

# Multimodality and translanguaging in negotiation of meaning

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## The Challenge

Given the wide-spread use of video calls and the affordances the medium provides for foreign language learning and, specifically, for oral interaction, how do learners manage the use of multimodal and multilingual elements in oral interactive tasks? Do multimodality and linguistic repertoires aid comprehension and enhance the meaning negotiation process?

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## Abstract

The present study examines the role that multimodality and translanguaging play in scaffolding oral interactions during language-related episodes (LREs) involving meaning negotiation. The oral tasks carried out using synchronous video-based computer-mediated communication were part of a tandem virtual exchange (Spain, Canada). The participants, 18 dyads of English and Spanish college-level learners, conducted three oral interaction tasks in pairs online. LREs were identified and transcribed and data were analyzed quantitatively and qualitatively, including all instances of translanguaging and uses of multiple modes of meaning-making. Quantitative data revealed that translanguaging involved not only English and Spanish, but also other shared languages and occurred mostly during meaning negotiation. Additionally, the use of multimodal elements, including gestures, postures,

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gaze, multiple digital and physical devices (mobile devices, computers, props, notes) was examined. Qualitative data analyses revealed the interplay between multimodality and learners' multilingual repertoires which reinforced and complemented meaning-making during these episodes.

#### KEYWORDS

computer-mediated communication, English, foreign language instruction, higher education, interactional feedback, multimodality, negotiation of meaning, oral interaction, Spanish, translanguaging

## 1 | INTRODUCTION

Multimodality, especially gestures, has been studied in relation to its ability to complement speech in facilitating comprehensibility for foreign language (FL) learners. The use of multimodal elements facilitates mutual understanding in learner–learner or teacher–learner interaction (Belhiah, 2013; Dahl & Ludvigsen, 2014) and meaning-making in interactions mediated by mobile devices and digital tools (Jovanovic & van Leeuwen, 2018). Translanguaging and the role of learners' bilingual or multilingual repertoires in the FL classroom have been investigated to understand how bilingual and multilingual speakers navigate their linguistic repertoires across different contexts. The need to address translanguaging in relation to language learning has become more apparent in a globalized world where multilingual and multicultural environments have become a reality in many educational settings (Barton & Lee, 2013; Kramsch & Huffmaster, 2015).

Multimodality and translanguaging have been approached from a myriad of angles but not in combination during language-related episodes (LREs). LREs have been largely researched within the interactionist perspective (Bueno-Alastuey, 2010, 2013; García Mayo & Azkarai, 2016; Loewen, 2005; Swain & Lapkin, 1998; Williams, 2001; Yanguas, 2010, 2012; Yilmaz, 2011), as they allow us to observe language learning in progress (Swain & Lapkin, 1998). Essentially, these episodes constitute instances of learners focusing on form in otherwise meaning-oriented oral interactive tasks. These instances are triggered by a communication breakdown that involves meaning and form negotiation (Kenning, 2010), enabling the co-occurrence of several essential elements beneficial for L2 development (Doughty, 2001; Yanguas, 2012). These are, namely, the provision of comprehensible input and feedback, which help learners notice the gap between their interlanguage and the target language, and the subsequent possibility of producing modified output. LREs have been analyzed in several interactive contexts, examining interactions between learners and teachers as well as among the learners themselves during classroom interactions and as part of virtual exchanges (VEs) (Bueno-Alastuey, 2010, 2013; Yanguas, 2010, 2012). The use of multimodality in interaction has been analyzed using conversational analysis (CA) (Belhiah, 2013; Dahl & Ludvigsen, 2014) and also by Lee et al. (2019) using Varonis and Gass's (1985) model. This study addresses LREs as related to multimodality and translanguaging.

Multimodality as a concept encompasses the idea that all language communication is multimodal in nature in the sense that communication is mediated by the simultaneous use of several modes of communication which complement each other to contribute to meaning-making. In language learning environments where communication between learners is encouraged, these modalities

include speech elements but also gaze, gestures, and images. In CMC these elements become particularly important because they are mediated by another layer of modality enabled, but sometimes also constrained, by technological tools (Lee et al., 2019).

