

# Teachers' codeswitching in L2 Chinese classes: Awareness, intentions, and attitudes

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The study deals with the sociolinguistic phenomenon of codeswitching as manifested in community-based ethnic-language classes. More specifically, it focuses on teachers' codeswitching from students' second language (Mandarin Chinese) to students' first language (English). The empirical study was conducted at one Chinese community school in the United Kingdom to investigate the instances in which teachers switch to students' first language and to explore teachers' introspection regarding their codeswitching behavior. Twelve types of codeswitching were identified and categorized in accordance with functions recorded in other studies. Discrepancies between teachers' beliefs on the choice of language medium and their actual practices were found. Teachers were not always aware of their codeswitching and they generally held positive attitudes towards their conscious codeswitching and negative attitudes towards subconscious codeswitching. Conscious switches were used mainly for pedagogical, interpersonal, and interactive purposes. A sense of guilt was found to be associated with their unconscious codeswitching. This study suggests that raising teachers' awareness of the potential usefulness of codeswitching within ethnic-language education is paramount.

Keywords: *codeswitching* (语码转换), *awareness* (意识), *attitude* (态度), *Chinese* (中文), *teacher training* (教师培训)

## 1. Introduction

Since the rise of Ailing Gu as a young and bright Gold Medalist in the 2022 Beijing Winter Olympics, there has been heated discussion regarding her language use and identity. As an English-Chinese bilingual, she is able to switch between the two languages naturally, fluently

and creatively. To her, and many other competent bilingual speakers, this practice of codeswitching, alternating between two or more varieties or languages, is a natural resource used in their daily communication without second thought. Indeed, codeswitching (hereafter CS) is a sociolinguistic phenomenon that occurs daily around the world and serves a number of different and valuable functions. As Canagarajah (2011, 4) succinctly put it, everyone codeswitches regularly, regardless of whether they are monolingual or multilingual: monolinguals alternate between formal and informal registers while multilinguals additionally alternate between their languages. CS is undeniably beneficial yet its use is very often prohibited in classrooms around the world (Li and Martin 2009). Educational linguists, however, have repeatedly argued that CS should be viewed as a valuable pedagogical and communicative resource which can be better utilized by teachers in the classroom (e.g., Yiakoumetti 2011; Lucas and Yiakoumetti 2019; Yiakoumetti 2022).

This study focuses on teachers' CS in community-based ethnic-language education: specifically, Chinese language education in British community schools. The study comes as a response to the calls for further research into teachers' CS within community-based Chinese education (Macaro 2001; Turnbull and Arnett 2002; Creese and Martin 2006; Francis et al. 2009).

We are aware of the rising attention that the concept of translanguaging– which views the languages of bilingual speakers as intertwined – has been enjoying in recent years (García et al. 2012, Canagarajah 2011, García 2009). Translanguaging is used to describe the original, dynamic, and complex discursive practices that cannot be easily assigned to one or another variety of bilingual or multilingual speakers. We agree with Li W. (2018) who proposes translanguaging as a practical theory of language and emphasizes that it does not mean to replace terms such as codeswitching and codemixing. Noting that translanguaging is a useful and well-established research area, this study nevertheless focusses on clearly identifiable switches by teachers from students' second language (L2) to students' dominant language (L1).

### *1.1 Codeswitching in Language Classrooms*

In the field of L2 education, CS is mainly associated with the choice of language medium, that is L1 vs L2 in class, and it has been used as a positive substitute for 'the use of L1' and 'recourse to L1' (Macaro, 2003). L2 teachers' CS became the focus of research due to the communicative language teaching approach's recommendation that teachers should mainly use students' L2. As early as the 1980s and 1990s, there have been debates on the role of L1 in L2 classrooms. Discussions on this issue can be roughly categorized into three positions as proposed by

Macaro (2001: 535; 1997): (1) the *virtual position*, where the classroom is like the target country and therefore there is no pedagogical value in L1 use, (2) the *maximal position*, where there is no pedagogical value in L1 use yet teachers have to resort to the L1 as perfect teaching and learning conditions do not exist, and (3) the *optimal position* where there is some pedagogical value in L1 use and some aspects of learning may be enhanced by use of the L1.

The virtual position holds that there is no place at all for L1 in L2 classrooms. It is suggested by Krashen's (1987) comprehensible input hypothesis that L1 should be excluded from L2 classrooms. However, there are justifiable concerns regarding the L1 exclusion on the effect of comprehensible input. Later, in 1988, Krashen and Terrell (1988) proposed that L2 should be 'virtually' used throughout the whole L2 class. It is thus interesting to investigate the meaning of the word 'virtually'. There seems to be a weak implication that L1 can be used in L2 classrooms only if the virtual L2 position is obviously held and is not being threatened. In summary, those who hold this position do not believe that there is pedagogical and learning value in using L1 in L2 classrooms and the use of L1 might 'undermine the learning process' (Chambers 1991; Macdonald 1993).

The maximal position holds that L1 cannot be totally forbidden in FL classrooms. Halliwell and Jones (1991) believe that the use of L2 in L2 classrooms is beneficial for learners in terms of experiencing the language as a real means of communication and "developing their own in-built language learning system". Nevertheless, they do not promote exclusive L2 use, suggesting instead that L2 should and can be used to the maximum. At the same time, Skinner (1985) sees one disadvantage of exclusive use of L2 as "forming an obstacle to connect thoughts" which prevents concept perception and formation (cited in Macaro 1997, 74). Dickson (1992) points out two notions of fundamental importance: (1) input does not equal intake, and (2) the quantity of input does not equate to the quality of input. Exclusive use of L2 is therefore implied to be non-crucial in terms of accelerating learners' acquisition of L2. This position does not see much pedagogical value in L1 but it acknowledges the difficulty in excluding L1 completely from L2 classrooms.

