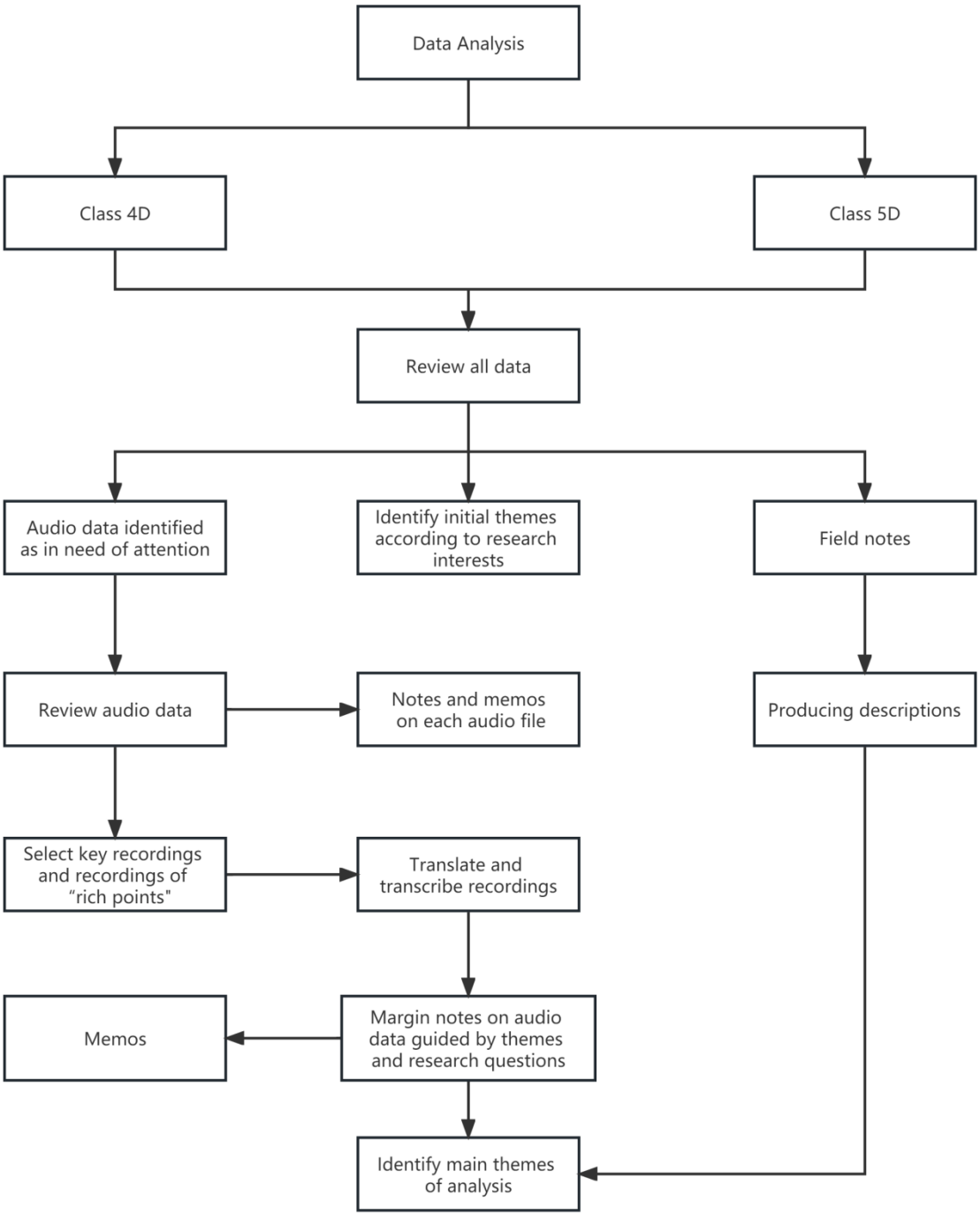
Two sub-research questions:

1. What translanguaging practices, if any, occur in the classes, and why do they occur?

2. How do the students engage in classroom translanguaging, and what do they achieve through these translanguaging practices?

I examined all types of recorded data – the audio recordings in the classroom, the interviews with both teachers and students, the field notes of observations in each session, and the artifacts brought by the student participants. By reviewing these data, I aimed to identify any significant themes. I believe that these initial themes are essential not only for understanding the language use in the classrooms and their significance to my participants but also as investigative clues that provide sufficient evidence to trace back to the collected data. Therefore, before working on the formal data analysis work, I employed an initial analysis map to guide the entire data analysis process (see Figure 4.2 below).

Figure 4.2 Initial fieldwork analysis



The approach to analyzing data is mainly guided by my research interests and research questions. After reviewing all the data, I planned to select a subset of 'key recordings' that I considered most relevant to pursuing the themes. At the same time, I aimed to select recordings that I believed could constitute the 'rich point' (Agar, 2008) in the data – these parts are of special or particularly important interest in my research. Short memos were used as an analytical assistant when reviewing these data. It is important to note that ongoing research might lead to

additional points, such as insights gained from continuously reviewing literature. As suggested by Bloome *et al.* (2004), a methodological discussion was connected with a theoretical discussion about the nature of the phenomenon being analyzed and described. I support this claim as it informs me of the dialectical relationship between theoretical principles and practical applications. During my data analysis procedure, several approaches and perspectives will be applied to handle the data. I will use the thematic analysis approach to identify, analyze, and report themes within the data (Braun and Clarke, 2006), the "theoretically informed analysis" to evaluate data through the lens of existing frameworks (Copland and Creese, 2015, p.45), and the moment analysis, which is an integral part of the analytical process to understand individuals trying to make sense of their world (Li, 2011a).

In this section, I prefer to present my design of data analysis based on the type of data collection methods, while also introducing some analysis approaches as the overarching analytical orientation for the analysis work. By structuring the analysis this way, I hope to create a clear image of the different types of data with their respective approaches to data analysis in my entire analysis design. This is because the data of my research comes from multiple resources, and each of them has its characteristics and rules for data disposal. It is crucial for me to draw a comprehensive picture including each type of data at the first stage. However, it should be noted that this division is not intended to deal with different types of data separately; instead, I will always look into how they interact with each other on different dimensions of what is happening and how they are related to and different from each other (Heller, 2011).

4.6.2 Classroom observation analysis

4.6.2.1 The procedure of classroom observation analysis

After an initial review of the data corpus, I started with analyzing the classroom observation data because these data were most directly related to my research questions, which aim to explore the nature of translanguaging practices in the

Chinese classroom. Meanwhile, the interview transcripts also served this analysis process, providing supplementary evidence to deepen my understanding of classroom translanguaging practices.

The primary aim of the classroom observation analysis was to generate an original list of discussion themes with some data abstracts. Due to the large number of classroom observation audio recordings and the strategy of focusing on 'key recordings' as introduced above, I did not transcribe all the classroom interactions. Instead, after carefully listening to the entire recordings, contrasting them with my field notes, and based on my research interests, such as Chinese classroom language use and the resources used by students in language practice, including translanguaging during Chinese learning, I preferred to focus on particular fragments in the audio-recordings that appeared to be highly relevant to my research interests. I then conducted detailed transcriptions and translations. An example is shown below to illustrate my transcription:

Picture 4.1 Transcript example

Date: 12/10/2019 Class:5D Audio recorded classroom observation session 2

Key segment 10_12_10_2019

T: 要求写上你们的感觉，是冷还是热，开心或者不开心[*You can write down your feelings, such as cold or hot, happy or unhappy*]?

Y：大家都非常不开心，要来中文学校 [*Everyone is unhappy and don't want to come to Chinese school*].

Y: Everyone complains.

S1: Miserable.

T: 你们得给我出个主意，我也想让你们高兴，你说怎么办？ [*You can give me an idea, I want to make you happy, what should i do*]?

C：灰色的 [*grey*].

Y: Everyone's minds are grey

S2{laugh}: How do you write grey in Chinese.

C {soliloquizing}: I speak Scottish stuff.

T: 可是你们怎么办？我是来教给你们的啊[*How about your Chinese study? I come to teach you Chinese*].

Ss: En??? Oh no.

Y: Everyone's feelings are grey today.

T: 那怎么办 [*How can we deal with this problem*]？

Y：The same like the sky.

{It paused for about half a minute}

T: 你看，老师真的是尽力了，你们不喜欢写雨天，我给你们换阴天，刚刚你们觉得这个视频没什么意思，我不再播放，但是有硬性要求的老师确实没有办法改变。我不哄你们了因为你们已经 10 岁 12 岁了，对吧？我要是哄你们啊，听话其实星期六好有意思的，那是 10 岁以前的孩子 (C: I'm ten)。12 岁，12 岁有些家庭快到当顶梁柱的年纪了，好吧？ 如果你们这点不能讲出这个道理的话。那不太合适了。老师把你们当大人一样看，把你们当我一样看，所以呢我跟你们平等得讲道理，我给你们讲道理 [*You see, I really did my best.*

T: 你说怎么办[*Can you give me an idea*]?

C/Y: I don't know.

T: 我被要求来这儿上课，你们被要求来这儿听课 [*I was asked to come here for teaching class and you were asked to come to the class*].

C: Let's just do nothing.

T: 那考试怎么办?下节课考试哦 [*What about the exam? We are going to have a test next week*].

C: I don't wanna do that!

S3: Play together.

T: Play together, 我倒是无所谓,你们怎么办啊？你们将来不要了？我中文水平没问题,我在国内考过级考了[*It does not influence me, but how about your future? I have passed Mandarin exam in China*].

C: I don't want learn Chinese.

You don't like to write rainy days. I changed to a topic you like. Just now you thought that video was boring. Ok, I won't play it anymore, but there is really no way for a teacher with hard requirements to change all the things you don't like. I'm not going to coax you because you are 10 and 12 years old, right? If I coax you guys and tell you that it's really interesting to be here on Saturday. I might said it for a child under 10 years old (C: I'm ten). At the age of 12, in China, some pupils started to look after the whole families, okay? That's not suitable if you are still not sensible on those things. I treat you like an adult and treat you like myself, so I treat you equally, and I try to be reasonable to you].

C {slightly saying} Every time you force us to write something different.

---------- The End ----------

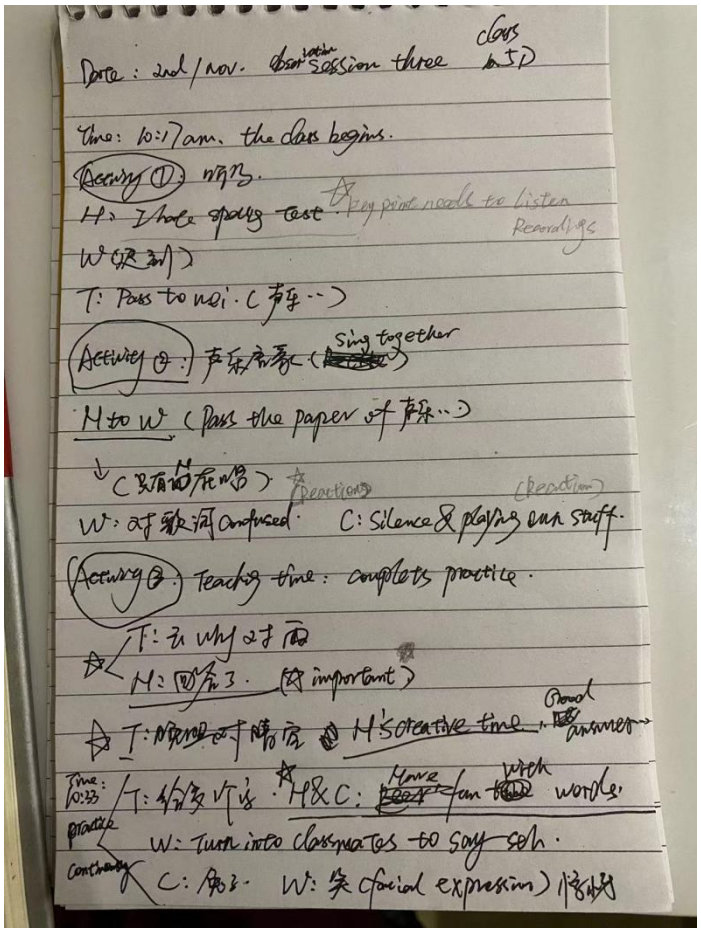
Meanwhile, for the translation work, as the researched classes are in bilingual settings and the participants are bilingual language users, the languages they used usually mixed English and Mandarin. This 'mixing' contains the use of what was said to be code-switching and translanguaging. The former entails going back and forth between one named language and the other (García, Aponte and Le, 2019), while the later emphasizes a unitary repertoire of meaning-making signs for bilinguals (García and Li, 2014). Mixing languages is a form of bilingual language use; sometimes speakers rely on switching codes to make meaning, while other times they translanguage to express their opinions and cultures. Bilinguals are capable of deciding how to use languages to make meaning for themselves. Moreover, the reasons behind the action of 'mixing' are what I want to explore in this study. Accordingly, in my transcripts, there are many recorded instances that need to be translated from Mandarin into English. In this case, I did not translate verbatim, but used a sense-for-sense translation approach to accurately express the meaning of the speakers. In this way, I begin the work of transcription, translation and first open coding of the datasets.

When dealing with data, it is necessary to consider the approaches or methods we can use to organize, categorize data, and establish relationships between data. For this reason, I turned to Foster (1996)'s suggestion about dealing with observational data, which outlined the kinds of approaches that I can use, such as "producing descriptions, evaluations and explanations" (p.62). Thus, I applied this guide to work with the observational data in the following ways.

Producing descriptions

Firstly, I started reading the data carefully to become thoroughly familiar with their content and features (Foster, 1996). This process involved reviewing the field notes relevant to each observational session, with a particular focus on the key student participants and their languaging practices during classroom observations. The original field notes were hand-written and stored in my notebook, as shown in the example below.

Picture 4.2 Original hand-written field notes



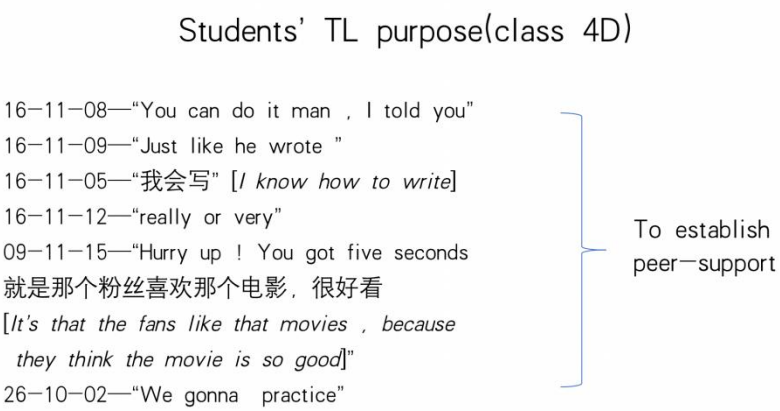
The field notes recorded the activities among participants in the classroom, with a main focus on the key student participants, their interactions, utterances, and behaviors. I also paid particular attention to the resources that students utilized in their languaging practices. The notes were written in Chinese and English with my marks aside, which were only understandable to me. While the notes remained "personal and messy" (Emerson *et al.*, 1995, p.ix), they were useful for my later construction of the class schedules (see Table 5.1 and 5.3 in the findings chapter). More importantly, the highlighted scenes and moments in the notes assisted me in specifically identifying and transcribing those 'key fragments' (see the example above in Picture 4.1) while listening to the recordings of classroom observations.

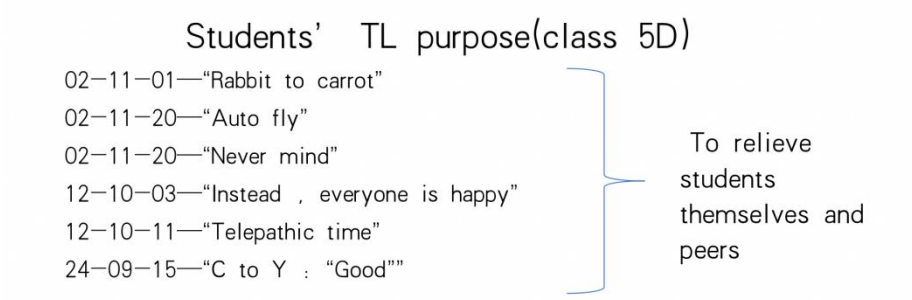
Although this stage aimed to investigate observational data, it was also important to consider other data such as interview recordings and documents relevant to the research themes. Foster (1996) suggested that it might be appropriate to keep both flexibility and foci in working with data as new ideas and avenues might

emerge, contributing to further analysis of existing data or collecting new data. However, it is crucial to avoid delving into too many avenues.

Secondly, I identified key themes and topics from the data. In this procedure, I used color coding to highlight interesting, unusual, or relevant signs, patterns, moments, and routines in my transcripts. I also marked the similarities and contrasts between different parts of the data and took notes of my own thoughts and ideas in the form of memos. However, the explicit marking and categorization would only be conducted in the data evaluation parts, which I will discuss later. Besides, organizing the data efficiently to ensure efficient storage and retrieval is important (Foster,1996). My data from classroom observation consists of audio recordings, transcripts and field notes. Initially, they were stored in chronological order. As the ongoing data analysis progressed, I organized some data by breaking it down into segments with codes related to their topics, themes, and categories. These segments were then manually stored under respective category headings. For example, the topic of translanguaging function was categorized by various themes with different purposes of students and teachers in translanguaging practices, as displayed in Picture 4.3 below, which illustrates this analyzing process.

Picture 4.3　An example of categorizing themes





Thirdly, conceptual categories should be developed so that the data could be classified. Foster (1996) suggested that conceptual categories are labels assigned to types of phenomena sharing certain characteristics. Ideas for category systems might come from several sources, such as the researcher's existing knowledge, or categories "spring from the data itself" (Foster, 1996, p.64). However, regardless of the resources drawn upon, it is crucial that the categories are relevant to the research questions being addressed (Foster, 1996).

Producing evaluations of data

This procedure does not differ greatly from producing data descriptions, as discussed earlier. However, this process emphasizes the comparison between "how a phenomenon ought, or is preferred, to be and how it is observed to be" (Foster, 1996, p.71) after the data have been collected.

To evaluate data, I first defined characteristics of categories and developed criteria for allocating data based on which data could be assigned to specific categories. In my case, the data comparison procedure was crucial in determining which translanguaging purposes could be categorized as meaning-making, negotiation, or any other relevant themes that emerged. I specified some categories related to translanguaging purposes based on my prior list and then evaluated the data I had collected to see to what extent my observed data aligned with or diverged from the categories I established before (see more details about this step in section 4.6.2.2) (Foster, 1996). After establishing these categories, it became possible to clarify the relationships among them. This process also tested

the categories of data by making distinctions between exclusive and inclusive categories based on my evaluated criteria (Foster, 1996). Once the data had been entered and stored, more complex analyses could be conducted next.

Producing explanations of data

The last form of observational data analysis involved producing explanations. According to Foster (1996), there are two ways to approach this procedure: first, to discover why instances of observed behavior have the characteristics they do. For example, in my case, I explained why students used different languages to respond to teachers and peers, and why they used a particular language in certain activities in the classroom. Second, observational data can be used to interpret other aspects. I used the data from the classroom pedagogical approaches to explain patterns of students' language preferences in the classroom (see the discussion in the findings chapter).

4.6.2.2 Coding procedure for classroom observational data

During the mentioned procedure of "producing descriptions, evaluations and explanations" (Foster, 1996, p.62) above, coding is the one of the foremost analytic tools that have been employed to assist the analysis work. I adopted Saldana (2013)'s coding manual, which suggests that the qualitative analytic process is cyclical rather than linear. Thus, I divided the coding process into several cycles and combined basic coding methods (attribute coding, descriptive coding, structural coding or holistic coding, etc.) (Saldana, 2013) as a generic approach to dealing with my data. Meanwhile, I remained open to changing them if they were not generating substantive discoveries for me (Saldana, 2013). Besides, along with the coding procedure, I marked the class routine of each observation session. This step allows me to quickly become familiar with each particular class teaching and learning, so I can better recall data when I want to compare, link, and establish certain relations among different data.

My approach to observing classroom translanguaging is theoretically based on what Canagarajah (2011a) suggested, that translanguaging as a practice occurs naturally amongst multilinguals. This is because the spontaneous and discursive bilingual practices are prevalently reflected in my observed classroom, "sometimes surreptitiously and other times out in the open" (Tian, 2022, p.331). There are many instances from my observed classes showing that bilinguals could spontaneously initiate translanguaging as well as strategically engage in translanguaging. Many of these strategic methods students utilize are full of their own creativity and criticality instead of being instructed. However, I also adhere to what Canagarajah (2011a) indicated that translanguaging has to be taught in school, as "there is still more for bilingual students to learn in translanguaging" (p.402). Indeed, in my data, I have noticed that some more proficient bilinguals helped other bilinguals acquire meanings/knowledge during classroom translanguaging practices. This means that some individuals are better at translanguaging than others. Moreover, it also indicates the need for educators to care for, employ, instruct and develop translanguaging as a pedagogy in language learning. Besides, it is worth mentioning that the examples captured in my study would mainly concentrate on translanguaging practices involving students. This decision was based on the research aim, which is to primarily investigate the language use of students.

Therefore, in order to capture and describe the classroom translanguaging practices, the coding procedure started by looking closely at every languaging occasion within multiple languages, semiotics, or any other elements that I deemed influenced the languaging activities in the classroom. By coding each of them, I asked myself the question, 'how does this languaging happen here?' At the initial stage, as the purpose was to draw an all-inclusive picture with codes of classroom languaging as many as possible, I did not aim to explore this question further. However, this self-questioning is a good analytical point that enlightens my idea about how to analyze the data of captured translanguaging practice. Therefore, I designed a table (see Table 4.3 below) with existing schemes to fill

in codes from observational data.

Table 4.3 The example of codes organization

Languages	Classroom event	People involved	Purpose (students/ teacher)	Description	Notes

The design of this scheme was refined from my classroom observation schedule. It aimed to record, organize and display codes of translanguage practices. More importantly, this scheme provided a guideline for me to further analyze how translanguaging practices occurred there. The item *languages* refers to the languages that students and teachers used in one language practice, usually English, Mandarin, or mixed language. The item c*lassroom event* is designed to include various class activities, such as dictation, textbook learning, and chatting. The term *event* has an analytical consideration; it has been used as an analytical unit situated in a context where students and teachers collaborate during languaging practices. Next, the item *People Involved* is about participants involved in one translanguaging practice. The fourth item, *Purpose (students/ teacher),* is generated to understand the reason why translanguaging practice occurred on that occasion. Working on translanguaging purpose broadened my thoughts, allowing me to explore translanguaging function to further analyze the nature of class translanguaging practice. This question fits into my underlying query about why translanguaging happened here; more discussion on this point is in the following section. *Description item* records the content of translanguaging practice. The last item, *Note,* is a kind of memo that reminds me if there are any significant or interesting things that are worthy of attention (such as some translanguaging practices with pedagogic intent that has the potential to be generated as one theme). Each item in the above table is not necessarily filled under the corresponding translanguaging practice from the classroom observation transcripts. As there is too much verbal translanguaging recorded during the two-hour class, and some of the practices could be classified into the same category,

at the beginning stage, this table provides me with an entry point to deal with the huge and complicated data.

Meanwhile, I started another round of translanguaging readings and particularly focused on the discussion of translanguaging's purposes. This cross-referring to the literature enabled me to link data analysis with the literature review, which was customized to suit the needs of this stage's coding work (Saldana, 2013).

To capture translanguaging purposes, I adopted the technique of both inductive and deductive approaches. Firstly, I employed the deductive approach, identifying themes from the data based on my theoretical and analytical interests. Thus, I extracted the categories of translanguaging purposes from relevant studies, then made them a reference list for me when conducting the coding procedure. This step is the theoretically informed analysis, with the aim of evaluating existing data through "an engagement with other theoretical frameworks used by a wider community of scholars" (Copland and Creese, 2015, p.45). For example, for student's translanguaging purposes, I employed a typology designed by García *et al*. (2011) for their study on translanguaging functions in a preschool classroom, specifically focusing on the five aspects among them. This study analyzed language practices of 37 preschoolers aged 5 and 6 in a two-way dual bilingual program where Spanish and English are taught as vehicular languages, and six functions were identified for these young multilingual learners in their translanguaging practices (see more details in Table 4.4 below).

Table 4.4. Translanguaging functions used by very young learners

Categories	Description
To mediate understandings	Students often use both languages because they want to ensure that they're understood. (e.g., using translation and interpretation)
To co-construct meaning	Translanguaging in the classroom enables language acquisition without having to wait for the teacher to assume her role.
To include or exclude	Translanguaging plays a role in order to include/exclude other people in a conversation by

	estimating those people's bilingual abilities or identities.
To show knowledge	Translanguaging provides opportunities for students to demonstrate their language proficiency.

Although my study mainly focuses on bilingual students, I still coded the teacher's translanguaging purpose, as the teacher was an indispensable part of the class interaction. Creese and Blackledge (2010) indicated that the languages of student and teacher were overlapping in the classroom languages, rather than enforcing the separation of languages for learning and teaching. Similarly, the observed translanguaging conversations in my researched class usually included both students and teachers; many times, students' translanguaging practice was a response to the teacher's activities. Therefore, I categorized students and teachers with their translanguaging purposes, respectively. It's important to keep in mind that the purpose of recording teacher's translanguaging purposes is to support the understanding of students' classroom translanguaging practices.

To list pre-codes of the translanguaging purposes of teacher, I employed, adapted, and integrated typologies designed by Ferguson (2003, 2009) and Fennema-Bloom (2010). The categories presented in Table 4.5 are the pre-code list for translanguaging purposes of teachers. It is worth mentioning that although these categories are derived from classroom-based code-switching functions and did not fully engage with the theory of translanguaging, they still offered me ways of investigating translanguaging function of this study. This is because, in some situations in the bilingual classroom, code-switching and translanguaging have some similar strategies of language use. Both of them can be used as scaffolding devices for pedagogic purposes or for other purposes from speakers. For example, in my two researched classes, through linguistic switches, teachers were able to construct communicative learning events by increasing students' comprehension, scaffolded students' content acquisition, checked comprehension, and explained difficult elements targeted for language acquisition. These practices are common in the bilingual classroom, whether they are regarded as using code-switching techniques or discussed as bilinguals using two or more languages to engage in

languaging practices. García (2009) suggested that how teachers utilize code-switching on a conversational level in their classrooms may be best described as translanguaging. This indicates that translanguaging includes some forms of code-switching, but it goes beyond merely relying on the switching of codes and focuses on the speakers' language repertoire.

Table 4.5 Translanguaging purposes of teachers

Category	Description	Relevant studies
Instructional for content acquisition/ knowledge construction	Content instruction is moving along between the two codes. Basically, to help students understand the subject matter of their lessons.	Fennema-Bloom (2010); Ferguson (2003, 2009)
Reformulation	Content is reformulated or translated with no new information and no new instruction.	Fennema-Bloom (2010)
Instructional for language acquisition	Content instruction is usually disrupted or postponed in order to draw attention to linguistic development.	Fennema-Bloom (2010)
Classroom management	E.g., To motivate, discipline and praise pupils, to assign tasks, and to signal a shift of topic or activity.	Fennema-Bloom (2010); Ferguson (2003, 2009)
Habitual	Switching is a product of the teachers' individual discourse patterns as bilingual speakers.	Fennema-Bloom (2010)
Interpersonal relations	Classroom is a social and affective environment to humanize the affective climate and to negotiate different identities.	Ferguson (2003, 2009)

The translanguaging purposes presented in Tables 4.4 and 4.5 are the predetermined categories that guided me to identify similar purposes of students and teachers to translanguage in my classroom observation. However, at the same time, I realized that there were some translanguaging practices that could not be applied to the prepared categories to explain either the teachers' or students' purposes. Thus, I used the inductive approach, which involves identifying themes from my data without trying to fit them into predetermined categories, to start another round of coding. I particularly focused on the translanguaging practices which were left over from the last coding process. Meanwhile, I tried to delineate

these newly emerged categories with distinct properties of translanguaging purpose not presented in the existing typologies. Then, I listed these additional categories with short examples in Table 4.6 and Table 4.7 below.

Table 4.6 Additional translanguaging purposes of students

Category	Definition	Example
Request information	Students use translanguaging to ask questions in the classroom.	S: Teacher, 是谁的 [*whose*] book？
Class response	Students use translanguaging to respond teacher's teaching activities or peers' questions.	T: 你几年级啊 [*What grade are you*]? S: I'm six.
Personal or affective meanings	Covering students' personal experiences, feelings.	T: 我家那边现在是 [*My living area is*] two, two degrees. S1: What? S2: Oh my god!
Negotiate or challenge teacher's authority	Students use translanguaging to negotiate with teachers, usually for school tasks, classroom manner.	T: {the teacher was correcting students' sitting posture}:坐好 [*Sit properly and behave yourself*]. S: But there is no fun.
Complain	Students use translanguaging to express they are unsatisfied with Chinese class.	S: 中文课非常 [*Chinese class is very*] boring.
Soliloquy	Students use translanguaging to talk to himself/herself.	S: 我的笔呢 [*Where is my pen*]? Oh! Here!
Facilitation	Students use translanguaging to assist teacher's classroom management.	When the teacher announced that dictation was finished, some students still ignored teacher's instruction and continued to write. At this moment, a student spoke loudly: "Time out! Time out!"
Interpersonal relations	Students use translanguaging's	(1) During the dictation, Jeff, Chen's desk mate, was very upset

	social function to send consideration to others, such as encouragement or saving teacher's face.	because he could only write a few words, Chen talked to him: 'You can do it, man, remember? I told you that.' (2) Students acknowledged that their English level was higher than that of their Chinese teacher. Sometimes, they were keenly aware of the teacher's English insufficiency and helped them to interpret some words in English for peers.
To have fun with words (Li, 2011a).	Students' abilities of highly creative use of the languages to have fun with words (Li, 2011a).	S1: 故宫？故宫是什么 [*Gu gong？What is Gu gong*] Chen: Forbidden city. Chen: Forgiven city. Ss: {laugh} *2 *2 This excerpt described student could not only use translanguaging to mediate understandings for peers but also freely use his linguistic resources to change "forbidden" into a new word 'forgiven'. (See more discussion about this excerpt in the finding chapter section 5.3.3.)
Habitual	Switching is a product of students' individual discourse patterns as bilingual speakers.	The switch tends to be an idiosyncratic habit of the students, such as the word 'okay' or 'yeah' 'oh' (Fennema-Bloom, 2010).

Table 4.7 Additional translanguaging purpose of teacher

Category	Definition	Example
To emphasize meaning	Usually used to emphasize important indications (e.g., security, school holiday).	T: No running 下课时 [at *the break time*], understand?

Two rounds coding of the translanguaging purposes of students and teachers have deepened my understanding of why people preferred to translanguage on certain occasions. These codes helped me further analyze the contextualized moments at which translanguaging practices occurred.

4.6.3 Analysis of the 'context' of translanguaging practices

Next, my data analysis has entered into another stage of analyzing the context of translanguaging practice. Investigating the context of translanguaging under different class activities (i.e., literacy learning, chatting conversation, classroom negotiation) is one of my foremost analysis tasks. I believed that translanguaging does not happen in a vacuum or out of context. Therefore, the context where translanguaging occurs is vital for analyzing how translanguaging practices happen. In addition, the context represents a form of language ecology that influences translanguaging practices. In other words, the *context* in the languaging practice contains elements that influence individual's language use, which is similar to the concept of language ecology, which discussed the relationship between languages and the environment where it happened.

In my research, the term *context* represents two layers of meanings. Briefly speaking, first, it refers to the physical setting of the research context, which constructs a general image of the context in my research, such as the researched school and class. These contexts defined the physical boundary of this research. Second, contextualization is a way of understanding classroom translanguaging. The data analysis in my research mainly revolves around understanding the context of translanguaging practices, focusing on how they occurred in the Chinese class.

Context can be a term that is all-embracing as well as so abstract. As Bloome *et al*. (2008) stated:

> "Context is not a set of independent variables that influence an event, but a set of socially constructed relationships among one event and other events, among people in one place and people in other places, between one social institution and another social institution, between one time and other times, and so on" (p.31).

This statement emphasizes the function of link, resound, and relations, which are crucial to understanding translanguaging practice. Likewise, Lewis, Jones and Baker (2012a) have suggested that the concept of translanguaging needs to be situated, engaged, and sociolinguistic. They stated that "understanding of translanguaging requires it to have context and not just content, cognitive and cerebral activity and not just about linguistic code, and operate continuously and not just in classrooms" (p.667). Therefore, considering how to define, explore, and describe context is an essential step for analyzing translanguaging practices. This investigative procedure enabled me to review and divide the data with translanguaging elements from a dialectic perspective, encompassing both a macroscopic (out of class environment) and a microscopic (within the class environment) perspective to consider how translanguaging practices were emerging and engaged with.

My approach to seeking context starts by categorizing classroom events. As mentioned in the above section, I listed the class schedule in the initial data review stage. Then, assisted by my field notes, I coded classroom events that I regarded as prominent. The assisting resources include: (1) recording notes, which referred to this phase's analytical notes that I produced while revisiting the observation recordings; and (2) field notes, which were written during the classroom observations. These two types of notes worked together and were meant to mark class activities in the classroom observation that I deemed to contain translanguaging practices or warrant further analysis. I called these classroom events *translanguaging events*, and I adopted this term as an umbrella term, including the translanguaging practices and with the analytical consideration of context.

In addition, to further explore the context of classroom translanguaging, the concept of language ecology was introduced, as the context represents the form of language ecology that acts on translanguaging practice. Therefore, by analyzing the relations across key students, peers, teachers and language forms (see Figures 5.1 and 5.2 in the findings chapter) and through the analysis of influential factors

on individual's language use, my scheme to analyze the context of classroom translanguaging practice was established.

4.6.4 Interview data analysis

The interview data of this research included: (1) key students' individual interviews, (2) key students' group interviews, and (3) teachers' individual interviews. The data was mainly used to support the interpretation of my second research question – how students engaged in translanguaging practices. Keeping this purpose in mind, when working with my interview data, I reminded myself 'what is said?' and 'how it is said?' Then, I applied thematic analysis to identify the opinions and commentaries from the interviewees around the research themes. The themes in the interviews were highly relevant to the themes derived from the data analysis of classroom observations, from the preconceived themes, such as my research interests in exploring how students creatively and critically use language and exploring how they navigate through languaging practices using different resources, and from newly emerged themes in the interview discourses. For example, the classroom observation analysis revealed the theme of 'resources for translanguaging' as significant to my participants and research context. Therefore, when I approached the interview data analysis, I particularly focused on how students' narratives related to this theme and connect many classroom translanguaging practices to this theme. Almost all my key participants mentioned how they used various resources during their translanguaging practices for different purposes, even though they did not explicitly use the direct word 'resources' in their narratives.

Further analysis under the categories of themes required me to employ moment analysis as an integral analytical approach to understand how students themselves interpreted their ways, experiences, and ideas in the spur-of-the-moment actions during translanguaging. The aim of this analysis step is to reveal the details of the relations between language users, languages, and any other factors that could impact students' language use. According to Li (2011a), moment analysis is used

to analyze critical and creative moments of individuals' actions in translanguaging space, with a focus on spontaneous, impromptu, and momentary actions and performances of the individual. Li (2011a) further argued that moment analysis focuses on metalanguaging, in which people articulate and position themselves. In this sense, when dealing with metalanguaging data, I combined notable themes and links from students' narratives with classroom observations and my interpretations of students' naturally occurring behaviors and actions in the translanguaging events. In doing so, the data was presented as a double hermeneutic, as Smith and Osborn stated (2008, p.53), "the participants are trying to make sense of their world; the researcher is trying to make sense of the participants trying to make sense of their world".

