Zhiyan Guo* and Xinyue Xu

Understanding intercultural virtual exchange through a translanguaging lens in Chinese as a foreign language

https://doi.org/10.1515/jccall-2022-0018
Received August 15, 2022; accepted June 13, 2023; published online July 7, 2023

Abstract: Virtual exchange refers to technology-enabled online communication between people who are geographically separated from each other. It has been increasingly adopted in education in the past two decades, especially since early 2020 when teachers and students were forced to move to an online mode of teaching and international exchange owing to the most recent pandemic. The current study is based on a nine-week virtual exchange project that took place between 22 students learning Chinese as a foreign language (CFL) from a British university and their partners from a Chinese university. The subjects conversed online with each other on self-directed topics on a weekly basis, and they completed their collaboration project for showcasing in the final week. From a translanguaging perspective, naturally occurring online conversations between intercultural interlocutors were investigated through the method of multimodal conversation analysis (MCA). The students leveraged a range of linguistic, semiotic and multimodal resources to navigate through communication with their partners. It is hoped that this study will contribute to the understanding of how translanguaging is embodied in virtual exchange interaction and how MCA can be applied to reveal the details present at the micro level of intercultural exchanges in the CFL context.

Keywords: Chinese as a foreign language; intercultural communication; multimodality; translanguaging; virtual exchange

1 Introduction

Telecollaboration has been increasingly adopted in education over the past two decades. It has been referred to in the literature as “e-pals” or “keypals”, “e-tandem”,

***Corresponding author: Zhiyan Guo**, University of Warwick, Coventry, UK,
E-mail: zhiyan.guo@warwick.ac.uk. https://orcid.org/0000-0002-5852-4419
Xinyue Xu, Nanyang Technological University, Singapore, Singapore, E-mail: xinyue.xu@ntu.edu.sg

"collaborative online international learning" and "virtual exchange" (VE) (Helm, 2016; O'Dowd & Dooly, 2022). As an umbrella term, VE is "a practice, supported by research, that consists of sustained, technology-enabled, people-to-people education programs or activities in which constructive communication and interaction takes place between individuals or groups who are geographically separated and/or from different cultural backgrounds, with the support of educators or facilitators" (EVOLVE, 2019). The term "VE" is used in this article as this study focuses on the collaborative nature of the online communication between intercultural participants, with students playing a central and agentic role while tutors are supportive (see Dooly & Vinagre, 2022; O'Dowd & Dooly, 2020; O'Dowd, 2021a for more discussion of terms). During the Covid-19 pandemic lockdown periods, researchers and practitioners devoted exceptional attention to the online mode of teaching and international exchange. The rapid shift to online configuration highlights the shared, bi-directional and collaborative features of VE interactions (Dooly & Vinagre, 2022).

Although the chosen approaches in VE research have often taken text as the predominant modality in the data corpus, multimodal interactions in other media such as audio, video, semiotic objects and non-verbal cues have been increasingly captured and analysed in studies concerning naturally occurring interaction (Lilja, 2022; Satar, 2013). By incorporating multimodal interaction, VE partners bring together their multiple linguistic and multimodal resources, as well as their prior knowledge, life experiences and personal interests, to construct meaning and negotiate a virtual space while communicating between intercultural partners. To reveal the minute details of human interaction, conversation analysis (CA), which originated in the field of sociology in the 1960s, has been widely used in qualitative research of human interaction in diverse contexts such as second language acquisition, medicine and commerce (Stivers & Sidnell, 2013). This approach is concerned with understanding spontaneous everyday interaction, which occurs naturally without much intervention from researchers. It is often interchangeable with "multimodal conversation analysis" (MCA) when various media and modalities are at play in the different contexts in which human interaction unfolds. Foreign language education inevitably falls into this category (i.e., whether learning takes place between teacher and learner or between learners themselves in the traditional classroom or in virtual space). MCA, a more microanalytical approach, can take into consideration participants' perspectives (Dooly, 2017) and examine multimodal online interactions (Lamy, 2009). This study uses MCA to examine the data.

Given that there is a considerable proportion of the world's population operating with more than one language, translingual and transcultural practices are bound to emerge in VE sessions (Helm & Hauck, 2022). In order to encourage participants to bring in their existing linguistic and cultural resources to the exchange, the project

design and data analysis are underpinned by the translanguaging theoretical framework. Translanguaging represents a paradigm shift in understanding bilingualism, multilingualism, language learning and classroom pedagogy. It offers a holistic approach to viewing any human interaction as multisemiotic and multimodal, transcending the use of any named language. Having been applied in various educational contexts, translanguaging offers an innovative perspective to examine online exchange, as intercultural participants transcend the mere use of language and leverage all available means to understand each other and collaborate with each other. However, there is little research on how translanguaging practices can be embodied in telecollaborative interactions among Chinese as a foreign language (CFL) students at universities.

In recent years, teaching Chinese as a foreign language (TCFL) has gradually been built into worldwide higher education curricula; however, this so-called "distant culture" and less commonly taught language has remained under-researched in VE studies until recently. Many of these inquiries (e.g., Guo et al., 2022; Lewis & Kan, 2021) have paid more attention to linguistic challenges intercultural partners were confronted with as well as to language and intercultural learning evidenced mainly from written texts and recordings of spoken exchanges. There is little research exploring how CFL students gain translingual and transcultural insights using MCA in online exchanges. While some students in these exchanges may be anxious about whether they can apply the target language in conversations with their partners, others were so satisfied that they were willing to continue similar exchanges in subsequent years. It is thus important to explore what happened in their VE sessions that incentivised this continuation. The current study attempts to accomplish this and aims to contribute to the understanding of how translanguaging has been embodied in VE interaction to facilitate intercultural learning and how MCA can be applied to reveal minute details of intercultural online exchanges in the CFL context.

This study is based on one VE project between twenty-two university students in a British university and a university in China with a duration of nine weeks in the academic year of 2021–2022. Underpinned by the theoretical framework of translanguaging, it draws on literature in virtual exchanges mostly between English and other European language speakers, with a few involving CFL learners. The research design will be described in terms of context, participants and procedures involved in data collection and analysis. The key data sets consist of 110 learning diaries and 14 audio/video recordings of weekly VE sessions (roughly 15 h in total), the transcripts of which are scrutinised using MCA. The findings will be discussed while answering the research questions, followed by implications, limitations and future research directions in the conclusion.

2 Literature review

2.1 Translanguaging as a theoretical framework

From the translanguaging perspective, all language users can be perceived as not merely using a specific, conventionally named language on its own at a time in their communication; rather, they deploy all linguistic, cultural, cognitive and semiotic resources available to them in the meaning-making process (García & Li, 2014; Li, 2018). This leads to a shift of the focus from separate languages to a holistic view of how bilinguals and multilinguals make use of different resources in an integrated and coordinated manner. Thus, the language practices of bilinguals and multilinguals are not considered to just be sourced from one or more separate language systems, but as one autonomous linguistic repertoire with features of different languages (García & Li, 2014).

Translanguaging can be perceived both as a practical theory of language and as a pedagogical framework (Vallejo & Dooly, 2019). It reflects the fluid and dynamic practices of the linguistic reality in the 21st century that go beyond the boundaries of conventionally named languages, language varieties, and other semiotic systems, including images, gestures, emojis, facial expressions, etc (Li, 2018). Furthermore, translanguaging highlights a very common feature of human social interaction, that is, that "language users move dynamically between the so-called languages, language varieties, styles, registers, and writing systems, to fulfil a variety of strategic and communicative functions *(through)* the alternation between languages, spoken, written, or signed; between language varieties; and between speech, writing, and signing" (Li, 2018, p. 26). In both everyday communication and learning in formal and informal arenas, social interaction is multisensory, multimodal and multilingual in nature, "transcending the traditional divides between linguistic and non-linguistic cognitive and semiotic systems." (Li, 2018 p. 20). The notion of translanguaging also echoes Canagarajah's (2015) translingual approach, which involves the use of various semiotic resources. It can also be perceived as a form of inclusive multilingualism (Backus et al., 2013) and equitable multilingualism (Ortega, 2017). As Walker (2018) argued, translanguaging affords interlocutors flexibility and diversity in language use, encouraging them to create learning opportunities for all parties involved.

Translanguaging challenges the deficit model (Li, 2011) of bilingualism or multilingualism, which takes native competence as an ultimate objective, highlighting the emerging and developing nature of language acquisition. Multilingual users may not think unilingually even when they use one conventionally defined linguistic system, such as Arabic, Chinese, French or Spanish (Li, 2018). Rather, to achieve effective communication, any conventionally named language is only one of the various

linguistic resources available and deployable. In any sense-making and meaning-making process, people use multiple modes including image, text, layout, speech, videos, etc. and in the digital world, these modes of communication undergo a constant shift from isolated texts as the main source of communication to image, sound and motion being used more frequently. From a multimodal perspective, these different modes, as socially and culturally shaped resources, are integrated to create meaning in human communication (Kress, 2010).

In the creative and agentic deployment of multiple resources, language users create a social space in which they bring together their personal interests, life experiences, attitudes, beliefs and value systems to interact with each other (see Li, 2011). This was termed a "translanguaging space" (Li, 2018), wherein national and ideological dichotomies can be broken and boundaries between languages and disciplines can be transcended in engaging diverse meaning-making and meaning-negotiating processes. According to García and Li (2014), education can be a translanguaging space where teachers and students engage and challenge outdated understanding, transform existing structures and practices and generate new ones. In the last decade, translanguaging has been applied in both formal and informal settings. These range from face-to-face classrooms in content and language integrated learning (CLIL) and English as a medium of instruction (EMI) (e.g., Tai, 2022; Tai & Li, 2021a, 2021b), to informal arenas such as karate clubs (Zhu et al., 2020) and self-directed virtual exchanges (Helm & Hauck, 2022). Participants in those studies created a translanguaging space for themselves to construct and negotiate meanings in their interactions and that supplemented and enhanced their everyday life experiences. However, translanguaging has rarely been explored in VE involving CFL learners. The current study aims to fill the gaps in both telecollaboration and translanguaging studies, exploring how VE participants construct their talk with each other to create a translanguaging space for themselves during online interaction.