Macaro's *optimal position* holds that CS between L1 and L2 is certainly of value. Naturally occurring CS is seen as a strategy and additional resource within teachers' language practices in FL classrooms. There is 'nothing to prove that codeswitching is inappropriate' (Cook 1991, 66). Moreover, CS is an important language skill in multilingual interaction (Hagen 1992). Macaro's study (2001) demonstrates that use of L1 in the six student teachers' classrooms was functionally and reasonably oriented and many other studies indicate the need and value of CS in L2 classrooms in practice (Atkinson 1993; Chambers 1992; Dickson

1996; Macaro 1996; Mitchell 1988; Neil 1997). From this viewpoint, CS from L2 to L1 seems to play a positive role in the following three perspectives:

- (1) The switch to L1 is able to promote L2 acquisition effectively (Canagarajah, 1995).
- (2) From a sociopolitical point of view, the use of L1 assists in diminishing pupils' cultural and linguistic shock when they learn the L2 (Auerbach 1993, 16).
- (3) Within a cognitive approach, there is a kind of shared underlying language proficiency which makes it possible for academic and literary-related skills to be transferred across different languages, which is claimed by Cummins' (1991) linguistic interdependence principle.

Among the above three positions, the optimal position is the only one that acknowledges the pedagogical values of CS to L1 and its legitimate role in L2 classrooms.

### *1.2 Teachers' codeswitching*

Teachers' codeswitching has attracted a great deal of research attention. This research has pointed to a direct link between target-language achievement and language choice which has consequently led many policy makers and educators to be in favor of the virtual position and maximal position (e.g., Turnbull 2001). According to van Lier (1995) and Cook (2001), many researchers tend to equate the maximal with the virtual position and thus further prohibit the use of L1 in language classes.

At the policy level, many language policies around the world prescribe the use of the target language alone and view CS as undesirable and harmful. Therefore, in many linguistically-diverse classrooms around the world, teachers' CS is viewed unfavorably even by teachers themselves (Mitchell 1988; Probyn 2009; van de Craen and Humblet 1989; Carless 2008).

However, in the foreign language teaching context, it is generally unrealistic for teachers to use the target language in an exclusive manner. The optimal position is found to be pervasive among many language teachers, though perhaps at the subconscious level. Cases where CS was employed purposefully and successfully by teachers have been reported. An empirical study carried out by Raschka et al. (2009) in Taiwanese EFL classrooms demonstrates that teachers switch between Mandarin and English for reasons including socializing, topic switching, classroom management, and metalinguistic functioning. Another empirical study, also carried out in Taiwan, supports these findings and provides additional reasons for CS: to unlock meaning and to promote harmony in the classrooms (Tien 2009). In Kenya, Cleghorn (1992) explains that teachers switch to one of the three Indigenous languages of Kenya, Kiswahili,

Kikuyu and Luo, to convey important information. Similarly, in Malaysia, Ahmad and Jusoff (2009) demonstrate that, to enhance students' learning experience, teachers and students regularly switch to Malay, the common language amongst the multilingual students. In South Africa, Adendorff (1993) highlights that switches from English to Zulu guide academic activity as well as the interpretation of social information. It is heartening that a number of researchers acknowledge the potential benefits of using L1 in L2 classrooms (Duff and Polio 1990; Kraemer 2006; Polio and Duff 1994; Macaro 2001; Hobbs et al. 2010; Cook, 2001).

While most prior studies on teachers' CS address the role of CS, our study not only presents the functions CS performs but, critically, also investigates teachers' own understanding of their actual practices. Through exploring individual teachers' awareness of, attitudes toward, and intentions of their CS in everyday teaching practices, a deeper and more comprehensive understanding of the complex nature of CS in L2 classrooms can be gained.

### *1.3 Community-based Ethnic-language Education*

Our study focusses on Chinese community education in Britain. Community schools, also known as 'heritage', 'complementary' or 'supplementary' schools, serve primarily immigrant and ethnic communities in multilingual England (Li W. 2006). Complementary schooling is essentially designed by and for immigrant communities in an effort to maintain their linguistic and cultural heritage (Yiakoumetti 2015). Over the last three decades, there has been enormous voluntary commitment to the teaching of community languages by minority communities themselves (Kempadoo and Abdelrazak 2001) and a number of research studies have informed the field of community-based ethnic-language education in Britain (Li W. 1993; W. Li W. and Wu 2009; Francis et al. 2009; Mau et al. 2009). However, the field is in dire need of further research (Hall et al. 2002).

Our study is timely as Chinese community schools in Britain are currently faced with exciting opportunities derived from larger numbers of students joining these schools. This is due to the increasing attention that the teaching and learning of Chinese is enjoying in Britain. However, this heightened attention brings some challenges that mainly relate to untrained teaching staff and lack of teaching materials. We agree with Kagan (2005) who explains that ethnic-language learners cannot be neatly categorized as either native or foreign speakers of the ethnic language. Such learners are required to negotiate between majority and minority languages and identities and thus require their own curriculum and materials as well as sociolinguistically-informed teachers who are aware of their unique identity as ethnic-language learners. We view the work of community language schools as immensely significant in

promoting linguistic diversity (Creese and Martin 2006).

## **2. Research design**

The present study is part of a larger project which examines the awareness, intentions, and attitudes towards teachers' CS from both the teachers' and students' perspectives. CS here is defined after Macaro (2003: 42) as 'the switch between two or more languages'. CS can be classified into two types: inter-sentential and intra-sentential. Inter-sentential CS refers to switches between sentences; intra-sentential CS involves switches within one sentence (Milroy & Muysken, 1995). Both intra-sentential and inter-sentential CS are taken into account for analysis in this study. This paper focuses on the teachers' perspectives and addresses the following research questions:

- 1) What functions does teachers' CS serve?
- 2) Do teachers' practices reflect their opinions of how and when to switch?
- 3) Are teachers always aware of their CS in L2 classrooms?
- 4) What are teachers' intentions for, and attitudes towards, their CS?

A case study was conducted at one Chinese community school located in Cambridgeshire. The school, like most community schools in Britain, offers two-hour Mandarin and Cantonese language classes of various levels on weekends. The majority of the students are British-born Chinese whose L1 is English. They attend these schools in an effort to improve their proficiency in Chinese and to enhance their knowledge of Chinese culture. Students, ranging from four to 17 years of age, are assigned to different classes based on their language proficiency rather than their age.

Two Mandarin classes, one from grade three (students ranging from 7-9 years old) and one from grade six (students ranging from 10-12 years old) were chosen as two study groups and were observed during the first stage of the project. The two classes were named class 3 and class 6. One teacher and two students from each class were then interviewed. The teachers of class 3 and class 6 are referred to as teacher W and teacher J respectively and student data are not presented here. Both teachers were qualified teachers from Mainland China with Mandarin Chinese being their L1 and English their L2. Both were female and had been teaching at the school for a minimum of nine months prior to the commencement of the study and both volunteered to participate. Teacher W, who was 25, came to the UK to study for her MPhil degree, while teacher J, at the age of 48, was a visiting scholar at the University of Cambridge.