4.6.5 Trustworthiness

A study's trustworthiness represents the degree of confidence in its data, interpretation, and methods used to ensure the quality of the research (Pilot and Beck, 2014). Accordingly, it is essential to establish a rigorous procedure for a study to ensure it is deemed worthy of consideration by readers (Amankwaa, 2016). Thus, I draw inspirations from the 'basic trustworthiness criteria' outlined by Lincoln and Guba (1985) and discuss how I ensure the trustworthiness of my data analysis from the credibility, dependability, and confirmability perspectives.

Credibility

Several strategies were used to establish the procedures for credibility of this study. The first one was using the lens of the researcher. Creswell and Miller (2000) suggested that the lens of the researcher determines the credibility of a study. In this study, I conducted my fieldwork in the Chinese school for one semester. In order to seek a holistic understanding of my research case, multiple research methods were employed. Besides, prior to the formal data collection, the volunteer teaching experience enabled me to become familiar with the basic knowledge of research site, e.g., culture, organization, and school history. The second one was using a lens of participants. Creswell and Miller (2000, p.125)

suggested that “the qualitative paradigm assumes that reality is socially constructed, and it is what participants perceive it to be”. Therefore, I iteratively checked my data to ensure that the realities of my participants were accurately represented.

Dependability

Since my research involved child participants and I wanted to protect their identity from being exposed to third parties, I decided not to apply the audit trail, which involves individuals external to the project (Creswell and Miller, 2000). Instead, I used other methods to ensure the trustworthiness of my analysis, such as documenting my entire data collection process, carefully and clearly recording my data analysis procedures and inviting my research participants to verify the interview transcripts to make sure I fully and truly presented their words.

Confirmability

Confirmability refers to the neutrality and consistency of the findings (Connelly, 2016). To prevent biases stemming from only one person's perspective in the analysis process, various methods were employed (Connelly, 2016). For instance, I utilized multiple theoretical perspectives to examine and interpret data, including the translanguaging perspective from Li’s (2018) translanguaging as a practical theory, as well as the language ecological conceptual framework from both Haugen (1972) and Garner (2004). Additionally, I maintained regular meetings with my supervisors throughout the research process. They engaged in discussions with me and provided valuable input regarding my data analysis reports.

4.7 Ethical considerations

Ethical issues have been carefully considered throughout my research project. Before starting the fieldwork, I obtained ethical approval from the College of Social Sciences Ethics Committee at the University of Glasgow. Informed consent

was obtained from the teachers, children's parents, and children themselves, using consent forms and a plain language statement that explained the research project and their voluntary participation. Additionally, I obtained written permission from the vice-principal of the Chinese school and the relevant director of students.

To ensure adherence to ethical practices, I took several measures, especially considering the vulnerability of the children aged 8-10 years old who were the focus of my research (Flewitt, 2005). I obtained PVG clearance, avoided inappropriate topics, and communicated effectively with the school, teachers, parents, and children to ensure that my fieldwork was understood and consented by each party. I ensured that both teacher and students' participation voluntarily, without any pressure, and maintained confidentiality and anonymity throughout the research process (Bryman, 2012). The participants' names were kept anonymous during the data transfer, storage, and writing-up stages (Cohen, Manion and Morrison, 2013). They were assured that their involvement would be treated confidentially. I also assured that all the research activities were conducted in the presence of teachers and/or parents.

It is worth mentioning that during the research process, my dual role as both a voluntary teaching assistant in the Chinese school and a researcher at the research site led me to reflect on my positionality as a researcher entering the school. I do acknowledge that there are benefits and challenges to maintaining both identities.

Firstly, being a member of the staff at the research site enhanced my understanding of the research itself and contributed to my ongoing research design. For example, due to my weekly work at the school, I could access the school place outside of the research time, thus I had many opportunities to learn from the school, including its basic information, events, agenda, and the school environment. This opportunity allowed me to become familiar with the researched school, and I was able to learn from the research site as much as possible.

Meanwhile, as a teaching assistant in the Chinese language class, the classroom practices made me reflect on my knowledge towards Chinese language teaching, learning and classroom interaction. Those experiences cross-referenced with my daily work as a researcher, which in turn informed my research work, especially in terms of bridging the understanding of the discrepancy between my own teaching practices and what was discussed in the literature.

Secondly, when conducting the fieldwork, there were many conveniences that I gained as a staff member in the school. For instance, as I discussed earlier in this chapter, I was able to get the class list earlier, which helped me save time in preparing for classes and selecting teachers. As a committed staff member working in this school, I successfully negotiated with school administrators and obtained their support in many aspects for conducting this fieldwork. For example, they agreed to prepare backup classrooms for my interviews in case the originally planned classrooms were unavailable for any temporary reasons.

Thirdly, my dual role facilitated the establishment of rapport between me and students and parents, which was significant in obtaining their consent to take part in this research and maintaining sincere and open communication with them later on. For students, they might regard me as a PhD student from university who was going to conduct ‘research’ with them, an outsider who came to their school and classes to observe them with curiosity and questions. They may have had some doubts about the research, about me, and may have been a little uncomfortable or nervous about participating in research. However, due to my other role as a teaching assistant in this school, I was not a completely unfamiliar face to them. They might know me as ‘Ms. Yang’ from somewhere, and they might have met me in the school corridor or canteen. Therefore, throughout my fieldwork, they always treated me with welcoming faces and trusted me as their ‘teacher’. For parents, when they found out that I was also a teaching assistant here, some of them gradually put away their watchful eyes toward me and showed their recognition that I was a teacher in this school, not a stranger. Meanwhile, my identity as a researcher has also been respected by parents. They regarded me as

a scholar in the research field, were keen to discuss their children's bilingual learning with me, and hoped that I could give them some advice as a professional in this field. Therefore, throughout the research process, the dual identities helped me to build up communication, trust, openness and reciprocal relationships with the participants and parents.

However, there were also challenges in maintaining these two identities. The foremost one was how to ensure that students were sincere in discussing questions with me, such as their experiences of learning in the Chinese school and their own language learning strategies. Because these questions might reveal some personal opinions of students towards the Chinese school, Chinese teachers and classroom learning, and these views also would reflect students' daily language learning. In this case, they might have been afraid that I was a staff in this school, and that I would criticize their language learning or spread their words to others. To address this concern, I tried to decrease the possible influence of my staff identity on the interviews. So I chose to have open discussions with students, proactively dispelled any doubts they may have, and emphasized my research protocol of confidentiality and anonymity. These methods were successful, as student participants were reassured by my promise and expressed their thoughts boldly and freely during our conversations. For me, those experiences taught me the significance of maintaining sincere communication during the research work, and I have benefited a lot from them.

Ethical issues regarding research in ethnic minority group were given special attention. As my research participants were from the Chinese ethnic group, which is a socially identifiable group with special culture in Scotland, they might have different language preferences towards English and Chinese. Therefore, I paid more attention to the language used when communicating with them and provided them with the flexibility to choose any language that they thought was comfortable during the whole conversation. In the culture aspect, I showed respect for their self-identity, their opinions towards both Scottish and Chinese culture, and kept open discussions with them about different learning experiences

in Chinese school and mainstream school.

However, during the fieldwork, I encountered a few ethical dilemmas when working with children:

(1) According to my interview protocol, students were invited to share their interpretations of some language examples which they had done in the classroom. However, it was challenging for them to recall these scenes or moments during our dialogue. To address this, I employed a different approach of stimulating their recall by playing audio segments of their speech from classroom observation. This approach proved to be effective as it not only entertained the students by hearing themselves in the recordings, which helped ease the interview atmosphere, but also stimulated their memories. Additionally, conducting group interviews with students sitting together encouraged peer interaction, which further facilitated recollection, collaboration, and rich discussions.

(2) When interviewing children, it is essential to be mindful of the language and words used. Avoiding overly formal or written sentences is crucial, and instead, using easily understandable expressions appropriate for their age is important for better comprehension. To achieve this, I incorporated creative methods during the interviews, such as showing audio recording segments and using pictures for them to pick answers. Additionally, I adapted my questioning style if I noticed signs that the children were having difficulty understanding.

Given that children are a vulnerable group of interviewees, I approached working with them with great consideration. While I suggested in my ethical protocol that teachers, teaching assistants, or parents could remain close during interviews, few of them opted to do so. As a result, most interviews were conducted individually with the students. To ensure the comfort and relaxation of the students during the interviews, I drew from my experiences as a voluntary teaching assistant in the research setting, which helped me become aware of the health and wellbeing protocols in the school setting. This allowed me to perceive

the students' reactions during the interview and make necessary adjustments, such as changing the interview environment from a classroom to a more spacious corridor or returning to a familiar classroom setting.

4.8 Chapter summary

This chapter has described and discussed in detail the process of conducting fieldwork for this research. The study involved a qualitative inquiry carried out at two Chinese classes in a Chinese school in Scotland. The research design and various methods used for data collection aimed to achieve a comprehensive and in-depth understanding of students' language use in the Chinese class, with a particular focus on exploring their creative and critical language use through the lens of translanguaging practice. Guided by the philosophical stance of the research and employing a range of qualitative research methods, this chapter carefully examined the rationale behind the research design, explained the entire fieldwork procedures, systematically illustrated the analytical process, discussed ethical implications of being a member of staff in the research site, and reflected on the sensitivity of working with a vulnerable group. Together, these efforts ensured a rigorous and attentive approach to describing, understanding, and explaining students' language use in the Chinese classroom and how they engaged in translanguaging practices.

CHAPTER FIVE: FINDINGS

5.1 Introduction

My approach to capturing translanguaging is closely related to four fundamental points: (1) the language practices of bilinguals are examples of translanguaging (García, 2009); (2) translanguaging as a practice occurs naturally among multilinguals (Canagarajah, 2011a); (3) I value the context in which translanguaging occurs. I have established these three points in the literature review and methodology chapter in the corresponding sections 2.2.2 and 4.6.2, respectively. However, along with my research, the language ecological approach has provided me with another perspective to understand how translanguaging can occur in the classroom. This approach explores the relationship of languages to each other and to the society where these languages exist (Cress and Marin, 2003). In other words, translanguaging occurs as an inevitable relation between languages and among multilinguals who use it, within the environment where it happens. Therefore, I would claim that translanguaging can be a natural process in bilingual classrooms. Ultimately, the four points that emerge from the literature review and empirical work have come together to guide my findings.

The findings chapter will present classroom translanguaging by using a consistent term - *translanguaging practice* - to refer to any multi/bilingual language practices produced by students and/or teachers to communicate with each other in the Chinese classes. This discussion has been established in the literature review section.

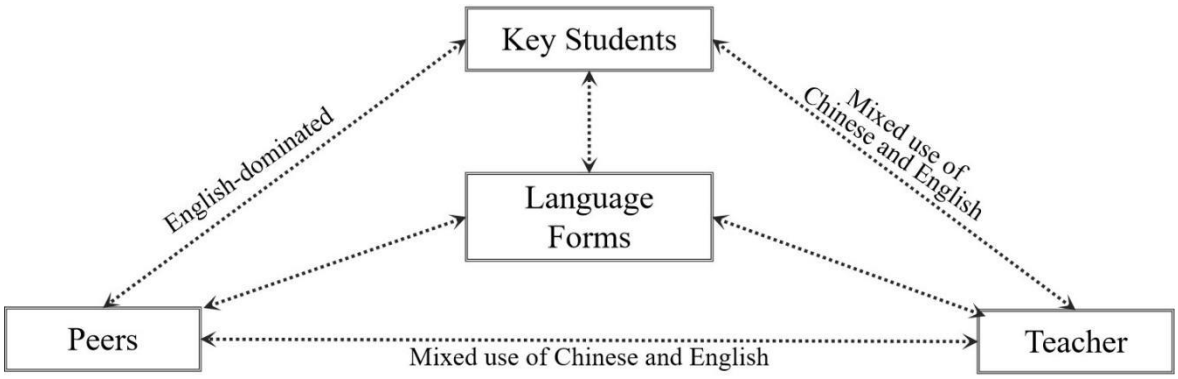
In this chapter, I will first provide an overview of classroom use by presenting the significant relations among key students, teachers, peers, and language forms. By establishing their language relations, it helps to understand the occurrence of translanguaging and further investigate the factors that influence students' language use within the class environment and the wider environment. Next, I will demonstrate the process of capturing translanguaging practice in two classes: 4D

and 5D. Then, I will present the instances of classroom translanguaging in tables, and finally, I will analyze prominent translanguaging practice examples within different classroom events to identify what translanguaging occurred in the Chinese classes and how students engaged in these practices. The general writing structure of this chapter aims to showcase the translanguaging practice in classes 4D and 5D separately. This separation is done because these two classes have distinctive features in their languaging practices, allowing readers to gain a clearer understanding of each class's translanguaging practice.

5.2 Language use in the Chinese classes

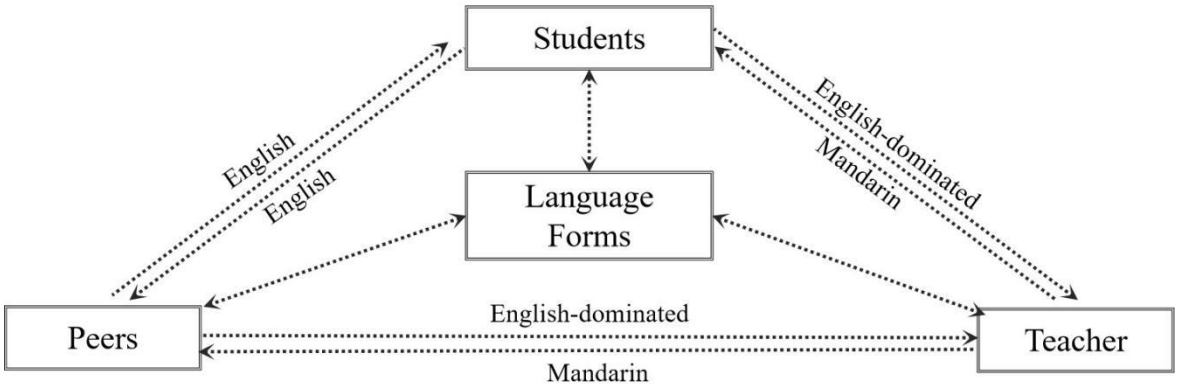
Initially, the classroom language ecology started as a metaphor in my mind, which I employ to visualize how language is used across different agents: the teacher, key students, peers, and languages forms in the Chinese classes. In this research, 'language forms' refer to various forms of language, such as textbooks, reading materials, artifacts, individuals' psychological activities, visual elements shown on computers, and so on. Some of these languages may pertain to abiotic objects or remain invisible, but they all have the ability to interact with language users in the classroom. Figures 5.1 and 5.2 below provide a general overview of language use among key students, teachers, peers, and languages forms in classes 4D and 5D, respectively. It should be noted, particularly in these two diagrams, that I did not label any specific named languages people used to interact with 'language forms'. Their relations cannot be solely explained by named languages. Instead, I will elaborate on their interaction in a manner that goes beyond using named languages to establish connections in the following selected translanguaging examples.

Figure 5.1 A general overview of language use across key students, teacher, peers and language forms in class 4D



It can be seen from Figure 5.1 that, in class 4D, English remains the primary language for students to communicate with each other. However, in other instances, it is common for students and teachers to mix English and Chinese within a sentence or conversation. Therefore, both the teacher and students engage in flexible bilingual use, freely employing their full linguistic repertoire to convey meaning to each other.

Figure 5.2 A general overview of language use across key students, teacher, peers and language forms in class 5D



In Figure 5.2, due to the teacher's prominent pedagogy, which emphasizes ‘Chinese only’, the language used from the teacher to students is exclusively Chinese (a detailed explanation of the teacher's pedagogy will be provided in the discussion chapter). Simultaneously, the students communicate with peers using English only, and when interacting with the teacher, the students predominantly use English in their discourse, occasionally incorporating a few Mandarin nouns or

noun phrases for the purpose of learning Mandarin, developing Chinese literacy, or conveying meaning.

The above two diagrams primarily depict an overview of language use among individuals in these two Chinese classes. At the primary stage, they provided a macro perspective on the relationships between languages and speakers, allowing me to develop a general understanding of language use in these two bilingual classes. However, as my research delved further into the flow of languages within each dialogue, I found that by simply displaying different people's use of English or/and Chinese is insufficient to explain all the complex, dynamic, fluid and specific relationships among speakers, languages and the environment. Therefore, the term 'language ecology' no longer served solely as a visual metaphor for displaying named languages in the bilingual classes; instead, it became a way of thinking and acting (Lier, 2004), aiming at exploring and understanding the nuanced aspects of classroom language use.

Therefore, I propose that within the context of the Chinese school classroom, an ecology and ideology of language use exist, and these can be investigated through the contextualized interactions of student participants with (1) teachers, (2) peers, (3) themselves, and (4) language forms. These interactions form the fundamental language relations within the classroom environment, and it is within these interactions that the activity of 'languaging' occurs. Thus, my approach to capturing translanguaging elements begins here, by examining the interactions within the class and considering the broader factors that influence individuals' language use.

5.3 Capturing translanguaging in class 4D

Class 4D consisted of 19 students aged 8 to 10 years old, one Chinese teacher responsible for class teaching, and one teaching assistant in charge of reviewing students' homework. The teacher of class 4D—Ms. Hong (pseudonym)—is a parent-teacher who has been working at the school for more than 10 years. On weekdays,

Ms. Hong also works at a local nursery school. She initially became a volunteer teacher at the Chinese school because her sons had studied there, and she enjoys this volunteer job as she takes pride in witnessing the students' growth in the school.

Table 5.1 below shows the classroom schedules which were observed in class 4D. The criteria used to create this table are based on classroom interactions. To accomplish this, I carefully reviewed the audio-recorded classroom observations transcript and classified the interactions into different schedule categories according to the class timeline. Therefore, this table provides a comprehensive overview of the teaching and learning activities in class 4D. By examining these schedules, I can gain insights into how this class operated during its half-day sessions, which will help me understand more about how translanguaging occurs in this setting. Additionally, the classroom schedules are vital in categorizing significant classroom activities with translanguaging elements for the next stage of my analysis.

Table 5.1 The schedule of class 4D (based on audio-recorded classroom observations)

The first audio-recorded observation	The second audio-recorded observation	The third audio-recorded observation
Chit-chat sharing funny things from last week	Chit-chat: Holiday experiences and Favorite seasons	Chit-chat: Weather of today
Review last class	Review last class	To prepare dictation
To prepare dictation	To prepare dictation	Dictation
Dictation	Dictation	Learning personification technique in the Chinese writing
Students show the drawing work which they did at home	Learn new text	Learning the tone in the Chinese sentence
Break time	Break time	Classroom practice: using your imagination to create a story and playing it in Chinese

Students show the drawing work continuously	The teacher gives general feedback to students' weekly diary	Break time
Learn new text	Read and comment on each student's weekly diary	Inviting students to show and play the story that created by themselves
Read text together	Re-emphasize school rules	The teacher gives general feedback on students' Chinese writing
The teacher explained students' questions	Students helped the teacher to assign practice book	Learning the new text
Watching Chinese National Day ceremony video	Collocation practice	Assign homework
	Assign homework part 1	Announce dictation score
	Students share some funny Chinese brain twister	
	Chatting about food	
	Assign homework part 2	

Despite the stereotype of Chinese classes being 'teacher-oriented classroom learning', the class arrangement in class 4D was filled with interactive activities. These included chit-chat between the teacher and students, peer cooperation in group tasks, and students being invited to showcase their drawings on stage. Most of the time, the teacher played the role of assisting students in their learning experience, providing comments and feedback on their work, and encouraging their participation in class activities rather than exerting pressure or strict requirements. As a result, the overall atmosphere in class 4D was relatively pleasant.

After reviewing the classroom schedules in the table above, my next step is to identify classroom interactions with translanguaging elements under each schedule and classify those elements into corresponding events. Table 5.2 below presents the comprehensive classification of translanguaging practices in class 4D. It aims to present translanguaging practices under different classroom activities

with different purposes. According to Daniel and Pacheco (2016), students' direct experiences with language reflect their complex relationships with language use. Therefore, the data in Table 5.2 mainly comes from classroom observations, focusing on how students engaged in language practices. Besides, I have also referenced interview data from both students and the teacher to gain insights into how the participants themselves perceived and interpreted these translanguaging practices.

Table 5.2 Occasions of translanguaging by students and the teacher in class 4D

Classroom ev ents	Literacy events	Casual conversations	Other remarkable events
Translanguag ing practices	(1) literacy practices revolve around texts, including Chinese characters learning, reading comprehension practices, reciting, dictation, story role play. (2) Classroom negotiation/discussion on classroom tasks, including reciting, assignments, and dictation. (3) Students helped and encouraged each other.	Classroom socializing, including chit-chat with peers and teachers.	(1) The teacher emphasized school rules and classroom tasks in both languages. (2) To learn about making longevity noodles for birthdays. (3) Discussion about ancient Chinese emperor. (4) Making fun with words.
Translanguag ing purposes	(1) To request, affirm/reject, respond, clarify, declarative. (2) To make meanings, and to mediate understandings. (3) To promote the transfer of knowledge via multilingual and multimodal resources.	(1) To express personal or affective meanings. (2) To make sense to each other. (3) To practice oral communication with languages.	(1) To clarify and emphasize meanings. (2) To promote the link of knowledge across cultures. (3) For joyfulness.

	(4) To assist teacher's classroom management. (5) To include and exclude people. (6) To establish peer-support. (7) To talk to himself/herself. (8) To have fun with words (see Li, 2011a). (9) As a habitual language. (10) To relieve the tension in the classroom.		

In this table, the term *event* refers to the occurrences within a specific situation (see more about this notion in the methodology chapter). The event categories are established based on both time-stamped classroom activities and distinct occasions when translanguaging practices took place. Therefore, the classroom events are divided into three categories: (1) literacy events, which focus on curriculum-related tasks and involve numerous translanguaging practices aimed at learning Chinese literacy; (2) casual conversations, which are noticeable events in class 4D where students and teachers flexibly utilize both English and Chinese during discussions; (3) other remarkable events, which aim to capture any other significant language practices with translanguaging elements. It is worth mentioning that, unlike class 5D where students regularly engage in learning Chinese culture within a specific period, cultural acquisition in class 4D is integrated throughout the entire teaching and learning process and can occur during any event in the class. Beneath the 'classroom events' row, the 'translanguaging practices' row shows the summary of the translanguaging practices under each event, and the last row, 'translanguaging purposes', displays the aims of employing translanguaging within the corresponding translanguaging practices column.

5.4 Translanguaging practice examples in class 4D

Translanguaging in class 4D involved some pieces of inter-sentential, intra-sentential and extra-sentential switching between English and Chinese. These kinds of switching often occur spontaneously among bilingual speakers in communications with others who share their languages. They demonstrated a sophisticated linguistic skill of bilinguals, which is deemed as the characteristic of fluent bilinguals (Milroy and Muysken, 1995). In this study, I do not aim to investigate how students manipulate language switching in the classroom, instead what interests me the most is that it unfolded how translanguaging beyond linguistic implications has intertwined with students' experiences in the Chinese class. This includes language use for socializing, peer support to enhance Chinese learning, and students finding enjoyment in Chinese character learning. I will explain these examples in the following sections. Additionally, as my research focuses on investigating translanguaging within the specific educational context of Chinese schools, I aim to gain new insights about translanguaging within this unique context. Therefore, it is meaningful to concentrate on translanguaging practices that incorporate Chinese classroom experiences, rather than solely focusing on the linguistic aspects of translanguaging.

5.4.1 Translanguaging practices in literacy events

Literacy events, which encompass various curriculum-related practices, are the main part of classroom interactions, leading to numerous language practices by both students and the teacher. Similar to other events (e.g., casual conversations), students exhibited considerable flexibility in their language use (Baker, 2010), but with different purposes of learning. Meanwhile, the teachers' language use in this context appeared to reflect an autonomous, intuitive, and possibly unconscious strategy to engage with students and support their learning (Adinolfi and Astruc, 2017). The language use of students and the teacher in class 4D shows how they flexibly and sophisticatedly perform bilingualism. Thus, I adopted the term 'flexible bilingualism' (Creese and Blackledge, 2011) to describe this language use in class 4D.

5.4.1.1 The pedagogical approaches of the teacher in class 4D

Ms. Hong, the teacher in class 4D, held her own language ideology when it comes to language teaching. She emphasized the importance of cultivating interest in language learning, particularly for immigrant Chinese students who may exhibit resistance, indifference, or fatigue when learning Chinese, a language they perceive as more challenging than English due to the Grammar Translation approaches and teacher-centered classroom pedagogy many teachers adopted. Therefore, Ms. Hong figured out her ways to promote students' interest and alleviate their learning fatigue. For example, she created a relaxed and joyful atmosphere in the Chinese class, making it resemble an after-school club. She encouraged students and adopted a friendly approach, positioning herself more as a companion than a strict teacher.

Moreover, various strategies were employed in class 4D to facilitate students' Chinese learning, including the use of Grammar Translation pedagogical approaches. The translation between English and Chinese is the most frequent-used practice observed in Ms. Hong's class. During dictation exercises, Ms. Hong required students to translate Chinese vocabulary into English, and when studying passages, she translated Chinese sentences into English to enhance students' comprehension. On one hand, this translation practice aligned with the requirements of the Chinese language test in the school. For example, in the listening test, the listening materials are in Chinese, but the questions for students to answer are in English. Therefore, the translation practice in class significantly aids students to cope with this format of the Chinese language test. On the other hand, as a parent from a Chinese immigrant family, Ms. Hong understood that English is the primary language used by Chinese immigrant children, both in their weekday schools and at home when conversing with parents or siblings. In contrast, exposure to the Chinese language may be limited to their attendance at the Chinese school on Saturdays. Recognizing that some students may have better English comprehension than Chinese, Ms. Hong utilized grammar translation as a teaching method to establish understanding and foster communication between

students and teachers. It also provided an opportunity for Ms. Hong to teach students how to understand and express the same meanings in both Chinese and English.

5.4.1.2 Students' engagement in the literacy events

While translation is an important practice during the literacy events in class 4D, I will not delve into it extensively as it is not the main focus of my research. More discussion about translation can be referred to in Chapter 2 (see section 2.2.5). Instead, I will place emphasis on translanguaging as an interactional activity (Licona, 2018) employed by students during their interactions. Translanguaging not only embodies the cultural and ideological differences between students and the teacher but also represents a more complicated approach to facilitating Chinese learning compared to translation. This can be observed in the following excerpt.

Excerpt 5.1

1 S1: 老师是写英文吗 [*Teacher, should we write English*]?

2 T：英文拼音都要写，像他，你看 [*Both English and Pinyin should be written,*
3 *like him, you see*].

4 Lin {showed Chen's exercise book to S1}: Just like he wrote.

5 T: Yep, one two three, 你看他把拼音，英文都写上 [*you see he writes*

6 *Pinyin and English*].

7 S1: Alright.

8 T: 他写的很好 [*He wrote very well*]!

Bilingual students often have a good sense of engaging in translanguaging practices, allowing translanguaging to facilitate their language learning process. Excerpt 5.1 above shows a dictation scene where Ms. Hong required students to write down both Chinese Pinyin and English. S1 was not sure about this requirement, so he asked the teacher in Chinese (see line 1). Interestingly, almost every student in class 4D preferred to use more Chinese when communicating with the teacher. Key students Chen and Lin from class 4D explained the specific reasons for this preference. They mentioned that since the teacher was a Chinese teacher from China and could understand English, it was feasible to mix both English and Chinese during their conversations.

The ability of bilingual students to choose named languages to communicate with different groups of people can be influenced by their life experiences. Living in a bilingual environment, bilingual individuals develop the skill to determine in which languages and in what ways they make sense of their world. Likewise, their language preference is also determined by the specific situatedness in which conversation takes place. In excerpt 5.1, S1 used Chinese to ask a question to the teacher instead of using English, which was his usual language of communication in the Chinese class.

The interaction in this instance is full of dynamics, and translanguaging is occurring here, allowing speakers to draw upon various resources (or forms) to make sense of their world. In order to help S1 understand the dictation requirement, the teacher suggested that he learn from another student, Chen, who did well in the dictation task. In response, Lin, a student seated behind Chen, quickly retrieved Chen's exercise book and showed S1 Chen's writing while using English to explain it. This was a brilliant and prompt reaction from Lin. Indeed, the exercise book, as a visual material, could possibly go beyond complex oral explanations and provide direct meaning through visual observation. García and Li (2014) suggested that the non-verbal interaction signals a trans-semiotic system with many meaning-making signs. That is to say, the synchronized organization,

such as speech, gesture, gaze and other signs, also shape interactional activities and combine to create meaning (Mazzaferro, 2018). As a result, through this effective interaction between peers, translanguaging practices with multiple sources of engagement, such as the visuals (Chen's writing in an exercise book) and oral instructions in English, emerged. Therefore, translanguaging here is moving beyond the linguistic mode, and it includes all modes of meaning-making and the ways in which students flow/move between them.

It is worth mentioning that Lin's explanation in English (see in line 4) assisted S1's understanding process. Lin used English on this occasion on purpose. As discussed earlier, bilingual students know quite well which language preference to use when speaking with different groups. In this case, since S1 was Lin's classmate, they typically communicated in English, making English Lin's first choice to explain to S1.

Also, teacher's response which mixed both English and Chinese (lines 5-6) was a typical language using form that she often applied for classroom instructions. For a Chinese teacher, adopting translanguaging in class is a natural and practical pedagogy for their students, who mostly have English as their first language (L1) (Huang, 2021), and it also reflects the teacher's language ideology. Ms. Hong indicated that using both English and Chinese is common for class teaching, as these bilingual students had a limited understanding of Chinese. If she only spoke Chinese in class, some students with lower Chinese level might find the class too difficult to catch up. This could lead to comprehension barriers and difficulties in students' completing classroom tasks and might cause them to gradually lose attention and confidence in Chinese learning. Some students might even feel bored and resistant to learning Chinese or engage in small tricks, such as making noise and chit-chatting with desk mates, in the classroom. However, by incorporating English into a conversation, students could be assisted to understand the teaching content, which promoted the interactions between teachers and students. Once students grasped the material better, they could participate more

actively in class activities and gain confidence in using Chinese. Then, it would be possible for them to learn Chinese language further and deeper. Otherwise, students might lose their interest in learning Chinese.

To sum up, the language phenomenon depicted in excerpt 5.1 aligns with the general language use among key students, the teacher, and peers in class 4D, as discussed in Figure 5.2. Meanwhile, the language ecology here presents a holistic and dynamic interaction. The language relations between students and the teacher involved a mixture of English and Chinese for interaction. However, several factors influenced the decision for such a language usage, including the teacher's pedagogical approaches, students' perception, students' language experiences in daily life, and the speaker's reaction at the present.

Moreover, from a linguistic aspect, bilingual speakers use two languages in a conversation to reduce communicative barriers. The student sophisticatedly selected a certain language to communicate with a certain group of people, which largely promoted the efficiency of meaning-making process. Meanwhile, the teacher was fully aware of the advantages and disadvantages of bilingual students in different languages' proficiencies, so she used one language flexibly to complement the other. In this sense, language serves not only as a means of communication but also possesses the potential to complement another language. Besides, beyond the linguistic aspect, visual language as a useful tool helped bilinguals through the visual sense to promote the outcome of doing translanguaging. All these steps contributed to successful classroom teaching and learning in the Chinese literacy event.

During the literacy learning events, using one language to explain another language is also prevalent, I regard this as another function of translanguaging and a distinctive feature of language ecology in the bilingual class, as seen in excerpt 5.2 below.

Excerpt 5.2

1 Chen: 我不知道这个字诶 [*I don't know this vocabulary*].

2 T: 树影的影，迷人的迷 [*We learned 'Ying' in the vocabulary of 'Shu ying' which*

3 *means the shadow of tree, we also learned 'Mi' in the vocabulary of 'Mi ren'*

4 which means charming].

5 T: 你们学了一个单一的字，你要知道他们两个字加入在一起[*You have learned*

6 *the single word, you also need to know what they mean by adding these two words*

7 *together*] make up phrase，然后是什么意思呢? 影迷是什么意思呢? [*So, what*

8 *does "Yin mi" mean*] *?*

9 Lin: 需要写英文吗 [*Do we need to write English translation*] *?*

10 T:英文是什么意思呢 [*How to say it in English*] *?*

11 S1: 我不知道啊 [*I don't know*].

12 T: Movie fans.

13 S2：Movie fans?

14 Lin: Movie fans?

15 Chen: Movie fans?

16 T: 你好像你喜欢一个 [*It's like that you are fond of a*] famous star.

17 T: 你们看电影的时候，你很喜欢那个电影，你很 [*When you watch a movie,*

18 *you like that movie very much, you are very that*] …

19 Ss: 啊 [*Oh*]!

20 T: 你们有没有谁是你的[*Do you have your*] role model 啊 [*ah*]？

21 Chen: 那个两个字我们就是学过的 [*Did we learn those two words*] *？*

22 T: 啊,树影啊无关树影啊，迷人，加在一起影迷，又是什么意思呢[*Yes, tree*

23 *shadows, but there is irrelevant to tree shadows and the charming, so what*

24 *does it mean to add the two single characters together*] *？*

25 S3: 就是那个粉丝吗 [*Is it fans*] *？*

26 Lin: 就是那个粉丝喜欢那个电影,很好看 [*It's that the fans like that movie,*

27 *because they think the movie is so good*], teacher, next word!

During the dictation activity, some students were confused about the meaning of '影yǐng迷mí', even though they understood the individual meanings of the characters '影yǐng' and '迷mí'. The teacher initially tried to provide the English translation of '影yǐng迷mí' as 'Movie fans', but this did not resolve the students' confusion (see lines 13-15), as they might not have been familiar with this English vocabulary. In this case, translating the Chinese vocabulary into English was not sufficient for the students to understand the meaning. Therefore, the teacher chose to use Chinese as a main language resource to explain the meaning of 'movie fans'. The teacher's explanation of the meaning in Chinese can be observed (lines 16-18 and 20). The students readily accepted the use of Chinese to explain the English vocabulary and gradually arrived at its meaning. Lin's statement in lines 26-27 indicates not only her full comprehension of the vocabulary but also her

ability to paraphrase it for her peers. This serves as evidence that Chinese can serve as a language resource to scaffold the meaning-making process in language learning, going beyond its role as a target language to be learned in the classroom. Besides, in this conversation, the languages of Chinese and English were utilized effectively to cooperate with each other, enabling bilingual learners to seek meaning. This shows how languages coexist within the bilingual classroom language ecology (Creese and Martin, 2003).

As mentioned earlier in section 5.4.1 on the literacy learning events, translation was commonly used in the class for communication and literacy learning purposes. This is because, most of the time, students could quickly grasp the points by translating Chinese into English. However, in certain cases, such as when learning Chinese idioms, translation might not provide exact explanations for the students. For instance, in excerpt 5.3, the students were learning the phrase (鸟语花香niao yu hua xiang), a four-character Chinese idiom:

Excerpt 5.3

1 T：鸟语花香也要知道 [*You need to know "niao yu hua xiang"*].

2 S1: 鸟语花香也要听写 [*Do we also need to dictate "niao yu hua xiang"*]？

3 S2: No!

4 T: **不用翻**译，因为你很难 [*You don't need to translate, as it's hard to*] explain

5 every word, **要翻**译的话就是一大段 [*It will be a big paragraph if we translate*].

