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# Translanguaging in content and language integrated learning (CLIL):

## Practices in the classroom at a Chinese university

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### Abstract

*This article examines translanguaging practices in a content and language integrated learning (CLIL) classroom at the tertiary level in the context of mainland China. This exploratory study investigated an English-medium science course, which adopted the CLIL approach, in a Chinese university. Classroom audio-recording data (130 minutes in total) was collected to investigate the situations and the purposes of the teacher's use of translanguaging. The results of the analysis show that the teacher uses translanguaging to provide background knowledge, deepen students' understandings, improve teaching efficiency, engage students, and ensure classroom interactions. Implications for translanguaging in CLIL at the tertiary level are also discussed in this study.*

*Key words: translanguaging, content and language integrated learning, content-based education, bilingual classroom*

### Résumé

*Cet article examine les pratiques de translanguaging en classes d'enseignement d'une matière par l'intégration d'une langue étrangère (EMILE) au niveau tertiaire dans le contexte de la Chine continentale. Cette étude de cas exploratoire a porté sur un cours de sciences donné en anglais, qui a adopté l'approche d'EMILE, dans une université chinoise. Des données d'enregistrement audio de la classe (130 minutes au total) ont été collectées afin d'étudier les situations et les objectifs de l'utilisation du translanguaging par l'enseignant. Les résultats de l'analyse montrent que l'enseignant utilise le translanguaging pour fournir des connaissances de contexte, approfondir la compréhension des étudiants, améliorer l'efficacité de l'enseignement, faire participer les étudiants et assurer les interactions en classe. Les implications du translanguaging dans l'EMILE au niveau tertiaire sont aussi discutées dans cette étude.*


*Mots-clés: translanguaging, enseignement d'une matière par l'intégration d'une langue étrangère, formation basée sur le contenu, classe bilingue*

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### ***Introduction***

The term *translanguaging* has been explored widely over the last few decades by scholars worldwide (see Baker, 2011; Lewis et al., 2012b; García & Li, 2014; Liu, 2020; Nikula & Moore, 2019). Translanguaging refers to “multiple discursive practices in which bilinguals engage in order to make sense of their bilingual worlds” (García, 2009, p. 45) and the pedagogical approaches that use those practices (García & Li, 2014). More specifically, those practices “include *all* the language practices of students in a class in order to develop new language practices and sustain old ones, communicate and appropriate knowledge, and give voice to new sociopolitical realities by interrogating linguistic inequality” (García & Kano, 2014, p. 261). Studies on translanguaging have shed light on its potential in fostering content learning, developing students’ competence in the second language (L2), strengthening the home-school links, affirming identities, and involving the reconstruction of the social structure (Baker, 2001; Cummins et al., 2015).

Translanguaging in content and language integrated learning (CLIL) has become a heated topic in Europe and Asia and fruitful research results have been achieved in various educational contexts, such as Portugal, Italy, and Hong Kong (see Caruso, 2018; Gallagher & Colohan, 2017; Lin & He, 2017; Liu, 2020). This article focuses on the practices of the translanguaging approach in CLIL at the tertiary level in the context of mainland China. An exploratory study was carried out in an English-medium science class at a Chinese university. The objectives of this study are to investigate when and why the teacher translanguages in class, to understand the nature of translanguaging in this context, and to explore potential advantages of translanguaging in CLIL at the tertiary level. A qualitative method was employed to interpret the audio-recording data of the CLIL lessons.

### ***Literature review***

#### **Translanguaging**

The term translanguaging was coined by Williams (1996), originating from the Welsh word *trawsieithu* in the 1980s (Conteh, 2018). At the outset, the term refers to a pedagogical practice conducted in Welsh revitalization programs (Li, 2018). In class, the teacher would deliberately switch between Welsh and English, and students would be asked to receive input in one language (e.g., Welsh) and produce output in the other language (e.g., English) (García & Li, 2014; Li, 2018). In the Welsh context, translanguaging simultaneously retains and develops the learner’s bilingualism and deepens understanding of the subject matter (Lewis et al., 2012b).