Observations, questionnaires, and interviews were used as the main research instruments for data collection. There was no interruption to normal course schedules during the research.

With consent obtained from the school, the two teachers and parents, classroom observation data in the form of audio recordings and video recordings were collected to examine teachers' CS from Chinese to English in the classes (i.e. research question 1). Following the transcription and categorization of the observation data, teacher questionnaires were employed to answer the second research question: "do teachers' practices reflect their opinions of how and when to switch?" Hypothetical instances based on twelve types of CS categorized from the observation data were provided in the questionnaire. The teachers were asked to choose the preferred language medium for each instance and to comment on each instance as they felt necessary.

Subsequently, in response to research questions 3 and 4, semi-structured interviews were conducted with the two teachers. At the interview, the teachers were shown video clips of instances in which they codeswitched from Chinese to English in class and were asked to report whether they were aware of their practices. At least two instances for each type of CS were provided for discussion during the interviews. They used terms such as 'conscious' and 'unconscious' to express their awareness. Only when the teachers reported that they were conscious/unconscious to both instances was this type of CS coded as 'conscious'/'unconscious'. The teachers' intentions when adopting CS and the attitudes toward them were also addressed in the interviews. For conscious CS, the teachers were invited to talk about reasons for the switch, and whether they were satisfied with the effects of the switch. For unconscious CS, the teachers were asked to comment on, justify, and evaluate the corresponding CS instances.

The aim of our study is not to simply identify a set of functions that CS fulfils as numerous studies have already identified many such functions (e.g., Allwright 1988; Canagarajah 1995). Similarly, we do not aim to quantify teachers' CS (e.g., Duff and Polio 1990). Rather, we aim to provide a holistic picture of teachers' CS practices in L2 classrooms and their awareness of, attitudes toward, and intentions for CS, hoping to highlight practical implications for teacher training programs and community-based ethnic-language education in Chinese community schools.

### **3. Findings and discussion**

#### *3.1 Teachers' codeswitching*

Twelve functions of CS were identified and are displayed in table 1. An example for each function is provided. Teachers' CS to students' first language (English) is indicated in italics and a translation is provided in parentheses. The functions are presented in order of frequency, with the function most frequently identified presented first. For a detailed explanation on each

category, readers can refer to Li F. (2015).

Table 1. Twelve Types of CS

Types of CS	Functions	Examples
Explanation	to explain unknown words or grammatical structures.	“山顶”的意思是什么呢? <i>The top of the hill, the top of the mountain.</i> (What does “hilltop” mean? <i>The top of the hill, the top of the mountain.</i> )
Substitution	referring to objects or names of frequently used terms.	你们可以到那个 <i>School Library</i> 去看一看, 它专门有一个东方语室。 (You could go to visit the <i>School Library</i> , there is a special area pertaining to Eastern Languages.)
Evoking student response	to solicit a response from students.	大家知道, 比方说, 现在在进行 <i>election</i> , <i>OK, election</i> 。 <i>Yeah, you know that an election is going on?</i> (You know, for example, that currently, <i>election is going on, OK, election. Yeah, you know that an election is going on?</i> )
End marker	to indicate completion of the topic discussed.	现在打仗, 千军万马, <i>right</i> (falling tone). (Currently a war is taking place, thousands of soldiers and millions of horses, <i>right</i> .)
Beginning marker	to attract students' attention when a new discussion/topic is about to commence.	这个不太有趣。 <i>Next one</i> , 请读一下这个句子。 (This one is not so interesting. <i>Next one</i> , read the sentence please.)
Classroom management	to give directions about a classroom activity.	啊, 几点了, <i>All right, have a rest now, please.</i> (Oh, what's the time? <i>All right, have a rest now, please.</i> )
Affection	to show affection and motivate students to keep their interest in the topic being studied.	生日快乐! <i>Happy birthday! It's your birthday today. You are a big girl now.</i> (Happy birthday! <i>Happy birthday! It's your birthday today. You are a big girl now.</i> )
Discussion of non-lesson issues	to discuss personal matters or topics which are not directly related to the learning content.	你去过冰岛吗? <i>Did you visit Iceland? Did you like it? Do you like the snow?</i> (Did you visit Iceland? <i>Did you visit Iceland? Did you like it? Do you like the snow?</i> )



Repetition	to enhance students' understanding.	这是很严重的惩罚，是的， <i>punishment</i> 。 (That is very strict punishment, yeah, <i>punishment</i> .)
Initiation of self-correction	to correct themselves.	每个人，请把你们的书翻到 17 页， <i>oh let me check, no, page 19</i> 。 (Everyone, please turn to page 17, <i>oh let me check, no, page 19</i> .)
Disciplining	to discipline students.	翻到 18 页。 <i>OK, you pair, if you don't stop talking, I will tell you to sit there, OK?</i> (Turn to page 18. <i>OK, you pair, if you don't stop talking, I will tell you to sit there, OK?</i> )
Joking	to create a relaxed classroom atmosphere and to make jokes.	她的名字中有这个字， <i>unfortunately, I don't have that in my name!</i> (Her name contains this word, <i>unfortunately, I don't have that in my name!</i> )

The functions of CS presented above are congruent with findings from prior educational and linguistic research. In a recent empirical study, Yiakoumetti (2022) identified 27 CS functions which include those that the teachers of our study employed. Similarly, the teachers of our study employed CS for all three overarching purposes identified by Pan and Pan (2010): access, classroom management and interpersonal relations. Our findings also support Kang's (2008) study of a Korean EFL teacher who used the L1 for functions such as grammar explanation, task organization, student disciplining, and test implementation. They also accord well with Franklin's (1990) study which demonstrated that many teachers preferred the L1 for disciplining, Edstrom's (2006) study which reported that L1 helps establish rapport and solidarity with students, and Harbord's (1992) study which showed that teachers employ the L1 to tell jokes to reduce student anxiety. Finally, our teachers' actions are in accordance with Atkinson's suggestion (1987) that teachers should explain grammatical rules in their students' mother tongues so that the rules can be better reinforced.