6 Lin: Bird, language, flower…oh no!

7 T: 这个不用翻译 因为你很难用 [*You don't need to translate, as it's hard to do*]

8 word翻译 [*translation*].

9 T：鸟语花香我们通常用在春天的时候，春天的时候那些花儿都开了 [*We usually*

10 *use "niao yu hua xiang" to describe in spring, when all the flowers bloom*].

11 Chen: 鸟语花香有没有那个 [*Does "niao yu hua xiang" have that*] translation?

12 T: Translation**不可能用四个**词语解释，会解释得很多，鸟语花香就是说那个13 鸟在叽叽喳喳的叫，那你怎么说？用英文怎么说 [*is impossible to explain in* 14 *four words, you need a long sentence to explain it. "Niao yu hua xiang"*

15 describes that the bird is

16 *chirping, so what do you say? How to say in English*]?

17 Chen: The birds twitter.

18 T: The birds twitter there, and the flower is so nice smell.

19 Chen: Oh!

According to the excerpt above, it can be seen that, even if the phrase has been correctly translated by students, they were still unable to grasp the meaning of the idiom. At first, students like Lin (line 6) literally translated the idiom as 'bird', 'language', 'flower', and 'fragrance'. Clearly, this translation method did not

convey the complete meaning of the idiom. In this context, meaning-making is not simply about understanding the vocabulary within the phrase; instead, translanguaging in this process allows students to enter a realm of imagination. To facilitate this, Ms. Hong encouraged students to use their imaginations as a resource for meaning-making, creating a virtual scene where they pretended to walk in a garden filled with twittering birds and fragrance of flowers, symbolizing a beautiful spring day. By guiding students in learning idioms through this approach, it becomes easier to convey the intended meanings of the idioms, and students can also develop the skill of using the idiom to describe a place/scene where there is full of spring vitality. This progress can be considered a significant milestone in Chinese literacy learning.

Learning Chinese idioms can pose challenges for students, according to the key participants Chen and Lin, who recognized the difficulty in translating idioms into single words or phrases, leaving them with limited resources for meaning-making. A similar problem was observed in class 5D, where students felt unable to translate classical Chinese and struggled to understand the meanings, resorting to memorizing the sentences repeatedly. I will further elaborate on this point in the corresponding example from class 5D. However, in class 4D, despite the challenges encountered in language learning, the key student Chen demonstrated a critical and creative approach to translanguaging during untranslatable moments. Please refer to excerpt 5.4 below for more details.

Excerpt 5.4

Chen：Maybe看一下鸟语花香在一个 [*look at Niaoyuhuaxiang in a*] sentence, 可以看一下那个字 [*look at the other words*] around它 [*this idiom*]。可以看一下鸟语花香那个字的前面，后面 [to *look at the front and back of the word around the Niaoyuhuaxiang].*看一下 [*Then take a look at*]

what would fit in鸟语花香 [*Niaoyuhuaxiang*], 和那个[*and*] probably mean鸟语花香[*Niaoyuhuaxiang*].

Excerpt 5.4 shows Chen's strategy for understanding the idiom 鸟语花香(*Niaoyuhuaxiang*), which was discussed in the previous paragraph and was commented on by Ms. Hong as "impossible to explain in four words'. According to Chen, he began to grasp the meaning by considering the context in which the idiom was used. Specifically, he looked at the sentence containing the words 鸟语花香 (*Niaoyuhuaxiang*). Then, he examined the words preceding and following the idiom. By analyzing the overall meaning of the sentence and the words surrounding the idiom, Chen took a crucial step that showcased his critical thinking: he tried to determine 'what would fit in Niaoyuhuaxiang'. The meaning of the idiom was deduced based on the context, compared with possible meanings believed by Chen, drawing on his own literacy knowledge.

I admire the students' creativity and critical ability when faced with the limitations of traditional language learning methods, such as grammar translation. In the case of excerpt 5.4, evaluating meanings based on context, fitting in with the surrounding meanings, and making educated guesses about possible meanings are commendable steps in translanguaging. All those excellent steps of translanguaging provide me with new insights into language learning, highlighting that the goal of learning a language should not always be merely finding meaning but also grasping and getting closer to meaning. Whether the students in class 5D chose to memorize and adhered to a specific language or the students in class 4D employed more complex methods of language analysis, learners constantly stimulated their potential to overcome various challenges and difficulties in language learning. Moreover, this potential, demonstrated by bilingual individuals through translanguaging, makes the methods of language learning more diversified, which I will return to in section 5.7.4.6.

5.4.1.3 Peer interaction in literacy events

Peer interaction plays a prominent role during the literacy event, facilitating languaging practices and enhancing them through continuous and constructive interaction. This interaction serves not only as an interpersonal function, as is common in many classrooms, but also serves other purposes, such as leveraging students' bilingualism, facilitating class dynamics, and assisting the teacher in classroom management. In class 4D, peer interaction was often initiated by more proficient bilinguals, who helped other bilinguals to acquire/explain both languages without having to wait for the teacher to intervene (see excerpt 5.5 below).

Excerpt 5.5

S1: 老师 [Teacher].

T: uh-huh

S1: 文物英文是什么，我不知道怎么说 [*How to say "wen wu" in English, I don't know how to say it*]？

Ss：文物!文物是[*"Wen wu"! "Wen wu" is]...*

S2: Cul...

S3: Culture...

Lin: Cultural relics.

T: Yeah. Cultural relics.

S1: 怎么写 [*How to spell*]？Cultural relics.

Chen: Oh, no, I didn't work on it.

T: 英文是 [*The English is*]...

S1: C-L-T...

Lin: C-U-L-T-U-R-A-L!

Ss: L-L-

T: L-

Ss: R-E-L-I-C!

S1: L-E-I?

T: L-I-C.

T: 你可以加 s 可以不加, s 就是证明有很多, 没有 s 就是一样的 [*You can add -s or not, -s is to prove that there are more than one, without -s it is*], ok, only 一个 [*one*].

Excerpt 5.5 presents a scenario where students worked together to assist S1 with his question. S1 was unsure about the translation of the Chinese word and sought help from the teacher. Before the teacher could respond, many students in the class eagerly tried to assist him. Based on this excerpt, it is evident that Lin, a more proficient student, provided the correct answer twice and led the discussion forward each time.

This class interaction highlights how students engaged in translanguaging practices to resolve the question at hand. As García (2009, p.304) maintains, "... children translanguage constantly to co-construct meaning, to include others, and to mediate understandings". Here, the students collaborated, starting with the pronunciation of 'cul-' associated with the word 'culture', and eventually arrived at the phrase 'cultural relics'. This interactive process demonstrates how the initial clue guided the students toward the relevant word, prompting them to

correct the noun part of speech ‘culture’ to the adjective form ‘cultural’, ultimately leading to the correct answer. Throughout this process, students incorporated one another's ideas, made revisions, and co-constructed the correct response. In this learning event, the teacher no longer solely held the responsibility of answering questions; instead, students themselves led the problem-solving process. Lewis (2008) and Jones (2010) classified this translanguaging activity as ‘pupil-directed translanguaging’.

Besides, from the language ecology perspective, the responsibility that students showed in this instance is impressive. The initiative and active involvement of students’ agency propelled the knowledge construction process forward. For example, Lin always offered answers promptly when her classmates asked. This action demonstrates her awareness that she can influence her classmates by providing correct answers. In other words, Lin’s agency of responsibility encouraged her active participation in this discussion and enhanced the overall interaction.

Studies (e.g., Cenoz and Gorter, 2022; Robinson *et al.*, 2020; Mazak and Herbas-Donoso, 2015) have shown that translanguaging occurs with pedagogical purposes of teachers in classrooms, which is somewhat different from the purposes of students in their translanguaging practices. Lin indicated that she used a specific language to create a sense of comfort and encouragement among her peers during literacy activities. For instance, during dictation exercises, Lin often spoke out instructions such as ‘next word, please’ or ‘time out’ (see excerpt 5.6 below). She explained that since dictation could be a stressful task, she chose to use these words to help her classmates feel less nervous.

Excerpt 5.6

Lin: 就是一点点那种，没有那么 nervous... 我也不知道为什么，就是感觉那个，有可能会等得更久嘛，就是因为一些人有可能是没有复习的，然后想字就会在那儿想字就会一直想下去 [*Just a little bit of that, not so nervous... I don't know*

why, I just feel that, maybe we will wait longer, because some people may not review the words before, and then they will think about the words and they will keep thinking about them].

In this example, Lin used these languages for two main reasons. Firstly, it demonstrates Lin's awareness of the classroom atmosphere and her concern for her classmates. Through classroom observations and interviews with Lin, I observed that she is a caring individual who always looks out for others. She shared her experiences of translating English into Chinese for her mother and helping her younger sister with Chinese-to-English translation. Therefore, it is Lin's caring nature that prompted her to use the above words with her classmates. Secondly, Lin deliberately chose to use English rather than Chinese in this instance. This decision was influenced by her cultural and social knowledge, which led her to believe that English was the more appropriate language for Scottish-Chinese bilingual students who typically have a better understanding of English, even when engaged in a Chinese dictation task. Here, the languaging practice was driven by thoughtful intentions.

5.4.2 Translanguaging practices in casual conversations

Ms. Hong emphasized the importance of 'to understand' and 'to express' in Chinese learning. As a result, casual conversation, a classroom activity aimed at practicing students' listening and speaking abilities, became one of the most significant components in class 4D. It differed from class 5D, where chatting was considered a disruption to the classroom environment. The conversations in class 4D took place between the teacher and students and revolved around topics unrelated to the curriculum. Typically, these conversations occurred at the beginning of the class, with students and the teacher spending 30 to 50 minutes (out of the total 2-hour class) discussing their weekly experiences, recent news in the community, family and school matters, the weather, or any other discursive topics. During this event, the teacher would invite students, one by one or in groups, to share their opinions on a given topic. The conversations were not solely

limited to the teacher-student dynamic; they also involved interactions between the teacher and multiple students. This kind of chatting also happened at the end of class from time to time, after the students finished their curriculum tasks. Although these chats may seem informal, they held the teacher's intention towards Chinese language learning, as evident from the teacher's explanation (see excerpt 5.7 below).

Excerpt 5.7

S1: 老师我们已经会写了，为什么还要学啊 [*Teacher, we already know how to write, why should we learn*]?

T: 我们为什么要来学中文主要是学会和人沟通，要 understand. 除了会认，你要会认，会表达 [*The main reason why we come to school to learn Chinese is to learn how to communicate with and understand others. You should know the words and use the words to express yourself*].

The above statement is an example which reflects Ms. Hong's CLT pedagogy towards language teaching. The teacher explained several times in the class that she thought the students came to the class not only because they need to learn how to develop Chinese literacy, but it was also important for them to practice Chinese oral expression, and to learn how to communicate with others. This understanding has led to the occurrence of numerous student-led conversations in the classroom. Students develop their communicative skills through using the target language to discuss with others. Besides, since these chats happened regularly in each class, students were required to pay more attention to the outside world so that they could actively participate and share their experiences during these conversations. Additionally, the teacher believed that this approach helped students become more aware of and practice Chinese in their daily lives. It's important to note that the teacher did not impose any language requirements or emphasize specific languages during these conversations. Instead, both the

teacher and students engaged in flexible bilingualism during this event. As a result, productive translanguaging practices emerged.

Excerpt 5.8

T: 大家放了一个星期的假，大家假期怎么样呢 [*We took a week off, how about everyone's holiday*]?

Lin：Emm...OK.

Ss {Many of them said terrible and boring}

S1: Because he has so much homework to do.

T: 我们也不是太多啊 [*We don't have too much homework*].

Chen: 我们有很多 [*We have lots of*] Club,没有时间做作业 [*No time for homework*].

T：你休息了一个星期,你告诉我没时间做功课 [*You rested for a week and you told me that you didn't have time to do homework*]?

Chen: 有很多 [*So many*] club.

T: 有什么 [*Which*]club 啊 [*ah ha*]?

Chen: 我有很多课，有钢琴 [*I have many lessons, I have piano*] , church，跆拳道 [*taekwondo*].

T: Only half an hour or one hour，你看，钢琴半小时，跆拳道半个小时 [*You see, half an hour on the piano, half an hour on taekwondo*] ?

Chen: 1 个小时 [*One hour*].

T: 那就一个半小时 [*Then an hour and a half*] church 可能久一点 [*May be longer*]?

Chen: 3 个小时 [*Three hours*].

T: Church only Sunday.

Chen：还有那个跆拳道是 [*And the taekwondo is*] twice a week.

T: So two hours.

Chen {Laugh}

T: 可是你没有一个星期没有上课呀 [*But you didn't have class in a week*]?

Lin: Too busy.

As shown in excerpt 5.8, translanguaging primarily serves the function of mediating meanings for bilingual speakers during communication. While this function may seem basic compared to translanguaging's multiple functions, it is worth mentioning as it represents the most direct and fundamental aspect of translanguaging found in the Chinese class. Through in-depth data analysis, more insights can be gained regarding the occurrence of translanguaging in such contexts, allowing for further investigation of the relationship between translanguaging and the classroom language use of bilingual students. The following discussion will further unfold the communicative function of translanguaging in the Chinese class.

Translanguaging facilitates communication among bilingual speakers by overcoming language barriers. In bilingual environments like the Chinese class, it is common to mix both Chinese and English within a single conversation. This promotes smooth communication and allows speakers to freely mix languages in any situation, time, or pace, enabling timely and accurate understanding between speakers. Mixing languages also helps students and teachers leverage their

language strengths when communicating with individuals proficient in different languages. This is particularly beneficial for Scottish-Chinese bilingual learners, as mixing both languages compensates for their limitations in Chinese vocabulary and expression, ultimately enhancing communication. Translanguaging, in this context, serves the purpose of effective communication.

Accordingly, in class 4D, both the teacher and students engaged in flexible bilingualism. The teacher said in the interview that she fully recognized that in a class like the Chinese class, it is inevitable to connect to English and Chinese due to the cultural and language backgrounds of the bilingual speakers. This mixing of languages is not only limited to the Chinese class but also extends to other contexts such as homes or Chinese community gatherings, where English and Chinese are commonly used when conversing with ethnic Chinese individuals.

The habit of language use is a product of students' individual discourse patterns as bilingual speakers. For example, during an interview with Lin, one of the key participants in class 4D, she mentioned that she often spoke English unconsciously in Chinese class. Lin's interview and classroom observation transcripts confirm her tendency to mix both English and Chinese in a sentence or dialogue. For example, she said in class: "我 last year, 回中国[*I returned to China last year*]". She explained that this has become one of her language habits. As she was learning French simultaneously, she perceived this language blending as a flow she adopted from her French class. Lin explained that she was influenced by the smoothness of speaking French and the flow of words in French sentences. Consequently, she imitated this flow from her French class and incorporated it into her Chinese learning. This example illustrates that the language use of bi/multilingual learners reflects their language repertoire.

Regarding language mixing, the occurrence of different languages and the mixing of those languages in both classes represented the initial emergence of classroom translanguaging practices, whether for communication or learning purposes. In this sense, translanguaging shares similarities with the concept of code-switching,

which focuses on the dimension of code choice or use of language alternation (Nilep, 2006). However, I argue that the traditional notion of 'code-switching' fails to adequately capture and explain the bilingual nature of my researched classroom. Based on my observations of language use in the classroom, translanguaging involves language switching but goes beyond mere switching between languages, thereby necessitating an analysis that transcends mere switching.

To further illustrate, in the instance of Lin mentioned above, her utterance was influenced by incorporating the language practices of English, Chinese, and French into her own linguistic repertoire freely and flexibly. Therefore, her language use cannot be classified as 'code-switching'; instead, her multilingualism should be more appropriately understood through the notion of translanguaging. Translanguaging differs from code-switching in that it involves combining two languages as a unity to achieve communication, rather than simply switching between separate monolingual codes (Cahyani, de Courcy, and Barnett, 2018). Likewise, Lin's example aligns with what García (2011, p.1) stated, that "translanguaging posits that bilinguals have one linguistic repertoire from which they select features strategically to communicate effectively".

Another notable observed example is shown in excerpt 5.9 below, indicating that translanguaging is a more appropriate term to illustrate students' language use in the Chinese class.

Excerpt 5.9

1 T:谁喜欢吃香蕉 [*Who likes to eat bananas*]? Banana.哪个动物最爱吃香蕉

2 [*What animal likes to eat bananas the most*]?

3 Ss: Monkey.

4 Ss: 猴子 [*Moneky*].

5 Chen: 孙悟空 [*Sun Wukong*].

This is a chatting conversation that occurred near the end of the class, the teacher was explaining to her students where bananas grow. The dialogue was simple, with the teacher asking a question and the students responding. Students used either the English word ‘monkey’ or the Chinese vocabulary ‘猴子’ to answer the question, which demonstrated their bilingual language proficiency in the conversation. However, Chen, one of my key participants, provided a different answer than the other students. He replied with ‘孙悟空’ (Sun Wukong), the Monkey King who is a legendary mythical figure best known from the 16th-century Chinese novel ‘Journey to the West’. As one of the main characters in this novel, the Monkey King has had a profound influence on later Chinese modern animation, drama, and other artworks. Chen's response cannot be adequately explained through code-switching, as ‘孙悟空’ (Sun Wukong) is not the switched code of ‘Monkey’ from a linguistic aspect. Moreover, it is hard for a student to transfer from ‘Monkey’ to ‘Sun Wukong’ without having relevant knowledge background of this ancient Chinese character. This excerpt highlights how translanguaging can naturally occur during a conversation among bilingual speakers. They might not realize, but the factors such as the cross-culture and funds of knowledge have impacted how they did the languaging practice.

Therefore, I argue that this translanguaging example not only demonstrated the students’ language proficiency in both languages but also showcased Chen's knowledge beyond the language aspect. Meanwhile, it is worth mentioning that the teacher added the English translation ‘banana’ after she said the Chinese vocabulary ‘香蕉’ (banana) (see in line 1). This reflects her high-frequency language habit during teaching. In this sense, translanguaging helped the teacher in checking students' understanding and making the content comprehensible by providing concurrent translations of vocabulary (Fennema-Bloom, 2010). In one

dialogue, translanguaging could serve different functions for the teacher and the students.

5.4.3 Translanguaging practices in other remarkable events

Excerpt 5.10

T: 博物馆 [*museum*]

S1：我不管 [*I don't care*].

Ss: {Laugh}

Excerpt 5.10 above presents a funny moment during the class teaching and learning. The teacher was introducing a new vocabulary '博物馆' (museum). However, the Mandarin pronunciation of 馆(guan) sounds the same as 管(guan), and the other two words 博(bo) and 物(wu) have the same vowel sound with 我 (wo) and 不 (bu), respectively. S1 recognized this interesting linguistic comparison and came up with a new phras '我不管' (wo bu guan), which means 'I don't care'. The new phrase brought laughter to the class. On the one hand, it is very creative and funny to make up this new phrase and shows students' high linguistic competence. On the other hand, as the class was nearing its end, the students were feeling tired of studying. '我不管' (I don't care) can be seen as a reflection of their exhaustion towards learning new Chinese vocabulary at that moment, and it was spoken out by the students on that particular occasion and time. Although S1 may not have considered this subtle reason when creating this phrase, it happens to be a very wonderful and meaningful translanguaging practice in Chinese learning. This example shows that translanguaging can reveal the current thoughts and states of bilinguals through an ingenious expression in a new language phrase. Students using language to bridge two distinct linguistic systems and showcasing their creativity with words has left a strong impression on me. Excerpt 5.11 below presents another scene of students' interaction with words.

Excerpt 5.11

1 T: 你们可以画故宫 [*You can draw the picture of Gu Gong*].

2 S1: 故宫？故宫是什么 [*Gu Gong ?What is Gu Gong*]?

3 Chen: Forbidden city.

4 Chen: Forgiven city.

5 Ss: {laugh}

In the excerpt above, the class was about to learn a new passage from the textbook. The teacher suggested that the students could draw a picture of Gu Gong (the forbidden city, the Imperial Palace of emperors in the Ming and Qing Dynasties), which was described in the text. S1 was unsure about what Gu Gong is. Therefore, he asked the question in Chinese (see line 2). Chen not only helped him understand Gu Gong but also creatively used linguistic resources to change the word 'forbidden' into another word 'forgiven'. The new phrase made Chen's classmates laugh, as the meaning was completely different from the original one. In contrast, the newly created vocabulary 'forgiven city' seems meaningless in understanding the original Chinese vocabulary. However, Chen's creativity in the translanguaging practice brought a delightful atmosphere to the class. Moreover, this serves as evidence of bilingual students' highly creative ability to have fun with words using different languages (Li, 2011a).

5.5 Summary of translanguaging practices in class 4D

To sum up, the language use in class 4D exhibits distinctive features. The grammar translation approach was the most widely-used pedagogy in the classroom; however, there were many occurrences of translanguaging, especially when the pedagogical approaches shifted towards Communicative Language Teaching.

Section 5.4 above mainly presented and discussed the translanguaging practices that occurred during different classroom events and how students engaged in these practices. Firstly, in literacy events, translanguaging facilitated the meaning-making process and promoted positive peers' interactions in Chinese learning. Students utilized various resources to assist their peers' learning and employed specific languages for specific purposes, alleviating the class pressure during learning tasks. Secondly, in casual events, translanguaging served as a communicative tool that enhanced classroom interaction among the teacher, students, and peers. Lastly, in other remarkable events, I highlighted examples of how students played with words, revealing their creative use of languages for the purpose of humor. What's more, several factors influenced students' performance in these translanguaging practices, including the Chinese teacher's language ideology, students' prior knowledge, and life experiences.

The following sections will focus on the language use in another observed class, 5D.

5.6 Capturing translanguaging in class 5D

Class 5D consisted of 18 students aged between 9 and 11 years old, with one Chinese teacher primarily responsible for teaching and one teaching assistant in charge of reviewing students' homework. The teacher of class 5D is a University PhD student — Ms. Xi (pseudonym). Before she pursued her PhD degree in Scotland, she was a lecturer with several years of teaching experience in an art college in China. Although teaching children and language were new experiences for Ms. Xi, she was confident in her role as a Chinese teacher.

Compared to the relaxed and free atmosphere in class 4D, the teaching approach in class 5D was stricter and more traditional. Apart from the fact that class 5D was one grade higher than class 4D, there was an increased learning content expected from the students at this grade level. Furthermore, Ms. Xi's pedagogical approaches were influenced by her prior experiences and epistemologies

(upbringing, education etc). She tended to make the Chinese class resemble the traditional Chinese educational system, emphasizing aspects such as neat handwriting, precise pronunciation, memorization and recitation of the textbook, and adherence to standardized, textbook language, or the "proper Chinese", as Li and Zhu (2013, p.123) put it.

The following are the observed classroom schedules in class 5D. It aims to show a routine of teaching and learning in this class. In addition, it provides me a chance to see how translanguaging practices occurred in any specific events.

Table 5.3 The schedule of class 5D (based on audio-recorded classroom observations)

The first audio-recorded observation	The second audio-recorded observation	The third audio-recorded observation
Pre-class: (1) Remind everyone to prepare for dictation. (2) The teacher played Guqin (Guqin is a plucked seven-string Chinese musical instrument of the zither family).	Pre-class: Remind everyone to prepare for dictation.	Pre-class: Remind everyone to prepare for dictation.
Call the roll	Call the roll	Dictation
Review text	Dictation	Learning the Enlightenment of Rhythm.
Read text together	Read the text alone for 5 minutes	Read text together
The teacher led the students to classify exercise books.	Explain vocabulary from the text	Review text
Dictation	Correct pronunciation	Self-review for 3 minutes
Students read the text by themselves.	Chatting about restaurants in Scotland	Read the dialogue in the textbook twice.
Reading comprehension exercises	New Chinese character explanation	Correct pronunciation

The teacher explained verbs in the text.	Read texts twice	Learn the new text
Students read the text aloud in groups.	Explanation for polyphone	Class task of painting
Teacher and students discussed how to remember new words.	Self-practice the new Chinese character for 10 minutes.	Break time
Pronunciation practice	The teacher taught the method of remembering new Chinese characters and corrected students' pronunciation.	Students watch an illustration video then create the follow-up story
Multi-syllable explanation	Discussion of the performance for the Spring Festival	Read the Enlightenment of Rhythm.
Students reviewed the new Chinese character and texts they learned today.	Break time	Students memorized the Enlightenment of Rhythm for five minutes.
(1) Watch the video of Guqin: Playing the theme song of the movie Game of Thrones. (2) Watch the video of Guqin: Playing the theme song of the Chinese TV Series Journey to the West.	Introduce the tea: (1) Explain the origin of tea. (2) Watch a video about how to make tea. (3) The teacher showed how to make tea. (4) Teach students how to differentiate types of tea. (5) Teach the philosophy of making tea. (6) Introduce the Chinese tea set.	The teacher checked students' memorization one by one.
Break time	The class voted for the performance for Spring Festival.	Students learned about how to write Weather topic essay.

(1) Introduce the history of Guqin. (2) Explain the structure of Guqin. (3) Introduce the function of Guqin. (4) Watch the video of poetry singing from the master of Guqin. (5) Students passed the table flag of Guqin (the table flag is a soft decoration placed on the table, which is derived from traditional Chinese culture) while listening to the teacher playing ‘wo long yin’, a song from ‘Romance of the Three Kingdoms’, one of the four greatest classical works in China. (6) The teacher invited the students to play the Guqin. (7) Watch the video of Guqin's performance of ‘Classic of Poetry’ (Classic of Poetry is the oldest existing collection of Chinese poetry, comprising 305 works dating from the 11th to 7th centuries BC).	Assign the homework	Assign the homework
Assign the homework		

It can be found that the class arrangements in class 5D revolved around the textbook, such as the dictation, reading and recitation of text, learning and practicing writing Chinese characters, and text review. Indeed, they are the regular and traditional pedagogical approaches in Chinese language learning, and many of them are related to grammar translation. Besides, the teacher of class 5D, Ms. Xi, paid attention to the cultivation of students’ understanding of traditional Chinese culture. Therefore, she was enthusiastic and prepared culturally relevant artifacts for the second half of class, such as tea, Chinese ancient instruments, and the ‘Enlightenment of Rhythm’, which is a reading material based on classic Sinology readings that helps children practice versification and master the rhythm of sound.

The following sections are organized by first introducing Table 5.4, which displays the categorized occasions for students to engage in translanguaging in class 5D. It

is then followed by selected excerpts that represent the codes relevant to translanguaging practices identified during coding.

The data in Table 5.4 mostly came from classroom observations in class 5D. It also referenced students' interview data to provide a clear interpretation of the translanguaging practices they engaged in and to learn from their perceptions while viewing and experiencing those practices. By constructing Table 5.4, my understanding of what translanguaging practices occurred in class 5D has been deepened.

Similar to the approach discussed in section 5.2, the classroom events in class 5D are divided into three categories: (1) literacy events (2) cultural acquisition events, and (3) other remarkable events. These categories are based on the translanguaging practices that occurred within different classroom events. In the 'translanguaging category' row, the codes of translanguaging practices are combined to form the overarching themes under different events. Particularly, under the literacy events, I made a distinction between the items 'task referring' and 'non-task referring'. The former refers to translanguaging practices that occurred during literacy-related classroom tasks, while the latter describes translanguaging practices that occurred during literacy events without specific tasks. This sub-category was created because, unlike the notable casual conversations in class 4D, which could be captured as a separate classroom event, there was no specific event in class 5D solely dedicated to classroom chatting. However, there were numerous chatting events with research-worthy translanguaging elements happening in the literacy events. Next, the 'translanguaging practices' row shows the codes for different translanguaging practices, and the last row displays 'translanguaging purposes' under each corresponding translanguaging practices category.

Table 5.4 Occasions of translanguaging by students and the teacher in class 5D

Classroom events	Literacy events		Cultural acquisition events	Other remarkable events
Translanguaging category	Task referring	Non-task referring	Intercultural perspectives exchange	N/A
Translanguaging practices	(1) literacy practices revolve around texts or the talk about texts, including Chinese characters learning, reading comprehension, reciting text, explaining passages and words' meaning. (2) Classroom negotiation on dictation; classroom tasks; reciting text; learning something that is not interesting; complaining Chinese class and learning Chinese.	(1) classroom socializing includes chit-chat with peers or teachers. (2) students helped and encouraged each other. (3) students flexibly switched between English and Chinese when talking with peers and teachers.	(1) Students' interpretation of Chinese ancient story. (2) Music as a bridge to connect Chinese ancient instrument and students' daily music experience. (3) Students' confusion about Chinese culture and philosophy. (4) classical Chinese learning. (5) The learning on couplets.	(1) Teacher transmitted her perception of Chinese learning in the class. (3) Teacher conveyed her language ideology. (3) Teacher taught students how to conduct themselves and business in their life and study, such as developing good habits in daily life; learning to be observant; being patient; handling things neatly and maturely; being brave when facing problems.
Translanguaging purposes	(1) To request, affirm/reject, respond, clarify, declarative, make meaning.	(1) To include and exclude people. (2) To relieve students	(1) To promote the link of knowledge	To bring the outside world into the classroom.

	(2) To demonstrate cultural identity, to challenge teacher's authority, to promote the transfer of knowledge across multilingual and multimodal resources.	themselves or the whole class. (3) To establish peer-support. (4) To promote socialization.	across cultures. (2) To make meanings of classical Chinese learning	

(Note: N/A= Not available)

5.7 Translanguaging practice examples in class 5D

In class 5D, there were numerous instances where language use involved two separate and intertwined lines between Chinese and English. Often, the teacher speaks only in Chinese, while students respond using a mix of English and a bit of Chinese when communicating with the teacher, and they use English exclusively to discuss with their peers. Observing this feature of classroom language use, I realized that to understand the translanguaging practices that occurred here, I need to move beyond focusing solely on how the two named languages switched in the classroom. Instead, I should consider the implications behind these translanguaging practices and the multimodal dimensions of languaging. The selected excerpts below aim to illustrate the meanings of engaging in translanguaging for students' Chinese literacy and cultural learning. Additionally, I will explore the reasons why so many translanguaging practices in class 5D were related to complaints or conflicts, as these are very noticeable moments in class 5D, and they are rarely seen in class 4D.

What's more, by looking at translanguaging under different events, I would argue that it is also a chance to see what translanguaging practices the students or teachers were able to engage in under such circumstances, and how they

performed in those situations. Besides, those classroom translanguaging moments also brought out topics around borrowing learning strategies, cultural values immersion, Chinese cultural knowledge acquisition, and intercultural perspectives exchange. All of them made translanguaging become very important to boost the interaction within the classroom, minimize the knowledge and perception gaps, and finally support Chinese teaching and learning in class 5D.

5.7.1 Students' interaction with named language in the literacy events

Although for those Scottish-Chinese bilingual learners, the named languages, English and Chinese, are the most common languages to use all the time, there are still subtle reasons for how these languages have been used. See excerpt 5.12 below which shows how students interacted with those languages in the event of literacy learning.

Excerpt 5.12

1 T:老师用蓝色笔在给你们在纸上改了一个读音哈[*I used a blue color to*

2 *change the tones of a word on the paper*].

3 Yu: What？

4 Cai: Yes, this one.

5 Cai {Cai fingers out the place in the paper where the teacher talked about

6 and shows it to Yu}: This one.

7 T：然后呢,你们把它后面的那个字也改成四声 [*Then, you should change*

8 *the next words to the fourth tone*].

9 Cai：哪个 [w*hich one*]？

10 Yu：一客 [*yi ke*].

11 T：一客也改成四声 [*"yi ke" also needs to be changed to the fourth tone*].

In the beginning of excerpt 5.12, the whole class was prepared to read a new text. Before reading it together, the teacher told the students that she had revised the tone of one word. Yu did not understand the teacher's instruction, so he spoke out, "what" (line 3). This utterance can be considered a bilingual learner's spontaneous reaction. For students growing up and living in the UK society, it is normal for English to be their spontaneous reaction language, even in the Chinese class. Regardless of the language used by students to express their doubts or questions, it is impossible for the teacher to address every student's question at all times. However, peer support seems to fill this gap. Therefore, Cai, who sat next to Yu, offered his help by pointing out the correct word to Yu, saying "this one" (line 4).

Peers' interaction is predominantly in English, as they perceive this language to be more easily and universally understood by each other. Yu shared his experience in the interview to support this point. He mentioned that his peers rarely spoke Chinese in their daily lives. Once he mentioned '橄榄球' (rugby) and '曲棍球' (hockey) in Chinese class, but his peers did not understand until he switched to the English words. Since then, Yu realized that for specialized vocabulary, using English would be better understood by his peers. Therefore, I observed that Yu intentionally spoke about 'rugby, PE, swim' in English during the Chinese class.

Although the interaction between students and peers was mostly in English, they also mixed in Chinese within sentences or even switched to complete Chinese language depending on the specific context of the conversation. This all depends on the situatedness in which the conversation occurred. In other words, the specific context would impact the performance of languaging practices. Moreover, this is also what the natural and ecological interaction shows in a bilingual class. Bilingual students have the capacity to manipulate languages smoothly and

intentionally to interact with others, and translanguaging assists them in achieving this performance.

Towards the end of excerpt 5.12, when the teacher told students that they also needed to change the tone of the next word, Cai became confused. He asked in Chinese, “哪个” (line 9), which translates to “which one”. While many students felt free to use whichever language to communicate in the classroom, they also understood that it was better to use Chinese when interacting with the teacher. This is influenced by the cultural value within the Chinese community, which emphasizes the expectation that students should show respect to their teacher. Therefore, recognizing that the teacher mostly used Chinese, Cai asked the teacher in Chinese. Before the teacher could respond to Cai, Yu promptly pointed out the correct words “一客” [yi ke] (line 10) to him. Here, Yu's language use was not determined by his daily language habit of using either English or Chinese, but by how he decided to make sense to Cai. This reflects the student'' own perception of how to use languages to interact with their current environment. Lastly, the teacher confirmed Yu by saying “一客也改成四声” [yi ke also needs to be changed to the fourth tone] (line 11).

The conversation in excerpt 5.12 is characterized by the use of both English and Chinese. The teacher primarily used Chinese as the language of instruction, and the students freely utilized their bilingualism as a common resource to ask questions and help each other. Additionally, both the students and the teacher behaved comfortably and naturally in this literacy conversation, skillfully operating in either Chinese or English depending on the context.

Furthermore, in this excerpt, translanguaging is a distinctive feature throughout the entire process. In a bilingual context, translanguaging is an inseparable part that exists within and interacts with the language ecology. Through the use of translanguaging, students were able to achieve seamless communication and understanding during Chinese literacy learning. In this literacy event, translanguaging assisted the students in effectively understanding Ms. Xi's

Chinese-only teaching instructions and also allowed them to utilize their own resources — bilingualism and peer support — to create a conducive learning environment.

5.7.2 The negotiation moments in the literacy events

In class 5D, it is common to see students (even the teacher) using languages as a tool to negotiate with each other. Complaints often arise when students are dissatisfied with the Chinese class. These moments frequently occur during dictation time, when assigning classroom tasks, reciting textbooks, or learning something they are not interested in. During these moments, students typically use English as the named language to express their feelings. According to Cai, one of my key participants in class 5D, using English to argue in the Chinese class is quite normal for him. I have observed many of these kinds of moments involving him during classroom observations. He explained that he is accustomed to the English language as it surrounds him in his daily life. This can be seen in the excerpt below, taken from the individual interview with Cai.