Since then, the term has been extended by many researchers, but there is

no agreed-on definition yet. A majority of scholars generally agree that the full linguistic repertoire is treated as an integrated system in translanguaging (see Canagarajah, 2011; García, 2009; García & Li, 2014; Lewis et al., 2012b). And yet, some contention over the notion of translanguaging has emerged as the discussion progressed. Williams (1996) and Baker (2011) explain that it refers to a bilingual pedagogy based on alternating the languages used for input and output systematically. Lewis et al. (2012a) then claim that “both languages are used in a dynamic and functionally integrated manner” in translanguaging (p. 655). Nevertheless, García (2009) and García and Li (2014) propose that translanguaging goes beyond the “two languages” mentioned above and is seldom used in schools in any systematic way. These controversies over the concept of translanguaging may stem from historical factors and ideological diversities. In the era of globalization and technology, some key concepts such as language and bilingualism have developed a lot (Lewis et al., 2012a). It can be revealed that the term translanguaging is based on “radically different notions of language and bilingualism than those espoused in the 20th century” (García & Li, 2014, p. 20). In this sense, the ongoing conceptualization of translanguaging can be seen as an outcome and a symbol of epistemological changes (Lewis et al., 2012a).

According to Lewis et al. (2012b), the term translanguaging has been extended beyond a pedagogical strategy and has been generalized from the school to the street, i.e., from *classroom translanguaging* to *universal translanguaging* and *neurolinguistic translanguaging*. Similarly, Cenoz and Gorter (2017) classify translanguaging into *pedagogical translanguaging* and *spontaneous translanguaging*.

Translanguaging has a close connection with the term code-switching which refers to the shift of two languages in classroom exchanges (Lewis et al., 2012a). Code-switching can be seen as a bilingual activity including *inter-sentential* and *intra-sentential* switches between the mother tongue (L1) and L2 (Baker, 2001). García and Sylvan (2011) point out that translanguaging includes code-switching and translation. Despite much overlap between the concept of translanguaging and code-switching (Lewis et al., 2012a), the former goes beyond the latter as translanguaging are multiple discursive practices of bilinguals to make sense of their bilingual world (García, 2009). Therefore, translanguaging supports flexible language use and permeable learning through languages, while code-switching is related to language separation (Lewis et al., 2012a).

As Baker (2001) discusses, translanguaging has potential educational advantages. First of all, it may promote a deeper understanding of the subject matter and provide students with opportunities to use their whole linguistic repertoire in fostering content learning (Baker, 2001; Caruso, 2018). Secondly,

translanguaging may help to develop students' competence in the weaker language, leading to bilingualism and biliteracy eventually (Baker, 2001; Hornberger & Link, 2012; Lewis et al., 2012b).

Thirdly, translanguaging extends to all meaning-making modes, embracing "the multimodal social semiotic view that linguistic signs are part of a wider repertoire of modal resources" (Li, 2018, p. 22; see also García & Li, 2014). Based on that, Lin (2015b) develops the notion of trans-semiotizing that is characterized by using multiple kinds of semiotics, i.e., meaning-making resources (e.g., language, music, gestures, and images). Li (2018) highlights that "translanguaging is a transformative and resemiotization process" (p. 22) whereby students potentialize meaning-making, creativity (i.e., the ability to follow or flout norms of linguistic behaviours), and criticality (i.e., the ability to use evidence to question, problematize, or express views) (García & Li, 2014; Li, 2011). Li further proposes the notion of *translanguaging space*, which is created through translanguaging practices. It enables multilingual language users to bring together their personal history and utilize their multilingual resources (Li, 2011, 2018). Translanguaging and trans-semiotizing are also shown to help the teacher and students in co-making meaning and co-expanding their shared communicative repertoires in a CLIL classroom (Lin & He, 2017).

Lastly, translanguaging practices allow students to more freely share their experiences and invest their multilingual identities (Cummins et al., 2006). In this way, students are encouraged to use their home language as a resource for learning and view their multilingual talents as a crucial part of their identities (Cummins, 2005; Cummins et al., 2006), which is relevant and useful for language learning (Blackledge & Creese, 2010). In particular, according to the literacy engagement framework proposed by Cummins et al. (2015), engagement with literacy will be enhanced when the instruction enables students to activate background knowledge, affirm their identities, and extend the academic language. Then, when students engage actively in literacy activities, their literacy achievement will be improved, especially in reading comprehension and writing expertise (Cummins et al., 2015).