### 3.2 Comparison between teachers' beliefs and practices regarding CS

This part reports the results from the questionnaire which was designed to investigate whether teachers' CS practices reflect their beliefs. For the hypothetical instances provided in the questionnaire, the teachers were asked to choose the preferred language medium according to their beliefs and comment on each instance when necessary. Their responses and the

comparisons between their beliefs and practices are shown in table 2. In the table, “L1” refers to English, “L2” Chinese, and “B” means both L1 and L2.

Table 2. Comparisons between teachers’ beliefs and practices

Types of CS	Teacher W			Teacher J			Belief-Practice Consistency
	Belief	Practice	Comparison	Belief	Practice	Comparison	
Explanation	B	B	Same	L2	L1	Different	NA
Substitution	B	L1	Different	B	L1	Different	Inconsistent
Evoking student response	L1	L1	Same	L2	B	Different	NA
End marker	B	L2	Different	L2	L1	Different	Inconsistent
Beginning marker	B	L2	Different	L2	B	Different	Inconsistent
Classroom management	B	B	Same	L2	B	Different	NA
Affection	L1	B	Different	B	B	Same	NA
Discussion of non-lesson issues	L1	L1	Same	B	B	Same	Consistent
Repetition	L1	L1	Same	B	B	Same	Consistent
Initiation of self-correction	B	L1	Different	B	L1	Different	Inconsistent
Disciplining	L1	L1	Same	B	N/A	Same	Consistent
Joking	L1	L1	Same	B	B	Same	Consistent

There are four content areas where the teachers’ beliefs were inconsistent with their practices: substitution, end marker, beginning marker, and initiation of self-correction. For substitution and initiation of self-correction, the teachers thought that they would use both students’ L1 (English) and L2 (Chinese). However, according to the recordings, they only used students’ L1. As for the end marker and beginning marker, one teacher overestimated her use of students’ L1 by stating that she used both languages. Meanwhile, the other teacher underestimated her usage of L1 by indicating that she used either L2 or both languages on these two occasions.

At the same time, the teachers’ beliefs were consistent with their practices in the following four types: discussion of non-lesson issues, repetition, disciplining, and joking. In these four

areas, the teachers either reported they have used L1 or both L1 and L2, which are consistent with their actual practices. It seems that the teachers were very confident of their choice of languages in these areas. This echoes many previous studies revealing the effectiveness of CS in creating a relaxing classroom atmosphere and building interpersonal relationships with students.

For the remaining four types of categories, no consensus could be reached across the two teachers. For explanation, evoking student response, and classroom management, teacher W's beliefs match her practices while teacher J's do not. For 'affection,' teacher J's response was consistent with her actual practice while teacher W's is inconsistent.

From the above results, it is obvious that there are some discrepancies between the teachers' estimations of, and beliefs about, their practice and their actual performance. These discrepancies can be accounted for by the mismatch between the teachers' beliefs in the ideal maximal position of L1 use and their unconsciously held optimal positions on this issue. At the beginning of the teacher interviews, they were asked to talk about their opinions on the choice of language medium. Echoing Macaro's (1995) reports, both teachers were in favor of the fact that L2 should be the major, if not exclusive, language medium. Regarding the factors influencing their beliefs, the findings are similar to those of Duff and Polio (1990): prior positive experiences as a language learner, theoretical convictions, and explicit promotion of L2 in teacher training. Meanwhile, the teachers also reported four factors causing difficulty in continuation with L2 such as (i) Pressure from the exams and teaching agenda, which is consistent with what was reported by Franklin (1990). (ii) A mixed-ability group, which is also explored by Mitchell (1988) and Franklin (1990) as an important factor. (iii) Students' misbehavior, which is identified in Macaro (1995; 2001) and Mitchell (1988). (iv) Building a good relationship with the students was seen as achievable only in L1, which is similar to the findings of a number of researchers (e.g., Dickson 1996; Macaro 2001; Neil 1997). According to Dickson (1996) and Macaro (1995), teacher confidence and proficiency in spoken L2 can affect their maintenance of L2. Similarly, teacher W reported that teachers' confidence and proficiency in English (which is the students' L1 but the teachers' L2) can affect the quantity of teachers' CS to L1. However, this factor is subject to clarification since Duff and Polio (1990) discounted it as a factor influencing teachers' language medium choice based on their project.

In summary, the fact that the teachers believed in the benefits of using L2 on the one hand, while presenting concerns and difficulties in maintaining L2 on the other hand, has led to the discrepancies between their words and actions reflected in the questionnaires.

### 3.3 Teachers' awareness of their codeswitching

The teachers' awareness of their CS was tackled in interviews during which teachers were shown video clips of CS and asked whether they were aware of it in class. They used terms such as 'conscious' (coded as C) and 'unconscious' (coded as U) to express their awareness. A summary of teachers' awareness of their CS is exhibited in table 3. Cases where neither conscious or unconscious judgments were applicable are marked with "-".

Table 3. Teachers' awareness of their CS.

Types of CS	Teacher W	Teacher J	Summary
Explanation	C	C	C
Substitution	C	C	C
Evoking student response	U	U	U
End marker	-	U	U
Beginning marker	-	U / C	U / C
Classroom management	-	U	U
Affection	C	U	U / C
Discussion of non-lesson issues	C	U	U / C
Repetition	C	C	C
Initiation of self-correction	U	U	U
Disciplining	C	-	C
Joking	U	-	U

Both teachers reported that they consciously and systematically codeswitched for the following four functions: explanation, substitution, repetition, and disciplining. They both also stated that these four functions played crucial roles in facilitating student learning and the smooth running of the lesson.

At the same time, they all reported that they were unaware of the fact that they engaged in CS in a number of other instances such as evoking student response, end marker, classroom management, initiation of self-correction, and joking. The remaining functions (i.e., beginning marker, affection, motivation, and discussion of non-lesson issues) received mixed responses with the teachers sometimes indicating awareness of use while other times professing that they

were unaware.