2.2 An overview of virtual exchange

It is well-established that virtual exchange is beneficial to learning foreign languages, digital skills, teacher education and intercultural communication (Commander et al., 2022; Fuchs et al., 2022; Hauck et al., 2020; Jiang et al., 2014; Luo & Gao, 2022; Luo & Yang, 2022; Rienties & Rets, 2022; Wigham & Satar, 2021), as it offers participants an authentic learning experience withth transformative potential while interacting with each other (O'Dowd, 2011; O'Dowd & Ware, 2009; Reynolds, 2020). Most existing studies focus on bicultural and bilingual subjects, mostly concerning English and other European languages such as French, German and Spanish as the target language and culture (e.g., Belz & Müller-Hartmann, 2002; Kramsch & Thorne, 2002;

O'Dowd, 2003, 2005, 2021b; Thorne, 2003). Participants are engaged in tasks including information exchange, comparing cultural practices, working on collaborative projects (The EVALUATE Group, 2019) or comparative exploration of juxtaposing materials such as parallel texts, films with similar themes (Belz, 2003) or songs with similar themes (Luo & Gao, 2022). This contrastive and comparative approach enabled the participants to better understand a different language and culture, the complex relationship between culture and language and develop their intercultural competence. O'dowd and Eberbach (2004) reported on how language students developed their intercultural communicative competence (ICC) via a message board exchange between Irish and German institutions. Schenker (2012) explored how intercultural partners gained more insights into different cultures and developed their ICC through the VE between sixteen pairs of German secondary school students and American university students. Elsewhere, through analysing texts communicated between partners, it has been found that participants developed specific language skills such as grammar form in Spanish (Fiori, 2005) as well as the lexical-grammatical features of the intercultural discourse (Liaw & Master, 2010). Similarly, Chun (2011) explored how online exchanges can impact second language learners' development of pragmatic competence and ICC, using data obtained from an exchange between university students in Germany and the USA. She explained how culture can be embedded in language as discourse and how foreign language learners expressed facts and opinions and negotiated meanings with their partners, displaying different discourse styles. Although these studies identified the complexity of social interaction and its contextual factors in online exchange, they did not relate the findings to CFL students.

There is an emerging interest in adopting *lingua franca* approaches to virtual exchanges; that is, exchanges in which neither of the partners are native speakers of the target language (O'Dowd, 2021a). English has been a *lingua franca* in most exchanges involving students from Spain, Sweden and Israel (O'Dowd et al., 2019), and German was also used in online interactions between students from France, the Netherlands, Finland and New Zealand (Kohn & Hoffstaedter, 2017; Korkealehto, 2022). Comparison and discussion in these exchanges covered tasks that required collaboration beyond explicit bicultural comparison and were concerned with global themes. Apart from ICC, the focus was on the development of global citizenship and leadership, as well as understanding issues applicable to different countries.

Within less than a decade, telecollaborative partnerships have extended to an increasing number of locations worldwide. Chun (2015) reviewed bicultural exchanges and identified a wide range of examples involving France and China and the USA, and the Philippines and the USA. Many of the inquiries focused exceedingly on English as a foreign language (EFL) students (e.g., Angelova & Zhao, 2016; Chen & Yang, 2016; Feng et al., 2021; Liaw & Master, 2010). Feng et al. (2021) investigated the

changes in feedback types offered by native-level English-speaking trainee teachers at a US university and the factors concerning the successful uptake of EFL students at a Chinese university. Through a quantitative analysis of five weekly Zoom-based group videoconferences, the authors concluded that feedback type and linguistic level did not predict successful uptake; however, peer repair was likelier to lead to better uptake. Fuchs et al. (2022), writing about a similar university context between Chinese EFL students and US trainee teachers, reported how the teachers' mediation facilitated task completion in online exchanges in stages including task design, implementation and evaluation.

2.3 Modes and modality in virtual exchange

Mode and modality in VE depend principally on technological affordance and practicality in various institutions for different learners. The choice of modes of communication leads to varying levels of connectivity and interactivity (Liaw & Master, 2010) and creates significant differences in online dynamics (Liaw & Ware, 2018). Certain tools such as email, forum or Zoom have enabled virtual exchanges to be asynchronous, synchronous or both in order to achieve certain pedagogical and research purposes.

The dominant modality in VE studies involves written exchanges between participants via asynchronous technology such as emails, forums and discussion boards (Avgousti, 2018). They can be highly beneficial tools for cultural learning when planned carefully, administered competently and supervised effectively (e.g., Fiori, 2005; Fuchs et al., 2022; Liaw, 2007; Liaw & Master, 2010; O'Dowd & Eberbach, 2004; Schenker, 2012). Combining tools has also been found to generate more benefits in VE. Hauck and Youngs (2008) reported how students developed closer relationships with their partners through the asynchronous tool, while a synchronous audio-conferencing environment used during the exchange enabled the participants to maintain real-time contact with native speakers. Similar findings on the effective use of videoconferencing in conjunction with emails between two target language groups have been reported in many studies such as O'Dowd (2007), Lewis and Kan (2021), where the participants were given more opportunities to discuss in more life-like conversations to clarify doubts in their email correspondence about the target language and culture. Angelova and Zhao (2016) recounted that Chinese students learning English improved their English grammar and developed their cross-cultural awareness, while prospective EFL teachers in an American university improved their teaching skills by communicating with their Chinese partners via discussion boards, emails and Skype. In a similar context, Liaw and Ware (2018) found that native English-

speaking trainee teachers posted videos while Chinese EFL students used mixed modes of text and the uploading of videos and audio during their online exchanges.

With more sophisticated synchronous platforms being adopted for online delivery, synchronous communication appears to be more suitable for intercultural negotiation due to its affordances for instant clarification, questioning and expansion—although it requires better linguistic, pragmatic and sociolinguistic skills on the part of students (Jauregi & Bañados, 2008)—more effective in discussing matters of cultural interests (Angelova & Zhao, 2016; Avgousti, 2018); and more feasible when intercultural interlocutors interact with each other across borders with instant and natural feedback (Liaw & Master, 2010). Chun's (2011) study noted more engagement and greater development of ICC in synchronous chat than in discussion forums.

Hampel and Hauck (2006) argued for a new framework to inform the development of online language teaching and learning, demonstrating how meaning can be made differently in virtual spaces with the support of Computer Mediated Communication (CMC) synchronous and asynchronous technological tools. Since then, there has been a growing interest in CMC research in terms of utilising multimodal (inter)action analysis as a new method to understand online interaction due to its nature of multimodality (Lamy, 2009; Satar & Wigham, 2020). As a "combination of different semiotic modes" (van Leeuwen, 2005, p. 281), multimodality can be described as a collection of communication practices that include textual, aural, visual, spatial and physical resources (e.g., technology that is used to make meaning and facilitate understanding) (Kress, 2010). Being multimodally competent, learners become semiotic responders and semiotic initiators with full multimodal awareness, harnessing the full potential of a wider array of meaning-making resources for online communication, whether it be visual, spoken, gestural, written or a combination of different types (Hauck & Satar, 2018). Although linguistic resources could be assumed to play a dominant role, other semiotic resources are likelier to contribute distinctively to the meaning-making process (Sindoni, 2013). Whether they deploy multimodality consciously or not, participants' meaning-making could occur holistically (Norris, 2004), and every mode could have equal potential to make meaning (Jewitt, 2016).

The perspective of multimodality justifies semiotic resources such as image, posture, gestures an objects in the environment, including technological tools in addition to language as valid data to collect and analyse. In online interaction, participants can communicate with each other through spoken language, written information on a screen, postures, gestures, head movements, and gazes. In video-conferencing, Wang (2007) found that as semiotic tools for meaning-making, facial expression and gestures were used to facilitate the completion of task, while Satar (2013) evidenced the importance of mutual gaze and eye contact in learner interaction for positive social relations. Wigham and Satar (2021) adopted the

multimodal analysis of interactional features such as gazes in teacher's instruction in online language teaching. Gaze shifts, gaze direction, hesitation markers and raised eyebrows can all carry subtle messages in engaging students as resources along with utterances and written information on screens. Wigham and Guichon (2014) examined trainee teachers' gestures in and out of the webcam frame and the functions of these two categories in delivering online sessions during desktop videoconferencing interactions. Satar and Wigham (2017) provided a detailed multimodal (inter)action analysis of instruction-giving practices involving semiotic resources such as gaze and gesture, as well as word stress and text chat in a telecollaborative exchange between students of French and their trainee teachers. The study exemplified how multimodal analysis can be used as both a research and pedagogical tool in teacher education and how the potential of semiotic resources can be harnessed in online language teaching.

Through detailed contextual analyses of visual data, many studies found that participants in telecollaborative activities developed their digital literacy (Bezemer & Jewitt, 2010; Dooly & Hauck, 2012) and engaged with technology in an unexpected way, which could diverge from teacher's pre-arranged tasks (Dooly, 2011, 2018). The innovative use of technology highlights the spontaneous and inadvertent learning of languages in online exchanges. Korkealehto (2022) and Korkealehto and Leier's (2021) reported a virtual exchange project between intermediate learners of German (their common target language) from universities in New Zealand and Finland. Students were required to upload five posts that took the form of video, audio, online sites, photos and text. The study adopted multimodality as the theoretical framework as well as content analysis for the qualitative data, which consisted of Facebook logs and transcripts of semi-structured interviews. They found that multimodal collaboration enhanced students' digital literacy and ICC development and that student engagement was fostered through collaboration, authenticity, use of tools and teachers' support. Helm and Dooly (2017) addressed the challenges of transcribing and representing multimodal data as well as resolving them in computer-assisted language-learning research. They argued that multimodal competence appears to be complex but worth probing further to understand the micro level of VE interaction.