Translanguaging was first used to refer to pedagogical practices that involved using English and Welsh for different activities or in different domains (Lewis et al., 2012). The term was soon adopted by García (2009) to refer to the manner in which bilinguals intentionally communicate and make meaning using all their linguistic repertoires. These practices involved disregarding the use of state-endorsed discrete or named languages (Otheguy et al., 2015) and contributed to highlighting the importance of giving room to the use of learners' entire linguistic repertoires during their education (García & Wei, 2014; Lasagabaster & García, 2014). The term translanguaging emerged as an alternative concept to code-switching or code-mixing which were the terms formerly used in the field (Auer, 2013). As opposed to code-switching, which underscores the representation of the linguistic repertoires of plurilingual speakers as separate linguistic systems corresponding to different named languages (Otheguy et al., 2015), the term translanguaging emphasizes the idea that plurilingual speakers communicate and make meaning using the linguistic repertoires they have at their disposal, regardless of whether these comprise the use of different named languages. The current paper adopts the term translanguaging which becomes particularly useful to analyze the linguistic behavior of plurilingual language learners in the present study who resort to different languages to construct their speech, convey their messages and interpret each other's utterances. However, part of the literature review will address papers which studied this phenomenon adopting the former terminology.

Translanguaging has been approached by Sert and Balaman (2018) and Walker (2018) to examine oral interactions and by Tudini (2016) to account for language switches in written text chats. However, to the best of this author's knowledge, no other study has examined the combined role of translanguaging or multimodal elements during LREs.

This article approaches translanguaging and multimodality in combination to examine the role they play together when aiding in the meaning negotiation process, scaffolding the oral interaction in a manner which has been deemed beneficial for L2 development (B. Smith, 2004). Multimodality is analyzed in conjunction with translanguaging due, to a large extent, to the context in which the interaction took place, a bilingual telecollaboration exchange carried out online via synchronous computer-mediated communication (CMC) using a videoconferencing tool.

## 1.1 | Oral interaction in synchronous computer-mediated communication (SCMC)

The analysis of oral interaction in SCMC contexts has been approached from interactive perspectives to account for L2 development. Specifically, the interactional nature of communicative and meaning-oriented oral tasks allows for comprehensible input, positive and negative feedback and modified output to occur during focus-on-form episodes benefiting L2 development (Doughty, 2001; Gass & Mackey, 2006; Yanguas, 2012). Most of the research conducted on LREs adopt variations of Varonis and Gass's (1985) model of trigger > indicator > response > reaction to response including the possibility of comprehension checks occurring at every point. These language-related episodes consist of a focus on form triggered by a communication breakdown and have been said to represent language learning in progress (Basturkmen et al., 2002; Swain & Lapkin, 1998). Learners notice a gap between their utterances (or their partners' utterances) and the system of the target language and use several discourse moves, such as clarification requests, confirmation checks, and feedback, as strategies to

maintain the flow of conversation while they negotiate meaning and form during these interactions. In successful episodes, learners reach a mutual understanding and resolve the communication breakdown or misunderstanding by testing the hypotheses they have formed about the target language (Ziegler, 2016). The fact that these episodes get successfully resolved does not guarantee that acquisition is taking place, as B. Smith (2005) brought up in his study of the role of learner uptake in the acquisition of lexical items in text-based and task-based SCMC activities. However, several other authors (Doughty, 2001; Gass & Mackey, 2006; Yanguas, 2012) indicate that these episodes facilitate the occurrence of comprehensible input, positive and negative feedback, and modified output which benefit L2 development.

There have been numerous studies which have examined LREs focusing on instructed second language acquisition (see Loewen & Sato, 2018 for an overview). Most of them come from a long tradition of researching negotiation of meaning within the interactionist perspective (Long, 1996). The literature review for the present paper will focus solely on the categories identified by Gass and Mackey (2006), namely, “Instances in which learners may (a) question the meaning of a linguistic item; (b) question the correctness of the spelling/pronunciation of a word; (c) question the correctness of a grammatical form; or (d) implicitly or explicitly correct their own or another’s usage of a word, form or structure” (p. 190), together with recasts and metalinguistic feedback (Mackey, 2012). The present study examines these categories following the Varonis and Gass’s (1985) model, which identifies the trigger (lexical, phonetic, morphosyntactic and global) as well as the resolution process that categorizes resolved episodes. Episodes which were not fully understood or noticed or ignored in the usual string “indicator > response” (plus the optional reaction to response) were also coded. Van der Zwaard and Bannink (2016) suggested including nonoccurrence of negotiation of meaning (NoM) to be able to provide a truthful picture of learner behavior and task performance when examining LREs.