It is not surprising that the teachers were not always aware of their CS practices in class. CS is so natural for bilingual speakers that it is routinely performed subconsciously. Heller (1988) claimed that the notion of CS was so powerful that even people who switched may be ‘unaware of their behavior and vigorously deny doing’ so. Other researchers have also found that teachers are not consciously aware of their CS practices (Adendorff 1993; Yiakoumetti and Mina 2013a; Yiakoumetti 2022). Furthermore, and similarly to Canagarajah’s (1995) findings, not only were the teachers unaware of their CS, they also displayed surprise and dismay when they realized that they had used far more L1 than they intended.

Teachers’ lack of awareness of their CS could, in certain instances, influence students’ learning and performance in the target variety (Yiakoumetti and Mina 2013b). It is for this reason that we believe that teachers need to be trained in the potential role and functions of CS within community-based ethnic-language education. Some universal principles may apply to all language settings, but the unique learning context of each setting should be addressed in appropriate training (Yiakoumetti 2011).

### *3.4 Teachers’ intentions and attitudes when employing CS*

Teachers’ intentions for and attitudes toward CS were discussed in relation to three groups of CS: conscious, unconscious and mixed group.

#### *3.4.1 Teachers’ intentions of and attitudes towards conscious CS.*

According to the results presented in Section 3.3, explanation, substitution, repetition, and disciplining are the four types of CS that the teachers consciously used in classes. Intentions of, and attitudes towards this group of CS are discussed below.

##### *(1) Explanation*

CS for explanation was an important teaching strategy used by the teachers to facilitate students’ comprehension. According to the teachers, the ideal pattern was as follows: the target word or phrase was firstly explained in the students’ L2, and then in L1. However, it was quite common for teachers to switch to students’ L1 without attempting to explain information first in students’ L2. According to the teachers, the existence of this type of CS is attributed to two causes: (i) the teachers believed that the L1 equivalent of a new L2 property was able to facilitate the acquisition of the new word, an opinion which they drew from their own language learning experiences; the other was that the teachers found it difficult to use Chinese (students’ L2) to explain things due to the fact that they were much more used to teaching English as a

foreign language and hence introducing new items in English. The lack of qualified teachers and lack of proper training in teaching Chinese in Britain are confirmed by this second reason. The teachers were satisfied with the effect of this type of CS, which was manifested by students' immediate understanding. Nevertheless, they were concerned that students might get used to relying on L1 explanation, which is not beneficial for their L2 learning in the long term.

#### (2) Substitution

The teachers switched from students' L2 to L1 when they used the L1 substitute of an L2 word or phrase. They did this for convenience and assumed that students would find it easier to accept the L2 substitute. Being satisfied with the effect of this type of CS, both teachers reported that they were in favor of this language phenomenon as they considered it an indispensable outcome of multicultural and multilingual experiences in the globalized world.

#### (3) Repetition

The teachers used this type of CS to clarify and emphasize what they were talking about, either for running the class or content transmission. For instance, at the end of class, teacher W addressed her students, as in (1):

- (1) ‘好的，对完这两课我们可以先休息一会，可以休息一会了，we will have a break now.’  
‘OK, since we have checked these two lessons, we will have a break now. We will have a break now. *We will have a break now.*’

It was not until teacher W repeated the instruction in English that some students started to respond ‘Yeah’ and realized it was break time. The desired effect of this type of CS was achieved. This is either because students could not understand the teachers' Chinese utterances, or they were not paying enough attention to the teacher when she was speaking in Chinese. According to the teachers, this kind of CS was effective in attracting students' attention, which has been echoed in other studies (e.g., Dickson 1996; Macaro 2001).

#### (4) Disciplining

The teachers switched to L1 to discipline the class and warn some misbehaving students. They attempted to strengthen the degree of severity through the CS. This is consistent with Mitchell's (1988) report that teachers used L2 for ‘mild disciplinary intervention’ and L1 for ‘real disruption’. The teachers believed that the use of L1 in disciplining was effective as students can easily understand their L1 and immediately know that the teacher is angry. Thus, teacher W emphasized that she would ‘definitely’ switch to L1 when disciplining. The other

reason was that the teachers would feel embarrassed if students could not catch their meaning in Chinese (L2). Although Mitchell (1988) argues that the problem here is more psychological rather than linguistic, this present study takes into account both aspects. Most of the time, this type of CS was very effective and students would behave well after the teachers switched to L1, even if only temporarily. The effect of CS to L1 in maintaining control over students was also confirmed by Macaro (2001).

In summary, with pedagogical, interpersonal, and interactive reasons, the teachers switched consciously and were satisfied with the effects of these switched practices. Despite the teachers' expectations of the effects being successfully realized, there were concerns that students might get used to relying too much on L1 to acquire new words in L2 and uncertainty as to how much L1 could and should be used.

### 3.4.2 Teachers' account of and attitudes towards unconscious CS.

The teachers all reported that they were unconscious of the following types of CS: evoking student response, end marker, classroom management, initiation of self-correction, and joking. Their justifications of, and attitudes towards, these CS are presented below.

#### (1) Evoking student response

Teachers justified this CS by saying that they focused on the meaning conveyed instead of the form applied. The effect of switching to L1 was satisfactory as students responded to the teachers' enquiries immediately. Teacher J did mention in the interview that she should have used L2 here, but she switched to L1 naturally and spontaneously. A mixed sense of feeling was conveyed by her words. This is consistent with the findings in Canagarajah (1995) that teachers in his study considered it inappropriate to use L1 in L2 classes.

#### (2) End marker

This type of CS was so unconscious that the teacher herself did not even notice it when watching the videotape. She attributed this kind of switch as habitual language behavior. On most occasions, the teachers switched a single word or phrase at the end of their utterances. A typical example is illustrated in example (2).

- (2) ‘现在事情太多了真是千丝万缕呀, OK? 现在打仗, 千军万马, right.’ ‘Translation: Now there are too many things to think about, *OK?* Currently the war is taking place, thousands of soldiers and millions of horses, *right.*’

From a functional point of view, the teachers used these linguistic properties very naturally to check students' understanding and to indicate the shift of topics. Usually, the teachers

organized the class systematically and had to make sure students were following them so as to move on from one agenda to another. Hence, it is reasonable to claim that ‘the end marker’ was driven by an authentic communication need between the teachers and the students in class. The teachers were not satisfied with this type of CS as they believed that this task should have been accomplished in L2.