#### **CLIL and integrating content and language in higher education (ICLHE)**

Emerging in the mid-90s in Europe, CLIL refers to "an educational approach where curricular content is taught through the medium of a foreign language, typically to students participating in some forms of mainstream education at the primary, secondary, or tertiary level" (Dalton-Puffer, 2011, p. 183). Costa (2016) points out that although the term CLIL is often used at the primary and secondary levels, it is also used in relation to the tertiary level of instruction. Moreover, CLIL at the tertiary level can be called ICLHE (<https://iclhe.org> in

Europe (Costa, 2009; Pérez-Vidal, 2015). There are still some disagreements on the distinction between CLIL and other types of bilingual education, such as content-based instruction (CBI), immersion education, and English medium instruction (EMI). Cenoz et al. (2013) argue that CLIL is not really different from other types of CBI. From the conceptualization perspective, they believe that CLIL should be seen as an *umbrella* construct, including a lot of variants — and even immersion can be included (Cenoz et al., 2013). However, by clarifying characteristics of CLIL and research agendas, Dalton-Puffer et al. (2014) affirm the distinctiveness of CLIL. As a dual-focused approach, CLIL gives equal attention to content and language and involves processing them simultaneously (Garzón-Díaz, 2021), while EMI is adopted in settings where the content learning is the foci (Dafouz, 2014).

CLIL showcases its advantages in various dimensions. The 4Cs framework proposed by Coyle, et al. (2010) contributes to illustrating the potential of CLIL within specific contexts. It contains four contextualized elements (i.e., content, cognition, communication, and culture) on which CLIL may have a positive effect. A longitudinal study carried out in secondary education in Basque demonstrates that students who learned content through a foreign language (FL) obtained similar results to the students in the control group who learned content in their L1 (Ruiz de Zarobe, 2015). Dalton-Puffer (2011) highlights that CLIL fosters the speaking and writing skill of L2 spontaneously. Furthermore, secondary students in Spain who attend CLIL programs may show more positive language attitudes with a lower level of anxiety and higher motivation to learn than those in English as a foreign language groups (Lasagabaster & Sierra, 2009).

However, there are several challenges in CLIL. One concern lies in the teachers' qualification in language as they need broader expertise and experience in teaching through L2 or FL (Barbero & González, 2014; Liu, 2020; Tsuchiya, 2019). Another one is about the use of L1 in CLIL. According to some schools' medium of instruction (MOI) policy, students and teachers are only allowed to speak English in EMI classes (Lin & He, 2017). The loss of L1 in the implementation of CLIL has led to some concerns (Tsuchiya, 2019), for instance, learners may not be able to deploy their repertoire in L1 when they learn contents through L2 exclusively (Coyle et al., 2010). Hence, it is indispensable to discuss the potential role of L1 in CLIL (see Lin, 2015a). According to Liu (2020), systematic and judicious use of L1 in CLIL has been proven to be advantageous in improving language learning and deepening the cognitive processing of contents in L2 in some contexts (see Littlewood & Yu, 2009). In this sense, translanguaging can be a possible solution to concerns over L1 use in CLIL.

### **Translanguaging practices in CLIL**

Nikula and Moore (2019) delineate three extracts of three classes in different locations and analyze the bilingual behaviour of those teachers, none of whom are native speakers of the target language (TL) (English), and secondary students, especially their translanguaging actions and their purposes in the CLIL classroom. In the biology class in Finland, translanguaging between English and Finnish is conducted by the teacher and students. The extract in the history class in Austria illustrates a student's presentation delivered in English and German. The extract in the technology class in Spain shows a student's employment of translanguaging techniques, like anglicizing a Spanish word *pelota* to *pelot*. The three cases imply that these bilingual practices in CLIL may serve a variety of purposes encompassing facilitating learning of content and language, ensuring the flow of interaction, and offering a translanguaging space (Nikula & Moore, 2019). García and Li (2014) summarize the goals of translanguaging as follows:

1. differentiate among students' levels and suit instruction to different types of students;
2. build background knowledge to enable students to make meaning;
3. deepen understanding, develop and extend new knowledge, and develop students' critical thinking;
4. enhance students' metalinguistic awareness in cross-linguistic activities;
5. strengthen students' cross-linguistic flexibility;
6. invest students' identity and positionality to engage learners;
7. interrogate linguistic inequality.