The Varonis and Gass’s (1985) model has been challenged on many accounts over the years. Although it applies only to written CMC, B. Smith (2003) suggested initial changes to the model to accommodate specific constraints and affordances of the medium (text chat), such as non-adjacent discourse patterns, which according to B. Smith (2003) lead to “split negotiation routines” (p. 48). In another article, B. Smith (2004) claimed that triggers caused by unknown words not included in the original model deserve some attention given that negotiation routines were most often triggered by lexical difficulty. In fact, these types of episodes are included in the current study and prove to be amongst the most common triggers for translanguaging. Additionally, B. Smith (2003) found that reactions to responses are more dynamic than previously reported and they could give way to longer NoM episodes. Along the same lines, Yanguas (2010) claimed that the Varonis and Gass (1985) model falls short in accounting for the interaction which continues after NoM has ended. In the present research, these last two concerns were addressed by means of coding follow-up questions and follow-up explanations or clarifications involving several additional turns and comprehension checks. The Varonis and Gass’s (1985) model has also been applied in various other studies (Blake & Zyzik, 2003; Clavel Arroitia, 2019; Kötter, 2003; Lee et al., 2019; Pennock-Speck & Clavel-Arroitia, 2015; B. Smith, 2005).

Even though previous studies have pointed out the benefits of text-chat over face-to-face (FTF) interaction in NoM, arguing that the text saliency helps in noticing L2 forms and thus improves grammatical competence (Pellettieri, 2000; Salaberry, 2000), only Yanguas (2010) set out to examine the differences between oral CMC, video CMC and FTF communication. He observed significant differences in the way learners carry out negotiations in audio and video CMC and discovered that tasks carried out using only oral CMC fostered more NoM due to the

need to make use of linguistic resources exclusively (without visual cues). However, the fact that he observed that there was more negotiation does not imply that the episodes were all resolved successfully, and Yanguas (2010) himself was cautious about making any claims of oral CMC being more beneficial for L2 development than the other modalities (video and FTF).

Wang's (2006) application of the Varonis and Gass's (1985) model of NoM in desktop videoconferencing revealed that negotiation over this medium has its distinctive features, which include triggers in the form of questions, individual or level-related communication difficulties, communication breakdowns due to the sound and quality of the video, lack of familiarity with the virtual learning environment used, and the use of visual cues, such as facial expressions that promote understanding and communication.

van der Zwaard and Bannink (2014) compared interactions which took place over videoconferencing and over chat to detect possible differences dictated by the medium. Overall, they found fewer instances of NoM and more nonunderstandings in video SCMC than in text/chat SCMC and concluded that this was due to the face-threatening nature and immediacy of videoconferencing. In a later study, van der Zwaard and Bannink (2019) examined interactional patterns in NoM episodes in video SCMS and came up with several trajectories which the interlocutors can take after an expert speaker initiates the episode. These trajectories navigate between task-appropriate and face-appropriate responses. Generally, the former allows the listener to avoid getting into a negotiation of meaning episode. The avoidance of nonunderstandings seemed more common in interactions between native speakers and nonnative speakers. In the present study, some of these phenomena and patterns could be observed in a small portion of the data. However, given the nature of the tandem telecollaborative VE described here, participants were constantly exchanging roles and switching between being language experts and language learners, sometimes even within the same episode. Additionally, the high rate of occurrence of translanguaging which was observed in the corpus, even when the task was meant to elicit data in a given language, paint a more dynamic and nuanced picture, which the model by van der Zwaard and Bannick captures only partially.

## 1.2 | Multimodality in meaning negotiation

Although several recent studies have looked at multimodality, especially in online language learning settings (Akiyama, 2014; Belhiah, 2013; Dahl & Ludvigsen, 2014), only a few have tackled the use of multimodal features in NoM (Lee et al., 2019; Satar, 2015). Gestures are among the most studied features in studies which explore multimodality as semiotic resources employed for meaning-making and communication (Jewitt, 2009) in online contexts. In this sense, the analyses undertaken have focused on examining embodied engagements with digital tools and relate these with the language resources which are employed. Other authors (Jovanovic & van Leeuwen, 2018) have focused on how digital tools mediate interactions between learners to identify the affordances and constraints of a given tool by analyzing learners' use of visual information alongside spoken and written language. There is also a growing amount of research on gestures from the interactionist perspective (Nakatsukasa, 2016).