Excerpt 5.13

Qian: 在 argue 的时候你会喜欢说哪种语言来表达 argument？为什么？[*What language do you prefer to speak in the argument? Why?*]

Cai: Mostly English, cause I just do a lot of things with English. I watched English tutorial, like stuff, I usually watch English things, not like mostly Chinese, it is all English. I am just very used to English.

Similarly, Yu, another key student in class 5D, complained to his peers about the teacher's decision to have a dictation exercise every week. The students referred to this practice as a ‘spelling test’, which is a typical literacy exercise in Chinese class. Unlike the dictation requirements in class 4D, which focused on practicing students' translation between Chinese characters and English vocabulary, in class 5D, the dictation requires students to write down the correct Chinese characters

and Pinyin. This requirement is a standard dictation practice in primary schools in China. Ms. Xi introduced it into the Chinese school due to her Chinese-only pedagogical approaches.

Ms. Xi emphasized that the essential approach to her teaching is immersing students in a Chinese language environment, which she calls the 'immersive experience'. Therefore, she insisted on using Chinese as the sole classroom language for her teaching. She drew from her own experience to reflect on language learning. For example, she believed that the English proficiency of Chinese overseas students, like herself, improved more significantly than those studying English in China. This is because international students live in an English-immersive language environment in the UK society and school, where they inevitably come into daily contact with English and gradually acquire it. In this sense, she aimed to create a 'complete' and 'pure' Chinese language environment through half-day Chinese classes to facilitate immersion for her students. She believed that, through this experience, students should imitate and repeat Chinese, passively or actively accept the influence of the Chinese language, and naturally acquire it. Chinese dictation is one of her teaching methods for fostering immersion in the Chinese learning environment.

Furthermore, the teacher mentioned that the dictation would be assessed to evaluate students' overall performance at the end of the semester, and each dictation would be recorded with a marked score. Therefore, students perceived dictation as a test, which brought both challenge and pressure. They described it as 'horrible and stressful' (as mentioned by Cai and Yu in the individual interview).

Excerpt 5.14

1 T: 我们以后每节课都要进行听写 [*We will dictate every week from now on*].

2 Ss: No!!!

3 S1: why?

4 Yu: Spelling test.

5 Cai: Horrible.

6 Yu: The horrible day is the spelling test day.

In the above excerpt, Yu and Cai's attitude towards dictation was unitary. Their expression 'horrible' (see in lines 5-6), as a resource of vocabulary to make up his own speech, showed that they stood on the same side against the teacher's regulation of 'dictation for every week'.

Yu explained in the individual interview why the dictation or the spelling test (as he preferred to call it) was so difficult for them.

> "*Because we have spelling test every week in school, or every two weeks, if the teacher says a word, I can probably spell out, yes, I can spell it, but Chinese character, it is very... I can't use my English school method, I must review, review, review at home… (In the English school) I don't need to review too much, because English can be heard directly, you can use your spelling method, then you would know how to spell the word, but in Chinese, if the teacher asked you to write down, for example, "钱"* [*money*]. *{Yu laughed with a helpless facial expression}*" (Yu_interview_021119)

The above excerpt from Yu indicated that he had considered how to borrow the spelling test approach from the mainstream school for the Chinese dictation task, but he found that it did not fit well with Chinese learning. Unlike English words, which students could often write down based on the acoustic sounds of their pronunciation, Chinese characters' sounds were difficult for students to use as cues for writing. When teaching Chinese characters, the teacher usually uses metaphors to explain them. This is because Chinese characters are logograms, and many characters have relevant objects or meanings in nature that help with explanation and memorization. Additionally, Chinese classes typically emphasize practicing the stroke order of characters to remember them. Therefore, when

students compared the easier task of English spelling tests with the more difficult task of Chinese dictation, they tended to complain about the latter. As Cai said:

> *"...I do not have English test now, I used to have it. When I was doing them, no pressure, I'm confident more in English, not Chinese. Chinese are so many steps to do, but English is a letter to write..."* (Cai_interview_301119)

To further explain, Cai gave me an example. When trying to memorize the word 'book', he would start by thinking about the acoustic sound of the /ʊ/ pronunciation and then quickly recall that this phonetic symbol corresponds to the English letters 'oo'. In this word, 'book', he only needed to memorize the letter 'k' because, as he mentioned, the letter 'b' can also be spelled out based on pronunciation. However, he cannot use the same strategy to memorize Chinese characters. He said:

> *"…If it is book, I just remember the only /ʊ/ sound, like oo and k is much easier, just like letter than Chinese just is character, then you have to remember all the steps, 就是如果我有不懂的字的话我就会 [If I have English words that I don't know, I will] spell out, you can spell out Chinese words? No, you just write, you can not spell out..."* (Cai_interview_301119)

From the above examples of Yu and Cai, although the attempt to borrow learning methods from mainstream schools to the Chinese school may seem unsuccessful, I would argue that the students made a thought-provoking translanguaging trial, attempting to recall any strategies from their English learning that could be used in Chinese learning. In fact, it is understandable that these Scottish-Chinese students tried to establish connections or borrow English learning strategies for their Saturday Chinese learning. It is related to their daily study, as they usually spend five days a week studying in the mainstream schools where English is as L1, making them more accustomed to English learning methods. However, when English learning styles or borrowed strategies clash with the Chinese class, tensions arise.

Translanguaging in these moments attempts to make use of available resources across two different learning systems and facilitate bilingual students' Chinese learning. This effort should be encouraged, but encouragement alone is not enough. It also leaves room for reflection. For example, in the instances mentioned above, if students could be properly guided using their familiar language, community resources, prior knowledge, or other learning experiences (such as drawing or visual aids) to motivate and facilitate overcoming learning difficulties (Lin and He, 2017), they might be able to discover creative strategies and make connections between the two languages' learning, actively utilizing those connections to make further meaning.

There is another instance that exemplifies how, in a translanguaging practice, a student actively created meaningful associations between prior and newly learned knowledge to support their understanding of new knowledge.

During the individual interview with Yu, we discussed the difference between Chinese reading and English reading, and he initiated sharing his reading strategy with me. He took out a Chinese composition book, turned to one essay, and pointed to a printed sentence, "小青蛙忙着为冬眠作准备" [Little frog is busy preparing for hibernation], saying:

> "*Before I didn't know what this sentence means, I firstly thought about whether I had ever read or watched the English stuffs, such as books, or videos about frogs and winter. Then I came up with the idea, oh! this might be hibernation, that is, the frog would go to find food, because I had watched a video talked that a squirrel was preparing to hibernate, so I thought of this Chinese sentence was telling a cute frog to find food there*." (Translated from the transcript of Yu_interview_021119)

From Yu's explanation, it is clear that he organizes and utilizes prior knowledge (old traces: a squirrel preparing to hibernate, videos about frogs and winter) and a more familiar language with multimodal resources (English-language materials:

books or videos) to bridge the knowledge transfer and successfully comprehend the new Chinese sentence.

According to Yu, when he encountered unknown Chinese characters, he tried to first look at the characters before and after the 'unknown one'. If he knew any of them, he translated them into English and tried to guess the meaning of the entire sentence. In this example sentence, Yu didn't know what '冬眠' (hibernation) means, but he has learned the character '冬' in this vocabulary, so he translated it into the English word 'winter'. Then he tried to recall if he had read any English books or watched any English videos about '小青蛙' (frog) or '冬' (winter) before. He boldly imagined if '冬眠' (hibernation) means animals going out to find food, as he had watched an English video about '松鼠准备冬眠' (squirrel prepares for hibernation), which showed how the squirrel prepared food for the upcoming winter.

During Yu's thinking process, translanguaging not only provided him with a space to explore bilingual learning methods but also successfully allowed knowledge transfer across multilingual and multimodal resources, creating new knowledge for his Chinese learning. The associated process is not easy, which is why translanguaging is valuable and important for instructors to consider and develop to facilitate bilinguals' language learning. Besides, it is worth mentioning that grammar translation played a significant role in this learning process. Although grammar translation and translanguaging are two different pedagogies with distinct emphases, this instance exemplified how they can complement each other in language learning. In this way, students are able to obtain more linguistic resources to facilitate translanguaging process. Additionally, from a language ecology perspective, learning new knowledge is a holistic process that involves students' ability to interact with various resources and circulate knowledge by borrowing and associating prior knowledge to support the understanding of new knowledge.

5.7.3 Chatting moments under non-task referring in the literacy events

‘Boring’ and ‘reluctant to attend Chinese class’ are direct quotes from students in the Chinese class. It is not surprising to come across similar comments in the literature, such as ‘old-fashioned’ (Hancock, 2012) and ‘rigid and non-motivating’ (Curdt-Christiansen, 2006, p.204). On Saturday mornings, students had a two-and-a-half-hour intensive class that mainly consisted of teacher-directed didacticism, disciplined self-study, Grammar Translation pedagogy, and numerous tasks to complete. All of these factors contributed to the students appearing lethargic in the classroom. By contrast, in class 4D, the teacher prepared more communicative activities in the class and largely adopted the Communicative Language Teaching approach, which greatly boosted the emergence of translanguaging practices and enhanced the lively classroom atmosphere.

Although peer chatting is prohibited during class time according to the regulations of class 5D, chatting seemed to serve as a way for students to release their boredom. Excerpts 5.15 and 5.16 depict these chatting moments between Yu and S1.

Excerpt 5.15

S1: Why do you want my pen?

Yu: Because you stole my pen.

S1: I don’t steal your pen.

Yu: Yes you do.

S1: No, I don’t. Where is your pen? I will steal one right now.

Excerpt 5.16

T: 可以好好练习一下今天学的新字 [*Please practice the new Character learnt today*].

S1: I do not have any paper.

Yu: This is the invisible learn.

S1: What?

Yu: My book has gone invisible. No, it is on the table, but it is invisible.

S1: Can we check under the table? {Laugh}

S1: It is under there.

S1: No, I will take this.

Yu: Actually, it takes back.

In excerpt 5.15, Yu playfully took S1's pen and joked about him stealing it. In return, S1 took Yu's pen, and they exchanged jokes. In excerpt 5.16, the teacher asked students to write newly learned words on paper, but S1 didn't have any paper. Yu noticed this situation and used his imagination to turn it into a playful scene. These moments represented Yu's creative and humorous interactions with his peers, even though they deviated from the formal class learning and might seem slightly inappropriate for class time.

The classroom language ecology works quite dynamically and holistically under the above scenes. The interaction here not only happened between these two peers, Yu and Cai, but also among the peers with the teaching in the classroom. To further illustrate, the two students chatted with each other while the teacher continuously provided Chinese teaching. Many times, students were able to keep up with the class teaching while engaging in their own activities, such as chatting or drawing pictures. They listened to instructions from the teacher in Chinese, learn Chinese texts, and simultaneously chat with peers in English. The named languages used in these scenes are quite common in my observed classes: English for peers, and Chinese for the teacher. However, these languages coexisted

harmoniously, and I regard this form of language ecology as a unique and distinctive feature in the bilingual classroom.

In the Chinese learning context, the moments described in excerpts 5.15 and 5.16 could also be seen as students' private space for translanguaging. Therefore, I argue that the Chinese classroom itself is a space where bilinguals enact translanguaging. As discussed in the literature review chapter, learners freely bring together their personal experiences, knowledge, and resources in this translanguaging space to interact with each other. Moreover, this translanguaging space helps alleviate potential tension for the students. As Yu mentioned in the individual interview (see excerpt 5.17 below), if they felt too stressed, they became bored in class, and making jokes could adjust the atmosphere, just like what his math teacher did (see Excerpt 5.18 below).

Excerpt 5.17

Yu：我觉得（peers talking in the classroom）很重要，因为有时候，比如说很boring,我们要是太boring的话就会feel stress，要是我们讲话的话，我们就可以像那个，让那个bore come on! 从我们脑袋出来，这样子我们就不用一直想，哎呀好无聊好无聊好无聊，我们就可以直接聊天 [*I think it's important (to have peers' talking in the classroom) because sometimes, like very boring, we would feel stress if we bore too much, and if we talk, we can be like that... and let that bore come on! get out of our heads, so that we don't have to always think, oh, so boring, so boring, so boring, instead, we can chat directly*].

Excerpt 5.18

Yu: 比如说要是我们有math的话，要是大家突然觉得很无聊，讲到一个无聊的部分的话老师就会说个句子，比如说，举个例子比如说 Nifin 吃了什么....five tons of pizza，那个Holly吃了five tons，然后大家都会笑，因为Nifin是比较小的一个小孩，然后Holly挺大的，所以大家都开始笑 [*For example, if we are in the math class, if everyone suddenly feels bored, the teacher will say a sentence*

when it comes to a boring part, for example, what did Nifin eat....five tons of pizza, and Holly ate five tons. Then everyone in the class started laughing because Nifin was a small kid and Holly was big, so everyone started laughing].

In this sense, for bilingual students, the function of translanguaging extends beyond making connections between two languages' learning. It allows students to bring the English class style and the teaching methods of their English teacher into the Chinese class to address class-related issues. Especially when the Chinese class and teacher fail to meet students' needs, students can take the initiative to interact with each other or with wider factors, creatively and critically drawing on resources through translanguaging to build a comfortable space for themselves.

The above examples are not the first instance of students using translanguaging to ease the Chinese class. Apart from the speaker himself, translanguaging can also help ease the stress of the entire class (see excerpt 5.19 below).

Excerpt 5.19

T：你们要把自己喜欢的写下来，五分钟以后来收纸条，你们想一想 [*Write down your choice on the paper, I will collect your answer after 5 minutes, please think it over*].

Yu and Students: What?

Cai: Ah？What do you want? What do you want!

Yu: Telepathic time, everyone let's do telepathy everyone.

{Students laughed, and Cai started to imitate the sound of operating telepathy}

Yu: Let's discuss what we want to do, using the telepathy.

{Students all started to imitate the sound of operating telepathy}

Yu: You want to do No.1

Cai: Yes, yes.

Cai: You want do no.2.

Yu: No, I want do no.4.

S1: You want do no.2

{Students laughed}

In excerpt 5.19, the class was discussing the performance for celebrating the Spring Festival. After several rounds of discussion, they were still unable to decide on a show that everyone agreed with. Ms. Xi then suggested that each student write down their preferred show on a piece of paper for voting. The students seemed overwhelmed by making a decision. At that moment, Yu made a joke by suggesting they use telepathy to discuss. This joke cheered up the students. In the interview, Yu explained that he said it on purpose because he realized his classmates were struggling with the decision, and he wanted to encourage them to 'cheer up and not be stressed'.

This is a distinct form of peer encouragement that exclusively occurred in bilingual/multilingual classes. Translanguaging allows bilingual students to critically choose suitable languages at the right moment with a specific group of people to transmit information. It is another instance where translanguaging helps foster positive interactions in a bilingual class. Furthermore, it demonstrates that translanguaging is a beneficial practice whenever tension arises, as it offers a space for students to find ease in those moments.

Moreover, another notable phenomenon observed in the above example is that languaging can be expressed not only through words but also through emotions and body language. In this example, the students' laughter was a response to Yu's actions, showing their enjoyment in that moment. Additionally, the collective body experience of mimicking the sound of telepathy demonstrated the

multimodal ways of engaging in language and the transmitted power of body experiences. As Cai initiated the imitation, more and more students joined in. Languaging was transmitted among them, and this was directly and immediately influenced by languaging itself, which was a social behavior. At the same time, the stressful atmosphere was alleviated through the use of sign-making language.

5.7.4 Translanguaging practices under cultural acquisition events

Transmitting culture is a common focus in teaching in the Chinese school. The school syllabus aims for the second class to provide students with cultural knowledge, such as ancient poems. However, cultural learning is often not treated as a separate subject in many Chinese classes. Instead, it is integrated into Chinese literacy learning, embedded in textbooks and class activities. In class 5D, Ms. Xi has specifically scheduled cultural learning in the second lesson, which is a notable difference from class 4D and is exclusively observed in class 5D. Additionally, Ms. Xi has prepared various cultural artifacts, such as the Guqin (an ancient Chinese instrument) and Chinese tea, to better explain Chinese culture to bilingual students. She believed that these artifacts have a more intuitive impact on students than simply showing them pictures or videos. As a result, the following sections will present ample translanguaging practices with interesting, creative, and critical elements.

5.7.4.1 Translanguaging brings the outside world of the class to the Guqin learning event

Guqin (see Picture 5.1 below) is a seven-stringed plucked instrument that is somewhat similar to a zither. It is a Chinese instrument with a history of more than 3,000 years (Jirajarupat and Yinghua, 2023). The Guqin holds significant cultural and aesthetic value, making it the most esteemed musical instrument in ancient China (Zhang *et al.*,2015). It ranked first among the Four Arts of qin (the Guqin), qi (the strategy game of Go), shu (Chinese calligraphy) and hua (Chinese painting). In addition, due to its associations with Confucianism and the literary

upper classes, it is regarded as a representative of elegance by literati and has been an essential knowledge for many scholars (Gaywood, 1996).

Picture 5.1 The image of the Guqin instrument

Nowadays, Guqin is no longer a popular instrument favored by Chinese students to learn, and it is rarely seen in daily life. Therefore, when Ms. Xi introduced Guqin in class, this unique instrument sparked the interest of the whole class. During break time, many students gathered around the Guqin. What impressed me was that two usually quiet students took the initiative to talk to me about their experiences with learning instruments.

Excerpt 5.20

S1: 我六岁开始学小提琴 [*I started to learn violin at the age of six*].

Qian: 小提琴难吗 [*Is the violin difficult to learn*]?

S1:我觉得小提琴很简单呀，我每周上两次课，早上起来后就开始练习，晚上回家睡觉前练 2 个小时，就去睡觉了 [*I think the violin is very simple. I take classes twice a week. I practice it when I get up in the morning. I practice two hours at night before going to bed*].

S2: 我八岁开始学小提琴，我弟弟比我早，但我还学了钢琴，他没有学钢琴，我五岁学的钢琴 [*I started to learn violin when I was eight years old. My brother*

learned it earlier than me, but I also learned piano. He didn't learn piano. I learned piano when I was five years old].

In the above excerpt, the entire conversation was conducted in Mandarin. I was surprised by how fluently they spoke Mandarin, as both of them rarely spoke in class. This instance shows that Communicative Language Teaching pedagogy can allow language learners to start oral communication in the target language in a natural way. More importantly, in this scene, the Guqin facilitated a conversation between me and the students by triggering their relevant experiences with learning instruments. Likewise, all three of my interviewees mentioned that the Guqin allowed them to recall their own experiences with learning instruments. These moments are not uncommon when students engage in Chinese cultural learning, as translanguaging can bring the outside world of the classroom (e.g., prior knowledge and previous experiences) to influence the current moment.

When the outside world is brought into cultural learning events, it not only helps bridge the gap between students and remote ancient cultures or culturally relevant objects but also enables students to make intercultural connections and engage in cultural learning events. Excerpt 5.21 below illustrates how students linked and compared an English song with a Guqin performance.

Excerpt 5.21

1 Yu {Watching the Guqin playing video while singing a song.}

2 Cai: Coconut song?

3 {Other students began to sing.}

4 Cai: Stop!

5 Yu: This is better than the Coconut song, this is newly better than Coconut

6 song.{Students laughed}

In excerpt 5.21, the students were watching a video of a Guqin performance. As mentioned earlier, the Guqin is rarely seen or played nowadays. For students, Guqin was more like one of the instruments which was used in ancient times, and they had limited familiarity with it. When students learned about Guqin, they tried to connect it with what they already knew, such as music in the present moment.

As Yu and Wei discussed in the interview, they were unfamiliar with the song played on the Guqin because it sounded ancient and distant. However, in order to engage in the event, Yu began thinking about other songs that he and his classmates might know. He noticed from the video that there was a dancer in the background, which he found amusing and instantly reminded him of the 'Coconut song', a funny and popular song among his peers. Consequently, Yu and his classmates began singing and commenting on the 'Coconut song' alongside the Guqin playing.

Yu's action exemplifies how he engaged in multimodal translanguaging by linking the visual element (the dancer in the video) with the auditory element (the 'Coconut song'). According to Wright (2014), visual arts are an innate means of communication for children. Therefore, Yu quickly identified and utilized the visual arts element in the video to initiate the translanguaging process. In this sense, I would describe this languaging activity as the bilingual student's ability to perceive visual arts (such as dance) and transform it into another form of language (music), which can be referred to as translanguaging.

In addition, this process is related to cross-culture, as it involves transitioning from Chinese ancient instrument playing to a popular English song in contemporary trends. In this respect, visual arts are both "language unbounded" and "culture-free" (Leung, 2019, p.48), and translanguaging promotes cross-cultural moments in a bilingual classroom. The subsequent discussion among peers about the 'Coconut song' and Guqin playing (as seen in lines 2-6) serves as evidence that

students consistently navigated this translanguaging practice and fully engaged in the cultural acquisition event.

5.7.4.2 The Non-verbal interaction in the Guqin learning event

Non-verbal interaction within the Guqin learning event is observed. Although Ms Xi was keen on introducing the knowledge of Guqin, including its history, function, structure and how to play it, for students who were unfamiliar with this instrument, the knowledge proved to be somewhat challenging to grasp. In addition, since Guqin is closely related to ancient Chinese civilization, history, culture and legends, a relatively advanced level of Chinese literacy is required to fully comprehend its significance. Indeed, for the fifth-grade Scottish-Chinese students, this knowledge seemed beyond their reach. Despite initially showing curiosity about the Guqin, their interest quickly waned. Most of the time, Ms. Xi asked questions and answered them herself, while patiently continuing to introduce the Guqin. Gradually, verbal communication between the teacher and students faded into the background, and students' attention shifted to other things, such as looking out the window, drawing on papers, chatting with peers, or simply sitting idly in their seats.

However, the occurrence of students' translanguaging practices was never restricted to verbal interactions. García and Li (2014) suggested that non-verbal interaction constitutes a trans-semiotic system with various meaning-making signs. That is to say, the synchronized organization, such as speech, gesture, gaze and other signs, situated the interactional activities and combined to create meaning (Mazzaferro, 2018). Also, from the language ecology lens, there exists 'mutual relations' (Garner, 2014) among all organisms. This implies that the interplay between people, languages and any influencing factors in language use constitutes a holistic interactive mechanism. Even if non-verbal factors temporarily withdraw from the interactive process, various factors from multiple dimensions of semiotic resources can still influence the interactive activity.

Therefore, the 13-minute non-verbal interaction was disrupted when the teacher asked if anyone knew how to play the Guqin with their right hand. A girl who had been painting since the beginning of class responded with ‘pluck’, and the teacher agreed with her answer. This serves as evidence that, although some students appeared to be engrossed in their own world, and there was no visual communication between them and the teacher, the Chinese classroom itself is a translanguaging space that continually motivates students to engage in the translanguaging process.

5.7.4.3 Transmitting tea culture under the cultural learning event

Translanguaging practices were observed in the cultural learning event with the aim of facilitating students' understanding. For Scottish-Chinese students growing up in Scotland, a linguistically diverse environment, they are exposed to multiple cultures rather than being immersed in a single one. While these students might have some exposure to Chinese culture in their daily lives, they still face difficulties, puzzles, and confusion when learning about it. Additionally, culture learning is not something that can be quickly acquired or mastered. Therefore, students often employ various strategies and resources, including translanguaging, to make sense of cultural aspects. However, the trial was not always successful. The following excerpts from 5.22 to 5.23 illustrate the translanguaging practices that occurred when attempting to understand Chinese tea culture.

Tea, with a history of over 4,000 years, is an integral part of Chinese culture. Chinese tea culture is broad and profound. It encompasses various practices such as making, tasting, drinking, and savoring tea, all of which are deeply intertwined with the connotation and etiquette of Chinese culture. Savoring tea is not only a way to distinguish between good and mediocre tea, but also a means for people to indulge in contemplation and the act of tea drinking itself. Taking a moment of leisure from a busy schedule, making a cup of tea, sitting in a serene space, and slowly sipping tea to appreciate its subtle allure can help alleviate fatigue and

frustration, enhance thinking ability, and inspire enthusiasm. Ms. Xi introduced these aspects of tea culture, as shown in excerpt 5.22.

Excerpt 5.22

Ms. Xi：你们有没有发现一点，老师今天放的歌曲也好，视频也好都是慢节奏的，这也是一点需要你们了解的喝茶不像是喝冰饮，比如可乐，并不能让你们马上喝掉，他是用非常热的水去泡，需要你们慢慢去泡，慢慢去等，这就是养成了你们一个稳重的习惯和性情。生活其实是可以慢节奏的 [*Have you noticed that both the songs and videos played today are in a slower pace? This is also a point that you need to understand that drinking tea is not like drinking iced drinks, such as cola, and you cannot drink the tea immediately. The tea uses very hot water to steep; it needs to slowly steep and you wait it slowly. This is to develop a stable habit and personality for you. Life can actually be slow*]. (The transcript is from class 5D_classroom observation_021119)

Ms. Xi mentioned the relationships between the ways of making a pot of tea (pouring near-boiling water, steeping tea slowly) and cultivating people's calm and steady personalities. However, her statement made Yu confused about how drinking tea can be linked to a person's character:

Yu said: "我觉得很奇怪，我就会理解她说的需要用热水拿去泡，然后需要等,对，我就不知道茶跟性格有什么一样… 我觉得大部分的我都会 agree，比如她说需要热水泡这些的，可是比如说可以跟性格有什么,我就不确定，或者去 [*I find it very strange, I understand what she said that we need to use hot water to steep, and then we need to wait. But I don't know what the relations between personality and tea... I think I will agree with most of what the teacher said, for example, she said using hot water to steep tea, but what can be related to the personality, I am not sure if I can*] agree." (The transcript is from Yu_interview_021119)

According to Yu's words, he was able to understand the practical steps of making a pot of tea, such as how to steep, and the time to wait for steeping. Apparently,

these steps of making tea are the common sense of life. But understanding the deeper layers of tea culture posed a challenge for him, which is demonstrated in excerpt 5.23.

Excerpt 5.23

1 T: 里面最重要的一点是什么 [*What is the most important point inside?*]

2 {No one answered}

3 T: 里面最重要的一点是文化 [*The most important point is the culture*].

4 Yu: The Chinese cul (ture).

5 T: 里面最重要的一点就是天地人，这是一个很浪漫的一个解释[*The most*

6 *important point in it is heaven, earth and people. This is a very romantic*

7 *explanation*].

8 T: 这个盖碗有什么？有盖子有杯子还有一个杯托，象征着什么？盖碗是天，

9 杯拖是地，中间是人你们是在整个世界之间饮取一杯茶 [*What does this*

10 *covered bowl have? There is a lid, a cup and a cup holder. What does it*

11 *symbolize? The lid* is *the sky, the cup holder is the ground, the cup in the*

12 *middle is the person, you are drinking a cup of tea between the whole*

13 world].

14 Cai: I don't like.

15 T: 这是其中一个非常浪漫的解释方式 [*This is one of the very romantic*

16 *explanations*]

17 Yu: Whaaaaat. This makes no sense.

In excerpt 5.23, Ms. Xi prepared a video about tea craftsmanship and explained the art of drinking tea. However, from the reaction of Yu (line 17), he felt puzzled by what the teacher has said about the cup lid being 天 (heaven), cup holder being 地(ground), cup in the middle being 人 (people), and the people between the heaven and ground to drink a cup of tea as a romantic explanation. In his interview, he added:

> "我觉得挺奇怪的，因为这只是一杯茶嘛，然后我就想，挺奇怪的，不能理解她说的什么浪漫 [*I thought it was strange, because it was just a cup of tea, and then I thought, it was strange, I couldn't understand what romance she was talking about*]."

Lacking enough awareness about the history and cultural knowledge of tea, Yu felt hard to understand the teacher's words, he even questioned me in our interview what is "天" (heaven) "地" (ground) and "茶" (tea). As he further commented, he thought it was only a cup of tea, an object to see and touch. In terms of the invisible mood of romances that tea drinking represented, Yu failed to perceive it, even if this child was usually good at using resources to cope with difficulties during Chinese learning.

Cultural acquisition differs from Chinese literacy learning, which requires practice to master knowledge, and from classical Chinese, which can be initially understood through translation or references to Mandarin. Culture can be both tangible (e.g., a specific dance representing a certain culture) and abstract (e.g., the mood associated with tea drinking in Chinese culture). People's engagement with culture can be highly personal, shaped by their experiences, knowledge, and perception of the culture. Furthermore, an individual's connection to culture may be difficult to express and understand through language alone. As Yu said, the teacher's explanation of the mood of drinking tea made it challenging for him to

comprehend neither the language itself nor the cultural meaning (see the following excerpt from Yu's interview).

> "… 有时候老师讲的中文我也听不懂嘛，有时候她语言听不懂，因为要是有时候她讲什么天还有地的话，天，地，茶，人，我就觉得非常 [*Sometimes I don't understand what the teacher speaks in Chinese, sometimes I don't understand her language, because if sometimes she said the heaven and ground, the heaven, ground, tea, and people, I would feel it is very* confusing."

This highlights not only the gap in understanding between ancient culture and the younger generation but also the limitations of Ms. Xi's oral expression in conveying culture. On the one hand, Yu, as a second-generation Chinese immigrant, understood tea only from the experience of his father drinking Chinese green tea at home and his parents buying a teapot with cartoon pattern for him. He acknowledged that he had limited exposure to Chinese culture compared to his familiarity with Chinese literacy tasks, as the completion of these tasks was required by his parents.

On the other hand, the language used by the teacher to transmit tea culture only resonated with students at a surface level of meaning. Students responded based on their own experiences, with the reaction of 'listened to it' (as Wei and Cai did), or 'just do it' (as Yu did). However, when it came to understanding the deeper layers of meaning in the teacher's speech, the language used to convey culture failed to make sense to students through traditional Chinese learning methods of repetition, translation, or interpretation. The resources students typically relied on in the Chinese classroom to make meaning did not apply in this instance. The language carrying deeper layers of meaning could not be immediately perceived by students, leading to reactions such as 'not answering anything...just forgetting about it' (according to Cai) or 'trying to remember it' (according to Yu). The subsequent sections will further discuss students' reactions and perceptions toward Chinese culture learning.

5.7.4.4 Students' perceptions of learning Chinese culture

Students' different perceptions of learning Chinese culture not only illustrated their creative and critical engagement in cultural events but also demonstrate how they choose to use language.

Since culture is not easy to understand regardless of the language used by the teacher, students expressed their boredom with learning culture through the teacher's explanations. As a result, it was common to see some students preferring to engage in their own activities (such as drawing or crafting) without paying attention to the teacher's lessons. Meanwhile, other students like Cai and Wei chose to listen but didn't progress further with the teacher's language, as they believed they couldn't go any further with it.

In contrast to students who chose to ignore cultural learning, such as Lin from class 4D who opted to 'just pass it' when she didn't understand the cultural knowledge, or those who held an indifferent attitude towards cultural learning, Yu used 'to remember' to describe his way of acquiring the culture. This approach is somewhat similar to how students learn classical Chinese (which will be further discussed in section 5.7.4.6), where they recite sentences without necessarily understanding them.

Yu explained why and how he 'remember[ed]' the culture. Being a diligent student, he believed it was necessary to master all the knowledge taught in school. However, he found that culture was different from literacy, which could be read, recited, and practiced. Culture could be both tangible, such as tea and Guqin, and abstract, conveyed through language. Therefore, Yu's strategy was to filter information first, focusing on the parts that were easier for him to grasp at the moment. As for the more difficult parts, he would temporarily set them aside and rely on the teacher or his parents to teach him later, gradually absorbing the cultural knowledge.

Yu's engagement strategy in the cultural learning events exemplifies the creativity and criticality displayed by students in Chinese culture learning. Firstly, he demonstrated the wisdom of learning culture by treating easier and more difficult parts with different learning strategies. Furthermore, he drew upon his learning experience from textbooks and classical Chinese, utilizing techniques such as reading, repeating, reviewing, and memorizing, but adapted them to his own unique steps for cultural learning: listening, skipping, waiting, and learning again. Additionally, it's worth mentioning that throughout the learning process, Yu didn't rush to master all the cultural content at once. Instead, he respected and followed the gradual acquisition of culture, which is a crucial aspect of learning complex knowledge, allowing space for language and comprehension to develop.

In his interview, Yu further discussed his perception of self-expectation of cultural acquisition:

> “这个(culture)我也不太确定，以后长大的时候要是想要的话可以学一下，我就不确定以后要怎么用 [*I'm not sure about this (culture). When I grow up, I can learn it if I want it, but I'm not sure how to use it in the future*]?” (Yu_interview_021119)

Yu’s answer reveals how critically the student engaged with Chinese culture learning. Moreover, it corresponds with what ecology asserts about the notion of holism, which highlights the importance of considering culture learning as part of the learners’ entire repertoire, developed through their lifelong learning and experiences. I do admit that culture acquisition is a process of expansion and thickening. It can change with individuals at different ages, stages, or times, and each person may have varying perceptions of a particular aspect of Chinese culture. In addition, it is connected to the process of accumulation, such as through the development of one's knowledge. Therefore, there is not necessary to be frustrated when failing to capture or perceive culture at the moment. Learning about a culture can be similar to learning classical Chinese, where students may only understand a small portion (or a superficial layer) initially. However, as they

grow and gain more experiences and knowledge, they will gradually develop their own perception and understanding of what that culture entails. As Ms. Xi stated:

> “每个人的理解都是不一样的，所以没必要非要让他们理解我理解的东西. [*Everyone’s understanding is different, so there’s no need for them to understand what I understand*].” (Ms. Xi_interview_071219)

Besides, regarding the transmission of culture in Chinese schools, students have their own viewpoints. Firstly, Yu and Cai expressed that they were not accustomed to Ms. Xi's class arrangement, as they were used to learning from the textbook throughout two lessons. Furthermore, Yu explained that his parents would teach him about Chinese culture while watching videos at home, and he found this method enjoyable and devoid of pressure from the school context. However, when culture learning became a separate subject in class, the students felt it was an additional task for them, requiring them to acquire both Chinese literacy and Chinese culture. Secondly, Yu suggested that the language used to teach culture could be derived from books, such as textbook, as it would be easier for them to read and review multiple times instead of waiting for the teacher to explain. Thirdly, in order to enhance students' interest in culture learning, the students proposed a pedagogy that involves linking the culture with the things they were familiar with. Excerpt 5.24 captures Yu and Cai's discussion in a group interview.

Excerpt 5.24

Yu: Sometimes like, for example, you are talking about tea, and how we make it at home, we would like if we can link to things that if everyone does these things, like everyone does, I can’t explain it but...we can more link it.

Yu: Like everyone’s talent stuff, for example about instruments.

Cai: like we can talk about art things.

Yu: Yes! That’s it.

Students' discussion above provides inspiration and reflection for instructors on how to approach culture teaching. Yu and Cai emphasized the importance of 'linking' as a key concept and the main suggestion. In fact, as described in excerpt 5.20 (refer to section 5.7.4.1), connecting students' personal experiences of learning an instrument with Guqin could enhance classroom interactions during cultural learning events. This example demonstrates the feasibility of the students' suggestion to employ the concept of 'linking' in cultural studies. Moreover, it is also an instance to show that Communicative Language Teaching is an effective pedagogy to promote understanding, express opinions, and exchange knowledge in the bilingual class.