Wang (2019) proposes three principles that may illustrate why translanguaging is employed by teachers:

1. enhance students' comprehension and develop intercultural competence in the process of meaning-making;
2. improve teaching efficiency; and
3. augment students' motivation and encourage their engagement in class.

To sum up, the investigation into the purposes of translanguaging would provide the teacher with opportunities for considering pedagogical strategies and attitudes towards translanguaging, and thereby may improve the efficiency and effectiveness of teaching, learning, and communication (García & Li, 2014; Nikula & Moore, 2019; Wang, 2019). Therefore, it is crucial to delve

into this issue more profoundly, specifically in CLIL contexts where bilingual practices and pedagogies are commonly exploited.

In the context of secondary education in Hong Kong, research into translanguaging practices in CLIL has been fruitful. Lin and Lo (2017) state that teachers and students are able to co-construct *content* (i.e., thematic patterns) through translanguaging in a science class that employs the CLIL approach. In detail, by comparing and analyzing teachers' talk and the interactions between teachers and students in two English-medium CLIL lessons, they argue that translanguaging in class may involve students in co-constructing thematic patterns by using multiple linguistic resources to connect students' knowledge or experience in L1 (Chinese) with the target thematic patterns in L2 (English). Lin and He (2017) conducted an empirical study in an English-medium CLIL classroom in Hong Kong, which included South Asian students whose mother tongue was Urdu. In the excerpts, the teacher translanguages from English to Cantonese and allows the students to use Urdu so as to leave some space for the co-construction of meaning. By analyzing the classroom discourse, they propose that translanguaging, as dynamic activity flows, not only provides pedagogical scaffolding but also offers resources and opportunities for identity affirmation. Lin (2019) then defines translanguaging/trans-semiotizing as fluid and dynamic flows for co-constructing meaning and knowledge. In a similar educational context, Liu (2020) argues that translanguaging/ trans-semiotizing, as planned systematic scaffolding, may "enable co-construal of general and subject-specific English lexical knowledge and skills of academic English writing" (p. 168) and reduce negative self-evaluation of students for creating and embracing translanguaging space in an Integrated Humanities CLIL classroom.

As discussed above, studies that probe into the nature of translanguaging and the potential of translanguaging in diverse aspects have considerably enriched this concept from the empirical perspective. Studies focusing on CLIL at the tertiary level in the context of the Chinese mainland are still scarce but merit more research attention. Further research on translanguaging in this context may provide more insights on the use of L1 and the potential of this pedagogical approach in a very different national context. Unlike Hong Kong and some Southeast Asian areas, stakeholders in mainland China conduct no supra-national policies towards the use of English (Lin, 2015a; Wei & Feng, 2015). Therefore, language users' bilingual practices in mainland China would be different from those in other contexts (Wei & Feng, 2015). Research in such a context may thus provide a unique perspective on the implementation of translanguaging in CLIL at the tertiary level.

### ***Research question***

Based on the theoretical background and previous empirical studies on the translanguaging in CLIL reviewed above, this exploratory study aims at investigating when and why the teacher translanguages in the science CLIL class at a Chinese university, attempting to explore teachers' perception of the term translanguaging, understanding the nature of translanguaging and affirming the potential of translanguaging in meaning-making, content learning, language use, engagement, multilingual identity, and critical thinking in the context of CLIL (Baker, 2011; Cummins, 2005; García & Li, 2014; Li, 2018; Lin & He, 2017; Liu, 2020; Nikula & Moore, 2019; Wang, 2019). This exploratory study thus addresses the following research question:

In which situations and with what purposes does the teacher use translanguaging?