2.4 VE studies in TCFL

Although a few recent reviews (Avgousti, 2018; Guo, 2022; Luo & Yang, 2018; O'Dowd, 2016) of telecollaboration accentuated that less commonly taught languages and distant cultures remained under-researched, a number of studies on VE in TCFL emerged in the last decade. As an earlier enquiry, Jin and Erben (2007) examined how Instant Messenger facilitated intercultural learning among eight CFL learners from

an American university who were paired with Chinese native speakers. They found that participants' intercultural engagement and attentiveness steadily increased while critical thinking skills and respect for intercultural differences were developed. Under similar conditions, Jin (2013) reported participants' positive target language development in a 10-week VE project between 10 pairs of university students from China and the USA. She reported that CFL students steadily increased the number of Chinese characters produced, expanded vocabulary and improved reading ability; however, the quality of writing did not improve rapidly. Adopting a sociocultural theoretical perspective, she suggested that a scaffolding and feedback mechanism must be built into future training to improve productive skills in VE. Sharing a similar perspective, Lewis and Kan (2021) recounted the benefits and challenges of six-week e-tandem learning between CFL learners from a British university and EFL learners at a Chinese university. Using datasets consisting of email messages, learning diaries, Skype conversations, online surveys and follow-up interviews, they identified a significant improvements in CFL learners' language proficiency and intercultural learning while carrying out authentic communication with native speakers. While CFL beginners gained more understanding and increased their knowledge of Chinese culture, the primary concern of the students was the limited proficiency of the target language that affected learner engagement. Learners at the same level in Chen's (2017) study also improved their linguistic accuracy through VE, as did students in an advanced Chinese Business class in a British university in a study carried out by Wang et al. (2013). The latter used wikis as the platform for their written exchange with students of EFL from a Chinese university. In the work of Ryder and Yamagata-Lynch (2014), seven intermediate-level CFL students tele-collaborated with partners who majored in TCFL and were chosen according to their English proficiency test results. They applied activity theory to analyse online communication, identifying tensions between participants in their VE. From the perspective of social network analysis and adopting mixed methods, Rienties and Rets (2022) explored the impact of VE between university students from China and Portugal on their intercultural relationship and multiple competences. Using the multiple data corpus, Tang et al. (2021) provided detailed analysis of types of linguistic errors made by CFL learners in terms of grammar, lexis, idiomatic expressions and error correction strategies adopted by their VE partners.

Xu et al. (2022) investigated how L2 learners of Chinese and English develop linguistic competence, social skills and digital literacy in their e-tandem project between British and Chinese universities over a period of two years. They reported that participants frequently used translation software to resolve language issues. As the only study to our knowledge that adopted CA as part of the data analysis of VE interaction; the authors proved that students developed multimodal strategies to scaffold effective communication in the target language. In their study of exchanges

between EFL students at a Chinese university and CFL students at an American university, Luo and Gao (2022) explored how the use of songs with the same themes in both languages can promote intercultural learning. Adopting Byram's (1997, 2021) intercultural competence assessment model, Luo and Gao analysed the four varieties of data comprised of transcripts of a WeChat group discussion and end-of-semester interviews, videoconferencing audio recordings and CFL students' final reflection journals. Despite a close examination of the qualitative data, they did not reveal the minute details of the telecollaborative process through multimodal conversation analysis.

The literature review suggests that, as with existing inquiries involving other languages, most research on VE in TCFL concentrates on text as the main modality and less on other modalities. In a few studies that recorded online conversations between participants, attention was primarily paid to the development of language and cultural benefits as well as to the problems and challenges in VE. These studies reported on the issue of varying levels of target language proficiency between partners (Guo et al., 2022; Lewis & Kan, 2021; Luo & Gui, 2021; Luo & Yang, 2022; Tang et al., 2021); however, how best to design tasks to mitigate the issue has yet to be investigated. A closer scrutinisation of minute details via the MCA of naturally occurring conversations between intercultural partners during their VE interaction in TCFL has yet to occur. Sociocultural and ICC theories have been applied more than translanguaging, which is rarely mentioned in VE as an analytical framework. The current study is underpinned by the translanguaging approach to explore how CFL learners share their knowledge-building and meaning-negotiating processes in VE, using MCA to analyse online multimodality interactions at the micro level. Through a translanguaging lens, this study hopes to address the imbalanced level of proficiency in the target language between intercultural partners, incorporating various resources and engaging more multilingual and multimodal means.

2.5 Research questions

The current study aims to answer the following research questions (RQs):

RQ1: How are meaning negotiated and communicative purposes achieved in VE sessions through intercultural interlocuters' translanguaging practices?

RQ2: How do VE partners create a translanguaging space for bilinguals and multilinguals with Chinese as a foreign language (CFL) to facilitate intercultural learning?

3 The current study

3.1 Context, procedures and participants

The data were collected from a nine-week VE project between a British university and its partner university in Qingdao, China, in the academic year of 2021–22, when the pandemic made it impossible to conduct in-person exchanges. 22 CFL students at various levels were paired with native Chinese-speaking peers who were in their first year of postgraduate studies in TCFL. Microsoft Teams was the tool chosen due to its accessibility and convenience of monitoring for both sides.

Teachers of both universities paired their students, coordinated with them and had them exchange emails in Week 1 before setting up the first group meeting in Week 2 with all 22 pairs (another meeting took place in Week 9). Between Week 3 and Week 8, each pair was required to have a weekly one-hour synchronous exchange on MS teams, and they had the autonomy to arrange for mutually convenient meeting times themselves. In the task briefing, participants were given total freedom as to the topics they would like to talk about with their partners, and they were also encouraged to deploy all the resources while trying to use the target language as much as possible. Among those self-initiated topics, they had to choose one to present in the final week (Week 9), showcasing their project to all the participants in this project. Again, they could choose their preferred format, which could involve videos, PowerPoint presentations, stories, songs, etc. Among the most popular topics were food, festivals, popular songs or movies, university life, hometowns, music and history.

In addition, CFL students were required to write a paragraph in Chinese on any chosen topic that their partners would provide their feedback on in terms of linguistic accuracy. The feedback session was incorporated into weekly online meetings. As a way of recording their VE sessions, the students were encouraged to upload their weekly learning diaries, audio/video recordings of their weekly online meeting (subject to agreement of both parties) and their final reflective reports to the British university's virtual learning platform. They were also encouraged to complete an end-of-project questionnaire on an anonymous and voluntary basis. There were two parts to the questionnaire. Part I asked questions about language learning background and Part II focused on their perceived development in terms of ICC (Byram, 1997, 2021) (see Appendix I for sample statements). Part II encouraged participants to reflect on their VE experiences so that they would become consciously aware of their achievements or areas they should improve. Additional consent was sought from those whose audio/video recordings were used for further study. Pseudonyms were used in this study to protect participants' identities.

The final data set consisted of 22 completed questionnaires, learning diaries (LD; 110 in total) and 14 audio/video recordings of online meetings from six pairs for roughly 15 h in total. The profiles of participants who spoke more than two languages and the number of audio/videos recordings are listed in Table 1.

As one of the aims of this study is to explore how multilinguals make use of their existing resources, recordings of CFL participants who could speak more than two languages competently were chosen for analysis. English was the mother tongue for five of the participants from the British university, while one had French as her mother tongue. All of them could speak at least one other European language competently. They all learned Chinese as an optional module or part of their degree for different durations—between less than one year and five years. Two of the Chinese partners began learning English in secondary school, and, respectively, Korean and German while taking up their first degree in

Table 1: Profile of participants who speak more than two languages.

Pseudonyms	Years spent learning Chinese or English (on and off)	Degree title	Mother tongue	Languages spoken	Number of audio/video recordings
Harry	<1	BA Modern Languages	English	English, Spanish, Chinese	6
Carol	<1	BA Modern Languages	English	English, Spanish, German, Chinese	2
Lynn	<1	BA Modern Languages	English	English, French, Spanish, Chinese	1
Eleanor	<2	BA Literal Arts	English	English, Spanish, Chinese	1
Otna	3	BSc Mathematics	English	English, Spanish	1
Tina	5	BA Politics with Chinese	French	English, French, German, Chinese	3
Sailin	10	MA Teaching Chinese as a foreign language	Chinese	Chinese, English, Korean	[Already counted in Eleanor's entry]
Liufang	10	MA Teaching Chinese as a foreign language	Chinese	Chinese, English, German	[Already counted in Harry's entry]

university. The other four Chinese participants were not listed here, as they did not have any foreign language other than English. These pairs recorded their online exchange sessions (each session lasted between 20 min and a little over 1 h), the transcripts of which constitute the main data for this study. The analysis with the findings will be explained in Section 4, along with typical LD entries about the participants' weekly experience. For the entries in Chinese, English translation was provided.

3.2 Data analysis

In order to catch the minute details of the natural occurrences during virtual exchange sessions, the study adopted MCA as the main data analysis method. Transcription includes textual, visual and oral modes along with non-verbal cues (Helm & Dooly, 2017). Transcribing multimodal data entails multiple modes, including both linguistic and paralinguistic elements, silence and still and moving images and artefacts (Satar, 2016). In meeting the challenges of transcribing and representing multimodal data (visual, oral and textual), the choices on what to transcribe were made according to if and how they could address research questions, as it is not possible to transcribe everything (Helm & Dooly, 2017; Satar, 2016). In this study, the researchers viewed the video recordings separately a few times to figure out how linguistic items and cultural phenomena were explained and transmitted between the partners. For discussion, they then identified the most relevant episodes in accordance with the translanguaging approach. They were transcribed to include descriptions of multilingual, semiotic and multimodal cues such as gestures, emoticons, facial expressions, images and videos (see also Dooly & Hauck, 2012). The detailed transcription convention adopted by this study is listed in Appendix II (see more details of MCA transcription in Mondada, 2018). The transcription mainly includes oral interactions in Chinese and English. For utterances in Chinese, English translations are placed in curly brackets. Relevant non-verbal cues, such as gestures, and other visual modes, such as pictures and images, were also integrated into the transcript (Helm & Dooly, 2017). After the initial transcription and turn-by-turn analysis (Wigham & Satar, 2021), the researchers discussed again to decide on the final transcripts, whose accuracy of notes on gestures, images and translation was cross-checked before the final analysis was conducted. The three extracts were selected to show how intercultural partners interacted with each other in their online sessions.

4 Findings

In this section, the findings from two datasets will be presented: the participants' weekly LD entries and the three extracts of the video recording, which we believe are representative of the most frequently occurred and salient themes that emerged in the VE interactions. These were analysed line by line through MCA methods to explore how language and cultural learning are intertwined with each other, how meaning is negotiated and co-constructed and how learning opportunities are created from the translanguaging perspective. These analyses will be the basis for the discussion, in which the research questions are addressed.