5.7.4.5 Inhabiting a language to make meaning

Haugen (1972) proposed that language could be regarded as an organism. Expanded on the term *organism,* I introduce another term *Habitation* (Do Couto, 2014), to better describe the phenomenon of multiple languages being used in class 5D. In this classroom, various languages were employed, such as the named languages English and Chinese, each with distinct linguistic structures and language systems. However, students sometimes mixed these languages to convey meaning. Additionally, they utilized specific languages which were only understood among themselves, such as 'dong dong' (a phrase from Japanese cartoons meaning 'a thing') and 'na ni' (also a Japanese phrase meaning 'what' and an internet slang popular among young people in the Chinese Mainland). These linguistic elements were exclusively used in peer conversations. Although the teacher might not perceive these languages, they do not hinder the overall interaction in the classroom. Furthermore, various language forms were also employed, including semiotic signs and invisible languages (e.g., students' perceptions, ideas, and psychological activities).

The notion of inhabiting a language greatly influences the Chinese classroom and facilitates the process of meaning-making. In the following sections, I will further elaborate on this concept by providing examples from my empirical study.

5.7.4.6 Translanguaging practices at the event of classical Chinese learning

According to the Chinese school syllabus, the first class primarily focuses on Chinese literacy teaching, with the textbook as the main learning resource. The second class, however, aims to cultivate students' understanding of traditional Chinese culture, providing teachers with more autonomy in arranging the teaching content. The syllabus recommends various supplementary activities for the second class, such as culturally relevant stories, classroom games, Chinese children's songs, and ancient poetry.

In class 5D, Ms. Xi designed the first class to teach the textbook and dedicated the second class to traditional Chinese culture. Alongside culturally relevant artifacts like tea and Guqin, Ms. Xi also prepared classical Chinese reading materials. Classical Chinese language is inherently intertwined with traditional Chinese culture, making it difficult to exclude from the transmission of cultural knowledge. Additionally, Ms. Xi believed it was necessary to introduce classical Chinese to students in this age group, as they were advancing to a higher level of Chinese literacy in the fifth grade. In accordance with the syllabus, learning idioms from textbooks and ancient poetry were incorporated into the curriculum.

The *Enlightenment of Rhythm* was a classical Chinese reading material selected by Ms. Xi for her class. It is an enlightening text based on Classic Sinology Readings, designed to help children practice versification and master the rhythm of couplets. The reading itself was written in classical Chinese language, which posed challenges for the students to comprehend.

To acquire classical Chinese, students need proper practices to understand its meanings. The following excerpt shows how students learned classical Chinese in class and their perceptions of this language. Interestingly, regardless of whether the children fully comprehended the poems, they were able to recite and memorize them.

Excerpt 5.25

T: “阮途穷”的解释呢就是，阮籍这个人很穷，经常坐牛车到处逛 身上又没有钱，只有一个破牛车，身上一分钱没有。“徒”就是路的意思，在路上很穷。你们不用非得记住，但要知道这句话什么意思啊 [*The explanation of "Ruan Tu qiong" is that Ruan Ji is very poor. He often goes around in the bullock cart and has no money. He only has a broken bullock cart and he has no money. "Tu" means the road, he is very poor to walk on the road. You don't have to memorize this sentence, but you have to know what this sentence means*].

{The class keep silent for several seconds.}

T:就是阮籍这个人很穷，经常坐牛车到处逛身上又没有钱，所以就有“阮徒穷”[*It's because Ruan Ji is very poor and he often rides bullock cart and has no money on him, that's why we called this "Ruan Tu qiong"*].

Cai {sputter}: What?

T: 就是这么简单 [*It's easy to understand*].

Yu: He can buy a car? But have no money?

Yu: Why would he has a car, but no money?

Cai: He may need to sell the car, then will have money.

{Students all laughed}

In this excerpt, the class was learning a classical Chinese sentence from the *Enlightenment of Rhythm*. At the beginning of this excerpt, the teacher was explaining the sentence '阮途穷' (ruan tu qiong). Although this sentence only contained three characters, it represented a classic allusion. Therefore, the teacher shared the story behind this allusion. However, the class seemed confused about the content of the story. As seen in the conversation between Cai and Yu, they wondered how Ruan Ji, the character in the story, could afford to buy a car despite being very poor. There was a discrepancy between the teacher's words

and students' understanding. When the teacher said '阮籍经常坐牛车到处逛' (*Ruan Ji often goes around in the bullock cart*), she used the words '牛车' (*bullock cart*). However, for those students, '牛车' (*bullock cart*) sounded like a car because the word '车' (che) is often translated into *car*. Consequently, the students regarded '牛车' (bullock cart) as a type of car they have seen in their daily lives and doubted why Ruan Ji could afford a car but had no money for his living. Cai and Yu further discussed this topic in excerpt 5.26 in the group interview.

Excerpt 5.26

Yu: 我就感觉很奇怪，他为什么要花钱买牛车，而不直接去买食物这些他真正需要的东西[*I feel very strange, why does he spend money on bullock cart instead of buying food, the things he really needs*] ?

Cai: I don't know, you still ...never went to school.

Qian: You never went school?

Cai: No.

Yu: 他是说那个人，有牛车的人也不去学校上课，因为他觉得他很笨 [*He meant that the person with a bullock cart did not go to school, so he thought that person was stupid*].

Qian: Alright.

Yu: 他不是也需要钱买那个...那个... [*Doesn't he also need money to buy something...something...*].

Cai：But if he was smart he would buy food and shelter to live, but he did not.

Qian: 老师给你们讲了这个故事后，会对你们理解有点帮助吗 [*After the teacher told you this story, will it help your understanding on that sentence*]?

Yu：会懂一点了[*I can understand a little bit*]，但是还是觉得很[*but still feel* puzzled],不懂 [*don't know*] why.

From excerpt 5.26, apart from the misunderstanding about '牛车' (bullock *cart)*, the two students had other doubts related to the story itself. They questioned why Ruan Ji did not use his money to buy necessities like food or shelter. They also wondered why he did not go to school but instead traveled around in the bullock cart. Although Yu mentioned that he had some understanding of the allusion, he still felt puzzled about the overall meaning of the story.

Excerpts 5.25 and 5.26 presented both a funny and puzzling experience in language learning. They also provoked me to reflect on how students can learn classical language. Indeed, to fully grasp the meaning of a classical Chinese sentence, students need to overcome at least two layers of understanding. The first layer is realizing that classical Chinese sentences should not be translated literally. The second layer is understanding the allusion behind the sentence, which is an important aspect of the language ecology of classical Chinese. This language can be effectively understood when learners gradually master these layers of understanding. To achieve the second step, additional assistance is often needed, such as the instructor explaining the allusion in modern vernacular Chinese. However, even with this assistance, students may still struggle to fully grasp the meaning, as many classical stories require knowledge of ancient Chinese history or culture to fully comprehend. In the above examples, students misunderstood "牛车" (bullock cart) as a modern car. However, during the time Ruan Ji lived, "牛车" (bullock cart) was considered a low-grade cart used by poor people.

According to the interviews of class 5D, almost every interviewee indicated that when learning classical Chinese and Chinese culture, they found it unhelpful to draw upon all their language resources. Instead, they often resorted to translating the classical Chinese sentence or any keywords they could grasp from the stories.

During Yu's classical Chinese learning, he had tried hard to see if he could be an icebreaker in terms of making meaning. He gave an example of how he translated a classical Chinese sentence, '颜巷陋' (Yan xiang lou), in his interview:

> "... 因为我不知道它是什么意思，比如这些语言我也没学过，比如说第三个"颜巷陋" 我这个，我就想，颜色? 然后我就直接想不出来别的什么，我就直接背 [... *Because I don't know what it means, I haven't learned these languages. For example, the third sentence "Yan xiang lou", I think about color? and then I can't think of anything else, so I just recite them ...*"] (Yu_interview_021119)

Like the sentence '阮途穷' (ruan tu qiong), the sentence 颜巷陋 (yan xiang lou) represented a classic allusion. However, Yu had no idea about the allusion, so what he chose to do was trying to translate the words in this sentence. Yu's reaction is in line with what many Chinese language learner will do, and is a reflection of Grammar Translated Method pedagogy. The single word '颜' (yan) is commonly used in the vocabulary of '颜色' (yan se, means: color). Thus, Yu first tried to link '颜' (yan) to '颜色' (yan se), which showed his Chinese literacy skills. Then, he translated '颜' (yan) into English - *color* - in an attempt to gain further understanding of the sentence. However, he did not find any other avenues to explore.

Yu's attempt might not have met his expectations in understanding the meaning of the sentence, but it still demonstrated his creative and critical approach in utilizing available resources, such as translation and Chinese literacy skills, to learn a language. Moreover, translation and translanguaging are advocated as valuable pedagogies in Chinese language learning. They not only develop students' ability to operate between languages, but also, and most importantly, nurture creativity and a multilingual sense of self (Laviosa, 2018).

From an ecological perspective, the translation of 'color' (颜) not only served as the literal translation that Yu used as a starting point for language engagement, but it also functioned as an inhabiting language that Yu deliberately employed

within this complex classical Chinese sentence. By establishing connections with other words, Yu attempted to decipher the meanings. This example demonstrates how language learning pushes students to explore different approaches to languaging with the resources available to them.

Similarly, Cai mentioned that he also attempted to use translation when learning classical Chinese, but he encountered difficulties at this stage. He said in the group interview:

> "*I still don't understand, if I translate, but I still do not know what these words mean, I can't translate.*" (Cai_interview_301119)

Cai's statement highlights the challenges of learning classical Chinese when students were unable to rely solely on translation to make sense of the language. Furthermore, even if they managed to reach a literal translation, it could not guarantee a full understanding of the intended meanings.

Yu acknowledged Cai's point and shared his similar experience with classical Chinese:

> "... 这个也非常难，对我来说也会说翻译非常难，我用中文讲我又不知道是不是要讲老师两鬓霜是什么意思，还是说什么别的 [*This is very difficult. It is very difficult for me to translate. I don't know how to understand this sentence in Chinese, I don't know if the teacher going to talk about what the cis or something else*] ..." (Yu_interview_021119) (Note: Liang bin shuang is one Chinese Classical sentence from *Enlightenment of Rhythm*)

It is common for students to rely on translation as a means of language acquisition. In bilingual classrooms, Chinese teachers often use translation to explain words, phrases, and sentences in order to facilitate students' understanding. Similarly, students adopt the same approach. During moments of peer support, a student may translate the teacher's questions, instructions, or other classroom-related information to help their peers comprehend. Translation appears to be the most

common and direct method for overcoming comprehension barriers, and a strategy to make meaning. However, as illustrated in the examples above, when students encountered classical Chinese, translation failed to assist them in understanding the meanings, regardless of their efforts. It was only when additional processes were employed, such as gaining more knowledge of the allusion and utilizing other resources like prior knowledge, teacher explanations, and their Chinese literacy skills, that understanding was facilitated. All of these processes worked together to promote comprehension, and they are called translanguaging.

Besides, Yu's quote "*I don't know if the teacher going to talk about what the Liang bin shuang is or something else*" reveals the relationships between the student and the newly learned sentence. Indeed, there is a lack of interaction between the student and the language, as he was unsure of how to approach it, what implications it might hold, and was unable to make assumptions about its meaning. However, an ecological approach might guide the ways in which the classical Chinese language can interact with students and other languages. This includes linking with other languages, seeking assistance from other languages, borrowing resources, and inhabiting other languages. All these approaches could be helpful in facilitating meaning-making.

The ecology of learning classical Chinese encompasses how students interact with various factors that can influence their reception and understanding of the language. It also involves students' translanguaging practices, utilizing various resources such as translation, literacy skills, and prior knowledge to make sense of classical Chinese learning. However, this translanguaging process is not without its challenges. It requires not only determining which resources to utilize but also understanding the cultural and historical contexts that are intertwined with the stories within classical Chinese. In other words, students need to be aware of the available resources and how to interpret them. This can be a lengthy process and presents a significant goal for Chinese learners, especially considering the learning tasks they have already worked with, such as incorporating allusions into written work or translating classical Chinese into vernacular language. Additionally, it is

crucial to recognize the learner's agency in determining what it means to inhabit these language resources.

However, it is important to note that meaning-making is not always the final objective of language learning. In the case of learning classical Chinese, many students indicated that while they might not fully understand the meaning of the classical Chinese sentences, they were still able to memorize them. This phenomenon is evident not only in my group interview with Yu and Cai (see excerpt 5.27 below) but also during class quizzes, when students were tested on their ability to memorize these sentences, and the results showed that almost every student was able to do so.

Excerpt 5.27

Qian: 你们都会背吗 [*Can you memorize them*]?

Yu：嗯 [*Yes*].

Cai：读很多遍 [*Read many many times*].

Yu：我就直接那个我什么时候有时间我就大概背，每天晚上大概 10 分钟，我就直接念一个部分然后再试试看怎么背，如果不会背我就再念更多遍 [*I just recite it whenever I have time, and every night I read about 10 minutes, I would recite a part and try to memorize it. If I can't memorize, I'll read more times*].

Qian: 可是你都不知道什么意思，你知道吗[*But you don't know what it means, do you know it*]?

Yu：我第一次背的时候什么东西都不知道 [*I didn't know anything the first time I memorized it*].

Cai：No.

Qian: How to remember it? When you did not understand what it means.

Yu： 我就直接说，说啊，说出来，可是我也没有别的其他什么*办法 [I just read, read, read, I really have no other way*].

Cai：I don't know, I just read it out, 我妈妈就叫我一直读一直读 [*My mother told me to keep reading*].

Qian: 妈妈会给你讲解意思吗 [*Will your mom explain to you*]?

Cai：No.

Cai: Oh, sometimes a little bit.

There are three different expectations towards learning classical Chinese. Ms. Xi believed that for students in this age group, their learning experiences and interest in classical Chinese are more important than a deep understanding of each sentence. She acknowledged that even if she explained the sentence or allusion to students, it could not guarantee that they would fully grasp the culture of that ancient time. Learning classical Chinese is a gradual process, and students should not be expected to instantly comprehend the language. However, the words, sentences, and learning experiences leave an imprint on students' memories. As they progressed to the sixth or seventh grade, they might develop new understandings when revisiting these classical sentences and stories. Ms. Xi argued in the interview:

Excerpt 5.28

"他现在即使不能百分百理解，他之后，至少他现在是听过这个词的。之后，或者是有一天他突然理解了，这也是后面的一个长期的教学影响的一个目的 [*Even if he can't understand it 100% now, at least he has heard the word now. Later, or one day he might suddenly understand, which is also a purpose of a long-term teaching influence*]."

Ms. Xi's viewpoint reflected an ideology of treating language learning as a sustainable development process that could be transmitted and expanded over

time. However, the students and their parents might not share the same perspective or goals for Chinese learning. According to Yu, unlike his experiences in the mainstream school, where students would memorize passages after the teacher's explanation, Chinese learning involved stricter requirements set by his parents, who expected him to recite the *Enlightenment of Rhythm*, as shown in excerpt 5.27. Cai had a similar approach, demonstrating a commitment to Chinese tasks despite expressing fatigue. The choices made by students in doing a language were influenced by parental expectations and the value placed on being a Chinese student learning Chinese.

According to Yu, his parents always emphasized the importance of learning Chinese. This was echoed by my conversation with Yu's mother in the school corridor, as she expressed concerns about the Chinese language proficiency of second-generation immigrant children. She explained that, as these students spent more days in mainstream schools where English is the dominant language, they only had very limited time to learn Chinese. As a result, their level of Chinese proficiency was much lower than their counterparts in China. In fact, the worries of Yu's mother were not unique. In class 4D, Chen's mother also expressed similar concerns about his boy's Chinese level. Therefore, it is not surprising to see why Yu's parents made a stricter requirement for Yu on his Chinese learning.

Besides, students' choices in language learning are also influenced by societal perceptions of the Chinese community and Chinese students. The traditional Chinese values of hard work and obedience often shape the social image of students. Consequently, in the aforementioned examples, even though the students lacked a better method to understand the meaning of the reading material, they chose to read it repeatedly for memorization. This approach signifies a different way of doing and feeling a language, as they immerse themselves in the sounds rather than focusing on meaning.

5.7.4.7 Translanguaging practices in the event of learning couplets

Helping students develop a sense of the Chinese language through learning classical Chinese was Ms. Xi's teaching objective. The E*nlightenment of Rhythm* offered numerous examples of classical Chinese rhythms, particularly in the form of couplets. It is considered a valuable resource for students to practice the rhythmic patterns of classical Chinese. The *Enlightenment of Rhythm* was written in the genre of couplets (also known as dui zi), a unique literary genre in China. Couplets can vary in length. In the case of the *Enlightenment of Rhythm*, the couplets are relatively short, consisting of only three characters, such as 云(yún)对雨(yǔ) (meaning: cloud matches with rain). In other cases, the couplets can have several hundred characters, which can be seen on ancient Chinese architectures.

The structure of couplets can also vary. It can be zheng dui (parallel in meaning), for instance, "书山有路勤为径，学海无涯苦作舟" (*Diligence is the path towards success of learning, and hardship is the boat that carries you across the sea of knowledge*). In this example, "勤" (*diligence*) matches with"苦" (*hardship*). Another type of couplets can be Fan dui (antithetical in meaning), for instance, "上" (up) matches with "下" (down) in couplets. There is also Liushui dui (the grammatical structure of two sentences can be different, but the meaning of the two sentences should have a certain order to follow), for instance, "欲穷千里目，更上一层楼" (*You can enjoy a grander sight by climbing to a greater height*). In this example, there is a sequential order between the two sentences – people have to climb to a greater height to enjoy a grander sight. Additionally, a couplet should have the following features: (1) each line should have an equal number of characters and sense groups; (2) strict adherence to tonal patterns, such as distinguishing between level tone and oblique tone; and (3) using characters of the same part of speech in the same position (Deihui, 2008).

Excerpt 5.29 below is an example of how students learned the couplets in the *Enlightenment of Rhythm*.

Excerpt 5.29

1 T: 云为什么对雨知道吗 [*Why does cloud match with rain*]?

2 Cai：Because rain comes out from the clouds.

3 T：差不多，都是关于天气的 [*Almost, it's all about the weather*].

4 T: 晚照对晴空，什么是晴空 [*Wan zhao matches with qing kong, do you know*

5 *what is the qing kong*]?

6 Ss: I don't know.

7 Yu: 没有云朵的天 [*The Sky with no clouds*].

8 T：对 [*Yes*].

9 Yu {said to peers}: Not Scotland.

10 {Students all laughed}

11 Cai: That is opposite to Scotland.

Instead of explaining the complicated rules of couplets to students, Ms. Xi first asked the students about their understanding of "why cloud matches with rain" (in line 1). Cai gave his answer by saying, "because rain comes out from the clouds" (in line 2). Although this was not the correct answer, it was an experience-based response that reflected Cai's own understanding of the couplet. The teacher approved of his answer. As mentioned earlier, the language used in the *Enlightenment of Rhythm* is relevant to classical Chinese. Therefore, in order to understand the meaning of these couplets, learners usually start with understanding the classical Chinese language used in the couplets. Thus, Ms. Xi asked the students, "what is qing kong?" (in line 5), a question related to vocabulary meaning. This question seemed challenging for many students, as they could not give the answer, but Yu answered it correctly.

The process of coming up with an answer is a process of languaging itself, and it demonstrated the students' ability to utilize resources to respond to challenging questions. In the interview with Yu, he explained that he had learned the Chinese words "qing" and "kong" before, so he knew they meant "sunny" and "sky", respectively. Therefore, when these two words were combined, he guessed that it might refer to a "sunny sky." Additionally, as Yu had learned "wan zhao" before, he knew that this phrase meant "the sun is going down, the sky is getting dark". Next, he used the rule of couplets, which he had recently learned, to confirm that "qing kong" should be antithetical to "wan zhao", which means the meaning of "qing kong" should also be antithetical to "wan zhao". Through this pattern, Yu realized that "qing kong" might describe the sky getting bright. Finally, he concluded with "sky with no clouds", which is a distinctive feature of a bright sky, as his answer.

According to Yu's response, association and deduction are other key processes in understanding classical Chinese. Here is the translanguaging process in which Yu engaged: (1) He drew on his funds of knowledge, recalling previous Chinese learning; (2) He employed the Grammar Translation Method. Although Yu did not often translate Chinese words into English to make sense for himself, in this case, he critically used translation as the first resource. He translated the Chinese words "qing" and "kong" into the English words "sunny" and "sky", respectively. (3) He associated the translated words "sunny" and "sky" into the phrase "sunny sky". (4) When Yu recognized that the basic idea of the answer might be related to the meaning of "sunny sky", he employed a deductive approach in his languaging. He double-checked his thinking by adding another resource – the rule of couplets, which he had learned in class that day. This process was important for Yu to ensure that his direction in finding the answer was correct. Finally, (5) he expanded the meaning of "sunny sky" by drawing on his funds of knowledge of nature, leading to the phrase "sky with no clouds". Yu completed the entire process of translanguaging and provided the expected answer.

Another interesting aspect worth mentioning is that at the end of excerpt 5.29, after answering the question, Yu made a joke with his peers by linking the answer to the weather in Scotland. Cai and other students responded to Yu. Through this joke, Yu engaged with his current knowledge and location. It not only relieved the tense atmosphere of dealing with a challenging question but also demonstrated how dynamic the classroom conversation could flow among bilingual speakers. In the translanguaging process, language between students and the teacher, between students themselves, and their assumptions, perceptions, and funds of knowledge worked together. This is how language ecology allows people to do with language, enabling it to work in order, work together, and inhabit a new language in order to make sense of another language.

5.7.5 Translanguaging practices under other remarkable events

The teaching and learning of the Chinese language are inseparably intertwined with the teaching and learning of Chinese cultural values and ideologies (Li and Zhu, 2013). The textbooks used in Chinese schools are usually filled with traditional folk tales and stories that convey moral messages to learners, often related to traditional Chinese cultural values.

The following example, which I am going to present, was taken from a recorded classroom interaction. An article in the Chinese textbook told a story about a rabbit who gained everyone's love due to her hard work and excellent academic performance. However, the teacher, Ms. Xi, criticized the value conveyed in the article. She told the students, “You are worthy of being loved regardless of your academic performance or how hard you work” (translated from the transcript of 5D_classroom observation_021119).

In this instance, Ms. Xi behaved differently from the stereotype that Chinese teachers usually promote the value of being a ‘hardworking person’ to students. This was influenced by her own educational experiences in both China and the UK, where she realized that there are different cultural and educational ideologies.

Indeed, it is common to hear Chinese parents or teachers emphasize the importance of academic studies and hard work to achieve a successful future life. The article in the textbook expressed a similar value, encouraging students to be welcomed by others through hard work in their studies. However, Ms. Xi questioned the value conveyed by the textbook, as she said in the interview, “it is not very appropriate to pass this value from an adult, such as the teacher, who might have a large influence on the students” (translated from the transcript of Ms. Xi_interview_071219). She wanted to provide the students with an opportunity to critically examine traditional Chinese cultural values. Furthermore, she wanted students to have equal communication with adults, rather than always being taught and told what to do.

Therefore, Ms. Xi delivered the above speech in Chinese and received warm applause from the students. This was a rare scene I observed in class 5D. Many times, there were tensions, conflicts, and complaints in the class, with students complaining about challenging tasks or dull and boring teaching. However, this time, the students and the teacher were unified, agreed, and pleased with each other. In this case, I would argue that translanguaging facilitated a positive interaction between students and the teacher, allowing for deeper discussions on life philosophy and cultural values. Additionally, this interaction was vital in easing the weekly tensions between students and the teacher in Chinese class, bringing them together rather than putting them on opposite sides.

Furthermore, this instance exemplifies that while language is important for translanguaging in terms of communicative purpose, translanguaging can go beyond language itself to resonate with people. Although the students might not have fully understood the teacher's words, the ideology transmitted by Ms. Xi transcended language barriers and was somehow received by the students. To further illustrate, through her speech, Ms. Xi emotionally touched the long-standing views of the students regarding Chinese-style education, and they were able to reflect on their thoughts and find resonance in this communication. I consider this the charm and power of translanguaging in bilingual interactions.

Meanwhile, for Chinese language-minoritized students, social justice might be built up through having a conversation, or to put it in other words, through translanguaging, like the example I presented in class 5D. For my participating students, due to their ethnic appearance, society, parents, teachers, and even the students themselves have expectations regarding their Chinese language learning. This is one of the reasons why students attend Chinese school. According to my key student participants, all of them indicated that they came to Chinese school because of their surroundings (i.e., their parents' hopes or their friends attending the class).

In the Chinese class, they needed to adapt to the Chinese pedagogical approaches, Chinese language environment, and even some traditional Chinese cultural values. However, it is important to consider the students' viewpoints and understand what they think about Chinese learning and Chinese school. For example, in my interview with Wei, he indicated that his identity was 'Scottish' rather than 'Chinese', which might differ from how others perceived him. Therefore, there is a gap between how others think these students should learn Chinese or what they should be as 'Chinese students', and what the students themselves want to do or be. On this occasion, translanguaging tries to narrow this gap by allowing students to use whatever languages or language forms to speak out their opinions and to challenge the language policies in the Chinese school, such as the OLAT or OLON (Li and Wu, 2009). Indeed, based on many of my observed teaching and learning moments in the classroom, some of which have already been presented in the above sections of this finding chapter, translanguaging pedagogy enables students to freely exert the benefits of drawing on all linguistic resources to maximize understandings and achievements, rather than feeling inhibited to use more than one language to learn another language. In other words, translanguaging provides students with a space to develop their confidence and promote flexibility in learning Chinese. As a result, students don't have to believe that they must use the Chinese language exclusively in the Chinese class.

On the other hand, translanguaging opens spaces for social and cognitive justice in the education of these students (García *et al.*, 2021). In the above example, translanguaging transmitted the ideology of social justice from the teacher to the students. It highlights one's worth and role in the community and tells the students that they do not have to accept the Chinese value of becoming a diligent student to earn others' care and love. They were free to be themselves, and being hardworking was not the standard for determining if a person deserved to be loved or not. Although the topic might seem deep for students who were only 8-11 years old, and they might hear similar ideas in other places, such as in mainstream schools or on TV, it is still a valuable opportunity for them to learn about it through a way of classroom translanguaging. Besides, this instance is just one single case I observed in the classroom; however, I still think that it is worthwhile to be presented here, as the instance raises the possibility of taking steps towards the principles of social justice through the use of languaging practices.

5.8 Summary of translanguaging practices in class 5D

To sum up, translanguaging practices observed in class 5D provided ample examples for me to learn, investigate, and reflect on the occurrences of translanguaging in the Chinese class and how students engaged in them. The writing structure to present translanguaging practices in class 5D is based on the categories of major classroom events. In the literacy events, I distinguished two sub-categories: (1) events with task referring and (2) events with non-task referring. In the task referring events, translanguaging was employed to promote students' interaction with named languages, allowing them to use linguistic resources and peer interaction to create a learning space in literacy events. Besides, in order to facilitate students' Chinese learning and mitigate students' difficulty in coping with Chinese learning tasks, translanguaging was employed to explore if any strategies from their English learning could be applied to their Chinese learning. In the non-task referring events, translanguaging occurred to shape students' attitudes towards the Chinese class, such as socializing with peers,

relieving stress, and creating a more relaxed classroom atmosphere. What's more, it was also observed that translanguaging transcended the limitations of linguistic structure and enabled the utilization of multimodal modes, such as emotions and body language, to facilitate communication among students and the teacher.

The cultural acquisition event was a distinctive classroom event in this class. During the Guqin learning, translanguaging lightened a new insight that students could bring the outside world of the classroom (e.g., prior knowledge and previous experiences) to promote their current interaction with artifacts for cultural learning. In addition, students' translanguaging practices were never restricted to verbal interaction but could also occur through multiple dimensions of semiotic resources during their interactions. However, during the tea learning event, conveying cultural values through language posed a challenge in terms of students' understanding. Translanguaging at this moment called for more creative and critical approaches to establishing intercultural links to bridge understandings. Students themselves also put forward suggestions about how to link Chinese culture to their daily lives. In the context of classical Chinese learning events, translanguaging provided an innovative approach to inhabiting a language to make meaning, particularly when students' language resources could offer them little assistance. Moreover, from the language ecological perspective, recognizing and respecting the learning ecology of classical Chinese, creatively and critically utilizing resources, and working with different languages might be helpful and beneficial for sustained learning of classical Chinese for those bilingual students. Similarly, in the event of learning couplets, students demonstrated their creative and critical strategies of association and resource expansion within the translanguaging process. The final classroom event that I presented was named 'other remarkable events', and an example was selected to illustrate how translanguaging has the capacity to convey deeper topics in bilingual classes, such as cultural values from the teacher to students. Additionally, in this case, translanguaging transcended language barriers, transmitted ideology to students, and promoted social justice within the Chinese community.

CHAPTER SIX: DISCUSSION AND CONCLUSION

6.1 Introduction

This thesis aims to develop a holistic understanding of Scottish-Chinese students' language use in the Chinese school classroom, adopting both the lenses of translanguaging and language ecology perspectives. A three-month empirical investigation of two Chinese classes was carried out with a combination of qualitative research methods in four phases: (1) observations with field notes only to examine general language use in the classes and the classroom arrangement; (2) audio-recorded classroom observations to collect comprehensive languaging examples in the two classes; (3) semi-structured individual interviews with key student participants and their teacher respectively; (4) group interview with key students from the two classes at the end of classroom observation stage. The research endeavored to address one main research question with its two sub-research questions concerning students' complex, dynamic, flexible, creative, and critical languaging activities in the Chinese class:

The main research question is:

How are languages used by Chinese bilingual students in the Chinese classes?

Accordingly, two sub-research questions were developed from the main question:

3. What translanguaging practices, if any, occur in the classes, and why do they occur?

4. How do the students engage in classroom translanguaging, and what do they achieve through these translanguaging practices?

Translanguaging as both a practical theory and practice helps interpret the creativity and criticality of Scottish-Chinese bilingual children's languaging practices in the classroom. Meanwhile, due to the high degree of diversity in

linguistic and cultural experiences within the subjects and context of this study, translanguaging is applied as a lens to explore how participants draw upon a wider repertoire to engage in their classroom languaging. However, during my ongoing data analysis, I found that language learning was not always about drawing resources to make meaning. Thus, to explain the holistic, interactive, and dynamic language use in the Chinese classroom, the language ecological approach is employed as an additional lens, which provides me an orientation to explore the relationship of languages to each other and to the society in which these languages exist (Creese and Martin, 2003). These two lenses complement each other and help me answer my established research questions. Given the aim of developing a comprehensive picture of students' language use in the Chinese class, including translanguaging practices under different classroom events, the purposes for students to translanguage, and how students engaged in those translanguaging practices, this final chapter will take a view of 'looking down', regarding the findings of each research question as a piece of a puzzle and discussing the themes from the findings chapter in sequence.

In this chapter, I will first focus on the empirical (section 6.2) and theoretical (section 6.3) contributions related to the research questions by briefly recapping the key findings through two theoretical perspectives: translanguaging as a practical theory of language (Li, 2018) and language ecology perspective including Haugen's (1972) metaphorical language ecology and Garner's (2004) non-metaphorical language ecology. The two theoretical perspectives contribute to the development of an integrated conceptual model of 'Bilingual classroom language ecology' (see Figure 3.2). Methodological contributions will be presented in section 6.4. Next, section 6.5 is about the practical implications for institutions, Chinese teachers, parents, and bilingual students. A summary of key recommendations will be provided in section 6.6, particularly around pedagogy and classroom practice. Discussions of the research limitations and future research directions will follow in section 6.7.

6.2 Contributions to the literature on translanguaging

The first research question addresses the phenomenon of translanguaging practices in the Chinese classes. Before stepping into specific examples, the language ecology lens enables me to understand the overall eco-system of classroom language use by investigating general language use across students, teachers, and language forms (see Figures 5.1 and 5.2), and their interaction brought the languaging practices. Because the named languages of English and Mandarin are most commonly used by students and teachers for learning and communication purposes, they become the most readily observable language use in the Chinese classrooms. Meanwhile, I assume that there are multiple language forms in the classrooms, and they interact with agents visually or invisibly. To present these language relations, the clear interactive lines between each agent and between agents and language forms are identified, which is a vital starting point that guides me to capture the translanguaging practices in the researched classes. This enables me to move forward to address the second research question, which investigates how the influential factors from the classroom and wider cultural and social environment impact students' engagement in translanguaging practices, and how these practices, in turn, support Chinese learning of the students and enhance their classroom experience.

The schedule of the researched class (see Tables 5.1 and 5.3 in the findings chapter) was developed to facilitate the process of capturing translanguaging elements in the class. Subsequently, the instances of translanguage by students and the teacher were captured (see Table 5.2 and 5.4 in the findings chapter) and classified according to different classroom events: literacy events, casual conversations, and other remarkable events in class 4D; literacy events, cultural acquisition, and other remarkable events in class 5D. The two tables listed the major translanguaging practices in these two researched classes and analyzed the purposes behind the use of translanguaging by language users. The table helped me construct the answers to my first research questions. Here I am not going to

reiterate those translanguaging practices; instead, I will relate these findings to existing research to highlight the key findings of this research and their contribution to existing knowledge. Firstly, translanguaging is identified as a natural process that occurred in the Chinese classrooms. I will elaborate this point in the next section.

6.2.1 Translanguaging as 'the communicative norm of multilingual communities' in the Chinese classes

In their study of examining the case of a network of U.S. secondary schools for newcomer immigrants, García and Sylvan (2011, p.389) described translanguaging as "the communicative norm of multilingual communities". Specifically, it can be learned from García (2009)'s explanations:

> "[Translanguaging] is an approach to bilingualism that is centered not on languages as has often been the case, but on the practices of bilinguals that are readily observable. These worldwide translanguaging practices are seen here not as marked or unusual, but rather taken for what they are, namely the normal mode of communication that, with some exceptions in some monolingual enclaves, characterizes communities throughout the world" (p.44).

According to García's argument above, translanguaging is an everyday language practice of bilingual speakers, which is very normal for them and readily seen in their communication. Similarly, in my study, in the nature of Chinese complementary school classrooms, translanguaging is a common practice that goes beyond pedagogical practices and largely serves communicative purposes in various classroom events, including language and literacy learning, cultural learning, and casual conversations. Moreover, as the languaging practices in a bilingual class are discursive, dynamic, and highly unpredictable (Portolés and Martí, 2017), students often translanguage spontaneously and sometimes without

any certain purposes. Blackledge and Creese (2017, p. 34) described such translanguaging as “commonplace and everyday” for bilingual speakers.

Even if translanguaging can be treated as a habitual language or automatic reaction during students’ daily communication, it still reflects an individual’s entire language repertoire. For instance, in my research, a student’s language use may be influenced by incorporating languaging experience of multiple language learning (i.e., a girl was learning French, English, and Chinese at the same period, and these language experiences constitute her language repertoire, influencing her translanguaging performance in learning Chinese. Thereby, her French learning experience of ‘the flow of French’ impacted how she decided to speak Chinese. See the full explanation of this instance in extract 5.7).

Therefore, I agree with García’s (2009, p.140) description of translanguaging as “the act performed by bilinguals of accessing different linguistic features or various modes of what are described as autonomous languages, in order to maximize communicative potential”. She highlighted how bilinguals naturally use their linguistic resources without considering the named language categories, which is a crucial difference from another common language phenomenon, code-switching, in the bilingual world.