### ***Methodology***

#### **Context of the study**

In fact, English is now considered as the language of most science and “taken-for-granted lingua franca of higher education” (Mazak & Herbas-Donoso, 2014, p. 30; see also Caruso, 2018). Since 2017, the Ministry of Education of China has been promoting the New Engineering Education program, which aims at developing interdisciplinary subjects and fostering internationalization at universities in the Chinese mainland (Ministry of Education of People's Republic of China, 2017). With an eye on the trend and the program, English had been adopted as the MOI of many science courses offered by Chinese universities to both their undergraduates and graduates.

This exploratory study focuses on an English science CLIL course (“Marine Acoustic Detection”) at a Chinese university. The optional course, designed for the first-year Master of Science (MS) students, was held once a week (90 minutes per class) and lasted for 15 weeks in the fall term. The content objectives of this course were to enable students to have an overview of modern marine acoustic detection and deepen their understanding of underwater imaging sonar and other acoustic technology. More specifically, students should be capable of knowing subfloor topography and the subfloor environment worldwide, processing data acquired by sonar, and completing an individual project of analyzing a particular seabed and implementing image reconstruction with sonar signals through acoustic imaging software. Concerning the language objectives, the course aimed at enabling students to master key terms in English about marine science and marine acoustic detection, enhancing their ability of literacy in academic English including using lexical and morphosyntactic resources appropriately, as well as knowing and using some conversational skills with lower linguistic anxiety.



### Participants

There were seventeen students in the class. A subset of students ( $n = 5$ ) and the teacher participated in this pilot study. Both the teacher and the five students are Chinese and non-native speakers of English (L2). Participants' names are anonymized due to confidentiality. All of the five students passed the College English Test Band 6, an English proficiency test held by the Ministry of Education of China. Their level of English was approximately elementary–intermediate, namely A2–B1 in the Common European Framework of Reference for Languages (Council of Europe, 2020). The teacher possessed an intermediate-advanced level of English proficiency (B2 in CEFR). He had majored in science and had taught this English-medium course at the university for two years. Although the MOI of this course was English, he used both English and Chinese in class, so this course is a *de facto* bilingual course.

### Data

As mentioned above, each lesson lasted 90 minutes. In class, the professor typically gave a lecture of 65 minutes and left 25 minutes for students' presentation of their projects. With the permission of the professor, two lessons were audio-recorded in this exploratory study (65 minutes for each, 130 minutes in total), excluding the presentation part. The first lesson talked about ocean tectonics and some typical sediment distribution. In the second lesson, the teacher introduced some fundamental theories and techniques, like the multibeam sonar for seafloor detection.

The audio recordings which contained the teacher's utterances and interactions between the teacher and the five students were transcribed<sup>1</sup> afterward. After that, some episodes that contained the translanguaging practices of the participants were further selected. To address the research question, qualitative data analysis was conducted on these selected transcripts of the teacher's talk and teacher–student interactions (Adger & Wright, 2015; Warriner & Anderson, 2017). I took codes from the selected materials and then assigned the codes to different themes of situations and purposes of the teacher's translanguaging use which were enlightened by García and Li (2014) and Wang (2019). In what follows, I interpreted the classroom data by understanding the underlying meaning of discourse and considering the results of the analysis in such a specific educational context. Findings and discussions are demonstrated below to respond to the research question.

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<sup>1</sup>Transcription conventions are shown in the appendix.

***Findings and discussion*****Provide background information**

In the first recorded lesson, the teacher talked about plate tectonics and subsea topography. After reviewing continental plate tectonics, the teacher turned the topic into the subsea terrain. As shown in Excerpt 1, he indicated that there are similarities between continental and oceanic plate movements and then mentioned the term *crust* with which the students were unfamiliar in their L2. After that, he asked a question about the meaning of crust and gave students some clues to find out the answer. In this excerpt, the teacher translanguaged between L1 and L2 for pedagogical scaffolding, to provide students with some background knowledge.

**Excerpt 1**

Line	Speaker	Utterance
01	T:	海洋中的板块运动所产生的结果呢, 和我们在陆地上的大致相同, < Results of seafloor plate movements are similar to those on land >. 我们-我们在第一个位置上是什么呢 < What is it in the first place? > (.) continu- (.) continental and (.) and oceanic crust. 在第一个这个位置, crust 是什么意思 < In this place, what does crust mean >? (5) 女生应该都知道, 男生也应该知道 < Everyone should know it >. 我们经常会吃到一种叫做 cheese crust 的一种东西, 还有一种叫做 crust (.) biscuit < We usually eat a kind of food called cheese crust and something called crust biscuit >.