4.1 Coordinating to confirm cultural norms while reinforcing linguistic elements

One of the objectives of the VE in this study was to assist CFL students in learning Chinese language and help TCFL postgraduates (prospective teachers) practice Chinese teaching skills. In the actual exchange sessions, language learning and cultural knowledge exchange were intertwined in the conversation flow between the partners. Although in some situations the CFL students are 'language learners', it is not always the Chinese native speakers who introduce or 'teach' their culture or language to CFL students. In fact, during the VE processes, both parties constantly bi-directionally exchange their knowledge and experience based on their own cultural backgrounds. There are many moments in which the Chinese native speaker students initiated topics to confirm certain cultural facts or norms from the CFL partners. Many language and cultural learning opportunities and moments are embedded in this process as well. The extract below is evidence of such exchanges on cultural norms that enhances the linguistic elements of the two partners whose target language proficiency is imbalanced. Sailin began learning English in secondary school on and off for at least 10 years, while her CFL partner Eleanor had begun learning Chinese around two years prior. In Extract 1, the partners talked about their families, and Sailin came up with a specific question and used this opportunity to seek confirmation of a British cultural norm in the process of which Chinese vocabulary items were learned or reinforced.

Extract 1. Sharing information about the family.
[S: Sailin Qingdao (China) participant and E: Eleanor (UK) participant]

1. **S**: Eleanor can … can I ask you a question?
2. **E**: enhuh?
3. **S**: So I … I err … in my class so I have read some … book or article just say err … in England … en
4. people don't like to talk about your family because err … they think this is privacy (2.0) right?
5. Bu … but … you can talk about it, so maybe this is not right, yeah?
6. **S**: I have read some articles talk about the differences between English people … er the people
7. from England and the people from China. So sometimes in China and we just like to share
8. with our friends to talk about our family, but the article just says in England people don't like
9. Talk about the family with other people, because this is a privacy.
10. **E**: Oh!
11. **S**: So, yeah? (( ))
12. **S**: So, does it right?
13. **E**: Honestly no, I think 我 我喜欢 oh god I don't even know how to say this … 我喜欢谈谈 说
14. 我的家 with my friends
15. **S**: 啊 你喜欢 你喜欢谈你的家人
16. **E**: 嗯! er 我们 我的朋友 er 我们说 … 的 … 我的家 our? How do you say our family? 我的
17. **S**: 家?我们家 我的家人 our family
18. **E**: 我的家人
19. **S**: 对
20. **E**: Maybe the article is talking about it more negatively, some people don't like to talk about their
21. family negatively to other people
22. **S**: ah ok
23. **E**: But err personally 我喜欢 er I find it very interesting er so yeah that's interesting that you've
24. read an article on it but … yeah
25. **S**: Okay: So: I think this is a stereotype, right?=
26. **E**: =Hmm yeah
27. **S**: Stereotype of England because right now, I talk with you and I know this, the article just say,
28. is not right
29. **E**: Yes.
30. **S**: Okay.

During their conversation in Extract 1, S initiated a request very carefully and politely (Line 1, "Can I ask you a question?") as she intended to probe a cultural fact from E. After E's positive response in Line 2, S began to illustrate her query and confusion about a culturally specific norm that she learned from other channels, such as reading about whether English people like to talk about their families due to it being a private matter (Lines 3–5). In order to clarify what she was after, in Lines 6–8 she offered what she thought the Chinese norm was in sharing information with friends about one's family. Her understanding was that this was very different from the British norm that she had read before. After rephrasing in different ways, thanks to her English proficiency, she managed to convey her enquiry well to her partner. Immediately after S's comparison and illustration, E's response was "Oh!" (Line 10) in a surprising tone, showing that what S said was something unfamiliar to her as well. Hearing this, S further pursued a confirmation and explanations by asking, "So, yeah?" and "So, does it right [sic: is it right?"] in Lines 11 and 12. Although her grammar was not correct, her partner understood her. In Line 13, E first confirmed that what S read before might not be true based on her own British cultural experiences. She even added 'honestly' to indicate her affirmativeness. She then switched the target language, attempting to use Chinese to explain her interpretation of the British norm. Due to her limitations in terms of Chinese language proficiency, she was only able to express her main idea in Chinese with the assistance of English (Line 14, "with my friends"), clarifying that she herself liked to talk about her family with her friends. She also switched to English to fill in gaps or pauses possibly caused by searching words and choosing between 谈谈 and 说 (the former being slightly more formal than the latter). In Line 15, S repeated what E said in a proper complete Chinese sentence to acknowledge her receipt of E's explanation and confirm her understanding of the explanation with E. Meanwhile, she offered correct linguistic input, serving as a recast (a form of feedback) for her partner. S's feedback might have taught or reminded E of the Chinese word for family (家jiā). In Line 16, E confirmed that S's understanding of her previous talk in Chinese was correct and tried to pronounce it again. In Line 16, E also grabbed this opportunity to use the word "family" in Chinese that she was not very familiar with before. She initiated a question in English and proposed an answer in the form of a question, hoping to double-check with her partner if she was correct. In Line 17, S assured her partner about how to say the word in Chinese and offered another option, "家人"(family members), which was followed by the answer with an English explanation to assist her understanding. E practiced the word in Chinese again in Line 18, and S confirmed its correctness in Line 19. After this language learning moment, they went on to further discuss what S had read, with E trying to provide an explanation or possible analysis of the author's intention in Line 20. That is, what S had read could be that English people may not share something negatively about their family with their

friends (Line 1). She further commented on the fun experience in Lines 23 and 24. They finally (Lines 25–30) coordinated to come to the conclusion that the article S had read was only a stereotype or a partial reflection of a British cultural norm.

The interlocutors in Extract 1 did not have the same level of proficiency in the target language to enable them to converse effectively—half in Chinese and half in English. From the recording data, it is clear that they spoke more English than Chinese in their online exchanges. This was the case among the many pairs in this VE project. However, it was still clear that both linguistic and cultural items were exchanged between the partners, even though cultural learning seemed to have dominated in their interaction. The LD entry below, by Tina, whose mother tongue was French, illustrates similar intercultural learning:

> 我这周了解到万圣节在英国很重要，但在中国不一定。他们不会看恐怖电影，不会做“trick-or-treat”，等等。 然而，在中国越来越多人喜欢圣诞节因为他们可以交换礼物，但这不是普遍现象。比如说，我的伙伴不会做装饰圣诞树。所以我们庆祝的方式不同。 关于尊重的概念，我了解了与英国相比， 人们的地位要重要得多。比如说， 在中国他们会用“老师” 还是“Miss”但是在[英国]用过有时候，老师告学生他们可以叫他们用他们的名字。
>
> English translation: I learned this week that Halloween is quite important in Britain but not so much in China. They would not watch horror movies, play trick-or-treat, etc., but more people like Christmas as they can exchange presents, which is still not common. For example, my partner would not decorate the Christmas tree. We have different ways of celebrating. With regard to the notion of respect, I learned that people's social status in China is much more important than social status in Britain. For example, they would address their teacher as *Laoshi* (note: it means "teacher") in China, while in Britain it is "Miss"; however, teachers may sometimes let their students call them by their first names. [Tina – LD week 2 entry].

The above entry from Tina, a native French speaker who studied Politics with Chinese at a British university and had been learning Chinese for five years at the time of this study, shows how participants enjoyed learning customs in different countries through online exchange.

4.2 Collaborating in joint projects while negotiating meaning

In order to fulfil their learning goals, in addition to casually chatting with each other on any topics they were interested in, the pairs also had to complete their collaborative project in a format of their choice (e.g., PowerPoint presentation, video, screencast) to demonstrate their language and culture learning outcomes in the VE sessions. The topics of the presentation could cover something that they had worked on that represented the cultures of both participants. Therefore, during the VE sessions, there were many moments when participants co-constructed their

translanguaging space to discuss their collaboration projects. Since participants had different levels of proficiency in the target language, they had to employ both linguistic and other multimodal resources to scaffold each other's understanding, reaching common ground in their project collaboration and fulfilling their communication and learning goals. Extract 2 is an example of how the partners negotiated meaning to arrive at an agreement on what to do in their joint project.

Extract 2. Deciding on the collaboration project.

[L: Liufang, (China) participant and H: Harry, (UK) participant.]

Note: see Appendix II for the explanation of transcription convention, such as ↑.

1. **L**: So: other groups, they have decide: what to ↑show (.) the: ↑PowerPoint in the: last two weeks
2. So, I think we should=
3. **H**: =Ok
4. **L**: Oh Oh ((puts two hands on her forehead)) the Germanish ((laughs))
5. ((both laugh))
6. **H**: So yeah (.) we can ↑decide (0.2) you mentioned maybe doing a little bit on (0.5) a bit a bit of
7. everything (.) So: maybe doing a bit on (0.2) a bit on music, a bit on: ermm food (.) a bit on:
8. errmm Yeah(.) is that is that what you (.) were talking about what you're doing? Maybe a little
9. bit of (.) lots of things?
10. **L**: ((nods)) I think: we can err we can make the ↑PowerPoint (.) and err every—every week we
11. can talk about other ti tima-to- topic ((smiles)) topic (.) other topics (.) ↑sorry
12. **H**: That's ok
13. **L**: So: er how about food?
14. **H**: oh ↑yeah
15. **L**: en ok: (.) I can make: er the Chinese part and you make er the English part, so then ((puts two
16. hands together)) mix
17. **H**: ((nods)) <u>Perfect</u>
18. **L**: OK

In Extract 2, H had only been learning the Chinese language for two months, and L's major for her bachelor's degree was in German (during their early sessions, she mentioned that she had limited English proficiency). However, they had to communicate in English, as it was not possible to use Chinese when they discussed their collaboration for the upcoming presentation project to fulfil learning goals. Hence, non-verbal cues were more important than words in making and negotiating

meaning. H and L discussed how they would present their project, what roles they would take, and how they would communicate as they collaborated. In Lines 1–2, L suggested that the format of their collaboration project could be PowerPoint (with her voicing becoming louder and tone rising inadvertently when saying so), just as other groups would do. While H agreed with "OK" (Line 3), L commented on her own "German-ish" (coined from German and English) and apologised for not being able to articulate more clearly in English, accompanying this with hand movement (putting two hands on her forehead) and non-verbal behaviour (laugh). In Line 4, both signalled that they felt amused or embarrassed about using gestures due to the language barrier. They both laughed in Line 5 to sustain the turn-taking sequence and move it to H, who tentatively suggested in Lines 6–9 that their content could possibly incorporate all that they had talked about until then, since music was in their previous session and food was in the same video later (both extracts were not shown here). L nodded in Lines 10–11 to show her agreement, reiterating that they could use the PowerPoint from each week and confirming that H was right in that they had talked about other topics during the weeks, with her smile to indicate that she was not objecting to his suggestion. However, she thought that food could be a better idea, which she pinpointed in Line 13. This was endorsed by H in Line 14 with a positive note and a rising tone. Then, L suggested the possible distribution of work between them in Line 15, with herself being the one to prepare the PowerPoint slides about Chinese food and H for English food. In Line 16, she again applied both her simple English and hand gestures to state that the final product would be a combination (a "mix") with one part in Chinese and another in English.