In my research, since the approach to exploring classroom translanguaging has been integrated with the language ecology perspective, the findings indicate that translanguaging is a natural and inevitable process in the bilingual classrooms. It is the way that bilingual speakers interact with each other and with other language forms, and it boosts the languaging flows in an ecological way in a bilingual setting. This nuanced understanding of translanguaging provides us with a different perspective on its occurrence, contributing to the scholarly discussion on classroom translanguaging.

6.2.2 Translanguaging as flexible bilingualism in the Chinese classes

Translanguaging is identified as providing spaces for bilingual students to perform bilingualism flexibly and sophisticatedly in order to achieve smooth communication in the Chinese classes.

In this study, I present examples of speakers moving frequently between their languages, and I regard these bilingual language use in complementary schools as "a characterisation of heteroglossic, translanguaging practice" (Creese and Blackledge, 2011, p.1201). For instance, in the learning event of my study, when students needed to catch up the teacher's instruction, they usually asked questions in Chinese, but when speaking to peers, they quickly switched to English. This languaging phenomenon is influenced by several factors, including Chinese moral values that emphasize respect for the elderly. Speaking Chinese with Chinese teacher is seen as showing respect, as students perceived that Chinese teacher usually understand Chinese language better. On the other hand, students knew quite well that English was better understood by peers, especially when referring to specialized vocabulary, making it the preferred choice for communication with peers.

In contrast, during negotiations with their Chinese teacher, students usually preferred to use more English. This 'behavior shift' reflects students' subtle psychological changes. During tense classroom moments, students may be less willing to adhere to Chinese moral values or behavioral norms and instead prefer to stay in a more comfortable zone, intentionally choosing English, their most proficient language, to challenge teacher's authority, expressing complaints about the Chinese class, and demonstrating their cultural identity.

In general, students' language use is flexible, with no fixed standard or rules for them to follow, which I interpret as a reflection of their well-developed bilingualism. Besides, various factors might influence how students choose which named languages to use in a conversation, such as the current speaking context, individual's habitual language, and students' automatic reaction at present. These factors are presented and discussed in the findings chapter.

Lastly, although my research focuses on the complementary school, lacking sufficient data on bilinguals' out-of-school language use, I acknowledge that the flexibility in language use is not a single, fixed phenomenon that exists exclusively in the language complementary school. Rather, it is an identity marker embedded in bilingual speakers' everyday interaction (Creese and Blackledge, 2011).

6.2.3 Translanguaging as pedagogy in the Chinese classes

Although translanguaging, the focus of my entire research and a recent pedagogy, has brought many benefits and implications to language learning, in this study, the most predominant pedagogical approaches in classes 4D and 5D were situated in grammar translation pedagogical approaches. It can be seen that both students and teachers rely heavily on translation as a communication method for classroom interaction and a learning strategy for Chinese learning. In fact, the grammar translation method is still commonly used by many teachers and students to learn a second or foreign language, and the outcome is significant. Similarly, this research revealed that grammar translation is a meaningful pedagogy in Chinese language learning. More importantly, the findings echo Laviosa's (2018) suggestion to integrate translanguaging into translation pedagogy. Through the mutual exchange of these two pedagogies, grammar translation not only works as a pedagogical approach for learning a target language but also enables teachers to open up the space for translanguaging in their own pedagogies so that learners see and draw on their language resources.

Meanwhile, another pedagogical approach, Communicative Language Teaching, is employed in classes 4D and 5D, and the language use there demonstrated that translanguaging and CLT can complement each other and jointly support students' bilingual learning. On the one hand, translanguaging promotes students' communicative competence in the Chinese class. On the other hand, CLT pedagogy brings about the occurrence of translanguaging practices. It can be seen from class 4D that, by adopting CLT pedagogy, students and teachers engage in real-life communication in the classroom, bringing their own bilingual lives and

cultural identities into the conversations, resulting in many moments with translanguaging elements. This link between CLT and translanguaging also responds to one of my research questions: why translanguaging practices occur in the Chinese classroom.

More importantly, in my study, translanguaging pedagogy works as a meaningful learning approach in language and literacy learning, sustaining students' dynamic languaging and providing many valuable moments in my research to facilitate their language use. Translanguaging pedagogy is adopted by teachers from the two classes more or less. The teacher in class 4D preferred flexible bilingual teaching, embedding translanguaging pedagogy in her class teaching. Meanwhile, in class 5D, the teacher insisted on a Chinese-only language ideology, leading to a less prevalent use of translanguaging pedagogy in her class. However, despite the teachers' different language ideologies, there were no significant differences observed in students' language use between the two classes. The main reason is that for bilingual learners, translanguaging is not something confined to specific times or places; rather, it functions more like an everyday practice, unrestricted by time and place. As the weekend Chinese complementary school only has one Chinese class per week, students' language use is more inclined to their daily performance, a dynamic and flexible way of bilingualism.

Moreover, these bilingual students exhibit a high level of capacity in taking control of their language practices in the Chinese classes. As García and Li (2014) said, in bilingual class, not only teachers but also students can engage in translanguaging pedagogies. The students from both researched classes show strong autonomy in using translanguaging pedagogy to gain knowledge in language and other aspects. This finding is supported by many other studies (García and Li, 2014; Jones and Lewis, 2014; Safont and Portoles, 2016), all of which emphasize that the flexible use of students' entire linguistic repertoire is beneficial for language learning.

Next, I will move on to the discussion about why translanguaging happened in the Chinese classrooms by integrating a lens of functional perspective on translanguaging.

6.2.4 Meaning-making as the major function of translanguaging in the Chinese classes

In a bilingual class with language diversity, meaning-making is a frequent and common act for both students and teachers to communicate. This function serves as the foundation for other activities in the classroom, such as language/cultural learning, negotiation, and socialization. From my research, it can be found that there are triangular influences among meaning-making, interaction, and translanguaging. The interaction is largely boosted by bilinguals' constantly expressing and conveying information, while translanguaging effectively promotes this process. Furthermore, the interaction between bilinguals leads to more translanguaging practices.

Previous studies on early language learning have found that young language learners can strategically use their L1, L2, or L3 to serve different communicative functions (García *et al.*, 2011; Portoles and Marti, 2017). These studies identified several key findings, such as six functions of translanguaging among multilingual learners: (1) mediating understandings; (2) co-constructing meaning of what the other is saying (3) constructing meaning within oneself; (4) including others; (5) excluding others, and (6) showing knowledge. However, the focus of these studies was on very young learners (4-5 years old preschool children) and their translanguaging practices in early language learning. In contrast, this study expands the age of young learners to 8-11 years old and enriches the discussion by adding examples of Chinese literacy and culture learning.

Therefore, in my study, translanguaging has been identified with multiple functions, some of which have been reflected in previous studies, such as expressing personal or affective meanings (Portoles and Marti, 2017), having fun

with words (Li, 2011a), as a habitual language (Fennema-Bloom, 2010), and the above six translanguaging functions (García *et al.*, 2011). Some functions are exclusively found in my study. In Table 6.1 below, I will highlight my key findings of translanguaging functions, then unfold the discussion when moving into the second research questions in sections 6.2.5, 6.2.6, and 6.2.7.

Table 6.1 The list of key findings of translanguaging functions in this study

(1) Translanguaging eases the stress of students when they are coping with class tasks, and brings them a space to comfort and encourage peers in the intensive class time.	see excerpts 5.6, 5.17 and 5.19.
(2) Translanguaging might have the possibility to make steps of the principles of social justice for Scottish-Chinese students group, such as in the aspect of breaking the traditional Chinese value of being a 'good Chinese student', or highlighting one's worth and role in the community.	see the instance in section 5.7.5.
(3) translanguaging connects students' weekly English learning experience with the Saturday Chinese class, it includes calling on strategies of students' English learning to be used in their Chinese learning; students trying to borrow the English class style and English teacher's teaching ways in the Chinese class when dealing with the similar class issue.	see excerpt 5.18.
(4) translanguaging associates prior and newly learned knowledge to support students' understanding of the new knowledge.	see excerpt 5.14

(5) translanguaging allows knowledge transferring across multilingual and multimodal resources and then creates new knowledge to facilitate students' Chinese learning.	see excerpt 5.14
(6) translanguaging sets the scene for students to use heuristic methods towards how to link the culture knowledge of Chinese with students' daily experiences to facilitate Chinese culture learning.	see excerpt 5.2.1 and 5.2.2
(7) translanguaging maximizes the potential of students' creativity and criticality in learning classical Chinese.	see the instance in section 5.7.4.6
(8) translanguaging enables students to enter into an imaginative space to learn Chinese idioms.	see excerpt 5.3
(9) translanguaging illuminates a way of learning language which is to grasp and come close to meaning, and allowing spaces to grow between language and people's comprehension.	see excerpt 5.4
(10) translanguaging enables learning a language as immersion in sound rather than meaning.	see excerpt 5.25

Not all meanings can be made through drawing resources to make sense. In my study, during classroom events of cultural and classical Chinese learning, there were instances where resources were hardly drawn by learners to make sense of their translanguaging practices. Therefore, in the next section, I will focus on the second research question, which adopts a student-centered perspective and integrates translanguaging and language ecology lenses to discuss how students

engaged in the class events of learning Chinese language, literacy and culture, and what the findings will bring to the current debate on the literature of translanguaging. The structure of the following sections is arranged as: section 6.2.5 for translanguaging scaffolding students' Chinese literacy learning; section 6.2.6 for translanguaging leveraging students' creativity and criticality on classical Chinese learning; section 6.2.7 for translanguaging promoting students' experiences of learning culture in the Chinese classroom. In these three sections, I will also discuss the implications of drawing upon resources in translanguaging practices for making meanings.

6.2.5 Translanguaging facilitates Chinese literacy learning

Traditional Chinese literacy learning requires students to possess advanced language skills in listening, speaking, reading, and writing. However, for bilingual students, especially those who were born and raised in Scotland, standardized Chinese literacy learning poses inevitable challenges. In my study, translanguaging was exemplified as a contributing factor to Chinese literacy learning for bilingual students in the following aspects:

(1) Translanguaging utilizes available resources across English and Chinese learning systems to facilitate students in coping with Chinese class tasks (see excerpt 5.14); (2) translanguaging helps students associate, borrow and make use of prior and newly learned knowledge to support their understanding of new knowledge; (3) translanguaging allows students to recall and make connections between English and Chinese class pedagogy when dealing with issues in Chinese class (see excerpt 5.18).

These findings confirm what Li (2017) said about translanguaging, where the prefix *trans-* can be understood as an action of "transcending" or "go[ing] beyond" (p.27). Specifically, in my study, translanguaging has the power to go beyond time and space. When current learning challenges or puzzles in Chinese classes make students feel confused and inadaptable, translanguaging provides them with a

chance to step out of the physical setting of the classroom, shift their thinking from the current learning to the past experiences, break away from the conventional linguistic norms and rules, and creatively and critically draw upon resources from their funds of knowledge (Conteh, 2015) to associate and connect resources/knowledge. Besides, this 'transcending' can also lead learners to construct a tangible vision in their minds through the process of comprehending Chinese idioms. This innovative way of Chinese literacy learning also brings new insights to the studies of translanguaging.

Class facilitation is another notable translanguaging functions which is identified in the classroom Chinese literacy learning. Effective communication for literacy learning is largely contributed by peer interaction, or in other words, peer support. Aside from the interpersonal function (i.e., classroom socializing), peer support facilitates class learning through peers' knowledge construction towards a learning target, or through more competent bilinguals who launched a problem-solving process. As a result, language acquisition or literacy learning can be successfully undertaken without having to wait for the teacher to take the lead (García *et al.*, 2011). Besides, translanguaging assists teacher's classroom management by allowing them to use different named languages on purpose to explicitly communicate class rules, regulations, and tasks. The students can also take part in this activity, using their language advantage to mediate meanings to their peers. This finding is in accordance with what Fennema-Bloom (2010) found in his study. Although Fennema-Bloom (2010) focused on teacher's code-switching in the classroom, his finding also revealed that switching is a useful classroom management/facilitation device. Moreover, peer interaction with appropriate language resources helped students themselves and others to relieve tension when coping with classroom tasks, such as Chinese dictation, which also demonstrated the caring function of translanguaging in the interpersonal relationship in the Chinese class.

6.2.6 Students' critical and creative classical Chinese learning

The findings of this research contribute to the existing studies on classical Chinese language learning, with a unique focus on overseas-born ethnic Chinese children. Recent studies in multilingual education have highlighted the importance of using resources in language learning. Scholars, such as Lewis, Jones and Baker (2012b), Mazzaferro (2018), Li (2018), Li and Lin (2019) have acknowledged that translanguaging can successfully facilitate language users by drawing on different resources to make meanings and make sense of speakers' own world. However, the specific contribution of translanguaging to classical Chinese learning has not been extensively discussed yet. My research attempts to fill this gap through empirical study to investigate whether translanguaging could provide any enlightenment to classical Chinese learning, and the findings with discussion will be concluded below.

Classical Chinese is intertwined with culture knowledge. Hwang *et al*. (2021) indicated that students in classical Chinese class not only need to comprehend the meanings of ancient vocabulary and statements but also learn the culture of that era. Likewise, in my researched classes, the teachers regarded the teaching of classical Chinese as a way to cultivate traditional Chinese culture for students. Ivanhoe and Van Norden (2001) also agreed that the classical Chinese contained the essence of traditional Chinese culture, which is important for cultivating one's humanistic spirit. Here, I am not aiming to expand the complexity and profound meaning of classical Chinese. Instead, I regard it as a form of Chinese language for learning. Therefore, my discussion will go around classical Chinese as a language and how it interacts with students when they were learning it.

Comprehending classical Chinese brings both challenges and enlightenment to bilingual students. The challenge comes from the process of comprehending this particular language. The selected classical Chinese reading materials in my study are made up of couplets, and they are written in classical Chinese language. Although the couplets in this reading material were only made up of several characters, they usually contain a long classical story behind them. Therefore, the explanation from instructors at the beginning is important. The relevant Chinese

learning studies have indicated that even junior high school students rely heavily on teacher's explanations of and comments on classical Chinese (Tang, 2011). However, even with teacher's instruction, gaps still exist between students' comprehension and the meanings or the culture that ancient story represents. A work from Li and Zhu (2014) suggested that the teaching of culture needs meaningful representations that students could connect with. Scholars, such as Lwo and Chi (2012), indicated that to promote learner's higher-level thinking skills and to arouse their learning interest in classical Chinese, instructors could integrate this language learning with students' daily life experiences.

Likewise, my findings reveal that students' inability and confusion about understanding ancient stories and cultural backgrounds are because that knowledge is not relevant to students' everyday life. For instance, they lacked the collective memory about some specific lexical form (Ganassin, 2019), such as "牛车" (bullock car) from the couplet. This lexicon refers to the transport only used in the old era by the lower class, but for my participants, they misunderstood that it is a car from modern society. Therefore, they were confused about the culture story and put forward their doubts directly in class. In fact, I appreciate that those students can critically question and comment on the story rather than being indifferent.

Indeed, bilingual students' creativity and criticality have been fully revealed in the Chinese classes, especially when students draw resources to learn language and literacy. The concluding remarks of those findings in the classical Chinese learning have been presented in the following aspects.

Firstly, it is a quite natural or automatic reaction for bilingual learners to recall translanguaging resources in the first place when they were attempting to make sense of a new language as well as classical Chinese. This finding is crucial, as it challenges the monolingual ideology for bilingual education, such as the OLON or OLAT policy at Chinese complementary schools (Li and Wu, 2009), and it supports the ideology of multi/bilingualism in bilingual learning.

Secondly, translanguaging facilitates classical Chinese learning by drawing on and inventing multiple resources. It has been found in my study that in order to understand this language, multiple resources have been drawn by students, such as the help of the teacher's explanation of allusion, translating any accessible Chinese words into English, borrowing prior literacy skills and funds of knowledge to serve in the new language learning. Moreover, although it seemed very challenging for those immigrant students to comprehend classical Chinese, translanguaging constantly stimulates their linguistic ability and provides a research implication on how translanguaging can push bilingual students' limits and break boundaries during the languaging process (Li and Lin, 2019). As a result, students' enormous creativity and criticality have been motivated. For example, one of my participants came up with an innovation, employing the method of word association and deduction for couplets learning. This brilliant way justified what Huang (1982) had put forward, that the capacity of word association and logical judgment is necessary when reading classical Chinese texts.

Thirdly, guided by the ecological approach, students created a method of inhabiting a language when they tried to figure out the classical Chinese language. The language that used to inhabit is usually from the English translation or some associated phrases designed by students themselves. Through inhabiting those new languages at the place near the 'unknown words' in a classical Chinese sentence, students try to let the inhabited language make a connection with the before and after words in this sentence, or directly through their created language resources to pull out any possible ideas about this 'unknown words' (see the whole working process in section 5.7.4.6). This inventive learning strategy is not exclusively used in the classical language learning; in fact, it also happens in students' regular literacy learning. In class 4D, the key participant, Chen, used a similar method to locate and fit a meaning for 'unknown Chinese words', then to figure out the meaning of the idiom 鸟语花香 (*niao yu hua xiang*).

Strategies and resources scaffold students' language learning. However, the finding also provides us with the understanding that ample resources do not guarantee reaching meaning. Many times, students found that drawing upon all their resources was not helpful for classical Chinese understanding. Therefore, from the language ecology perspective, the study points out: (1) classical Chinese learning contains a certain order or rule (i.e., literal translation is usually not workable; allusion mainly relies on instructors' explanation in modern vernacular Chinese); (2) interacting with other knowledge (i.e., Chinese culture and/or history) is essential for understanding the background of that era; (3) be patient with classical Chinese learning as well as any language learning, allowing time and process to make learners move forward so that comprehensions can be developed gradually along with learner's life-long learning; (4) the approach towards language learning is diversified. In fact, meaning-making is not always the goal or the end of language learning. Instead, students are capable of doing language in their own ways. For example, in my research, students invented a way of inhabiting a language to grasp and come close to meaning; many of the students chose to memorize or recite the classical Chinese, by immersing themselves in sounds rather than meaning, which is another innovative way of doing a language.

To sum up, my study reveals that translanguaging can contribute to students' classical Chinese by means of creatively and critically drawing and arranging resources and tailoring learning strategies for students themselves. Meanwhile, when resources are hardly drawn, the language ecology perspective illuminates other ways of doing a language. All of them disclose a new scope of classical Chinese language learning for the ethnic Chinese community.

6.2.7 Students' experiences of learning culture in the Chinese classroom

Culture and language are inseparable for language learners. Despite the teacher of class 5D specifically arranging the culture learning curriculum for students, culture is an accompanying part of Chinese learning, and it is usually intertwined with language learning (Ramírez-Esparza and García-Sierra, 2014). Accordingly,

languaging practices related to cultural events were largely reflected in the Chinese classes. It is understandable that the school, teacher, and parents hope to integrate culture learning with language learning in the Chinese class, as this is one of the purposes of establishing Chinese complementary schools, which is to promote Chinese language (Cantonese and Mandarin) as a heritage language, and Chinese traditional and contemporary culture for Chinese immigrants in the UK society (Ganassin, 2017; Li and Zhu, 2014). It should be noteworthy that the term *culture learning* mentioned in this research does not have any specific references to Chinese cultural values or ideologies. Given the centrality of culture learning in the class agenda, this research does not seek to define culture learning or Chinese culture but aims to see how translanguaging and language ecology perspective can assist students to acquire cultural knowledge in the Chinese class.

In my study, it is common to hear that both students and teachers emphasize the importance of 'understand meanings' when learning Chinese (according to their transcript from interviews). The teachers often confirmed language learners' comprehension by verbally checking their understanding of new vocabulary, grammar points, or even instructions presented in class (Florkowska, 2018). This kind of instruction is pervading in language learning class. However, in terms of culture learning, for both instructors and students, culture is not something with criteria for people to evaluate the learning outcome. It is because (1) culture can be somewhat intangible, like a mood, a feeling, or nostalgia; thus, perceiving or understanding a certain culture can be very personal; (2) there is a gap between the younger generation and the ancient culture, as the content of cultural heritage is often far away from young people's daily life; (3) culture is not something that can be easily conveyed through verbal expression; instead, it is lived. Therefore, to some degree, students are learning the culture within their own native cultural understandings in the classroom (Hadley, 2000).

Nevertheless, in my researched classes, there are many examples of translanguaging in which the students use learning experiences, funds of knowledge, multimodal resources and personal understandings at their disposal to

connect with Chinese culture in classroom engagement. In addition, students' attitudes towards culture learning are consistent with how they chose to learn culture in the form of languages. Through borrowing, selecting and filtering their experiences of language learning, students improved their ways of learning culture with their own tips: listening, saving, remembering, and waiting. Given that few studies have discussed how using translanguaging ideology may integrate cultural learning in language complementary schools, my study provides an opportunity to see how translanguaging can lighten up the process of learning with and about culture for overseas-born ethnic Chinese children, and it takes the lens from both translanguaging and language ecological perspectives. For instance, translanguaging emphasizes using strategies to engage in the cultural events, such as drawing available resources to serve learners' comprehension; translanguaging allows students to make an intercultural exchange when taking part in the culture learning events, such as in my study students made comparisons between the music of ancient and current times to enhance their engagement in the Guqin learning. Meanwhile, the ecological perspective emphasizes that learning is a process of diversity, balance, interaction and complexity (Garner, 2004). Thus, culture learning should take into account the whole rather than breaking the learning process into isolated entities, and allowing time and space for learners to acquire knowledge gradually.

Besides, the interaction between the teachers and students influences how students learn culture. For example, the Chinese teacher facilitates students' translanguaging in the class culture learning by providing them with chances to draw from multimodal resources. In order to make culture learning more accessible, Ms. Xi brought cultural artifacts, including tea set and Guqin instrument, into the class, and performed how to make tea as well as played Guqin for students. This immersion goes beyond words and images and transforms intangible morals, values, and emotions into tangible artifacts or visible activities through multimodal ways, thus greatly increasing pupils' interest and enthusiasm in learning Chinese culture. Francis, Archer and Mau (2008), Archer, Francis and

Mau (2010) and Wang (2017) supported this learning method, indicating that pupils tend to construct a tangible and replicable vision of culture through particular artifacts (e.g., festivals and literature), and then facilitate students to develop the sets of relationships and ideas that are brought around that object.

In order to promote bilingual students' experiences in culture learning, this study also collected insightful suggestions from the students themselves:

(1) Eliminating the burden of learning culture as a class task. Instead, the students suggested learning about culture through everyday exposure to culturally related things, such as using the ideology of 'link' to narrow the distance between ancient culture and their everyday life. This suggestion is somewhat similar to some existing literature (Li and Wu, 2008; Mau *et al.*, 2009; Wang, 2017) that discussed the objectification of Chinese culture through cultural practices and symbols in Chinese complementary schooling. For instance, by emphasizing a tangible set of practices (i.e., festivals) and behaviors to objectify culture. Likewise, the research from Ganassin (2019) reported that students hoped to learn culture in real-life situations to which they could relate. However, in a recent study on Chinese classroom practices, Wang (2017) countered this viewpoint and put forward how the focus of the schools on cultural activities (e.g., poems, codes for dressing) risks exposing students to distant and stereotypical images of Chinese culture which they cannot connect. In fact, cultural learning in Chinese class is usually carried out by learning fables, stories, proverbs and legends. For students, learning culture through those symbolic meanings seemed to reflect fewer real things in their daily life. Sometimes, they are likely to challenge or be indifferent to this class culture learning. However, this learning approach is still a meaningful step toward making students move into cultural learning.

(2) Students appealed for reform of pedagogy from school on culture learning, such as using written language (i.e., textbook) to instruct culture knowledge, as this method allows students to have ample time and space to read and review. However, this method should also consider the objectification of culture, such as

by accessing the meaning of particular fables to learn culture. Ganassin (2019) revealed that students and teachers opposed the textbook-centric approach to cultural learning and valued more the engagement of cultural activities to learn Chinese culture.

In sum, the culture learning experiences in Chinese classes show how students creatively and critically engaged themselves in culturally relevant activities and actively negotiated with educators to achieve a better culture learning way. These findings from my study can bring enlightenment on how to implement translanguaging and language ecological ideology to facilitate Chinese immigrant children's cultural learning and cultural immersion, so as to promote the development of Chinese culture in the Chinese community.

6.3 Theoretical contribution

This study contributes to the research field of linguistics and bilingual education in the context of globalization and migration. First of all, by adopting translanguaging as the practical theory (Li, 2018), this study discloses the dynamic and complex languaging practices in the context of Chinese community in Scottish society. It applies the theory of translanguaging to various social science topics, including language learning, bilingual education, and heritage language learning. It illustrates both García's (2009) view of "translanguagings are multiple discursive practices in which bilinguals engage in order to make sense of their bilingual worlds" (p.45) and Canagarajah's (2011a) view of translanguaging as a practice that occurred naturally amongst multilinguals. It also aligns with Li's (2018) argument of translanguaging as a practical theory, which informs the research by placing students at the core position and employing the functional perspective of translanguaging to interpret their language use. Besides, there are a few points that I would like to highlight as contributions in the following sections.

In order to understand the language use phenomenon in the Chinese class, translanguaging is one of the notable perspectives that has been discussed in much

literature (Creese and Blackledge, 2010). However, I adopt the language ecology perspective along with translanguaging to jointly afford this investigation of classroom language use. This combined perspective enlightens me to construct the relations among language users, languages, language ecology and translanguaging in the Chinese learning context (see Figure 3.2 Bilingual classroom language ecology). Based on this framework, I define translanguaging from the perspective of relationships among languages; then, I justify that the interaction among languages, language users and the influencing factors within the class environment and from the wider environment can contribute to the activity of 'languaging'. Consequently, I argue that translanguaging is a natural process in the bilingual classroom.

Accordingly, the theoretical framework is highlighted as one of my innovative contributions in this research. I put forward two relationships between translanguaging and language ecology in this framework: (1) 'Language ecology is an umbrella concept for classroom translanguaging'; (2) 'Language ecology offers theoretical evidence of doing a translanguaging'. These new insights from my research can bring inspiration and implications to the field of language learning. Besides, by acknowledging that these two concepts have their different theoretical focuses on language, I argue that they also complement each other when explaining language phenomena in the bilingual class. This argument has been justified in the finding chapter. For example, language learners are used to drawing resources in the translanguaging practice in order to make sense of their world; however, meaning-making cannot always be achieved through drawing resources, which means, translanguaging is not always workable in the language learning process alone without taking into account the larger ecology of learning relations and processes. In this case, language ecology is introduced as another important concept to scaffold the explanation of language phenomenon in the Chinese class, focusing on how the existence and evolvement of languages in an ecosystem can impact language learning. To better interpret the complex language use in the classroom, I combine Haugen's (1972) metaphorical language

ecology and Garner's (2004) non-metaphorical language ecology (see Table 3.1 Language ecology conceptual framework) to construct my own language ecology framework. In addition, I emphasize that 'interaction' is the key factor that produces languaging activities, and the idea of 'mutual relations' is an approach to investigate influential factors on language use. Therefore, guided by the established conceptual framework, my investigative approach unfolds in two directions: (1) exploring the relationship of languages forms to each other through the interaction among language agents; (2) exploring classroom language use by considering influential factors within and outside the classroom environment. These directions guided me on how to approach my research question and led me into the discussion of the relations among language ecology, translanguaging and the context (e.g., language users, languages, and other influential factors).

To further explain learners' engagement in translanguaging practices, the research brings a discussion on the term 'translanguaging practices'. These translanguaging practices justified translanguaging function, which has been reported in previous literature works, and also provided a nuanced understanding of translanguaging function in the Chinese learning context.

The study also enriches the discussion about 'translanguaging as a practical theory' (Li, 2018). It discloses that translanguaging beyond linguistic implications has intertwined with students' classroom learning experiences, thus responding to Li's (2018) claim about translanguaging as a practical theory that takes us beyond the linguistics of systems and speakers to a linguistics of participation. This response is significant, as it verifies that, when adopting the translanguaging perspective on the multilingualism, it is insignificant to simply ask the question about which languages are being used. Instead, the focus should be moved away from treating languages as discrete and complete systems to how language users orchestrate their diverse and multiple meaning- and sense-making resources in their everyday social life (Li, 2018). Accordingly, the methodology adopted in this study has been influenced by this norm, and the analytic focus emerges from practical concerns

of understanding the dynamic practices students engaged in with multiple named languages, multiple resources, as well as multiple creative and critical methods.

Besides, this study reveals how translanguaging supports the development of students' home and community language. This finding differs from some literature in current bilingual education, which mainly focuses on how students' first or home language could serve the mainstream school's learning (e.g., Bailey and Marsden, 2017; Cook, 2001; Tkachenko, Romoren and Garmann, 2021), or second language learning (e.g., Wang and Kirkpatrick, 2012). In this study, I did not specifically distinguish students' L1 or L2, as this is not my primary focus, and these terms are not adopted in my study. Instead, my focus is to examine how language repertoire of students as a unity can afford their translanguaging practices in bilingual classes. In this sense, Chinese language is an inevitable part of students' language repertoire, and it works with other languages to act on students' language use.

6.4 Methodological contribution

This research offers several methodological contributions that could shed light on directions for future studies and relevant discussions around topics such as researching children and young learners' language learning in complementary schools. One prominent character of this study is its emphasis on valuing and involving the voices of children. This research design requires careful consideration of the ethics of working with children and a well-planned research methodology to facilitate fieldwork and follow-up data analysis.

Firstly, this research documents a complete procedure of fieldwork in the researched institution, recording the access, negotiation, dilemmas, and achievement at different stages in the fieldwork. The knowledge, experience, skills, sensibility and reflexivity of the researcher demonstrate the importance of coping with possible conditions during the fieldwork. Moreover, establishing rapport with the school, teachers, parents and students constitutes a key factor

in successful fieldwork. Therefore, this research project provides an example of engaging academic research in a local social institution and provides a reference for future studies on Scottish-Chinese communities.

Secondly, well-established methods were considered suitable for this research with children participants, contributing to the data collection in the following aspects. Firstly, the design of interviews with key students is significant in this research, as it provides a direct way to hear from them and learn from their voices. In order to achieve this research aim, group interview was employed. As I discussed in the methodology chapter, this method creates a more relaxed atmosphere for the interviewees compared to one-on-one interviews. In the group interview, students could feel less nervous and be more comfortable when discussing. In addition, group interview provides the space for peers to interact with each other, which is useful in stimulating new ideas through their discussions.

Besides, creative data collection methods used in the group interview also help facilitate the interviewing process with children. Using audio segments, in particular, was effective when participants were young children discussing topics related to their classroom observations. Playing back the audio segments not only stimulated students' recall of their languaging practices in the classroom but also entertained them by playing the sound of themselves. Under a joyful interview atmosphere, children became more active to talk in the interview. Likewise, showing images of artifacts used in class, such as tea or Guqin, helped children easily engage in the interview topics, particularly when discussing culture learning. These pictures worked as hints, allowing students to recall things in class. Besides, by adding those images during our dialogue, I hope that students could feel less bored during the interview, as children's research experience is my priority in the fieldwork. These creative methods are recommended for similar settings where the children are the research objects and the research aim is to interpret children's engagement/languages/behaviors in the classroom.

6.5 Practical implications

The findings of this study provide new insights into the explanation of students' Chinese class language use. It also offers practical implications that might benefit Chinese schools, Chinese teachers, and parents who want to understand and facilitate bilingual students' language and culture learning in the complementary school. The following sections will be divided into two main parts. The first part will particularly reflect from the perspective of pedagogy to see how translanguaging and language ecology theory could facilitate students' Chinese learning in a practical learning environment. The term 'pedagogy' here does not exclusively refer to methods and theory of teaching; instead, it represents a study method that could be used or realized by each stakeholder. In the second part, I will identify the practical implications for different stakeholders, i.e., every member involved or related, with the purpose of creating a supportive Chinese learning environment for bilingual students. Finally, key recommendations related to pedagogy and classroom practices will be summarized.

Pedagogy

The study provides research evidence on how translanguaging and language ecology could facilitate Scottish-Chinese immigrant children's Chinese language and culture learning, adding empirical knowledge to the field of bilingual education, language learning and translanguaging. At the beginning of the findings chapter, I presented two tables (Tables 5.2 and 5.4) containing the captured translanguaging occasions in my two researched classes, respectively, listing the detailed information about translanguaging function in the Chinese class. Therefore, in this section, I will not explicate the pedagogical function of translanguaging, but rather draw a quick conclusion about its pedagogical implications in the Chinese class.

First, translanguaging, as a natural languaging practices for bilingual speakers, allows both students and the teacher to flexibly navigate between language forms and go beyond them. This is crucial in solving communicative barriers, mediating meanings, enhancing understanding, and leading to clearer instructions during

teaching. Second, translanguaging provides a space for peers to support each other in the classroom, which is valuable, especially when there is only one teacher with many students in the class. The student can receive assistance through peer support without having to wait for the teacher to assume her role (García *et al.*,2011). Third, translanguaging allows students to facilitate learning across two different learning systems, such as mainstream schools and Chinese schools, and to adapt their experiences in mainstream schools for the Chinese learning.

This study also provides new insights into how translanguaging and language ecology could facilitate classical Chinese learning and Chinese culture acquisition, filling the gap in existing studies that pay little attention to the topic of translanguaging with Chinese classical learning and culture acquisition. In the classical Chinese learning event, translanguaging allows students to draw on resources, such as translation method, funds of knowledge, and instructor's explanation in modern vernacular Chinese, to assist comprehension. Meanwhile, during the translanguaging process, students' creativity, criticality, and bilingualism have been leveraged to invent their own methods for classical Chinese language learning, such as inhabiting a language, association and deduction, memorizing, and immersing themselves in sounds rather than meaning. Besides, the language ecology perspective provides enlightenment different from drawing resources; it includes relying less on literal translation, building up interaction between students and ancient language, linking classical Chinese with other languages, seeking assistance from other languages, respecting the long learning process of classical Chinese, and accepting the current learning progress. These principles are valuable for stakeholders to reflect on and borrow from, as they show that language learning could not always be achieved through resources, that meaning-making is not the only purpose of language learning, and that the criteria for evaluating whether a learner masters a language or not is not merely depending on if they could comprehend the meanings of the language. Language learning can be dynamic and personal and learners have the capacity to choose

how to do with a language. What's more, although strategic methods could be used for learning a language, the learning process itself contains ecological philosophy for students to realize and grow gradually.

Likewise, in the cultural acquisition events, translanguaging and language ecology perspectives provide overseas young learners with approaches and reflections on culture learning. The implementation of translanguaging pedagoy will allow students to utilize multiple strategies to engage in culture learning events, such as in my study, students employed multimodal resources (e.g., visual arts) to make inter-cultural links and bridge cross-culture. Meanwhile, the notion of language ecology complements the occasions when translanguaging may seem insufficient to draw resources to assist learners' understanding and put forward the norm of culture acquisition. Along with the knowledge accumulation of individuals, one's comprehension of cultural knowledge would be developed accordingly. This process highlights the roles of time and space played in learning, rather than merely emphasizing the importance of learning strategies. The above discussion has given immigrant children the practical instructions when learning heritage language and culture.

Practice

Next, I will discuss the practical implications of this study for students, parents, teachers, and school, respectively.

Students

The focus group of this study is the Scottish-Chinese immigrant students, and for this group, some insightful suggestions can be put forward according to this research. Firstly, the study helps raise awareness of this ethnic minority group's heritage language learning in the UK society. As discussed in section 6.2.2.1, many works have focused on how learners' heritage language could support mainstream schools learning, but less work has discussed how students orchestrate their entire linguistic repertoire to facilitate their heritage language and culture learning.