Van der Zwaard and Bannink (2016) research on nonunderstandings in NoM revealed the need to look out for nonverbal cues on the part of one of the interlocutors (long intraturn pauses, rising eyebrows, etc.) as indications of a lack of understanding that goes unaddressed due to its face-threatening nature. Although they justified the inclusion of multimodal and nonverbal data to identify possible nonunderstandings, the inclusion of these kinds of data in the present study

has additional motivations which go beyond the identification of nonunderstandings. Namely, the use of multimodal and nonverbal data is justified both by the nature of the medium (videoconferencing) and its affordances which makes the study more ecologically valid as these technologies are increasingly being adopted for language learning, and given that linguistic interaction is understood as a fully embodied practice (Belhiah, 2013).

Satar (2015) examined online multimodal interactions taking into account the social presence concept and devised an updated framework which enabled her to analyze multimodal interactions focusing on sustained interactions. Among other findings, she claimed that back-channeling facilitates meaning negotiation online and that learners who used more back-channeling (nods, gestures, and smiles) were perceived as warmer and friendlier reducing the psychological distance between learners. In these online interactions, nonverbal semiotic systems (postures, gaze, and gestures) served as location cues for meaning-making and determined to a large extent how messages were interpreted and understood. This last finding underscores the potential of nonverbal semiotic systems in NoM episodes and justifies its applicability in the context of the present study.

Lee et al. (2019) applied the Varonis and Gass's (1985) model to analyze NoM during video interactions among learners (including gestures) constrained by the use of mobile devices (smartphones). Lee et al. (2019) completed their data collection using a stimulated recall interview to gather learners' impressions of the meaning of certain gestures. The authors found that mainly iconic and deictic gestures supported NoM, providing extra cues that most of the time complement verbal utterances, especially in terms of scaffolding vocabulary learning. The use of mobile devices for deictic functions (pointing to an object) was viewed as a nuanced and complex act which required some practice in coordinating different channels. They found that language learners use gestures both to get their message across and to understand their interlocutors. The use of gestures aiding comprehension supports earlier research (Belhiah, 2013; Dahl & Ludvigsen, 2014; Holler et al. 2012) which indicated that gestures help reinforce "the meaning of verbal utterances, disambiguating the meaning of lexical items, and establishing gestural cohesion across turns" (Belhiah, 2013, p. 417). Similarly, Dahl and Ludvigsen (2014) claimed that gestures aid language comprehension, helping to recall explicit information and comprehend implied information. In their analysis of triadic interactions in FTF settings, Holler et al. (2012) indicated that both gestures and gaze play an important role in how messages are understood.

Gestures, especially iconic gestures, are also instrumental in lexical searches and aid lexical retrieval. They represent an important multimodal resource for language learners in videoconferencing interactions that in turn mediate and constrain the use of gestures (Negueruela & Lantolf, 2009). Research on the use of gestures in interaction has mostly focused on the use of iconic and deictic gestures and their role in aiding oral production, thus helping lexical retrieval (Krauss, 1998) and creating a mental image of the target lexical item during the lexical search (Wesp et al., 2001). Özyürek (2014) suggested that iconic gestures are especially meaningful because they "convey semantic information by virtue of their form-meaning resemblance to the objects and events that they represent" (p. 8). This type of semantic information is also informed by theories of cognition supported by Krauss et al. (1996), who suggested that "gestural representation serves to 'hold' the conceptual properties of a sought-after lexical entry in memory during lexical search" (p. 421). Krauss et al. (1996) also pointed to the need for analyzing gestures used in conversation and communication to reveal how gestures aid comprehension. In their research, they tested how gestures might facilitate comprehensibility by helping listeners construct mental models of the speech of their interlocutors, which partly determined the way that information was decoded and understood.