Throughout turn-takings between Line 4 and Line 17, it is clear that H and L negotiated their meanings and reached their decisions with linguistic elements, e.g., short English sentences, and non-verbal cues, e.g., nods, hand movement, smiles, raised voices, etc. They activated multimodal resources to scaffold each other's understanding and co-constructed their collaboration project, achieving their communication purposes so as to meet the learning expectations of the project.

Data from other participants' weekly LD entries also support the finding of translanguaging practices, in that VE enables the use of all available multimodal resources:

> There was a little bit of a language barrier. My Mandarin isn't great, so we stuck to English. Whenever one of us couldn't understand what the other meant, explaining with hand gestures generally worked! [Otna – LD Week 1 entry].
> For quite a lot of the time, we struggled with communication due to my very limited Chinese, and my exchange partner's spoken was is not great. We resolved both problems by using visual images or using translation on WeChat, which made it easier to understand each other. [Lynn – LD Week 3 entry].

Both the LDs and Extract 2 present typical scenarios among many pairs in the VE project when both or one partner lacks proficiency in the target language to convey the meaning fully with only verbal or written texts. By utilising bilingual and other multimodal resources, it is clear from the data that they achieved a communicative purpose, i.e., reaching an agreement on the topic and format of their collaboration project.

4.3 Creating mini learning sessions while deploying all resources

During their VE conversations on self-directed topics, participants provide many opportunities for language and culture learning, whether intentionally or incidentally. Food was among the most popular topics in the VE sessions. When their linguistic resources were limited, the partners took advantage of all the means and resources surrounding them to convey their cultural and linguistic messages to their partners. These include technological tools, such as mobile phones and internet; audio, visual, spoken and written modes; and actual objects in their living environments. They created learning opportunities in an accessible and resourceful manner. With the same pairs as in Extract 2, Extract 3 provides evidence of the co-creation of learning opportunities through the deployment of all possible resources to facilitate communication.

Extract 3. Harry's demonstration of British food.

[H: Harry, (UK) participant and L: Liufang, (China) participant]

Earlier, in the same recording as the extract below, L introduced Chinese foods by showing pictures and videos of Chinese foods she had downloaded from the internet.

1. **H**: Then er chips I don't know what chips is in Chinese, but [they're like
2. **L**: [Cheeps? C-H-E-E-↓P
3. **H** [Ermmm:
4. Er: Yes C-H-I-P-S ((uses index finger to write the letter in the air as he says each letter))
5. **L**: C-H-I-P-S, [Chips?
6. **H** [Yes tha-that
7. **L**: [Oh!
8. **H**: [That's ermm: This is where American English is different to British English↑(0.5)
9. Ermm:(.) because in America (.) chips are like ermm crisps (.) so do you know like:a: the ones
10. you have in a packet ((uses one hand to show the packet; the other hand makes a 'putting in'

11. gesture)) That you eat, you can just=
12. **L**: =Chips? ((uses one hand to hold a pen; the other hand forms the shape of the pen))
13. **H**: ↓Yes Umm Han- Let me show you, hanging on (.) I'll quickly show you=
14. **L**: =hehehe
15. **H**: Errr: So::: ((starts to share his screen via MS Teams function, see Figure 1))
16. ((H typing in 'crisps' on the screen))
17. **H**: So: Erm: this (1.0) Oh no, what I'm I doing ((clicks the wrong tab)) – ((the screen starts to
18. show pictures of crisps)) So these are err in ↑England, so where I am ↑from (0.2) we call
19. them CRISPS=
20. **L**: =↓Oh hehehehe ((laughs)) ↑OK
21. **H**: But in hehe in er:America, these are called ↑chips ((sharing screen, see Figure 2))
22. **L**: Hmm I ↑know ((nods))
23. **H**: Which is why it's confusing, but whereas if I search chips ((types 'chips' on the screen))
24. ermmm here (0.5) ((pictures showing up chips)) this what we would call ↓chips.

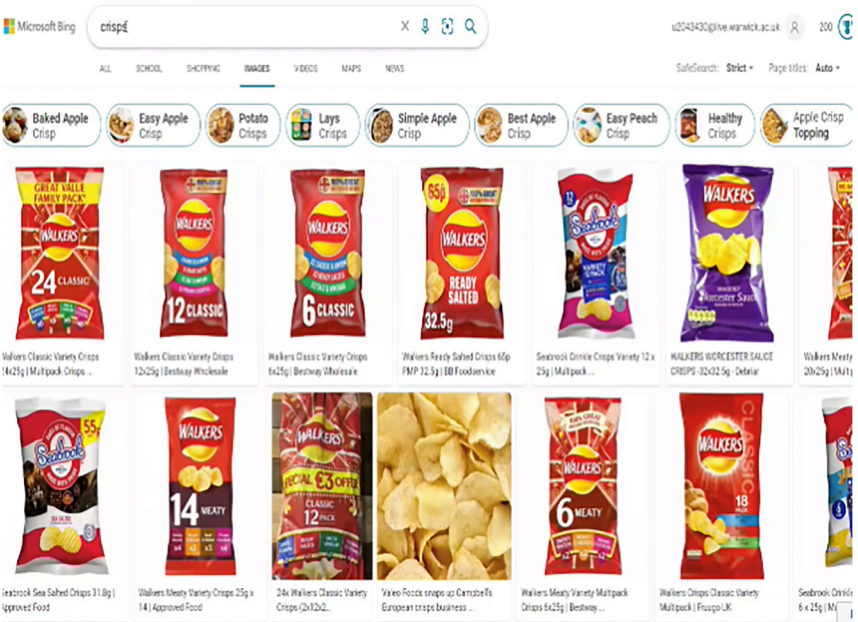

Figure 1: Images of crisps.

In Extract 3, H initiated the topic of the food/snack "chips" to his partner in Line 1, not knowing what it was called in Chinese. Hearing the pronunciation, L tried to spell the word in Line 2, although she was wrong in spelling "ee" instead of "I". Without pointing out the mistake straight away in Line 3, H recast it with the correct spelling while moving his index finger in the air in Line 4 and then confirmed it, following L's request in the form of a question in Line 5. Realising that this word might still be unfamiliar to L with her "oh" in Line 7, H explained a different use of the word in American English, which resembles "crisps" in British English. To clarify what he meant by "crisps", he showed L one pack of crisps that he might have prepared in advance or left randomly at his desk, moving his hand as if he was eating them (Lines 8–11). However, L did not seem to fully understand his explanation and maintained a fully doubtful voice (Line 12); H decided to seek other ways to explain his topic to L. In Lines 13 to 15, H started sharing his screen using the function of the platform (see Figure 1). After looking for pictures of crisps on the internet by typing the word on the screen in Line 16, clicking the wrong tab and finally showing these images until Line 19, H managed to get the message across to L, who laughed and finally understood it by Line 20. Then, H continued his further explanation in Line 21 that it was called "chips" in America. With L nodding to show understanding, H typed "chips" on the screen to explain what "chips" meant in Britain through the images that appeared (see Figure 2). H created a mini vocabulary learning session with a real learner on the spot. While showing images to accompany his explanation, he made his session very engaging.

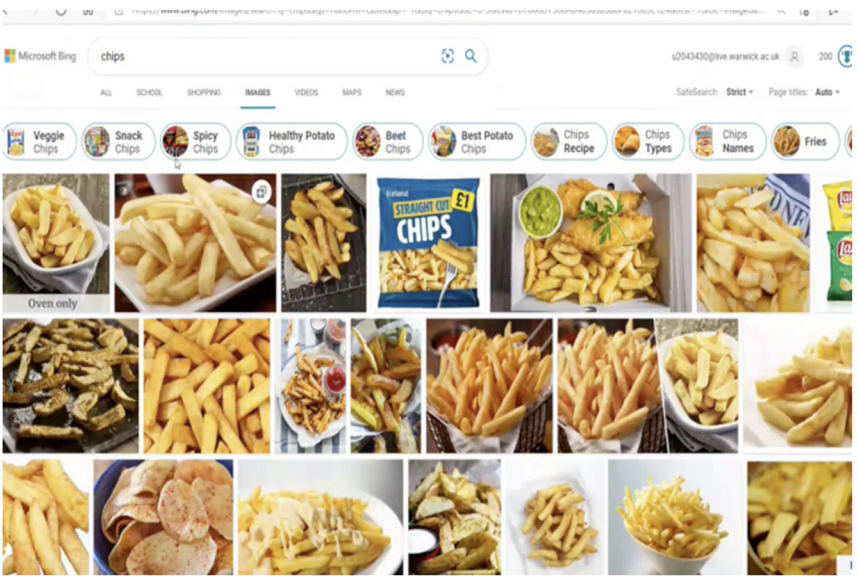

Figure 2: Images of chips.

This was similar to L's earlier teaching of Chinese foods via pictures and videos, which can be further confirmed by Harry's LD entries:

> I have learned some common Chinese foods and the manner in which they are made. I also had the chance to watch a video that showed what it was like to go out for something to eat (小笼包) in China and how to eat them. This reminded me of being in Spain and going out for the Christmas dinner—tapas placed on the Table. It was through observing other people that I was able to work out the best way for me to eat different foods. [Harry-LD Week 2 entry)

> I have learned a lot about the different dynasties in China and some specific Chinese phrases that can be seen above. I also watched an interesting video about the Terracotta Army. [Harry-LD Week 4 entry]

The extract and the LD entries above demonstrate that bilinguals/multilinguals are able to deploy all resources available to them to construct meanings, be it linguistic or semiotic, verbal or non-verbal, text or images, according to their partner's specific situations. It also illustrated how intercultural partners benefit from their VE sessions, where their construction of meaning cannot be based just on vocabulary of any language, but inevitably rely on multimodal resources.

5 Discussion

5.1 RQ1: How are meaning negotiated and communicative purposes achieved in VE sessions through intercultural interlocuters' translanguaging practices?