Secondly, students as the main target of observations and interviewees in this study, their viewpoints and suggestions are valuable for all stakeholders, including schools, communities, teachers, and parents, to improve the situation of Chinese learning for those Scottish-Chinese immigrant children. The improvement could include the following aspects. First, students' experience in the Chinese class should be enhanced. Some previous works, as well as this study, have reported that students complained about the dull and boring classroom experience. This research sheds light on this issue from the perspective of students' own voices, providing a channel for other stakeholders and a wide range of readers to understand those students' learning needs in Chinese class. Second, students' Chinese learning should be promoted. This is one of the highlights of this research, as it presents many dynamic translanguaging practices from the Chinese language learning, demonstrating how creative and critical the students could be in learning a language. What's more, these moments serve as evidence to show that translanguaging and language ecology could be useful pedagogy to support language learning.

Third, students' actively proposed suggestions on traditional cultural learning provide a reference for promoting cultural learning among immigrant children. For example, they suggested ways to increase students' interest in learning traditional culture and demonstrated their exploration of cultural learning methods. These examples will bring improvement and inspiration to cultural learning in the Chinese classroom. Fourth, from the voice of students, the relations among students, parents, teachers, and school regarding the issue of learning in the Chinese school emerge. These relations help us understand the different opinions of the stakeholders respectively but also altogether. For example, in order to understand why students complain in the Chinese class, I first listened to students' explanations, then analyzed the occurrence of negotiation in the Chinese class from the teachers' different language ideologies, and later identified parents' expectations and school's requirement as the reasons to explain this class phenomenon. Lastly, this study demonstrates that when

languages become a negotiation process in a bilingual environment, it represents the speakers' negotiation of their own cultural identity.

Teachers

The research contributes to improvements in practice in Chinese complementary schools within Scotland and the wider UK by providing an opportunity for heritage language teachers to reflect on and enrich their practices when working with Chinese ethnic children. More specifically, the findings of this research help to identify and address factors that may either foster or hamper Chinese language teaching and learning in the Scottish context, offering insights and improvements for future language teaching in Chinese schools. For instance, this study informs the classroom pedagogy, teacher training practice, and future curriculum design. The following points are provided to address contributions from this facet.

This research presents an updated discussion on the flexible bi/multilingualism within complementary school contexts, showing translanguaging as a basic norm within the contemporary bilingual world. Therefore, for educators, this research calls for further awareness of translanguaging as a pedagogy or as a thinking approach toward language learning in the bi/multilingual world. Besides, both students and teachers are encouraged to realize another norm of language ecology, which involves allowing time and space to work during the long process of language learning. According to the result of this study, it is worthwhile to pay attention to the entirety of the learner's linguistic repertoire rather than simply the knowledge of specific structures of specific languages separately (Li, 2018). Accordingly, language teachers in Chinese schools should be prepared and trained with the professional capability to adopt a flexible bilingual ideology in their teaching practices and have a comprehensive understanding of translanguaging, "not only as a pedagogic strategy to support learning but also as a feature of natural bilingual discourse, which they and their students can employ according to the situational demands" (Nikula and Moore, 2019, p. 245). Finally, the research provides ample evidence of how bilingual students engage in language learning

practice. Their approaches, strategies, ideas, practices, and feedback can help teachers better instruct them, thus contributing to future curriculum design.

School

The research provides two meaningful points that could inform the complementary language schools. First, teacher training is necessary based on this research. As one of the leading Chinese complementary schools in the UK, with hundreds of students enrolled, it is crucial for large-scale institutions like this researched Chinese school to provide qualified teacher training. The lack of professional teacher training and non-guaranteed teaching quality can hinder students' learning experience in the Chinese class and lead to conflicts between students and teachers. As mentioned in the methodology chapter, Chinese school teachers are usually composed of parent teacher and student teacher, meaning they lack professional language teaching qualifications. Therefore, launching teacher training can promote teaching quality, such as encouraging teachers to adopt flexible bilingualism and translanguaging pedagogy in the class. This need for teacher training is also highlighted by other authors like Prilutskaya (2021), who stressed the importance of providing teachers with thorough and explicit theoretical and instructional training on how to draw on students' linguistic repertoires. In my study, it can be seen that although Ms. Xi had rich domestic classroom experience, it was her first time teaching Chinese in a complementary school in the UK. Through the observation, her Chinese-only ideology did not align well with bilingual students' needs for flexible language use, leading to frequent complaints and negotiations in her class. In contrast, in Ms. Hong's class, such arguments seemed to be less frequent, partially due to the teacher's flexible language ideology, which made students feel freer and more confident when using languages in the class.

Second, this research provides implications for future teacher training programs in the multilingual world. The study records examples of classroom organization, students' classroom engagement, students and teacher's classroom interaction, students' negotiation with teachers, students' creative and critical learning

strategies of language and culture, and their feedback towards language/culture learning and teacher's language ideology. Some of these practices are proven to be inspiring and successful in language classes with young learners, while others can be viewed as reflections to evaluate, explore, and rethink the learning needs of this bilingual group. All these examples, together with my analysis, can be edited into materials for further designing teacher training programs.

Parents

This research provides the chance for Chinese parents and educators within the Scottish-Chinese community to better understand the needs, capacities, and linguistic potential of young Scottish-Chinese learners. For Chinese parents, who actively take part in their children's Chinese learning, this study reflects how home education can influence students' habits of language use, language learning, and their interests in learning the Chinese language and culture. Moreover, it sheds light on what children choose to do with the language, such as memorizing, reading, and comprehension. The study found that children's language learning is closely related to their family, including parents' expectations of Chinese learning, parents' requirements on how to learn, siblings' competition to boost learning motivation, and parents' teaching style at home. Therefore, this research provides parents with insight into how home education can bring opportunities and support to their children's language learning and how family can influence children's school learning. Besides, the study raises the need for reflection on how much work would be required with parents who may not be fully open to the values of translanguaging as an approach to language learning.

6.6 Summary of key recommendations

Pedagogy

The findings in this study point towards the important of adopting pedagogical translanguaging in the Chinese complementary classes because of its positive impact on both language and culture learning. By doing so, 1) students from all

backgrounds can be included in their own learning; 2) students' communicative competence in the Chinese language will be enhanced, including their receptive and productive skills as well as social skills in the school; 3) classroom participation will be improved when students easily understand what the teacher is presenting, and they are able to respond to the teacher and other peers; 4) expediting meaningful content learning and stimulates vocabulary learning; 5) students' initiative and potential in Chinese learning can be leveraged as translanguaging pedagogy allows students to arrange multilingual and multimodal resources creatively and critically at their disposal to cope with new knowledge and challenges in learning, including regular Chinese literacy learning, classical Chinese learning, and Chinese culture learning.

Lastly, CLT approaches are advocated for instructors to assist in the implementation of translanguaging pedagogy in Chinese classes. CLT and translanguaging pedagogy complement each other, leveraging students' communicative competence in the target language. Besides, even within my research context where grammar translation is valued, translanguaging can still be deployed productively and spaces can be carved for learners to deploy their language resources.

Classroom practice

To investigate students' experiences in the Chinese class has been one of my research interests in the thesis. Therefore, the suggestions about how to promote students' learning experience in the Chinese class are summarized below.

Firstly, flexible bilingualism is advocated in Chinese classes as it promotes classroom translanguaging practices, facilitates translanguaging pedagogy for language learning, and brings a lively learning atmosphere in which students can use their "stronger L1" and a "weaker L2" freely in the classroom (Nkhi and Shange, 2024, p.29). Secondly, instructors in the Chinese complementary school should allow, respect and understand the occurrence of translanguaging in the classroom.

As discussed earlier in this chapter (see section 6.2.1), translanguaging acts as 'the communicative norm of multilingual communities' and translanguaging could be either spontaneous or strategic. In other words, these features of translanguaging indicate its popularity and commonality in bilinguals' daily lives. In this sense, educational institutions should encourage language learners' engagement in classroom translanguaging practices rather than hinder its development by enforcing language policies such as OLAT, OLON or 'no English' policy. Otherwise, bilinguals' learning experience might be inhibited, leading to tension between learners and institutional ideologies.

Thirdly, to further optimize students' learning experiences in the Chinese class, it might be beneficial for language learners, instructors and parents to develop translanguaging and language ecology perspectives when coping with difficulties during the language learning. Translanguaging allows learners to utilize approaches and strategies for language/culture learning, while the language ecology perspective illuminates another way of doing a language, which is through revealing the relations between languages/culture learning and its environment. Learning is not only related to manipulating strategies and drawing on resources but also to allowing time and space for learners to build and process knowledge.

6.7 Limitations and reflection

One limitation of this study is that it only conducted empirical work in two Chinese classes with five key students. The sample is not large enough to involve more classes and students and observe their language use and translanguaging practices. Therefore, the findings on translanguaging function and students' learning strategies should be interpreted with this limitation in mind, and future studies could involve more classes and participants to investigate a greater variety of age groups.

As one of the purposes of this research is to understand children's perspectives on Chinese school and learning in Chinese class, the students were placed at the

center of the research objectives, and methods were carefully designed to collect data directly from them. However, there are still areas that could be improved for other researchers in future studies involving research with children:

(1) Pay more attention to the wording of interview questions. For example, one of my interview topics is about students using strategies for Chinese learning. During our dialogue, one student participant told me that he did not have any strategies. However, when I changed my wording and used another word 'method', he quickly understood the question and engaged in the topic. This experience also highlighted the importance of matching the age group of the interviewees when formulating interview questions during my future fieldwork.

(2) Apply good research practices to collect data. Based on my own interview experience, I observed that group interviews utilizing more creative methods can yield better research outcomes (including rich data and a more relaxed interview atmosphere) compared to one-on-one interviews.

(3) Be prepared to interact with different interviewees. This is true not only for interviewing children but for any interviews in general. The interviewees' intelligence, character and expressive ability often impact the interview results. For instance, in my research, one key student participant, Yu, is very open, active and creative. He provided ample evidence of his translanguaging practices and was able to explain them to me. On the other hand, another key student participant, Wei, is more introverted and provided limited data during classroom observation and interviews, although he performed well in Chinese learning. Therefore, when selecting research participants, researchers need to prepare to work with different interviewees and consider how to explore their perspectives when they might have difficulty expressing themselves. In addition, in the case of Wei, although I was interested in studying his translanguaging in the Chinese class,

my research design primarily focused on verbal and visible languages in the class, making it challenging to present his translanguaging practice adequately in this study. In the future, I will design research to pay more attention to students' different forms of translanguaging, such as through cognitive studies or developing arts-based methods to collect data.

This study's findings may be potentially limited by my learning experience, background, conceptions and interpretation. As a researcher, I am aware that I am still on a learning journey in this field. Given my restricted knowledge regarding the concepts analyzed herein and my limited research experience, it is possible that I may have misunderstood or lost sight of some points when viewing translanguaging, bilingualism or language ecology in the classroom, especially in terms of interpreting students' translanguaging practices. To address this matter, future studies might adopt the emic-etic dialectic (both insider and outsider perspectives) as the research methodology to collect and analyze data, in order to better interpret data.

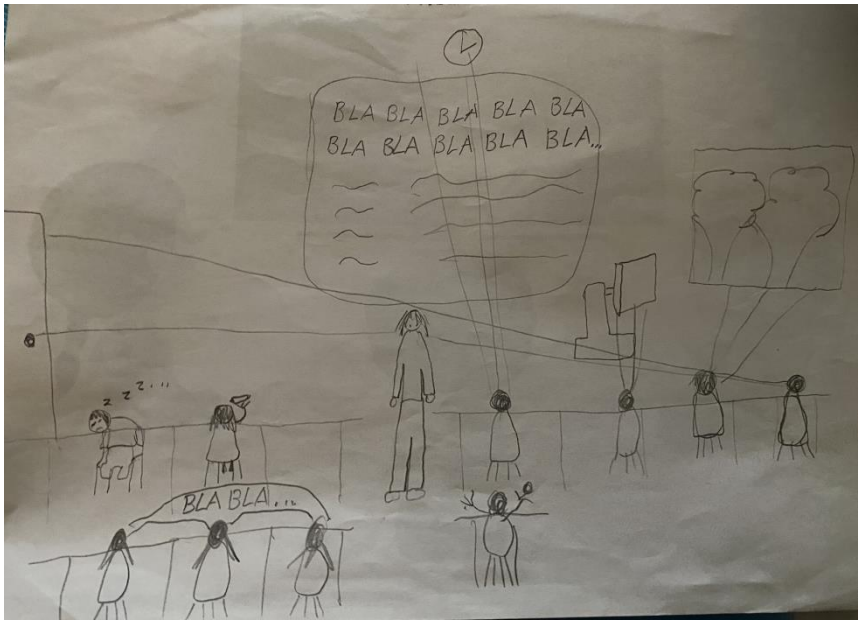
Besides, insufficient data on culture learning from one of my researched classes limited my further exploration of culture learning in Chinese schools. In class 5D, culture learning was organized as a special course by the teacher, providing more observable examples related to learning culture. However, in class 4D, cultural learning was not emphasized, and the teacher focused mainly on teaching Chinese literary knowledge, resulting in relatively limited data related to culture learning. Future studies aiming to explore the topic of culturally relevant learning in language classes could learn from my experience and consider viewing cultural learning and language learning as a whole rather than discrete parts, avoiding isolating cultural learning from language learning.

Furthermore, it's important to note that the data for this research was collected pre-pandemic (the fieldwork was completed in December 2019) and there was a pause between this stage and the analysis due to personal reasons. While I had a good data retrieval and storage system in my laptop, and a clear and complete

working record during fieldwork to allow me to quickly enter the state of data analysis after the pause, this pause may still have had a slight influence on my thinking and interpretation during the analysis process. Besides, as this study predates the pandemic, it would be interesting to see if the same dynamics have persisted, which I may include as part of my future research directions.

In addition, in the next stage, due consideration of the implementation of translanguaging should be investigated, which includes the understanding of teacher's perspectives and attitudes when applying translanguaging in language teaching, as language teachers may perceive this practice differently (Fang, Zhang and Sah, 2022). In my research, although I interviewed teachers for their viewpoints on classroom translanguaging practices and all of them indicated the positive and supportive attitudes towards translanguaging as a suitable pedagogy for bilingual teaching, I did not have sufficient time to dig further into this topic. In fact, the complexity of translanguaging as a pedagogical strategy in relation to its effectiveness in application (Paulsrud *et al.*, 2021; Liu and Fang, 2022; Sah and Kubota, 2022) is also related to various policy initiatives (Fang, Zhang and Sah, 2022), and "the implementation of translanguaging should be understood with due consideration of institutional and national or state policies regarding the medium of instruction" (Fang, Zhang and Sah, 2022, p.308). Therefore, future studies on translanguaging implementation require more exploration of teachers' understanding, practices and ideologies.

Picture 6.1 A drawing of Chinese class



Lastly, I will end this thesis by showing a drawing (see Picture 6.1) created by one of my key student participants, Yu. The drawing depicts the scene of learning and teaching in the Chinese class. There are many lines in this picture, and according to Yu's explanation, these lines represent what the students were doing in the classroom. In my view, the lines in the picture symbolize the interaction between people and their surroundings, which aligns perfectly with the theme of this research – the interaction that brings about languaging, and the languaging practices that contribute to a dynamic, interactive, and holistic Chinese classroom.

Reference list

Adinolfi, L. and Astruc, L. (2017) An exploratory study of translanguaging practices in an online beginner-level foreign language classroom, *Language Learning in Higher Education*, 7(1), pp. 185–204. Available at: https://doi.org/10.1515/cercles-2017-0008.

Adrian Blackledge and Angela Creese (2010) *Multilingualism : A Critical Perspective*. Bloomsbury Academic. Available at: https://doi.org/10.5040/9781474212281.

Agar, M. (2008) A linguistics for ethnography, *Journal of Intercultural Communication*, 16(1), pp. 1–16.

Ahearn, L.M. (2001) Language and agency, *Annual review of anthropology*, 30(1), pp. 109–137.

Alvarez, S. (2014). Translanguaging tareas: Emergent bilingual youth as language brokers for homework in immigrant families. *Language Arts*, *91*(5), 326–339.

Alvarez, S. (2017) Brokering Literacies: Child Language Brokering in Mexican Immigrant Families, *Community Literacy Journal*, 11(2). Available at: https://doi.org/10.25148/CLJ.11.2.009116.

Amankwaa, L. (2016) Creating protocols for trustworthiness in qualitative research., *Journal of cultural diversity*, 23(3).

Aoyama, R. (2020). Exploring Japanese High School Students L1 Use in Translanguaging in the Communicative EFL Classroom. *Tesl-Ej.23*(4), n4.

Archer, L., Becky Francis and Mau, A. (2009) "Boring and stressful" or "ideal" learning spaces? Pupils' constructions of teaching and learning in Chinese supplementary schools, *Research Papers in Education*, 24(4), pp. 477–497. Available at: https://doi.org/10.1080/02671520802584111.

Archer, L., Francis, B. and Mau, A. (2010) The Culture Project: diasporic negotiations of ethnicity, identity and culture among teachers, pupils and parents in Chinese language schools, *Oxford Review of Education*, 36(4), pp. 407–426. Available at: https://doi.org/10.1080/03054981003775293.

Arthur, J. and Martin, P. (2006) Accomplishing lessons in postcolonial classrooms: comparative perspectives from Botswana and Brunei Darussalam, *Comparative Education*, 42(2), pp. 177–202. Available at: https://doi.org/10.1080/03050060600628009.

Bailey, E.G. and Marsden, E. (2017) Teachers' views on recognising and using home languages in predominantly monolingual primary schools, *Language and Education*, 31(4), pp. 283–306. Available at: https://doi.org/10.1080/09500782.2017.1295981.

Baker, C. (2001) *Foundations of bilingual education and bilingualism*. 3rd ed. Clevedon [England] ; Buffalo [N.Y.]: Multilingual Matters (Bilingual education and bilingualism, 27).

Baker, C. (2010) Increasing bilingualism in bilingual education, *Welsh in the 21st Century*, pp. 61–79.

Baker, C. (2011) *Foundations of bilingual education and bilingualism*. 5th ed. Bristol, UK ; Tonawanda, NY: Multilingual Matters (Bilingual education & bilingualism, 79).

Becker, A.L. (1991) Language and languaging, *Language & Communication*, 11(1–2), pp. 33–35. Available at: https://doi.org/10.1016/0271-5309(91)90013-L.

Bell, E. (2011) *An anthropological study of ethnicity and the reproduction of culture among Hong Kong Chinese families in Scotland*. London School of Economics and Political Science.

Blackledge, A. and Creese, A. (eds) (2014) *Heteroglossia as Practice and Pedagogy*. Dordrecht: Springer Netherlands (Educational Linguistics). Available at: https://doi.org/10.1007/978-94-007-7856-6.

Blackledge, A. and Creese, A. (2017) Translanguaging and the body, *International Journal of multilingualism*, 14(3), pp. 250–268.

Blommaert, J. and Jie, D. (2010) *Ethnographic Fieldwork: A Beginner's Guide*. Bristol, Blue Ridge Summit: Multilingual Matters. Available at: https://doi.org/10.21832/9781847692962.

Bloome, D. *et al*. (2004) *Discourse analysis and the study of classroom language and literacy events: A microethnographic perspective*. Routledge.

Bloome, D. *et al*. (2008) *On discourse analysis in classrooms: Approaches to language and literacy research*. Teachers College Press.

Bodner, G.M. (1986) Constructivism: A theory of knowledge, *Journal of Chemical Education*, 63(10), p. 873. Available at: https://doi.org/10.1021/ed063p873.

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3(2), pp. 77–101. Available at: https://doi.org/10.1191/1478088706qp063oa.

Brewer, J. and Hunter, A. (2006) *Foundations of Multimethod Research*. 2455 Teller Road, Thousand Oaks California 91320 United States of America: SAGE Publications, Inc. Available at: https://doi.org/10.4135/9781412984294.

Brinton, D.M., Kagan, O. and Bauckus, S. (eds) (2017) *Heritage Language Education: A New Field Emerging*. 1st edn. Routledge. Available at: https://doi.org/10.4324/9781315092997.

Britain, D. (ed.) (2007) Chinese, in *Language in the British Isles*. 1st edn. Cambridge University Press, pp. 308–324. Available at: https://doi.org/10.1017/CBO9780511620782.020.

Bryman, A. (2012) *Social research methods*. 4th ed. Oxford ; New York: Oxford University Press.

Butler-Kisber, L. (2018) *Qualitative inquiry: thematic, narrative and arts-based perspectives*. Second edition. Los Angeles: SAGE.

Cahyani, H., De Courcy, M. and Barnett, J. (2018) Teachers' code-switching in bilingual classrooms: exploring pedagogical and sociocultural functions, *International Journal of Bilingual Education and Bilingualism*, 21(4), pp. 465–479. Available at: https://doi.org/10.1080/13670050.2016.1189509.

Canagarajah, S. (2011a) Codemeshing in Academic Writing: Identifying Teachable Strategies of Translanguaging, *The Modern Language Journal*, 95(3), pp. 401–417. Available at: https://doi.org/10.1111/j.1540-4781.2011.01207.x.

Canagarajah, S. (2011b) Translanguaging in the classroom: Emerging issues for research and pedagogy, *Applied Linguistics Review*, 2(2011), pp. 1–28. Available at: https://doi.org/10.1515/9783110239331.1.

Cenoz, J. and Gorter, D. (2022) Pedagogical Translanguaging and Its Application to Language Classes, *RELC Journal*, 53(2), pp. 342–354. Available at: https://doi.org/10.1177/00336882221082751.

Cohen, L., Manion, L. and Morrison, K. (2013) *Research Methods in Education*. 5th edn. Routledge. Available at: https://doi.org/10.4324/9780203720967.

Connelly, L.M. (2016) Trustworthiness in qualitative research, *Medsurg nursing*, 25(6), p. 435.

Cook, V. (2001) Using the First Language in the Classroom, *The Canadian Modern Language Review*, 57(3), pp. 402–423. Available at: https://doi.org/10.3138/cmlr.57.3.402.

Copland, F. and Creese, A. (2015) *Linguistic Ethnography: Collecting, Analysing*

and Presenting Data. 1 Oliver's Yard, 55 City Road London EC1Y 1SP: SAGE Publications Ltd. Available at: https://doi.org/10.4135/9781473910607.

Couto, H.H. (2014) Ecological approaches in linguistics: a historical overview, *Language Sciences*, 41, pp. 122–128. Available at: https://doi.org/10.1016/j.langsci.2013.08.001.

Creese, A., Bhatt, A., Bhojani, N., & Martin, P. (2006). Multicultural, Heritage and Learner Identities in Complementary Schools. *Language and Education*, *20*(1), 23–43. https://doi.org/10.1080/09500780608668708

Creese, A. and Blackledge, A. (2010) Translanguaging in the Bilingual Classroom: A Pedagogy for Learning and Teaching?, *The Modern Language Journal*, 94(1), pp. 103–115. Available at: https://doi.org/10.1111/j.1540-4781.2009.00986.x.

Creese, A. and Blackledge, A. (2011) Separate and flexible bilingualism in complementary schools: Multiple language practices in interrelationship, *Journal of Pragmatics*, 43(5), pp. 1196–1208. Available at: https://doi.org/10.1016/j.pragma.2010.10.006.

Creese, A. and Blackledge, A. (2015) Translanguaging and Identity in Educational Settings, *Annual Review of Applied Linguistics*, 35, pp. 20–35. Available at: https://doi.org/10.1017/S0267190514000233.

Creese, A., Martin, P., & Hornberger, N. H. (2008). Classroom ecologies: A case study from a Gujarati complementary school in England. In *Encyclopedia of Language and Education, 2nd Edition*.

Creese, A. and Martin, P.W. (eds) (2003) *Multilingual classroom ecologies: inter-relationships, interactions, and ideologies*. Clevedon, England ; Buffalo [N.Y.]: Multilingual Matters (Bilingual education and bilingualism, 44).

Creswell (1998) Qualitative inquiry and research design, *Choosing Among Five Traditions* [Preprint].

Creswell, J.W. (2007) *Qualitative inquiry & research design: choosing among five approaches*. 3nd ed. Thousand Oaks: Sage Publications.

Creswell, J.W. (2013) *Qualitative inquiry and research design: choosing among five approaches*. 3rd ed. Los Angeles: SAGE Publications.

Creswell, J.W. (2014) *Research design: qualitative, quantitative, and mixed methods approaches*. 4th ed. Thousand Oaks: SAGE Publications.

Creswell, J.W. and Miller, D.L. (2000) Determining validity in qualitative inquiry, *Theory into practice*, 39(3), pp. 124–130.

Creswell, J.W. and Poth, C.N. (2018) Qualitative inquiry and research design (international student edition): Choosing among five approaches, *Language*, 25(459p), p. 23cm.

Crotty, M.J. (1998) The foundations of social research: Meaning and perspective in the research process, *The foundations of social research*, pp. 1–256.

Csillik, É. and Golubeva, I. (2020) Translanguaging practices in early childhood classrooms from an intercultural perspective, in *International perspectives on modern developments in early childhood education*. IGI Global, pp. 15–39.

Curdt-Christiansen, X.L. (2006) Teaching and Learning Chinese: Heritage Language Classroom Discourse in Montreal, *Language, Culture and Curriculum*, 19(2), pp. 189–207. Available at: https://doi.org/10.1080/07908310608668762.

Daniel, S.M. and Pacheco, M.B. (2016) Translanguaging Practices and Perspectives of Four Multilingual Teens, *Journal of Adolescent & Adult Literacy*, 59(6), pp. 653–663. Available at: https://doi.org/10.1002/jaal.500.

Dehui, L.(2008). A cognitive study on two types of Chinese poetic couplets, *JOURNAL OF PINGDINGSHAN INSTITUTE OF TECHNOLOGY*, 68(3), pp. 83-85

Design. (1984). In F. C. Mish (Ed.),Webster's Ninth New Collegiate Dictionary (p. 343). Springfield, MA: Merriam-Webster.

Duff, P. (2014). Communicative language teaching. In *Teaching English as a second or foreign language* (4th ed., pp. 15–30). National Geographic.

Edgar, T.W. and Manz, D.O. (2017) Science and Cyber Security, in *Research Methods for Cyber Security*. Elsevier, pp. 33–62. Available at: https://doi.org/10.1016/B978-0-12-805349-2.00002-9.

Edwards, J. (2013) Bilingualism and multilingualism: Some central concepts, *The handbook of bilingualism and multilingualism*, pp. 5–25.

Eliasson, S. (2015) The birth of language ecology: interdisciplinary influences in Einar Haugen's “The ecology of language”, *Language Sciences*, 50, pp. 78–92. Available at: https://doi.org/10.1016/j.langsci.2015.03.007.

Emerson, R.M., Fretz, R.I. and Shaw, L.L. (1995) Writing ethnographic fieldnotes. Chicago guides to writing, editing. and publishing. *Chicago, IL: University of Chicago Press. Feld, S., and Brenneis, D.(2004). Doing anthropology in sound. American Ethnologist*, 31(4), pp.461-474.

Fang, F., Zhang, L.J. and Sah, P.K. (2022) Translanguaging in Language Teaching and Learning: Current Practices and Future Directions, *RELC Journal*, 53(2), pp.

305–312. Available at: https://doi.org/10.1177/00336882221114478.

Fennema-Bloom, J.R. (2010) Code-Scaffolding: A Pedagogic Code-Switching Technique for Bilingual Content Instruction, *Journal of Education*, 190(3), pp. 27–35. Available at: https://doi.org/10.1177/002205741019000304.

Ferguson, G. (2003) Classroom code-switching in post-colonial contexts: Functions, attitudes and policies, *AILA Review*, 16, pp. 38–51. Available at: https://doi.org/10.1075/aila.16.05fer.

Ferguson, G. (2009) What next? Towards an agenda for classroom codeswitching research, *International Journal of Bilingual Education and Bilingualism*, 12(2), pp. 231–241. Available at: https://doi.org/10.1080/13670050802153236.

Fielding, R. (2015) *Multilingualism in the Australian Suburbs*. Singapore: Springer Singapore. Available at: https://doi.org/10.1007/978-981-287-453-5.

Flewitt, R. (2005) Conducting research with young children: some ethical considerations, *Early Child Development and Care*, 175(6), pp. 553–565. Available at: https://doi.org/10.1080/03004430500131338.

Flick, U. (2018) *The SAGE Handbook of Qualitative Data Collection*. 1 Oliver's Yard, 55 City Road London EC1Y 1SP: SAGE Publications Ltd. Available at: https://doi.org/10.4135/9781526416070.

Florkowska, K. (2018) The use of Concept Checking Questions in the EFL classroom: Reflections on the CELTA experience, *Kingston University, London. British Council ELT Master's Dissertation Awards* [Preprint].

Foster, P. (1996) *Observing schools: A methodological guide*. SAGE.

Francis, B., Archer, L. and Mau, A. (2008) *British-Chinese pupils' identities, achievement and complementary schooling: Full research report ESRC End of Award Report*. RES-000-23-1513. Swindon: ESRC.

Francis, B., Archer, L. and Mau, A. (2009) Language as capital, or language as identity? Chinese complementary school pupils' perspectives on the purposes and benefits of complementary schools, *British Educational Research Journal*, 35(4), pp. 519–538. Available at: https://doi.org/10.1080/01411920802044586.

Francis, B., Archer, L. and Mau, A. (2010) Parents' and teachers' constructions of the purposes of Chinese complementary schooling: "culture", identity and power, *Race Ethnicity and Education*, 13(1), pp. 101–117. Available at: https://doi.org/10.1080/13613320903550089.

Freeman, M. (2000) Knocking on Doors: On Constructing Culture, *Qualitative*

Inquiry, 6(3), pp. 359–369. Available at: https://doi.org/10.1177/107780040000600305.

Freeman, M. *et al*. (2007) Standards of evidence in qualitative research: An incitement to discourse, *Educational researcher*, 36(1), pp. 25–32.

Frey, J.H. and Fontana, A. (1991) The group interview in social research, *The Social Science Journal*, 28(2), pp. 175–187. Available at: https://doi.org/10.1016/0362-3319(91)90003-M.

Ganassin, S. (2017) Chinese community schools in England as intercultural educational spaces: Pupils', parents' and teachers' constructions of the Chinese language, *Interculturality in Chinese language education*, pp. 107–130.

Ganassin, S. (2019) Teaching and learning about Chinese culture: pupils' and teachers' experiences of Chinese community schooling in the UK, *Language and Intercultural Communication*, 19(2), pp. 167–183. Available at: https://doi.org/10.1080/14708477.2018.1504953.

García, O. (2007) Foreword. In: Makoni, S., Pennycook, A. (Eds.), Disinventing and Reconstituting Languages. Multilingual Matters, Clevedon, pp. xi–xv.

García, O. (2009) *Bilingual education in the 21st century: a global perspective*. Malden, MA ; Oxford: Wiley-Blackwell Pub.

García, O. (2011) The translanguaging of Latino kindergarteners, in K. Potowski and J. Rothman (eds) *Studies in Bilingualism*. Amsterdam: John Benjamins Publishing Company, pp. 33–55. Available at: https://doi.org/10.1075/sibil.42.05gar.

García, O. *et al.* (2017) *The translanguaging classroom: leveraging student bilingualism for learning*. Philadelphia, Pa: Caslon.

García, O., Aponte, G. Y., and Le, K. (2019). Primary bilingual classrooms: Translations and translanguaging. In *The Routledge handbook of translation and education* (pp. 81–94). Routledge.

García, O. and Baetens Beardsmore, H. (2009) *Bilingual education in the 21st century: a global perspective*. Malden, MA ; Oxford: Wiley-Blackwell Pub.

García, O., Flores, N. and Chu, H. (2011) Extending Bilingualism in U.S. Secondary Education: New Variations, *International Multilingual Research Journal*, 5(1), pp. 1–18. Available at: https://doi.org/10.1080/19313152.2011.539486.

García, O., and Kleyn, T. (2016). Translanguaging with multilingual students. *Learning from Classroom Moments. New York, London, Routledge*.

García, O. and Leiva, C. (2014) Theorizing and Enacting Translanguaging for Social Justice, in A. Blackledge and A. Creese (eds) *Heteroglossia as Practice and Pedagogy*. Dordrecht: Springer Netherlands (Educational Linguistics), pp. 199–216. Available at: https://doi.org/10.1007/978-94-007-7856-6_11.

García, O. and Li, W. (2014) Language, Bilingualism and Education, in García, O. and Li, W., *Translanguaging*. London: Palgrave Macmillan UK, pp. 46–62. Available at: https://doi.org/10.1057/9781137385765_4.

García, O. and Li, W. (2015) Translanguaging, Bilingualism, and Bilingual Education, in W.E. Wright, S. Boun, and O. García (eds) *The Handbook of Bilingual and Multilingual Education*. Chichester, UK: John Wiley & Sons, Ltd, pp. 223–240. Available at: https://doi.org/10.1002/9781118533406.ch13.

García, O. and Lin, A.M.Y. (2016) Translanguaging in Bilingual Education, in O. Garcia, A. Lin, and S. May (eds) *Bilingual and Multilingual Education*. Cham: Springer International Publishing, pp. 1–14. Available at: https://doi.org/10.1007/978-3-319-02324-3_9-1.

García, O. and Lin, A.M.Y. (2017) Extending Understandings of Bilingual and Multilingual Education, in O. García, A.M.Y. Lin, and S. May (eds) *Bilingual and Multilingual Education*. Cham: Springer International Publishing, pp. 1–20. Available at: https://doi.org/10.1007/978-3-319-02258-1_1.

García, O. and Sylvan, C.E. (2011) Pedagogies and practices in multilingual classrooms: Singularities in pluralities, *The Modern language journal*, 95(3), pp. 385–400.

García, O., Zakharia, Z. and Octu-Grillman, B. (eds) (2013) *Bilingual community education and multilingualism: beyond heritage languages in a global city*. Bristol ; Buffalo: Multilingual Matters (Bilingual education and bilingualism, 89).

Garner, M. (2004) *Language: An ecological view*. Peter Lang.

Garner, M. (2005) Language ecology as linguistic theory, *Kajian Linguistik dan Sastra*, 17(33), pp. 91–101.

Garner, M. (2014) Language rules and language ecology, *Language Sciences*, 41, pp. 111–121. Available at: https://doi.org/10.1016/j.langsci.2013.08.012.

Gaywood, H.R.A. (1996) *Guqin and Guzheng: the historical and contemporary development of two Chinese musical instruments*. Durham University.

Gogonas, N. and Maligkoudi, C. (2019) Translanguaging instances in the Greek linguistic landscape in times of crisis, *Journal of Applied Linguistics*, pp. 66-82 Σελίδες. Available at: https://doi.org/10.26262/JAL.V0I32.7528.

Guba, E.G. (1990) The paradigm dialog., in *Alternative paradigms conference, mar, 1989, indiana u, school of education, san francisco, ca, us*. Sage Publications, Inc.

Guest, G., Namey, E.E. and Mitchell, M.L. (2017) Ethical dimensions of qualitative research, *Collect. Qual. Data A Field Man. Appl. Res*, pp. 317–350.

Hadley, A.O. (2000) *Teaching language in context*. 3rd ed. Boston: Heinle & Heinle.

Hancock, A. (2012) Unpacking mundane practices: children's experiences of learning literacy at a Chinese complementary school in Scotland, *Language and Education*, 26(1), pp. 1–17. Available at: https://doi.org/10.1080/09500782.2011.609280.