To introduce the topic of oceanic crust, the teacher offered some knowledge in Chinese (L1) that the students had already learned, i.e., continental plate tectonics. This utterance aims to evoke related resources and information that have been stored in their brains (Caruso, 2018). After posing the question, the teacher waited for a few seconds, but nobody answered him. In order to inspire students' background knowledge about the crust, he provided the expressions of "cheese crust" and "crust biscuit" (which seems to be "biscuit crust"). In terms of the form, the teacher implemented intra-sentential code-switching in the last sentence. However, it is worth considering that he seemed to use the two languages flexibly and seamlessly to make meaning without emphasizing them as separate language systems (García, 2009; García & Li, 2014; Lewis et al., 2012a). On this account, the bilingual practices of the teacher were seen as translanguaging rather than code-switching. By talking about the two kinds of exotic food that students may have had before, the teacher looked forward to helping students make

connections between their prior experiences and the multilingual resources. Also, their whole linguistic repertoire and knowledge were expected to be deployed in class, which could be associated with the enhancement of multilingual competence and intercultural competence (Canagarajah, 2011; García & Li, 2014).

### Deepen understanding

In general, most courses in this MS program are offered in Chinese. It is hard for these graduate students to catch up with a class offered exclusively in their L2 since most of them do not have sufficient opportunities to acquire knowledge of this subject in English at university. As demonstrated in Excerpt 2, the teacher in the first lesson explained a type of tectonic movement called *divergent boundary*. It seemed that students did not understand this term and its expression in English. To facilitate students' understanding, the teacher mentioned the word "divorce" which has the same prefix as divert and explained the "divergency boundary" by analogy with the concept of divorce in human society.

### Excerpt 2

Line	Speaker	Utterance
01	T:	<p>第一种是拉伸 &lt; The first type is divergent boundary &gt; divert (.) 我跟大家说一下这个词怎么记 &lt; I will show you how to memorize it &gt; (.) 离婚怎么说 &lt; How to say <i>li-hun</i> in English &gt; ? (2) divorce (.) 这个 divert 这个过程呢, 就相当于我们离婚的过程 &lt; The process of diverting is similar to that of the divorce &gt;, 两个人在一起但是两个人离婚了 &lt; A couple got married and then they divorced &gt;, divert 的过程呢, 会把两个板块往相反的方向拉伸 &lt; In the process of diverting, the tectonic plates would move toward the opposite directions &gt;.</p>

Bearing resemblance to translanguaging practices in Excerpt 1, this excerpt also presents intra-sentential translanguaging of the teacher for meaning construction. The goal of the pedagogical approach is to activate students' previous knowledge and enable them to have a fuller and deeper understanding of the term *divergent boundary* and strengthen their cognitive processing of the notion (Baker, 2001; Lin, 2015a). Students in this context were expected to develop and extend new knowledge of content and language simultaneously, which would facilitate the development of their critical thinking (García & Li, 2014).

### Engage the students

The second lesson talked about the means of underwater detection and some technologies in this field. In Excerpt 3, the students were asked about the methods of underwater mapping they knew. After a moment of silence, S1 replied that he did not know the expressions in English, as shown in Line 2. Translanguaging from English to Chinese, the teacher encouraged S1 to answer in L1. After that, he tried to retell the answers given by S1 in English, although having some hesitancy about the expression of “camera imaging” (see Line 5).

#### Excerpt 3

Line	Speaker	Utterance
01	T:	Is there any volunteer can tell me what is the mean you know can just mapping for this (XXX) in the marine? 大家能讲一讲海洋中你知道的一些成像的方式吗 < Can you tell me some ways of mapping in our subject >? (5) yes (.) please stand up.
02	S1:	我不知道用英语怎么讲 < I don't know how to say them in English > =
03	T:	=没关系, 用中文也可以, < It doesn't matter, you can answer in Chinese >.
04	S1:	声学成像 < Acoustic imaging > (.) 光学成像 < optical imaging > (.) 还有在一些浅海的地域可以用遥感成像 < and remote sensing imaging in some shallow sea areas >. 我知道的主流的方法就这三种 < These three are mainstream methods I know >. =
05	T:	=Okay, please (.) There are remote sensor- remote sensing imaging (.) acoustic imaging (.) and (4) camera imaging, something like that.