This study adopted the translanguaging perspective to make sense of VE interaction, in which intercultural participants deploy complex multilingual and multimodal repertoires in the process of meaning construction. Through coordinating to confirm cultural norms, collaborating in joint projects, and creating mini learning sessions, it is clear that meaningful communication between target language learners and competent target language speakers has been facilitated by translanguaging practices and has been assisted by images, screensharing, videos, audio and text-based online tools. Applying these translanguaging practices in VE interactions, the subjects sought confirmation from each other by constantly employing various means beyond just switching between the two linguistic systems. Code-switching, as one form of translanguaging, emerged only occasionally in their online interactions. For instance, S and E in Extract 1 conducted transitions freely between Chinese and English to fill gaps due to their lack of vocabulary in either language until the message was conveyed to the other side. In the end, they learned reasonably well about each other's cultural practices in sharing

family information with friends. In the process, Chinese words were taught or reinforced and the whole conversation appeared polite and enjoyable despite their imbalanced level of proficiency in the target language.

In Extracts 2 and 3, H and L attempted to decide the topic and format of their collaboration project, which was the final task of their VE sessions. L's non-verbal means, such as gestures, helped herself find the words she knew to sustain the turn. She nodded and smiled to show her understanding and agreement with H, when he expressed his intention about how to proceed; however, her body movement, such as putting her hands on her forehead and her slightly embarrassed facial expressions, indicated her lack of sufficient comprehension of H's suggestion. During their conversation, she held her mobile up for translation now and then and read out the English sentences there to request that H write in the chat box so that she could read to understand him, as her reading skills were much better than her listening skills. H, on the other hand, seemed to have understood the communication barriers between them in terms of insufficient common language proficiency in either English or Chinese. He also chose the apt images to show the differences between chips and crisps and possible confusions caused by lexical differences between British and American English, as such differences are common knowledge to many English speakers in the UK. He also slowed down his flow of speech to enable a better understanding of his partner, smiling and waiting patiently for the other side to formulate her questions. All of these seem to have enabled his partner to understand his messages without compromise. With their learning goals in mind, they utilised an array of available resources and multiple modes throughout the process of negotiating meanings, despite the limitations of their proficiency in a foreign language. They also played the role of a teacher effectively, perhaps without realising that it could be fulfilling and satisfactory. These sessions offered insight into such social spaces, or "translanguaging spaces" (Li, 2011), enjoyed by CFL learners and their partners.

The data from the questionnaire supports the above finding, as all of the 22 pairs completed their collaborative projects and would like to take part in future VE projects (they either "strongly agreed" or "agreed"), although two pairs did not showcase their project but uploaded their recordings later in the final week.

Our data support previous studies in that translanguaging practices are emerging in VE sessions (Helm & Hauck, 2022) when participants bring together their linguistic repertoire, personal interests, life experiences, attitudes and beliefs to interact with each other. Our study also resonates with previous studies (e.g., Jewitt, 2016; Satar & Wigham, 2017; Wang, 2007) where multimodal resources made distinctive contributions to online task completion. The use of translation found in this study lends further support for the strategy adopted by participants in Xu et al.'s (2022) study, who frequently resorted to translation software to resolve language issues.

5.2 RQ2: How do VE partners create a translanguaging space for bilinguals and multilinguals with Chinese as a foreign language (CFL) to facilitate intercultural learning?

The analysis of the three extracts, learning diary and questionnaire data demonstrated that the translanguaging space was created when participants were informed that they had the freedom to choose their topics, making use of all linguistic and non-linguistic resources to achieve authentic communication purposes. In this space, participants can voice their thoughts and facilitate their intercultural communication with multiple modes in a more dynamic environment. Across our data, participants usually spontaneously or incidentally co-constructed cultural understanding during their casual conversation by employing translanguaging practices. This lends further support to Walker's (2018) argument that flexibility in language use and the creation of learning opportunities are afforded by translanguaging. Virtual exchange between language learners from different cultural backgrounds becomes a prototypical translanguaging space.

From the three extracts, we can see that the translanguaging space S and E in Extract 1 enhanced their knowledge and perceptions of each other's cultural background, renewed their knowledge and challenged their assumptions or stereotypes about the other culture. Although H and L had limitations in terms of their target language proficiency, they actively showed their ideas and suggestions to each other and constantly coordinated to resolve the issues that emerged during their conversation. They employed semiotic resources aside from linguistic resources, such as body language, eye gaze, and facial expressions, to holistically facilitate each other's understanding and online communication (Dooly, 2018; Norris, 2004).

H, as an emerging trilingual who spoke English as his mother tongue, learned Spanish and Chinese for his degree and realised that his partner might not understand him very well; therefore, he simplified his English and reduced the speed of his speech while explaining British foods with pictures from the internet. L's first foreign language was German, and she did not understand her partner's English very well. She jokingly admitted herself to use her German-ish, although her pronunciation was good, and her reading proficiency in English was better than her speaking and listening proficiency. She managed to write her script in advance while preparing for each session. In another extract not shown here, she chose the right pictures and videos downloaded in advance that appealed to her partner, introducing food varieties of her hometown and other places she went before, and involving him in answering questions after watching the video. She also encouraged her partner to follow her in pronouncing the names of the food in Chinese and offered him apt feedback.

According to the traditional deficit model (Li, 2011), neither H nor L had sufficient proficiency in the target language, i.e., Chinese or English, to enable them to communicate with each other effectively in either language. This confirms the findings from existing VE studies involving CFL, where linguistic barriers were among the concerns for both sides (Lewis & Kan, 2021; Jin, 2013). However, throughout their VE sessions in this study, the participants looked very happy in the videos and expressed no anxiety in their LDs and reflections. Extracts 2 and 3 illustrate how they made good use of all the resources available to negotiate and co-construct meanings and inform each other of their own cultural products and practices through translanguaging. Their use of linguistic means appeared to not be much more useful than other semiotic and multimodal resources, such as pictures of foods, gestures, hand movement, facial expressions, etc. This coincides with Satar's (2016) analysis of the use of facial expressions and gestures as facilitators for task completion. They also resorted to searching for information on the internet and using mobile devices flexibly, moved from one tool to another with ease to maximise their ability to communicate. To a large extent, translanguaging practice has empowered online intercultural interlocutors to bridge the gaps in communication caused by insufficient linguistic proficiency in their target language. This challenges the traditional view in bilingual research, where low proficiency leads to poor performance in a second or foreign language. For example, American high school pupils' lack of everyday vocabulary in L2 Spanish was among the reasons for their poor word decoding and reading comprehension results (Sparks, 2015). The language deficit that Asian students have in English at Western universities negatively affects their critical thinking skills for exhibition in linguistically demanding tasks such as debate, discussion and essay writing, which are often required in academic studies (Rear, 2017). In virtual exchange, each individual is eager to make their exchange partner understand what they say rather than perform tasks such reading comprehension in a language class; thus, communication becomes the primary goal. It is clear from our data that translanguaging and multimodality have not only been taken as a strategy to address linguistic limitations but also allow flexibility and inclusivity in language use (Walker, 2018). Translanguaging practices in virtual exchange facilitate the meaning-making and learning processes; in so doing, linguistic limitations become less of an issue and are compensated by the successful completion of a communication task.

Translanguaging space not only encompasses different linguistic structures and different modalities, but also entails individuals' sociocultural identities and life experiences, as well as the "teaching" role. Through this space, language users subconsciously and creatively construct knowledge, negotiate meaning and modify their understanding. In VE sessions, two or more sets of cultural practices and values are brought into play, and participants leverage different resources to achieve

various communicative purposes—be it establishing rapport with their partners or working on collaborative projects.

The translanguaging practices of the participants in this context have been discursive and comprehensive. This finding concurs with previous studies (e.g., Dooly & Hauck, 2012; Li & Ho, 2018; Tai, 2022) in that linguistic, semiotic and sociocultural resources were leveraged together in learning. In this study, participants' responses and interactions demonstrated that they coordinated their own way of communicating for collaboration, navigating through the translanguaging space they created for themselves. While CA used in Xu et al. (2022) revealed that peer scaffolding and multimodality scaffolding were adopted to co-construct language-related knowledge, the adoption of MCA in this current study provides insights into more varied and enriching details on how an array of multilingual, multisemiotic and multimodal resources were deployed freely to create a translanguaging space in a virtual exchange project.

6 Conclusions

This study has presented a snapshot of CFL learners' translanguaging practices during VE, mostly at the beginning stages of their Chinese learning. A more extensive study can involve a larger cohort with more diverse linguistic profiles. More varied scenarios with learners from different cultural backgrounds could present VE as a more enriching translanguaging space for intercultural learning. A wider range of data can be collected to see how various multimodal resources can be investigated while being built in online interactions. More established analytical frameworks to be used for online interactions involving Chinese and CFL would help the data analysis more structured and more targeted towards gesture, gaze and facial expression between CFL learners and their partners. These areas can be probed in future studies.

In the past decade or so, it seems that a limited number of higher education institutions have integrated virtual exchange into their curricula. Many telecollaborative projects have been taken peripherally as extracurricular endeavours that are largely dependent upon students' voluntary participation. However, VE can be implemented and accredited to curricula and mobility in educational institutions, as advocated by the EVALUATE (2019) and FRAMES (2022) projects. In the actual implementation of virtual exchange, teachers' interventions should focus more on technological and mental preparation for students in advance, establishing partnerships and facilitating pairing and grouping (see more guidance in the findings of the EVALUATE project, 2019) and virtual innovation and support networks (VALIANT, 2022). Students' self-direction and autonomy should function at the forefront of weekly

sessions, while teachers only need to take a backstage role to assist and solve problems when needed. However, this does not mean that everything will be left at the students' own discretion; rather, collaborative tasks should still be required by the teacher as part of the VE project outcomes to engage students from both universities. In addition, students would benefit most from VE activities when they were more integrated into their weekly class hours (O'Dowd & Eberbach, 2004). Social presence brought upon by showcasing their projects to a larger audience, as well as teacher presence to bring a sense of achievement, would still incentivise students and serve as a goal for them to complete their exchanges successfully.

This study has explored intercultural virtual exchange in the CFL context through a translanguaging lens. Adopting the MCA approach to data obtained from weekly VE interactions between university students in Britain and China, the study sheds light on how intercultural interlocutors leverage a range of translanguaging practices, including linguistic, semiotic and multimodal resources, to create a translanguaging space in which participants navigate through virtual communication with peers from different cultures. Combining the translanguaging perspective with the MCA approach, this study has offered a microanalysis of VE interaction, a distinct stance from many previous studies on online collaboration in CFL contexts. As many VE projects are currently contingency plans, VE will not replace physical exchange. Nevertheless, it can be an integral part of blended mobility (O'Dowd, 2021b), even as the global physical exchange is restored in the future.