### (3) Classroom management

Again, the teachers felt they should not have switched to students’ L1 as the classroom management was expected to be conducted in the L2. The reason, according to their justifications, was the impact of the British living environment. The teachers admitted that they were used to communicating with others in English (students’ L1) and to thinking in an English manner. For instance, teacher J said at the end of a class as in (3):

(3) ‘啊, 几点了, All right, have a rest, please.’

‘Translation: Oh, what’s the time? *All right! Have a rest, please.*’

She agreed that even if she continued speaking in L2, students would be able to catch her meaning. However, she switched spontaneously. The teachers were not satisfied with this type of CS.

### (4) Initiation of self-correction

The teachers switched to students’ L1 to initiate self-correction as in (4).

(4) ‘五、六、七、八、九, 对五课, 我们一共学习五课, 好不好? Five lessons, Oh, let me check.’

‘Translation: Lesson 5, 6, 7, 8 and 9, in total five lessons, we have learnt five lessons in total, is that right? *Five lessons, Oh, let me check.*’

Teachers were surprised by this type of CS. However, it was entirely possible that they were influenced by the living environment, which was an English-speaking community. When asked about their attitudes towards this type of CS, teacher W said: ‘it is better to avoid self-correction in class, no matter which language is used.’

### (5) Joking

Similar to the function of evoking student response, the teachers cared more about the meaning than the form at that moment. They switched to students’ L1 to make jokes and to cheer students up. No matter which language was used, the teachers aimed at letting the students feel relaxed. The willingness to build good relationships with students was also expressed through the CS in making jokes. As indicated by previous research (Dickson 1996; Macaro 2001; Neil 1997), this is considered an important function of switching to students’ L1.



For these unconscious CS practices, the teachers' main justification was the influence from their living environment, where English was the leading language. They were not satisfied with most of the CS in this group. They even displayed regret for resorting to L1 in the above-mentioned content areas. However, a lower degree of dissatisfaction for 'self-correction' and 'joking' were identified as the teachers believed the main focus was not on the form but on meaning.

### 3.4.3 Teachers' intentions of and attitudes towards mixed CS.

The remaining types of CS, namely beginning marker, affection, motivation, and discussion of non-lesson issues, received mixed responses from the teachers. In these content areas, the teachers sometimes switched consciously and sometimes switched unconsciously.

Similar to the conscious group of CS, the teachers switched consciously for three main purposes: (1) to facilitate students' understanding, especially for the less able ones in terms of L2 learning; (2) to draw students' attention; (3) to safeguard an authentic communication environment and build good relationships with students. The teachers believed that students would take L1 as more casual and comfortable in communication than L2 and they generally associated L2 with study, while L1 with non-lesson issues. The teachers were in favor of their conscious CS as they proved to be effective in both teaching and personal communication.

At the same time, the unconscious CS was justified from the following two aspects: (1) the teachers were good at teaching English as a foreign language and used to using some English terms, words, and phrases in class habitually, and (2) their language choice was influenced by the English-language speaking environment in the UK. Though unconscious, the teachers honestly admitted that the switch to L1 was more effective for encouragement and maintenance of students' interest. For instance, teacher J once complimented a student on her good performance on a dictation by CS as in (5).

(5) '你可以看着写, (该学生 Q 说: 没关系, 我可以试一试) 啊, that's wonderful!'

'Translation: You can copy the words, [student Q said she would like to have a try]

Oh, *that's wonderful!*'

Teacher J's spontaneous CS to 'that's wonderful' was used to express the teacher's appreciation of the student's performance. The student was very happy to receive the appreciation in English. Though it achieved the desired effect, the teachers still reported having regretted making the unconscious CS.

In summary, the teachers' intentions for conscious CS are pedagogically, interpersonally,

and interactively oriented. Their attitudes towards CS varied depending on whether they did so consciously or unconsciously. Specifically, they believed that when they consciously engage in CS, they do it with the intention to benefit student learning. At the same time, they tended to hold negative attitudes towards some of the unconscious CS. A sense of surprise and even guilt and regret were conveyed through their discourse as they believed that they should have used students' target language on those occasions.

### **3.5 Concerns over ethnic language education**

In the interview, the teachers reported that they were unsure as to whether they should use L1 in an L2 class and, if so, to what degree and for what purposes. This uncertainty led them to conclude that they were somehow not qualified enough for teaching Chinese as an ethnic language. The teachers went on to articulate that, over their nine months of teaching in the community school, their views on teaching Chinese to ethnically Chinese British-born students had changed. They initially expected to primarily use Chinese in their lessons, but they realized that, in practice, this was infeasible. This was due to the fact that students resorted to English regularly for a number of reasons including low proficiency in the target-language tasks and low motivation to speak in Chinese. The teachers explained that they would like to be formally trained in key issues pertaining to ethnic-language education. This desire for training highlights that those who intend to teach in Chinese community schools would likely perform their duties with greater comfort and efficacy if they were = provided with explicit support in the deployment of CS. It certainly does not seem to be sufficient to merely be a native speaker of Mandarin as well as a qualified teacher from mainland China: such teachers from our study lacked confidence and shared that they felt unprepared for the ethnic-language educational context in which they worked.

Based on our findings, we argue that teachers would greatly benefit from sociolinguistically informed training that focuses on teaching ethnic minority languages. A deeper understanding of the unique linguistic habits (Li W. 1994; Li W. et al. 1992), the symbolic representation of students' diverse backgrounds within the ethnic community as well as the wider community (Wong 1992), and the language attitudes of the students who attend community schools, would place teachers in a better position to educate these students.

## **4. Conclusion**

Our empirical investigation at the Chinese community school provides evidence supporting the potential utility and benefits of CS in language teaching and presents teachers' understanding and awareness of their CS practices. It is found that teachers perform CS naturally for

pedagogical, interpersonal, and interactive purposes in class. There are discrepancies between teachers' beliefs on language choice and their actual practices in class. Teachers are satisfied with the conscious switches they make while being dissatisfied with those that they unconsciously made.

Teachers' CS is a critical pedagogical tool that can contribute to diversity in both L2 and ethnic language classrooms. Ethnic second languages are also better positioned for adoption and survival if they are encouraged via the utilization of students' dominant language(s). CS by teachers is thus an incredibly useful resource which should be deployed for students' benefit. Beyond CS, translanguaging pedagogies have been proposed as tools for the growth of bilingual/emergent bilingual students' language proficiency (García et al. 2012). As noted earlier, although this study set out to investigate CS, we wish to note that we consider pedagogical practices which reflect any natural codemixing that takes place in bilinguals' daily life appropriate (and, indeed, necessary) for a meaningful and authentic learning experience.