Hancock, A. (2014) Chapter 3. Chinese complementary schools in Scotland and the Continua of Biliteracy, in X.L. Curdt-Christiansen and A. Hancock (eds) *AILA Applied Linguistics Series*. Amsterdam: John Benjamins Publishing Company, pp. 59–80. Available at: https://doi.org/10.1075/aals.12.04han.

Hancock, A. (2016) Creating a dialogic space for research: a reading conference in a Chinese complementary school, *Language and Education*, 30(2), pp. 126–142. Available at: https://doi.org/10.1080/09500782.2015.1103258.

Hancock, A. (2010) Chinese Children's Experiences of Biliteracy Learning in Scotland. Ph.D. dissertation, University of Edinburgh.

Haugen, E. (1972) The Ecology of Language, ed. Anwar S. Dil, *The Ecology of Language*, pp. 325–339.

Haugen, E. (1975) Pronominal address in Icelandic: From you-two to you-all, *Language in Society*, 4(3), pp. 323–339.

Haugen, E. (1979) An ecological model for bilingualism, *Notes on Linguistics*, 12, pp. 14–20.

Haugen, E. (1987) *Blessings of Babel: Bilingualism and Language Planning. Problems and Pleasures*. DE GRUYTER. Available at: https://doi.org/10.1515/9783110862966.

Heller, M. (2011) *Paths to post-nationalism: a critical ethnography of language and identity*. New York: Oxford University Press (Oxford studies in sociolinguistics).

Heller, M. and Martin-Jones, M. (2001) *Voices of authority: Education and linguistic difference*. Greenwood Publishing Group.

Herriott, R.E. and Firestone, W.A. (1983) Multisite qualitative policy research:

Optimizing description and generalizability, *Educational researcher*, 12(2), pp. 14–19.

Hesse-Biber, S.N. and Leavy, P. (2010) *The practice of qualitative research*. Sage.

Hornberger, N.H. (2002) Multilingual language policies and the continua of biliteracy: An ecological approach, *Language Policy*, 1(1), pp. 27–51. Available at: https://doi.org/10.1023/A:1014548611951.

Hornberger, N.H. (2005) Opening and Filling up Implementational and Ideological Spaces in Heritage Language Education, *The Modern Language Journal*, 89(4), pp. 605–609.

Hornberger, N.H. and Link, H. (2012) Translanguaging in Today's Classrooms: A Biliteracy Lens, *Theory Into Practice*, 51(4), pp. 239–247. Available at: https://doi.org/10.1080/00405841.2012.726051.

Huang, C.T.J. (1982) *Logical relations in Chinese and the theory of grammar*. Thesis. Massachusetts Institute of Technology. Available at: https://dspace.mit.edu/handle/1721.1/15215 (Accessed: 31 July 2023).

Hwang, G. *et al*. (2021) Effects of a concept mapping-based problem-posing approach on students' learning achievements and critical thinking tendency: An application in Classical Chinese learning contexts, *British Journal of Educational Technology*, 52(1), pp. 374–493. Available at: https://doi.org/10.1111/bjet.13007.

Ivanhoe, P.J. and Van Norden, B.W. (2001) *Readings in Chinese classical philosophy*. New York: Seven Bridges Press.

Jirajarupat, P. and Yinghua, Z. (2023) The Transmission of Guqin Musical Instrument Knowledge Literacy and its Reflection Study in Guizhou Province, China, *International Journal of Education and Literacy Studies*, 11(2), pp. 22–29.

Jones, B. (2010) Amrywiaeth Caleidosgopig: addysg ddwyieithog yng Nghymru heddiw, *Gwerddon*, 5, pp. 9–26.

Jones, B. *et al*. (2014) Language arrangements within bilingual education, in *Advances in the study of bilingualism*. Multilingual Matters.

Kanaki, A. (2019). Exploring language education in Scotland: Multilingual aspiration in a monolingual perspective. *British Association of Applied Linguistics (BAAL) Conference, Taking Risks in Applied Linguistics*, 44–47.

Kroskrity, P.V. (2005) Language Ideologies, in A. Duranti (ed.) *A Companion to Linguistic Anthropology*. 1st edn. Wiley, pp. 496–517. Available at: https://doi.org/10.1002/9780470996522.ch22.

Lambert, W.E. (1974) Culture and language as factors in learning and education.

Lang, N.W. (2019) Teachers translanguaging practices and “safe spaces” for adolescent newcomers: Toward alternative visions, *Bilingual Research Journal*, 42(1), pp. 73–89. Available at: https://doi.org/10.1080/15235882.2018.1561550.

Laviosa, S. (2018). Translanguaging and translation pedagogies. In *Moving boundaries in translation studies* (pp. 181–199). Routledge.

Le Donne, S. (2018) Language ecology and English as a “lingua franca” in a glocal multicultural society: opening intercultural windows, *Epos : Revista de filología,* (33), p. 209. Available at: https://doi.org/10.5944/epos.33.2017.19186.

Leung, S.K. (2019) Translanguaging through visual arts in early childhood: A case study in a Hong Kong kindergarten, *Asia-Pacific Journal of Research in Early Childhood Education*, 13(1), pp. 47–67.

Lewis, G., Jones, B. and Baker, C. (2012a) Translanguaging: developing its conceptualisation and contextualisation, *Educational Research and Evaluation*, 18(7), pp. 655–670. Available at: https://doi.org/10.1080/13803611.2012.718490.

Lewis, G., Jones, B. and Baker, C. (2012b) Translanguaging: origins and development from school to street and beyond, *Educational Research and Evaluation*, 18(7), pp. 641–654. Available at: https://doi.org/10.1080/13803611.2012.718488.

Lewis, W.G. (2008) Current challenges in bilingual education in Wales, *AILA Review*, 21, pp. 69–86. Available at: https://doi.org/10.1075/aila.21.06lew.

Li, W. (2006) Complementary schools, past, present and future. *Language and Education* 20, no. 1 (2006): 76-83.

Li, W. (2011a) Moment Analysis and translanguaging space: Discursive construction of identities by multilingual Chinese youth in Britain, *Journal of Pragmatics*, 43(5), pp. 1222–1235. Available at: https://doi.org/10.1016/j.pragma.2010.07.035.

Li, W. (2011b) Multilinguality, multimodality, and multicompetence: Code-and modeswitching by minority ethnic children in complementary schools, *The Modern Language Journal*, 95(3), pp. 370–384.

Li, W. (2014a) Negotiating funds of knowledge and symbolic competence in the complementary school classrooms, *Language and Education*, 28(2), pp. 161–180. Available at: https://doi.org/10.1080/09500782.2013.800549.

Li, W. (2014b) Translanguaging knowledge and identity in complementary classrooms for multilingual minority ethnic children, *Classroom Discourse*, 5(2),

pp. 158–175. Available at: https://doi.org/10.1080/19463014.2014.893896.

Li, W. (ed.) (2016a) *Multilingualism in the Chinese diaspora worldwide: transnational connections and local social realities*. New York: Routledge (Routledge critical studies in multilingualism, 10).

Li, W. (2016b) New Chinglish and the Post-Multilingualism challenge: Translanguaging ELF in China, *Journal of English as a Lingua Franca*, 5(1), pp. 1–25. Available at: https://doi.org/10.1515/jelf-2016-0001.

Li, W. (2018) Translanguaging as a Practical Theory of Language, *Applied Linguistics*, 39(1), pp. 9–30. Available at: https://doi.org/10.1093/applin/amx039.

Li, W. (2023) Translanguaging and co-learning at the interface of language and culture, in Chikamatsu, N. and Jin, L., *A Transdisciplinary Approach to Chinese and Japanese Language Teaching*. 1st edn. London: Routledge, pp. 38–46. Available at: https://doi.org/10.4324/9781003266976-4.

Li, W. and Zhu, H. (2010) Voices from the diaspora: changing hierarchies and dynamics of Chinese multilingualism, *International Journal of the Sociology of Language*, 2010(205). Available at: https://doi.org/10.1515/ijsl.2010.043.

Li, W. and (Jenifer) Ho, W.Y. (2018) Language Learning *Sans Frontiers*: A Translanguaging View, *Annual Review of Applied Linguistics*, 38, pp. 33–59. Available at: https://doi.org/10.1017/S0267190518000053.

Li, W. and Lin, A.M.Y. (2019) Translanguaging classroom discourse: pushing limits, breaking boundaries, *Classroom Discourse*, 10(3–4), pp. 209–215. Available at: https://doi.org/10.1080/19463014.2019.1635032.

Li, W. and Wu, C.-J. (2008) Code-switching: Ideologies and practices, *Chinese as a heritage language: Fostering rooted world citizenry*, pp. 225–238.

Li, W. and Wu, C.-J. (2009) Polite Chinese children revisited: creativity and the use of codeswitching in the Chinese complementary school classroom, *International Journal of Bilingual Education and Bilingualism*, 12(2), pp. 193–211. Available at: https://doi.org/10.1080/13670050802153210.

Li, W. and Zhu, H. (2014) Language and literacy teaching, learning and socialization in the Chinese complementary school classroom, *Learning Chinese in diasporic communities: Many pathways to being Chinese*, pp. 117–136.

Licona, P.R. (2018) Translanguaging about Socioscientific Issues in Middle School Science, in Kelly, G. J. and Green, J. L., *Theory and Methods for Sociocultural Research in Science and Engineering Education*. 1st edn. New York: Routledge, pp. 73–100. Available at: https://doi.org/10.4324/9781351139922-4.

Lightbown, P.M. and Spada, N. (2006) *How languages are learned. 3rd edn: Oxford University Press*. Oxford.

Lin, A.M. and He, P. (2017) Translanguaging as dynamic activity flows in CLIL classrooms, *Journal of Language, Identity & Education*, 16(4), pp. 228–244.

Lincoln, Y.S. and Guba, E.G. (1985) *Naturalistic inquiry*. Beverly Hills, Calif: Sage Publications.

Lindholm-Leary, K.J. (2001) *Dual language education*. Multilingual Matters.

Liu, Y. and Fang, F. (2022) Translanguaging theory and practice: How stakeholders perceive translanguaging as a practical theory of language, *RELC journal*, 53(2), pp. 391–399.

López, L.E. (2008) Indigenous Contributions to an Ecology of Language Learning in Latin America, in N.H. Hornberger (ed.) *Encyclopedia of Language and Education*. Boston, MA: Springer US, pp. 3029–3043. Available at: https://doi.org/10.1007/978-0-387-30424-3_227.

Lwo, L.S.L. and Chi, L.C. (2012) The impacts of different modalities of multimedia on classical Chinese learning, *Journal of Chinese Language Teaching (JCLT)*, 9, pp. 1–29.

Makoe, P. (2018) Translanguaging in a Monoglot Context: Children Mobilising and (Re) Positioning their Multilingual Repertoires as Resources for Learning, in G. Mazzaferro (ed.) *Translanguaging as Everyday Practice*. Cham: Springer International Publishing (Multilingual Education), pp. 13–30. Available at: https://doi.org/10.1007/978-3-319-94851-5_2.

Mau, A., Francis, B. and Archer, L. (2009) Mapping politics and pedagogy: Understanding the population and practices of Chinese complementary schools in England, *Ethnography and Education*, 4(1), pp. 17–36.

Maxwell, J.A. (2012) *Qualitative research design: An interactive approach*. Sage publications.

Mazak, C.M. and Herbas-Donoso, C. (2015) Translanguaging practices at a bilingual university: a case study of a science classroom, *International Journal of Bilingual Education and Bilingualism*, 18(6), pp. 698–714. Available at: https://doi.org/10.1080/13670050.2014.939138.

Mazzaferro, G. (2018) Translanguaging as Everyday Practice. An Introduction, in G. Mazzaferro (ed.) *Translanguaging as Everyday Practice*. Cham: Springer International Publishing (Multilingual Education), pp. 1–12. Available at: https://doi.org/10.1007/978-3-319-94851-5_1.

Mignolo, W. D. (2000). *Local histories/global designs: Coloniality, subaltern knowledges, and border thinking* (Nachdr.). Princeton Univ. Press.

Miles, M.B., Huberman, A.M. and Saldaña, J. (2014) *Qualitative data analysis: a methods sourcebook*. Third edition. Thousand Oaks, Califorinia: SAGE Publications, Inc.

Mills, A.J., Durepos, G. and Wiebe, E. (2009) *Encyclopedia of case study research*. Sage publications.

Milroy, L., and Muysken, P. (1995). *One speaker, two languages: Cross-disciplinary perspectives on code-switching* (Vol. 10). Cambridge University Press.

Mitchell, M.L. and Jolley, J.M. (2013) Research design explained (8 uppl.), *Wadsworth Cengage Learning* [Preprint].

Mogashoa, T. (2014) Applicability of constructivist theory in qualitative educational research, *American International Journal of Contemporary Research*, 4(7), pp. 51–59.

Moon, K. and Blackman, D. (2014) A Guide to Understanding Social Science Research for Natural Scientists: Social Science for Natural Scientists, *Conservation Biology*, 28(5), pp. 1167–1177. Available at: https://doi.org/10.1111/cobi.12326.

Mora, R.A. (2014) Counter-Narrative: Key concepts in intercultural dialogue, *Center of intercultural dialogue* [Preprint].

Newing, H. (2010) *Conducting Research in Conservation*. Routledge. Available at: https://doi.org/10.4324/9780203846452.

Newson, D. (1998). Translation and foreign language learning. In K.Malmkjær (Ed.). *Translation and language teaching: Language teaching and translation* (pp. 63-68). Manchester: St. Jerome Publishing.

Ng, L.L. and Lee, S.L. (2019) Translanguaging Practices and Identity Construction of Multilingual Malaysian University Graduates in Digital Media, *English Teaching & Learning*, 43(1), pp. 105–123. Available at: https://doi.org/10.1007/s42321-019-00021-6.

Nikula, T. and Moore, P. (2019) Exploring translanguaging in CLIL, *International Journal of Bilingual Education and Bilingualism*, 22(2), pp. 237–249.

Nilep, C. (2006) "Code switching" in sociocultural linguistics, *Colorado research in linguistics* [Preprint].

Nkhi, S. E., and Shang, T. (2024). The impact of pedagogical translanguaging in enhancing communicative competence of university students in Lesotho. *International Journal of Language Studies*, *18*(1).

Nordstrom, J. (2015) Flexible bilingualism through multimodal practices: studying K-12 community languages online, *International Journal of Bilingual Education and Bilingualism*, 18(4), pp. 395–408. Available at: https://doi.org/10.1080/13670050.2014.909773.

Paulsrud, B., Tian, Z. and Toth, J. (2021) *English-medium instruction and translanguaging*. Multilingual Matters.

Pennycook, A. (2010) *Language as a Local Practice*. Routledge. Available at: https://doi.org/10.4324/9780203846223.

Peshkin, A. (2000) The Nature of Interpretation in Qualitative Research, *Educational Researcher*, 29(9), pp. 5–9. Available at: https://doi.org/10.3102/0013189X029009005.

Peshkin, A. (2001) Angles of Vision: Enhancing Perception in Qualitative Research, *Qualitative Inquiry*, 7(2), pp. 238–253. Available at: https://doi.org/10.1177/107780040100700206.

Polit, D.F. and Beck, C.T. (2014) *Essentials of nursing research: appraising evidence for nursing practice*. 8th ed. Philadelphia: Wolters Kluwer Health /Lippincott Williams & Wilkins.

Portolés, L. and Martí, O. (2017) Translanguaging as a teaching resource in early language learning of English as a an additional language (EAL), *Bellaterra Journal of Teaching & Learning Language & Literature*, 10(1), p. 61. Available at: https://doi.org/10.5565/rev/jtl3.698.

Prada, J. and Turnbull, B. (2018) The role of translanguaging in the multilingual turn: Driving philosophical and conceptual renewal in language education.

Prilutskaya, M. (2021) Examining Pedagogical Translanguaging: A Systematic Review of the Literature, *Languages*, 6(4), p. 180. Available at: https://doi.org/10.3390/languages6040180.

Probyn, M. (2019) Pedagogical translanguaging and the construction of science knowledge in a multilingual South African classroom: challenging monoglossic/post-colonial orthodoxies, *Classroom Discourse*, 10(3–4), pp. 216–236. Available at: https://doi.org/10.1080/19463014.2019.1628792.

Ramírez-Esparza, N. and García-Sierra, A. (2014) The Bilingual Brain: Language, Culture, and Identity, *The Bilingual Brain*, p. 22.

Reybold, L.E., Lammert, J.D. and Stribling, S.M. (2013) Participant selection as a conscious research method: thinking forward and the deliberation of “Emergent” findings, *Qualitative Research*, 13(6), pp. 699–716. Available at: https://doi.org/10.1177/1468794112465634.

Ricento, T. (2000) Historical and theoretical perspectives in language policy and planning, *Journal of Sociolinguistics*, 4(2), pp. 196–213. Available at: https://doi.org/10.1111/1467-9481.00111.

Richards, J. C., Platt, J. T., and Platt, H. (1992). *Longman dictionary of language teaching and applied linguistics* (C. N. Candlin, Ed.). Longman.

Richards, J. C., and Rodgers, T. S. (2001). *Approaches and Methods in Language Teaching* (2nd ed.). Cambridge University Press. Available at: https://doi.org/10.1017/CBO9780511667305

Richards, J. C., and Rodgers, T. S. (2014). *Approaches and methods in language teaching* (Third edition). Cambridge University Press.

Riley, K.C. (2011) Language socialization and language ideologies, *The handbook of language socialization*, pp. 493–514.

Ritchie, J. and Lewis, J. (eds) (2003) *Qualitative research practice: a guide for social science students and researchers*. Repr. Los Angeles, Calif.: SAGE.

Robert, L. (1979) Thinking and Language: A Psycholinguistic Model of Performance and Learning’, *Sophia Linguistica*, (12), pp. 3–24.

Robinson, E., Tian, Z., Crief, E., and Prado, M. L. (2020). Learning to teach English for justice from a translanguaging orientation. *Envisioning TESOL through a Translanguaging Lens: Global Perspectives*, pp.135–159.

Safont Jordà, M.-P. and Portoles Falomir, L. (2016) Pragmatic functions of formulaic speech in three different languages: A focus on early L3 learners of English, *Journal of Immersion and Content-Based Language Education*, 4(2), pp. 225–250.

Sah, P.K. and Kubota, R. (2022) Towards critical translanguaging: A review of literature on English as a medium of instruction in South Asia's school education, *Asian Englishes*, 24(2), pp. 132–146.

Saldaña, J. (2013) *The coding manual for qualitative researchers*. 2nd ed. Los Angeles: SAGE.

Scottish Government. (2012). *Language learning in Scotland: A 1+2 approach : Scottish Government Languages Working Group report and recommendations*. Scottish Government.

Seawright, J. (2009) Cantonese in Scotland, *Scottish Languages Review*, 20, pp. 25–30.

Seawright, J. and Gerring, J. (2008) Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options, *Political Research Quarterly*, 61(2), pp. 294–308. Available at: https://doi.org/10.1177/1065912907313077.

Smith, J.A. and Osborn, M. (2008) Interpretative Phenomenological Analysis, in G.M. Breakwell (ed.) *Doing Social Psychology Research*. Oxford, UK: The British Psychological Society and Blackwell Publishing Ltd, pp. 229–254. Available at: https://doi.org/10.1002/9780470776278.ch10.

Spirkin, A.G. (1983) *Dialectical materialism*. Progress Publishers Moscow.

Steffensen, S.V. and Fill, A. (2014) Ecolinguistics: the state of the art and future horizons, *Language Sciences*, 41, pp. 6–25. Available at: https://doi.org/10.1016/j.langsci.2013.08.003.

Swain, M. (2006) Languaging, agency and collaboration in advanced second language proficiency, *Advanced language learning: The contribution of Halliday and Vygotsky*, pp. 95–108.

Tai, K.W. and Wong, C.Y. (2022) Empowering Students Through the Construction of a Translanguaging Space in an English as a First Language Classroom, *Applied Linguistics*, p.amac069. Available at: https://doi.org/10.1093/applin/amac069.

Tang, Y.H. (2011) *The analysis of classical Chinese examination questions of the basic competence test for junior high school students (2001 to 2010)*. MA Dissertation, National University of Taiana, Taiana.

Thamarana, S. (2015). A critical overview of communicative language teaching. *International Journal of English Language, Literature and Humanities*, *3*(5), pp. 90–100.

Thomas, G. (2015) *How to do Your Case Study, 2nd Editio. ed*. Sage Publications.

Tian, Z. (2022) Translanguaging design in a third grade Chinese language arts class, *Applied Linguistics Review*, 13(3), pp. 327–343.

Tkachenko, E., Romøren, A.S.H. and Garmann, N.G. (2021) Translanguaging strategies in superdiverse mainstream Norwegian ECEC: Opportunities for home

language support.

Tsuchiya, K. (2017) Co-constructing a translanguaging space: Analysing a Japanese/ELF group discussion in a CLIL classroom at university, *Translation and Translanguaging in Multilingual Contexts*, 3(2), pp. 229–253. Available at: https://doi.org/10.1075/ttmc.3.2.05tsu.

Tumansery, G. S., and Munden, J. H. (2020). Communicative competence in English upper secondary school curricula in Indonesia. *International Journal of Language Studies*, 14(3), pp. 1-26.

Ukfcs.info (2018) Welcome to UKFCS. Available at: http://ukfcs.info/en/ (Accessed: 9 November 2018).

van Lier, L. (ed.) (2004) Theories of Language, in *The Ecology and Semiotics of Language Learning*. Dordrecht: Springer Netherlands (Educational Linguistics), pp. 23–53. Available at: https://doi.org/10.1007/1-4020-7912-5_2.

van Lier, L. (2008a) Agency in the classroom, *Sociocultural theory and the teaching of second languages*, pp. 1163–1186.

van Lier, L. (2008b) The Ecology of Language Learning and Sociocultural Theory, in N.H. Hornberger (ed.) *Encyclopedia of Language and Education*. Boston, MA: Springer US, pp. 2949–2961. Available at: https://doi.org/10.1007/978-0-387-30424-3_221.

Valdera Gil, F., and Crichton, H. (2020). Mother tongue plus two languages: Are Scottish primary teachers confident to deliver? *The Language Learning Journal*, *48*(4), 454–468.

Velasco, P. and García, O. (2014) Translanguaging and the Writing of Bilingual Learners, *Bilingual Research Journal*, 37(1), pp. 6–23. Available at: https://doi.org/10.1080/15235882.2014.893270.

Wang, D. (2014) Profession or passion?: Teaching Chinese in London Chinese complementary schools, *London Review of Education* [Preprint]. Available at: https://doi.org/10.18546/LRE.12.1.05.

Wang, D. (2017) Developing intercultural competence through cultural activities in London Chinese complementary schools, *Interculturality in Chinese language education*, pp. 131–150.

Wang, D. (2019) *Multilingualism and Translanguaging in Chinese Language Classrooms*. Cham: Springer International Publishing. Available at: https://doi.org/10.1007/978-3-030-02529-8.

Wang, Y.H. (2016) Could a mobile-assisted learning system support flipped classrooms for classical Chinese learning?, *Journal of Computer Assisted Learning*, 32(5), pp. 391–415. Available at: https://doi.org/10.1111/jcal.12141.

Wendel, J.N. (2005) Notes on the Ecology of Language, *Bunkyo Gakuin university academic journal*, 5, pp. 51–76.

Williams, C. (1994). *Arfarniad o ddulliau dysgu ac addysgu yng nghyd-destun addysg uwchradd ddwyieithog*. University of Wales (U.C.N.W., Bangor: Education). Available at: https://books.google.com/books?id=zQR6NwAACAAJ

Williams, C. (1996) Secondary education: Teaching in the bilingual situation, *The language policy: Taking stock*, 12(2), pp. 193–211.

Wright, S. (2014) The art of voice: The voice of art–understanding children's graphicnarrative-enactive communication, *Handbook of visual communication*, pp. 517–537.

Wu, C.J. (2006) Look Who's Talking: Language Choices and Culture of Learning in UK Chinese Classrooms, *Language and Education*, 20(1), pp. 62–75. Available at: https://doi.org/10.1080/09500780608668710.

Wu, T.T. and Chen, A.C. (2018) Combining e-books with mind mapping in a reciprocal teaching strategy for a classical Chinese course, *Computers & Education*, 116, pp. 64–80. Available at: https://doi.org/10.1016/j.compedu.2017.08.012.

Yasar Yuzlu, M., and Dikilitas, K. (2022). Translanguaging in the development of EFL learners' foreign language skills in Turkish context. *Innovation in Language Learning and Teaching*, *16*(2), 176–190.

Yin, R.K. (2009) *Case study research: Design and methods*. sage.

Yin, R.K. (2018) *Case study research and applications: design and methods*. Sixth edition. Los Angeles: SAGE.

Zhang, Q. *et al.* (2022) A translanguaging perspective on medium of instruction in the CFL classroom, *Journal of Multilingual and Multicultural Development*, 43(5), pp. 359–372.

Zhang, Y. *et al.* (2015) ChinAR: facilitating Chinese Guqin learning through interactive projected augmentation, in *Proceedings of the Third International Symposium of Chinese CHI*, pp. 23–31.

Appendices

Appendix 1: Classroom observation form

Classroom Observation Form

Bilingualism and Student Identity in Chinese complementary school classroom: A case study

Date and Time _____ Class Name: _____ Class Teacher: _____

Length of task: _____ Class size and gender balance: M/ F_____

Use focuses that apply to format of class observed.

Moments	Languages (English/Chinese)	Other Resources	Description/Comments

Documents and artifacts collection

Key Participant Student	Documents	Artifacts	Comments

Additional Comments

Overview

Reflection

Appendix 2: Student semi-structured interview guide

Student Semi-structured Interview Guide

Student Name_____ Class Name_____ Date _____

Thank and check consent to audio record. Reiterate issues of confidentiality, anonymity and right to withdraw.

Language background

1.What languages do you use at home? with whom? How about at weekdays or at school?

2.Can you give me some examples of things you do in Chinese/ English/other language on your own? (e.g., watch TV, make handwork)

3.What kinds of activities do you do with your family in Chinese/English/other language?

4.How often do you speak in Chinese/English or another language?

5. How do you feel when you speak English/Chinese or another language?

6.Do you have a preference of using Chinese or English? When? Why?

Language use in Chinese school classroom

1. How long have you been at this Chinese school?

2. What languages do you prefer to use in the Chinese class? Do you use one language more than the other? Why?

3. What languages do you speak with teachers and peers, why are there differences or why are they the same?

4. At Chinese school are you expected to speak one language rather than another at certain times? When?

5. Do you enjoy use two languages in the Chinese classroom? Can you give me examples?

6. When you are not clear about the teachers' instruction in class, what steps will you take to help understand?

7. What language does the teacher usually use to answer your questions? Can you usually understand?

(Free Question 8-10)

[Interviewers may follow up on anything they noticed during classroom observations]

8. I saw you use English/ Chinese at [asking question, expressing opinion *etc…*]. Tell me more about what it is like to use that language at that time? Why do you speak to teacher/peers in Chinese/English?
9. I saw you use [artifacts] at [asking question, expressing opinion *etc…*]. Tell me why did you use that artifact at that time?
10. I heard you said [...XXX]. (The researcher will make reference to what student said during the classroom observations and will ask his/her interpretation)

Appendix 3: Teacher semi-structured interview guide

Teacher Semi-structured Interview Guide

Teacher Name_____ Class Name_____ Date _____

(The interview will be conducted by two ways. The free questions are expected to be answered after the class, the other questions will depend on teacher's convenience and can be answered at any time.)

Thank and check consent to audio record. Reiterate issues of confidentiality, anonymity and right to withdraw.

1. How long have you taught in the class?
2. Tell me about your language educational experience?
3. Tell me about your language using in the classroom?
4. What went well for you/your students when using Chinese/English in the classroom?
5. What challenges did you/your students face using Chinese/English in the classroom?
6. How do you think students using Chinese/English to talk with peers?
7. Have you ever asked your students not to speak English/Chinese in classroom? When?
8. What language do you prefer your students to use in the classroom? Why?
9. What is the effect of using two languages in the classroom?
10. How do you think your students felt about using Chinese/English?
11. Can you tell me about some situations where the children found using their first language helpful?
12. Are there times when you use more than one language, if so why?

(Free Question 13-14) *[Interviewer may follow up on anything noticed during classroom observation] ****Ask for each practice observed*

13. I saw you use English/ Chinese at [*responding, explaining etc…*] Tell me more about what it is like to use that language at that time?

14. How do think [*XX (student) said/did XXX*]? (Usually the interviewer will use an example of student using the certain languages/other resources from the classroom observation).

Appendix 4: Student group interview guide

Students Group Interview Guide

Student Name_____ Class Name_____ Date _____

This sheet gives an example of the kind of questions I would prepare for myself ahead of my interviews with two key participants, based on the audio data I had collected from classroom observations, previous interviews or other questions related to their language practices. In this interview, the artifacts are intended as a flexible guide and key participants can lead the discussion into other areas of significance. Interviewees are free to talk in any languages at any time during the interview.

Interview Guide

Thank and check consent to audio record. Reiterate issues of confidentiality, anonymity and right to withdraw.

- Please introduce yourself.

- Ask them to describe, comment each other's drawings, signs from the copies of collected documents (to contextualize some audio recordings).

- Invite them to interpret the drawings and signs, ask questions what do you think when you are creating and the reasons of creating them?

- Listen to some fragments of audio recordings made by them in the previous classroom observation. Use the photos taken during the classroom observations as a reminder and clue. Ask them about their interpretations, of events.

The discussion content will include words, language using, actions and their interactions with others.

Appendix 5: Consent form for key student participants

Consent Form for Key Student Participants

Project – Language use in Chinese Complementary Classroom

My name is Qian Yang and I am a student at Glasgow University. I am doing research called a PhD. For my PhD studies, I am doing a project about student's language use in Chinese complementary school classroom.

I am going to come into your class to do this project.

I will come to watch your class three times. Every time, I will record your talking in the classroom. In doing so, I want to listen carefully to what you said in either English or Chinese and how you use these languages.

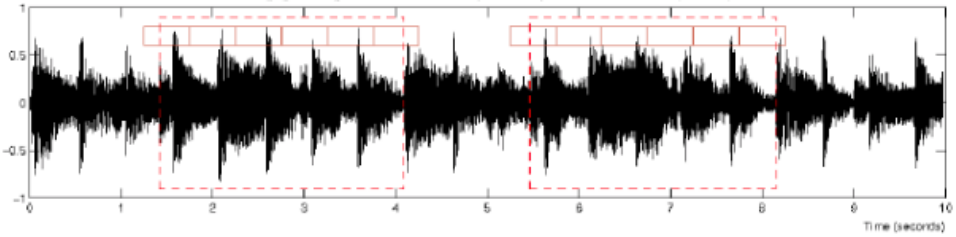
I will look at your textbooks, exercise books, jotters, other written works and artifacts that you bring in the classroom. You do not have to give me any things you don't want to, and you don't need to worry if I will check your classroom performance by looking at these. I just want to know your language use in your written work. Photos may be taken during the class, to assist with my memory of what happened in the classroom, these will be taken in such a way that you would not be identified in the image (i.e from behind), and I will allow you and your parents to review the photographs at the end of each class.

After the class, I will ask you some questions about your language use at home, weekdays or school as well as in Chinese classroom. There are no right or wrong answers. I am interested to hear what you think about language use at the different time, in different places and with different people.

At the last time's meeting, there will be you, me and one of your classmate.

We will look at some copies of the written works or classroom artifacts used by you and your classmate;

Hear some voice-recording fragments made by you and your classmates in the classroom;



Then, I will ask you to talk about the reasons or meanings while you are talking, using your body to make signs or, drawing some signs. You are also encouraged to express your own ideas about your classmate's actions.

You do not have to answer any questions that you don't want to.

If you agree that I can write about you in my studies, I will record what you say about the language use and take copies of the written work or artifacts you bring into the classroom. When I write about the project or talk about it, I will give you a different name or if you like you can choose another name for me to use so no one will know who you are.

It is up to you whether you agree to take part. You can say yes or no.

If you would like to know more about the project please either speak to me or Ms.Fu the headteacher at the school.

Thank you for taking the time to read this and for your help.

If I agree to allow my participation at ‘Chinese Classroom Language use’ project to be included in Qian’s PhD studies

- I understand that the discussions we have about the language use and artifacts use will be recorded.

- I understand that Qian will take copies of my written work or artifacts.
- I understand that at any point I can say I don’t want to be recorded, or that I don’t want Qian to take a copy of my written work or artifacts.

If you understand the statements above, you now need to decide whether you would like to take part in the project.

Please put a circle round Yes or No.

Yes

No

Signed.....

Please print your name.....

Date.....

Appendix 6: Consent Form for Parents of All Student Participants

University of Glasgow

College of Social Sciences

Consent Form for Parents of All Student Participants

Title of Project:
Bilingualism and Student Identity in Chinese complementary school classroom: A case study

Name of Researcher: Qian Yang
Supervisors: Dr Alan Britton, Ms Julie McAdam, Dr Lavinia Hirsu

1. I confirm that I have read and understood the Plain Language Statement Sheet for the above study and have had the opportunity to ask questions.
2. I understand that my child's participation is voluntary and that I am free to withdraw my child at any time, without giving any reason.
3. I consent to the researcher taking notes of my child's language use activities during the classroom observations.
4. I consent to my child's voice being audio-recorded during the classroom observations.
5. I consent to the researcher taking photos during the classroom observations, these will be taken in such a way that my child would not be identified in the image (i.e from behind).
6. I understand that my child will be referred to by pseudonyms (a false name) in any publications arising from the research.
7. I acknowledge that the material may be used in future publications, both print and online.
8. I understand that other authenticated researchers may use my child's words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.

I agree / do not agree (circle as applicable) to take part in the above study.

I agree to take part in this research study ☐

I do not agree to take part in this research study ☐

Name of Participant.....

Name of Parents/Guardian ..... Signature .....

Date .....

Name of Researcher ..... Signature .....

Date .....

..... **End of consent form** .....

Appendix 7 : Consent Form for Parents of Key Student Participants

University of Glasgow

College of Social Sciences

Consent Form for Parents of Key Student Participants

Title of Project:
Bilingualism and Student Identity in Chinese complementary school classroom: A case study

Name of Researcher: Qian Yang
Supervisors: Dr Alan Britton, Ms Julie McAdam, Dr Lavinia Hirsu

1. I confirm that I have read and understood the Plain Language Statement Sheet for the above study and have had the opportunity to ask questions.
2. I understand that my child's participation is voluntary and that I am free to withdraw my child at any time, without giving any reason.
3. I consent to the researcher taking notes of my child's language use activities during the classroom observations.
4. I consent to my child's voice being audio-recorded during the classroom observations.
5. I consent to the interviews being audio-recorded.
6. I consent to the researcher taking a copy of my child's textbooks, exercise books, jotters, other reading writing or drawing materials and artifacts that my child brings into the classroom during the study.
7. I consent to the researcher taking photos during the classroom observations, these will be taken in such a way that my child would not be identified in the image (i.e from behind).
8. I understand that my child will be referred to by pseudonyms (a false name) in any publications arising from the research.
9. I acknowledge that the material may be used in future publications, both print and online.
10. I understand that other authenticated researchers may use my child's words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.

I agree / do not agree (circle as applicable) to take part in the above study.

I agree to take part in this research study ☐

I do not agree to take part in this research study ☐

Name of Participant.....

Name of Parents/Guardian ..... Signature .....

Date .....

Name of Researcher ..... Signature .....

Date .....

..... **End of consent form** .....