Appendix I:

Sample Statements in the Questionnaire

For each statement, select one of the following responses: strongly disagree, disagree, uncertain, agree or strongly agree.

I am open-minded to people from different cultures.

I have gained much knowledge about other countries and cultures.

I can explain cultural events from the culture I am learning about and relate them to similar ones in my own culture.

I have changed my perspectives on other cultures.

I have exchanged contact details with my partner and contacted them outside of university hours.

I would like to do exchanges like this again.

Appendix II

Transcription Convention

(.): A full stop inside parentheses denotes a micro pause—a notable pause of no significant length.

(0.2) A number inside brackets denotes a timed pause. This is a pause long enough to time and is subsequently shown in the transcription.

[: Square brackets denote a point in which overlapping speech occurs.

> <: Arrows like these that surround talk indicate that the pace of the speech quickened.

< >: Arrows in this direction show that the pace of the speech slowed down.

( ): A space between brackets indicates that the words spoken here were too unclear to transcribe.

(( )): Double brackets with a description inserted denote contextual information where no symbol of representation was available.

Under: Underlined words or parts of words denote emphasis or increased volume.

↑: Upward arrows indicate rises in intonation.

↓: Downward arrows represent drops in intonation.

→: A right-facing arrow denotes a sentence of particular interest to the analyst.

CAPITALS: Capital letters denote something that was stated loudly or even shouted.

Hum(h)our: When a bracketed 'h' appears, it means that there was laughter within the talk.

=: The equal sign represents latched speech—a continuation of talk.

:: Colons represent elongated speech—a stretched sound.

References

Angelova, M., & Zhao, Y. (2016). Using an online collaborative project between American and Chinese students to develop ESL teaching skills, cross-cultural awareness and language skills. *Computer Assisted Language Learning*, *29*(1), 167–185.

Avgousti, M. I. (2018). Intercultural communicative competence and online exchanges: A systematic review. *Computer Assisted Language Learning*, *31*(8), 819–853.

Backus, A., Gorter, D., Knapp, K., Schjerve-Rindler, R., Swanenberg, J., ten Thije, J., & Vetter, E. (2013). Inclusive multilingualism: Concept, modes and implications. *European Journal of Applied Linguistics*, *1*(2), 179–215.

Belz, J. (2003). Linguistic perspectives on the development of intercultural competence in telecollaboration. *Language, Learning and Technology*, *7*(2), 68–99.

Belz, J. A., & Müller-Hartmann, A. (2002). Teachers as intercultural learners: Negotiating German–American telecollaboration along the institutional fault line. *The Modern Language Journal*, *87*(1), 71–89.

Bezemer, J., & Jewitt, C. (2010). Multimodal analysis: Key issues. In L. Litosseliti (Ed.), *Research Methods in Linguistics* (pp. 180–197). Continuum.

Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Multilingual Matters.

Byram, M. (2021). *Teaching and assessing intercultural communicative competence: Revisited*. Multilingual Matters.

Canagarajah, S. (2015). Clarifying the relationship between translingual practice and L2 writing: Addressing learner identities. *Applied Linguistics Review*, *6*(4), 415–440.

Chen, D. (2017). Can language exchange help beginners develop Chinese proficiency? *Journal of Chinese Teaching and Research in the U.S.*, *12*, 1–11.

Chen, J. J., & Yang, S. C. (2016). Promoting cross-cultural understanding and language use in research-oriented Internet-mediated intercultural exchange. *Computer Assisted Language Learning*, *29*(2), 262–288.

Chun, D. M. (2011). Developing intercultural communicative competence through online exchanges. *CALICO Journal*, *28*(2), 392–419.

Chun, D. M. (2015). Language and culture learning in higher education via telecollaboration. *Pedagogies: International Journal*, *10*(1), 5–21.

Commander, N. E., Schloer, W. F., & Cushing, S. T. (2022). Virtual exchange: A promising high-impact practice for developing intercultural effectiveness across disciplines. *Journal of Virtual Exchange*, *5*, 1–19.

Dooly, M. (2011). Divergent perceptions of telecollaborative language learning tasks: Tasks-as-workplan vs. task-as-process. *Language, Learning and Technology*, *15*(2), 69–91.

Dooly, M. (2017). Telecollaboration. In C. A. Chapelle, & S. Sauro (Eds.), *The handbook of technology and second language teaching and learning* (pp. 169–183). Blackwell.

Dooly, M. (2018). I do which the question": Students' innovative use of technology resources in the language classroom. *Language, Learning and Technology*, *22*(1), 184–217.

Dooly, M., & Hauck, M. (2012). Researching multimodal communicative competence in video and audio telecollaborative encounters. In D. M., & R. O'Dowd (Eds.), *Researching online interaction and exchange in foreign language education telecollaboration in education 3* (pp. 135–162). Peter Lang.

Dooly, M., & Vinagre, M. (2022). Research into practice: Virtual exchange in language teaching and learning. *Language Teaching*, *55*(3), 392–406.

The EVALUATE Group (2019). *Evaluating the impact of virtual exchange on initial teacher education: A European policy experiment*. Research-publishing.net.

EVOLVE. (2019). What is virtual exchange? https://evolve-erasmus.eu/about-evolve/what-is-virtual-exchange/. Retrieved February 19, 2023 from https://www.evolve-erasmus.eu.

Feng, R., Shi, X., Hu, S., & Yu, Y. (2021). Feedback and uptake in videoconferences for online intercultural exchange. *Journal of Virtual Exchange*, *4*(SI), 28–46.

Fiori, M. (2005). The development of grammatical competence through synchronous Computer mediated communication. *CALICO Journal*, *22*(3), 567–602.

FRAMES. (2022). Outputs – FRAMES (frames-project.eu) https://frames-project.eu/ Retrieved February 19, 2023 from www.frames-project.eu.

Fuchs, C., Snyder, B., & Tung, B. (2022). The value of mediation for task design and implementation in a US-China virtual exchange. *Journal of Virtual Exchange*, *5*(SI), 1–23.

García, O., & Li, W. (2014). *Translanguaging: Language, bilingualism and education*. Palgrave Macmillan.

Guo, Z. (2022). The Chinese-English virtual exchanges: A brief review and prospect. In S. Xu (Ed.), *Teaching Chinese as an international language in the time of COVID: Opportunities, innovations and development* (pp. 65–74). Sinolingua.

Guo, Z., Wang, P., & Guo, Z. (2022). Knowledge and skill development through intercultural virtual exchange: Gains and issues in Chinese as a foreign language. *International Journal of Computer-Assisted Language Learning and Teaching*, *12*(1), 1–19.

Hampel, R., & Hauck, M. (2006). Computer-mediated language learning: Making meaning in multimodal virtual learning spaces. *JALT CALL Journal*, *2*(2), 3–18.

Hauck, M., Müller-Hartmann, A., Bart Rienties, B., & Rogaten, J. (2020). Approaches to researching digital-pedagogical competence development in VE-based teacher education. *Journal of Virtual Exchange*, *3*(SI), 5–35.

Hauck, M., & Satar, M. (2018). Learning and teaching languages in technology-mediated contexts: The relevance of social presence, co-presence, participatory literacy, and multimodal competence. In R. Kern, & C. Develotte (Eds), *Screens and scenes: Multimodal communication in online intercultural encounter* (pp. 133–157). Routledge.

Hauck, M., & Youngs, B. L. (2008). Telecollaboration in multimodal environments: The impact on task design and learner interaction. *Computer Assisted Language Learning*, *21*(2), 87–124.

Helm, F. (2016). Facilitated dialogue in online intercultural exchange. In R. O'Dowd, & T. Lewis (Eds), *Online intercultural exchange: policy, pedagogy, practice* (pp. 150–172). Routledge.

Helm, F., & Dooly, M. (2017). Challenges in transcribing multimodal data: A case study. *Language, Learning and Technology*, *21*(1), 166–185.

Helm, F., & Hauck, M. (2022). Language, identity and positioning in virtual exchange. In L. Klimanova (Ed.), *Identity, multilingualism and CALL – Responding to new global realities* (pp. 24–48). Equinox eBooks Publishing. Retrieved December 12, 2022.

Jauregi, K., & Bañados, E. (2008). Virtual interaction through video-web communication: A step towards enriching and internationalizing language learning programs. *ReCALL*, *20*(2), 183–207.

Jewitt, C. (2016). Multimodal analysis. In A. Georgakopoulou, & T. Spilioti (Eds), *The Routledge handbook of language and digital communication* (pp. 69–84). Routledge.

Jiang, S., Wang, H., & Tschudi, S. (2014). Intercultural learning on the web: Reflections on practice. In D. M. Chun (Ed.), *Cultura-inspired intercultural exchanges: Focus on Asian and Pacific languages* (pp. 121–137). University of Hawaii, National Foreign Language Resource Center.

Jin, L. (2013). Language development and scaffolding in a Sino-American telecollaborative project. *Language, Learning and Technology*, *17*(2), 193–219.

Jin, L., & Erben, T. (2007). Intercultural Learning via instant messenger interaction. *CALICO Journal*, *24*(2), 291–311.

Kohn, K., & Hoffstaedter, P. (2017). Learner agency and non-native speaker identity in pedagogical lingua franca conversations: Insights from intercultural telecollaboration in foreign language education. *Computer Assisted Language Learning*, *30*(5), 351–367.

Korkealehto, K. (2022). A virtual exchange project enhances digital literacies and intercultural competence. *EDULEARN22 Proceedings*, 8368–8372. https://doi.org/10.21125/edulearn.2022.1984

Korkealehto, K., & Leier, V. (2021). Facebook for engagement: Telecollaboration between Finland and New Zealand in German language learning. *International Journal of Computer-Assisted Language Learning and Teaching*, *11*(1), 1–20.

Kramsch, C., & Thorne, S. (2002). Foreign language learning as global communicative practice. In D. Block, & D. Cameron (Eds), *Language learning and teaching in the age of globalization* (pp. 83–100). Routledge.

Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Routledge.
Lamy, M. N. (2009). Multimodality in second language conversations online: Looking for a methodology. In A. Baldry, & E. Montagna (Eds), *Interdisciplinary perspectives on multimodality: theory and practice* (pp. 385–403). Palladino. https://edutice.archives-ouvertes.fr/edutice-00387133/document
Lewis, T., & Kan, Q. (2021). Designing and supporting virtual exchange: The case of Chinese–English e-tandem. *Modern Languages Open*, *1*(19), 1–17.
Li, W. (2011). Moment analysis and translanguaging space: Discursive construction of identities by multilingual Chinese youth in Britain. *Journal of Pragmatics*, *43*(5), 1222–1235.
Li, W. (2018). Translanguaging as a practical theory of language. *Applied Linguistics*, *39*(1), 9–30.
Liaw, M. L. (2007). Constructing a 'third space' for EFL learners: Where language and cultures meet. *ReCALL*, *19*(2), 224–241.
Liaw, M. L., & Master, S. B. (2010). Understanding telecollaboration through an analysis of intercultural discourse. *Computer Assisted Language Learning*, *23*(1), 21–40.
Liaw, M., & Ware, P. (2018). Multimodality and social presence in an intercultural exchange setting. In R. Kern, & C. Develotte (Eds.), *Screens and scenes: multimodal communication in online intercultural encounter* (pp. 256–278). Routledge.
Li, W., & Ho, W. Y. (2018). Language learning Sans Frontiers: A translanguaging view. *Annual Review of Applied Linguistics*, *38*, 33–59.
Lilja, N. (2022). Multimodal conversation analysis as a method for studying second language use and learning in naturally occurring interaction. In G. Stam, & K. Urbanski (Eds.), *Gesture and multimodality in second language acquisition* (pp. 204–228). Routledge.
Luo, H., & Gao, P. (2022). Intercultural learning through Chinese–American telecollaboration: Results of a song sharing project. *Computer Assisted Language Learning*, *35*, 1–29.
Luo, H., & Gui, M. (2021). Developing an effective Chinese–American telecollaborative learning program: An action research study. *Computer Assisted Language Learning*, *34*(5–6), 609–636.
Luo, H., & Yang, C. (2018). Twenty years of telecollaborative practice: Implications for teaching Chinese as a foreign language. *Computer Assisted Language Learning*, *31*(5–6), 546–571.
Luo, H., & Yang, C. (2022). Pedagogical benefits of Chinese-American virtual exchange: A study of student perceptions. *ReCALL*, *34*(1), 37–50.
Mondada, L. (2018). Multiple temporalities of language and body in interaction: Challenges for transcribing multimodality. *Research on Language and Social Interaction*, *51*, 85–106.
Norris, S. (2004). *Analyzing multimodal interaction: A methodological framework*. Routledge.
O'Dowd, R. (2003). Understanding the "other side": Intercultural learning in a Spanish-English e-mail exchange. *Language, Learning and Technology*, *7*(2), 118–144.
O'Dowd, R. (2005). Negotiating sociocultural and institutional contexts: The case of Spanish-American telecollaboration. *Language and Intercultural Communication*, *5*(1), 40–56.
O'Dowd, R. (2007). Evaluating the outcomes of online intercultural exchange. *ELT Journal*, *2007*.
O'Dowd, R. (2011). Online foreign language interaction: Moving from the periphery to the core of foreign language education? *Language Teaching*, *44*(3), 368–380.
O'Dowd, R. (2016). Emerging Trends and new directions in telecollaborative learning. *CALICO Journal*, *33*(3), 291–331.
O'Dowd, R. (2021a). What do students learn in virtual exchange? A qualitative content analysis of learning outcomes across multiple exchanges. *International Journal of Educational Research*, *109*, 1–13.
O'Dowd, R. (2021b). Virtual exchange: Moving forward into the next decade. *Computer Assisted Language Learning*, *34*(3), 209–224.

O'Dowd, R., & Dooly, M. (2020). Intercultural communicative competence development through telecollaboration and virtual exchange. In J. Jackson (Ed.), *The Routledge Handbook of language and intercultural communication* (pp. 361–375). Routledge.

O'Dowd, R., & Dooly, M. (2022). Exploring teachers' professional development through participation in virtual exchange. *ReCALL*, *34*(1), 21–36.

O'Dowd, R., & Eberbach, K. (2004). Guides on the side? Tasks and challenges for teachers in telecollaborative projects. *ReCALL*, *16*(1), 5–19.

O'Dowd, R., Sauro, S., & Spector-Cohen, E. (2019). The role of pedagogical mentoring in virtual exchange. *TESOL Quarterly*, *54*, 146–172.

O'Dowd, R., & Ware, P. (2009). Critical issues in telecollaborative task design. *Computer Assisted Language Learning*, *22*(2), 173–188.

Ortega, L. (2017). New CALL-SLA research interfaces for the 21st Century: Towards equitable multilingualism. *CALICO Journal*, *34*(3), 285–316.

Rear, D. (2017). The language deficit: A comparison of the critical thinking skills of Asian students in first and second language contexts. *Asian–Pacific Journal of Second and Foreign Language Education*, *2*, 1–15.

Reynolds, A. (2020). Erasmus virtual exchange as an authentic learner experience. In M. Hauck & A. Müller-Hartmann (Eds.), *Virtual exchange and 21st century teacher education: Short papers from the 2019 EVALUATE conference* (pp. 85–99). Research-publishing.net.

Rienties, B., & Rets, I. (2022). The impact of virtual exchange on east–west social relations: Lessons from a China-Portugal foreign language exchange. *Journal of China Computer-Assisted Language Learning*, *2*(1), 1–19.

Ryder, L., & Yamagata-Lynch, L. (2014). Understanding tensions: Activity systems analysis of Transpacific collaboration. *CALICO Journal*, *31*(2), 201–220.

Satar, H. (2013). Multimodal language learner interactions via desktop videoconferencing within a framework of social presence: Gaze. *ReCALL*, *25*(1), 122–142.

Satar, H. M. (2016). Meaning-making in online language learner interactions via desktop videoconferencing. *ReCALL*, *28*(3), 305–325.

Satar, H. M., & Wigham, C. R. (2017). Multimodal instruction-giving practices in webconferencing-supported language teaching. *System*, *70*, 63–80.

Satar, M., & Wigham, C. R. (2020). Delivering task instructions in multimodal synchronous online language teaching. *Alsic*, *23*(1). https://doi.org/10.4000/alsic.4571

Schenker, T. (2012). Intercultural competence and cultural learning through telecollaboration. *CALICO Journal*, *29*(3), 449–470.

Sindoni, M. G. (2013). *Spoken and written discourse in online interactions: A multimodal approach*. Routledge.

Sparks, R. L. (2015). Language deficits in poor L2 comprehenders: The simple view. *Foreign Language Annals*, *48*(4), 635–658.

Stivers, T., & Sidnell, J. (2013). Introduction. In T. Stivers, & J. Sidnell (Eds), *The Handbook of Conversation Analysis* (pp. 1–8). Blackwell Publishing Ltd.

Tai, K. W. H. (2022). Translanguaging as inclusive pedagogical practices in English-medium instruction Science and mathematics classrooms for linguistically and culturally diverse students. *Research in Science Education*, *52*, 975–1012.

Tai, K. W. H., & Li, W. (2021a). Constructing playful talk through translanguaging in the English medium instruction mathematics classrooms. *Applied Linguistics*, *42*(4), 607–640.

Tai, K. W. H., & Li, W. (2021b). Co-learning in Hong Kong English medium instruction mathematics secondary classrooms: A translanguaging perspective. *Language and Education*, *35*(3), 241–267.
Tang, J., Kan, Q., Wang, N., & Hu, X. (2021). Exploring language learning and corrective feedback in an eTandem project. *Journal of China Computer-Assisted Language Learning*, *1*(1), 110–144.
Thorne, S. L. (2003). Artifacts and cultures-of-use in intercultural communication. *Language, Learning and Technology*, *7*(2), 38–67.
VALIANT. (2022). About VALIANT | valiant project. Retrieved December 19, 2022, from www.valiantproject.eu.
Vallejo, C., & Dooly, M. (2019). Plurilingualism and translanguaging: Emergent approaches and shared concerns. *International Journal of Bilingual Education and Bilingualism*, *23*(1), 1–16.
van Leeuwen, T. (2005). *Introducing social semiotics*. Routledge.
Walker, U. (2018). Translanguaging: Affordances for collaborative language learning. *New Zealand Studies in Applied Linguistics*, *24*(1), 18–40.
Wang, J., Zou, B., Wang, D., & Xing, M. (2013). Students' perception of a wiki platform and the impact of wiki engagement on intercultural communication. *System*, *41*, 245–256.
Wang, Y. (2007). Task design in videoconferencing-supported distance language learning. *CALICO Journal*, *24*(3), 591–630.
Wigham, C. R., & Guichon, N. (2014). And out the frame: teacher gestures during desktop videoconferencing interactions, *CALICO*, *6–10*, May 2014, Athens, Ohio, United States.
Wigham, C. R., & Satar, M. (2021). Multimodal (inter)action analysis of task instructions in language teaching via videoconferencing: A case study. *ReCALL*, *33*(3), 195–213.
Xu, S., Zhu, D., & Zhang, J. (2022). The development of intercultural competence and digital competences in the context of Chinese and English virtual exchange. In S. Xu (Ed.), *Teaching Chinese as an international language in the time of COVID: opportunities, innovations and development* (pp. 75–96). Sinolingua.
Zhu, H., Li, W., & Jankowicz-Pytel, D. (2020). Translanguaging and embodied teaching and learning: Lessons from a multilingual karate club in London. *International Journal of Bilingual Education and Bilingualism*, *23*, 65–80.

Bionotes

Zhiyan Guo
University of Warwick, Coventry, UK
zhiyan.guo@warwick.ac.uk
https://orcid.org/0000-0002-5852-4419

Dr. Zhiyan Guo, Professor of Chinese, University of Warwick; Senior Fellow, Higher Education Academy, UK; Chair (2016–18), the British Chinese Language Teaching Society; Fellow of Warwick International Higher Education Academy (2019–22). Her research interests are in intercultural communication, language acquisition, Chinese characters and reading, and language teaching and technology. She has published articles in these areas and edited books on Chinese pedagogy and been review editor of journals. She is the author of the monograph "Young Children as Intercultural Mediator: a Study of Mandarin-speaking Chinese Families in Britain" published by Multilingual Matters.

Xinyue Xu
Nanyang Technological University, Singapore, Singapore
xinyue.xu@ntu.edu.sg

Dr. Xinyue Xu, Research Fellow at Nanyang Technological University, Singapore. Her research interests include Conversation Analysis, language and social interaction, multilingual interaction, health communication, and medical sociology.