It was noticed that one of the challenges of CLIL lay in the use of L1 (Coyle et al., 2010; Tsuchiya, 2019). In the context of CLIL, students might feel uncomfortable and anxious to answer in L2, since they were unfamiliar with these terms in English and unsure about their answers. Thus, the scaffolding of their L1 was necessary for this classroom. The teacher allowed students to use L1 in Line 3, which aimed at encouraging students to interact with him and express their ideas more confidently (Wang, 2019). By responding to the question of language choice, the teacher also provided translanguaging space for students to assemble different dimensions of their personal experience and knowledge to make meaning in a coordinated manner (Li, 2011). In this sense, translanguaging would be useful to develop students' creativity of breaking boundaries between named languages (i.e., English and Chinese) and their criticality of querying, problematizing, or expressing views with evidence

(Li, 2011; Li, 2018). Furthermore, translanguaging practices could not only encourage students to utilize their full linguistic repertoire and cognitive resources but also provide a source of empowerment for them to affirm multilingual identities (Lin & He, 2017; Cummins et al., 2015). Seeing their multilingual ability as an asset, students could engage more actively in class and sustain higher intrinsic motivation for learning, which could contribute to the improvement of literacy achievements (Blackledge & Creese, 2010; Cummins et al., 2015).

### Improve the efficiency of class

After discussing the mapping method in the second lesson, the teacher turned the topic to the term monitoring and tried to guide students to think about the difference between “mapping” (i.e., instantaneous imaging) and “monitoring” (i.e., constant imaging). Excerpt 4 shows teacher-student interactions about the term monitoring.

#### Excerpt 4

Line	Speaker	Utterance
01	T:	So (.) what is monitoring? Is there anyone can tell me?
02	S2:	监测 < jian-ce >=
03	T:	=That is one meaning of monitoring (.) do you have got another meaning of that one? (2) 大家都有手机吧 < All of you have mobile phones > (.) 在课堂上可以打开手机查我们想查的所有东西 < In class, we can search for all information we need on our mobile phones >.

In Line 1, the teacher asked a question about monitoring in English. S2 responded with the Chinese word *jian-ce* (a common meaning of monitoring in Chinese). It was obvious that students had no idea of the meaning of monitoring in the field of detection. Then the teacher allowed students to use their mobile phones to find the answer, which meant they were able to search for relevant information in Chinese. In this way, translanguaging practices in Line 3 provided students with an opportunity to use all available resources in class.

To ensure teaching efficiency, the teacher had to pay attention to time control. Therefore, he was not willing to waste time on unnecessary delays in the classroom (Wang, 2019). When he asked a question to the students in English, he was eager to get answers as soon as possible and then move on promptly. At this moment, the translanguaging approach tried to improve the teaching efficiency and save more time for the teacher.

Compared to the monolingual classroom such as immersion instructional system, translanguaging could demonstrate its advantages on lecture delivery in a limited time (Wang, 2019).

### Ensure the flow of interaction

At the end of the second lesson, the teacher elaborated on the theory and the application of multibeam sonar, a detection technology. In Excerpt 5, there was a conversation between the teacher and S3, talking about the calibration of multibeam. As shown in Line 2, S3 proposed his assumption in Chinese to answer the teacher's question in English. After confirming S3's answer, the teacher further explained this issue and translanguaged from English to Chinese.

#### Excerpt 5

Line	Speaker	Utterance
01	T:	What causes this mistake? (3) Come on, come on, come on
02	S3:	呃是不是我们在前期校准它的时候假设海底是平的 < Er, is it that we assume the seafloor is flat in the earlier calibration >=
03	T:	=Yes (.) that is correct=
04	S3:	但实际海底可能并不是平的 < but in fact the seafloor may not be flat >=
05	T:	=Yes that is very correct. Because acoustic mapping is a remote sensing mapping. 平不平是与水面环境和其他因素相关的 < Flatness is related to the water surface and other factors >.