We note that this study's findings are limited to one British community school in which Chinese is taught as a minority ethnic language. The implications are nevertheless important for other related contexts: concern by teachers as to the extent to which they should utilize students' L1 in their teaching is likely to be a widespread phenomenon. We thus argue that it is critical to make teachers of community-based ethnic languages aware of both the uniqueness of the sociolinguistic and educational settings in which they work and the potential functions of CS in their teaching. The teachers' roles are immensely significant as they potentially hold the key for transmitting both linguistic and cultural knowledge relating to children's ethnic identity. Teachers' CS will play an important part in the development of children's translingual literacy and practices in their daily life (Canagarajah 2013a, 2013b). We believe that teachers will be more assured and more effective in teaching ethnic languages if they are empowered with a deeper understanding and an improved realization of the potential benefits of the functions and symbolic representations of CS practices in language classes.

## References

- Adendorff, R. 1993. "Codeswitching amongst Zulu-speaking teachers and their pupils: its functions and implications for teacher education." *Language and Education* 7(3): 141-162.
- Ahmad, B. H. and K. Jusoff. 2009. "Teachers' code-switching in classroom instructions for low English proficient learners." *English Language Teaching* 2(2): 49-55.
- Allwright, D. 1988. *Observation in the language classroom*. London, Longman.

- Atkinson, D. 1987. "The mother tongue in the classroom: a neglected resource?" *ELT Journal* 41(4): 241-247.
- Atkinson, D. 1993. "Teaching in the target language: a problem in the current orthodoxy", *Language Learning Journal*, No. 8, pp. 2-5.
- Auerbach, E. R. 1993. "Reexamining English only in the ESL classroom." *TESOL Quarterly* 27(1): 9-32.
- Canagarajah, S. 1995. "Functions of codeswitching in ESL classrooms: socialising bilingualism in Jaffna." *Journal of Multilingual and Multicultural Development* 16(3): 173-195.
- Canagarajah, S. 2011. "Translanguaging in the classroom: emerging issues for research and pedagogy." *Applied Linguistics Review* 2: 1-28.
- Canagarajah, S. 2013a. *Translingual Practice: Global English and Cosmopolitan Relations*. Abingdon, UK: Routledge.
- Canagarajah, A. S. (ed.) 2013b. *Literacy as Translingual Practice: Between Communities and Classrooms*. Abingdon, UK: Routledge.
- Carless, D. 2008. "Student use of the mother tongue in the task-based classroom." *ELT Journal* 62(4): 331–338.
- Chambers, F. 1991 "Promoting use of the target language in the classroom." *Language Learning Journal*, 4, pp. 27-31.
- Chambers, G. 1992 "Teaching in the target language, *Language Learning Journal*." 6, pp. 66-67.
- Cleghorn, A. 1992. "Primary level science in Kenya: constructing meaning through English and Indigenous languages." *International Journal of Qualitative Studies in Education* 5(4): 311–323.
- Cook, V. 1991. *Second Language Learning and Language Teaching*. London: Edward Arnold.
- Cook, V. 2001. "Using the first language in the classroom." *Canadian Modern Language Review* 57(3): 402-423.
- Creese, A. and P. Martin 2006. "Interaction in complementary school contexts: developing identities of choice - an introduction." *Language and Education* 20(1): 1-4.
- Cummins, J. 1991. "Interdependence of first- and second-language proficiency in bilingual children." *Language Processing in Bilingual Children* ed. by E. Bislystok, 70-89. Cambridge: Cambridge University Press.
- Dickson, P. 1992. *Using the Target Language in Modern Foreign Language Classrooms*.

- Slough: National Foundation for Educational Research.
- Dickson, P. 1996. *Using the target language: A view from the classroom*. Slough, UK: National Foundation for Educational Research.
- Duff, P. A. and C. G. Polio. 1990. "How much foreign language is there in the foreign language classroom?" *The Modern Language Journal* 74(2): 154-166.
- Edstrom, A. 2006. "L1 use in the L2 classroom: one teacher's self-evaluation." *The Canadian Modern Language Review* 63(2): 275-292.
- Francis, B., et al. 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): 519-138.
- Franklin, C. E. M. 1990. "Teaching in the target language." *Language Learning Journal* 2: 20-24.
- García, O. 2009. *Bilingual Education in the 21st Century: A Global Perspective*. Oxford: Wiley-Blackwell.
- García, O., et al. 2012. "Transgressing monolingualism and bilingual dualities: translanguaging pedagogies". In *Harnessing Linguistic Variation to Improve Education*, ed. by A. Yiakoumetti. 45-75. Bern: Peter Lang.
- Hagen, S. 1992 "Language policy and strategy issues in the new Europe" *Language Learning Journal* 5: 31-34.
- Halliwell, S. and Jones, B. 1991. *On target*. London: Centre for Information on Language Teaching.
- Harbord, J. 1992. "The use of the mother tongue in the classroom." *ELT Journal* 46(4): 350-355.
- Heller, M. 1988 "Introduction." In *Codeswitching: Anthropological and Sociolinguistic Perspectives* ed. by M. Heller, 1-24. Berlin/ New York/ Amsterdam: Mouton de Gruyter.
- Hobbs, V., et al. 2010. "Code-switching in Japanese language classrooms: an exploratory investigation of native vs. non-native speaker teacher practice." *Linguistics and Education* 21: 44-59.
- Kagan, O. 2005. "In support of a proficiency-based definition of heritage language learners: the case of Russian." *International Journal of Bilingual Education and Bilingualism* 8(2-3): 213-221.
- Kang, D.-M. 2008. "The classroom language use of a Korean elementary school EFL teaching: another look at TETE." *System* 36: 214-226.
- Kempadoo, M. and M. Abdelrazak. 2001. *Directory of Supplementary and Mother-tongue*

- Classes*. London: Resource Unit for Supplementary and Mother-tongue Schools.
- Krashen, S.D. 1987. *Principles and Practice in Second Language Acquisition*. London: Prentice-Hall.
- Krashen, S.D. and Terrell, T.D. 1988. *The Natural Approach*. London: Prentice-Hall.
- Kraemer, A. 2006. "Teachers' use of English in communicative German language classrooms: a qualitative analysis." *Foreign Language Annals* 39(3): 435-450.
- Lanvers, U. 2011. "Language education policy in England: is English the elephant in the room?" *Journal of Applied Language Studies* 5(3): 63-78.
- Li, F. 2014. "Ethnic Chinese Students' Perceptions of Chinese Language Teachers' Codeswitching in Class." *The Journal of Chinese Sociolinguistics* (1):92-109.
- Li, W. 1993. "Mother tongue maintenance in a Chinese community school in Newcastle Upon Tyne: developing a social network perspective." *Language and Education* 7(3): 199-215.
- Li, W. 1994. *Three Generations, Two Languages, One Family*. Clevedon: Multilingual Matters.
- Li, W. 2006. "Complementary schools, past, present and future." *Language and Education* 20(1): 76-83.
- Li, W. and P. Martin 2009. "Conflicts and tensions in classroom codeswitching: an introduction." *International Journal of Bilingual Education and Bilingualism* 12(2): 117-122.
- Li, W., et al. 1992. "A two-step sociolinguistic analysis of code-switching and language choice: the example of a bilingual Chinese community in Britain." *International Journal of Applied Linguistics* 2(1): 63-86.
- Li, W. and C.-J. Wu. 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): 193-211.
- Li, W. 2018. "Translanguaging as a Practical Theory of Language." *Applied Linguistics* 39(1): 9-30.
- Lucas, M. W. and A. Yiakoumetti. 2019. "Cross-linguistic awareness-raising practices can enhance written performance in EFL classes in Japanese universities." *International Journal of Bilingual Education and Bilingualism* 22(8): 958-973.
- Macaro, E. 1995. "Target language use in Italy." *Language Learning Journal* 11: 52-54.
- Macaro, E. 1996. Teacher use of the target language (part 1). " *Languages Forum* 1(5): 2-7.
- Macaro, E. 1997. *Target Language, Collaborative Learning and Autonomy*. Clevedon: Multilingual Matters.
- Macaro, E. 2001. "Analysing student teachers' codeswitching in foreign language classrooms:

- theories and decision making." *The Modern Language Journal* 85(4): 531-548.
- Macaro, E. 2003. *Teaching and Learning a Second Language*. London/New York: Continuum.
- Macdonald, C. 1993. *Using the target language*. Cheltenham, UK: Mary Glasgow Publications.
- Mau, A., et al. 2009. "Mapping politics and pedagogy: understanding the population and practices of Chinese complementary schools in England." *Ethnography and Education* 4(1): 17-36.
- Milroy, L. and Muysken, P. 1995. "Introduction: Codeswitching and Bilingualism Research. " In: *One speaker, two languages: Cross-disciplinary perspectives on codeswitching*, ed. by L. Milroy. and P. Muysken, 1-14. Cambridge: Cambridge University Press.
- Mitchell, R. 1988. *Communicative Language Teaching in Practice*. London: CILTR.
- Neil, P.S. (ed). 1997. *Reflections on the target language*. London: Centre for Information on Language Teaching and Research.
- Pan, Y.-c. and Y.-c. Pan. 2010. "The use of L1 in the foreign language classroom." *Colombian Applied Linguistics Journal* 12(2): 87-96.
- Polio, C. G. and P. A. Duff. 1994. "Teachers' language use in university foreign language classrooms: a qualitative analysis of English and target language alternation." *The Modern Language Journal* 78(3): 313-326.
- Probyn, M. 2009. "'Smuggling the vernacular into the classroom': conflicts and tensions in classroom codeswitching in township/rural schools in South Africa." *International Journal of Bilingual Education and Bilingualism* 12(2): 123–136.
- Raschka, C., et al. 2009. "Conflicts and tensions in codeswitching in a Taiwanese EFL classroom." *International Journal of Bilingual Education and Bilingualism* 12(2): 157–171.
- Skinner, D. 1985. "Access to learning anatomy of the language/ leaning connection. " *Journal of Multilingual and Multicultural Development* 6(5): 369-389.
- Tien, C.-y. 2009. "Conflict and accommodation in classroom codeswitching in Taiwan." *International Journal of Bilingual Education and Bilingualism* 12(2): 173-192.
- Turnbull, M. 2001. "There is a role for the L1 in second and foreign language teaching, but ..." *Canadian Modern Language Review* 57: 531-540.
- Turnbull, M. and K. Arnett. 2002. "Teachers' uses of the target and first language in second and foreign language classrooms." *Annual Review of Applied Linguistics* 22: 204-218.
- Van de Craen, P. and I. Humblet. 1989. "Dialect and education in Belgium." In *Dialect and*

- Education: Some European Perspectives*, ed. by J. Cheshire, V. Edwards, H. Munstermann and B. Weltens. Clevedon, 53: 13–29. Multilingual Matters.
- Van Lier, L. 1995. "The use of the L1 in L2 classes." *Babylonia* 2: 37-43.
- Wong, L. Y.-F. 1992. *Education of Chinese Children in Britain and the USA*. Clevedon: Multilingual Matters.
- Yiakoumetti, A. 2011. "Re-invigorating teacher-training programmes in linguistic variation. " In *Teaching Teachers: Approaches in Improving Quality of Education*, ed. by I. M. Saleh and M. S. Khine, 195-214. New York: Nova Science.
- Yiakoumetti, A. 2015. "Language policy and practice in multilingual Britain: perspectives from mainstream and complementary linguistically-diverse classrooms." In *English Language Education in a Global World: Practices, Issues and Challenges*, ed. by L. T. Wong and A. Dubey-Jhaveri, 137-146. New York: Nova Science Publishers.
- Yiakoumetti, A. 2022. "Teachers' language use in United Kingdom Chinese community schools: implications for heritage-language education." *Frontiers in Psychology* 13.
- Yiakoumetti, A. and M. Mina. 2013a. "Language choices by teachers in EFL classrooms in Cyprus: bidialectism meets bilingualism with a call for teacher training programmes in linguistic variation." *Teacher Development* 17(2): 214-227.
- Yiakoumetti, A. and M. Mina. 2013b. "The influence of first-language bidialectism in foreign-language classrooms: observations from Cyprus." *Language, Culture and Curriculum* 24(3): 287-297.



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