The interaction between the teacher and S3 informed that translanguaging performed not only as a pedagogical scaffolding approach, but more importantly, as dynamic naturally occurring flows (Lin & He, 2017), which went beyond the traditional monolingual instruction with strict MOI policies. More specifically, the teacher agreed with S3's opinion and made good use of his answer to further elaborate on some factors impacting the result of mapping (Lin & He, 2017), and thus indicated the necessity of calibration. Translanguaging of the teacher in Line 5 facilitated content learning, structured his discourse, as well as co-constructed meaning with S3 in a natural and spontaneous state rather than a planned and systematic environment (García & Li, 2014; Nikula & Moore, 2019).

This exploratory study provides an angle for us to observe the practices of the translanguaging approach in a CLIL class at a Chinese university. The analysis shows that the professor used the translanguaging approach with the purposes as follows:

1. providing background information to activate students' knowledge in L1;
2. deepening students' understanding and extending knowledge of both content and language;
3. engaging students to interact, providing translanguaging space to develop their creativity and criticality, and negotiating their multilingual identities to enhance their learning motivation;
4. improving the teaching efficiency; and
5. ensuring the flow of interactions between the teacher and students for pedagogic scaffolding and interpersonal communication.

### **Conclusion**

This exploratory study offers an opportunity to enrich the understanding of the nature of translanguaging. The concept is distinguished from code-switching and code-mixing, as it empowers the language users (both the teacher and students in this context) to deploy their full multilingual and multicultural resources instead of isolating languages as different systems (García, 2009; Lewis et al., 2012b). It would be helpful for teachers to perceive that the nature of translanguaging is twofold: one is planned systematic pedagogical scaffolding (Liu, 2020), the other is a dynamic naturally occurring phenomenon (Lin & He, 2017; Nikula & Moore, 2019). In this sense, translanguaging can be seen as a powerful means to construct meaning, interact with others, offer pedagogic resources, affirm students' identities, and motivate students in CLIL (Lin & He, 2017; Liu, 2020; Nikula & Moore, 2019). The analysis can also respond to one of the challenges of CLIL, which concerns the use of L1. It would be reasonable to infer from the analysis that the judicious use of L1 (Lin, 2015a) may help students to recall their experience and knowledge learned through L1, enhance their engagement in class, and thus acquire knowledge more efficiently through L2.

Overall, this pilot study has presented some translanguaging practices in the CLIL context and has employed a qualitative data analysis on excerpts of audio-recording in the classroom, which aims at seeking minor contributions to explore the implications and the potential of translanguaging at tertiary education in mainland China. It is obvious that more research on the multimodality of translanguaging is needed in CLIL. As noted earlier, translanguaging is multimodal per se and can be associated with the notion of trans-semiotizing (García & Li, 2014; Lin & He, 2017). From the multimodal lens, it would be interesting to research how translanguaging and trans-semiotizing influence learners' language performance and content learning in CLIL. Multiple types of data such as video recordings and

students' multilingual assignments or notes would be helpful to investigate this issue. Teachers' qualifications in language teaching (Barbero & González, 2014; Tsuchiya, 2019) would also be a possible topic for further research. In China, most CLIL teachers are non-native speakers of the TL and are qualified as content teachers rather than language teachers. In this case, their perceptions of translanguaging would be impacted. Would teachers regard L1 and translanguaging as resources or recourse (Nikula & Moore, 2019)? How to improve teachers' expertise in teaching contents through L2 and to deepen their understanding of translanguaging? Further research focusing on CLIL teacher training would provide more insights into the implications of translanguaging and more pedagogical recommendations for CLIL at the tertiary level.

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**Appendix A:**  
***Transcription conventions here***

(Adapted from Adger & Wright, 2015; Nikula & Moore, 2019)

T	Teacher
S	Student
.	sentence-final falling intonation
,	continuing intonation
?	sentence-final rising intonation
(.)	micro pause
(1)	timed pause
< >	translation
=	Latching
-	Truncated