Akiyama (2014) focused on the use of preemptive and reactive lexical LREs and their ability to promote focus on form during a telecollaborative project. The author analyzed audio and text chat from videoconferencing sessions between Japanese learners of English at a Japanese university and English learners of Japanese at a North American university. The findings highlighted how the SCMC tool's multimodal features (audio, image, chat, and webcam) can aid learners in providing so-called dual feedback. Even though the use of video was not indicated in the task, learners exploited the benefits of using a webcam and images sent through text to provide further explanations during the provision of feedback to their counterparts. This promoted focus on form, clarification of kanji homophones and the occurrence of NoM as well as the provision of feedback with the aid of images or gestures (motions using webcam) during interactive exchanges between learners. Nakatsukasa (2016) investigated whether gestures can be used during recasts to enhance the saliency of a target structure in an experimental study with two feedback conditions (recasts with or without gestures). The results indicated similar scores for grammar tests in all conditions, but the recast plus gestures group exhibited long-lasting gains for the production tests. This seems to indicate that there are some benefits for L2 development when feedback is accompanied with gestures.

In short, gestures contribute a great deal in the comprehension process, in lexical search and retrieval in oral interactions and in L2 development. They aid in understanding how actions are sequentially organized and coordinated along other semiotic resources (gaze, intonation, posture, pauses) and may enhance the saliency of target structures or of the feedback provided in interaction. In the context of the present study, the use of gestures and multimodal elements was mediated and sometimes constrained by screens and devices. Even though the participants in the present study constantly used gestures in their interactions, these were only analyzed when they helped solve language issues as part of LREs. The study's interest lies in the role gestures and multimodal elements play when providing comprehensible input and feedback to L2 learners.

### 1.3 | Translanguaging in SCMC

Although translanguaging and code-switching have been largely researched in language classrooms (Adinolfi & Astruc, 2017; Canagarajah, 2011; García & Kley, 2016; García & Lin, 2016; Kramsch & Huffmaster, 2015; Liebscher & Dailey-O'Cain, 2005), and in CMC (Kötter, 2003; Rao et al., 2016; Zheng et al., 2017), research on translanguaging in online SCMC and VEs is scarce. This section details the few studies which have examined different aspects of translanguaging in oral and written interactive tasks in online or hybrid settings.

Regarding oral interaction in SCMC, Sert and Balaman (2018) examined NoM to negotiate and co-construct task rules essential in the development of interactional competence. The participants interacted orally using a videoconferencing tool, after which several excerpts were analyzed using CA. Although the focus of this study was mainly the negotiation of tasks and its connection to learning opportunities, the analysis included a couple of instances of translanguaging and several multimodal resources which learners used to get their message across. The two switches to Turkish in an otherwise English-speaking task were seen by the learners as transgressions of the task rules (although they were not explicitly instructed about this) and were reconducted by the learners themselves to the use of the target language only.

Zheng et al. (2017) explored translanguaging practices in a three-dimensional virtual learning environment where four young learners of Chinese and English collaborated on a

project decorating a virtual living room and found a strong relationship between translanguaging and object manipulation. The learners helped each other while interacting verbally and translanguaging in English and Chinese to complete a task (putting up a piece of artwork on the wall of a virtual museum) in a situated and contextually rich environment. Translanguaging occurred more frequently when the tasks involved the manipulation of several objects.

Adinolfi and Astruc (2017) examined translanguaging practices in a beginner-level Spanish online audio-based synchronous lesson delivered through a videoconferencing tool. The analysis of teacher–student and student–student interactions revealed frequent use of translanguaging on the part of the teachers, mainly when giving instructions and prompting nonverbal responses, whereas students rarely exhibited any instances of translanguaging.

Focusing on written SCMC, Tudini (2016) analyzed the use of code-switching (and repair) in the speech of two participants—an L1 Italian speaker learning English and an Australian L1 English speaker learning Italian—while they gave each other linguistic feedback as part of repair sequences in an informal written conversation. The use of translanguaging in Tudini (2016) was regarded as an additional interactional and learning resource which helped the participants achieve understanding and indicate affiliation.

B. E. Smith et al. (2017) examined 28 eighth-graders' multimodal code-switching processes when creating a digital project. The authors conducted screen capture, video observations, interviews, and analyzed the multimodal projects. Code-switching (or codemeshing, in the authors' own words) occurred when the students were exploring the composing tool, collaborating with peers, and visually brainstorming using their heritage languages for different purposes during the process, all while becoming increasingly proficient in the use of digital tools and more comfortable with all their linguistic repertoires.

In their study of collaborative blog writing and written online interactions as part of a VE between 22 French learners of Chinese and 24 Chinese learners of French, Rao et al. (2016) set out to explore the development of metalinguistic awareness, plurilingual competence, and bilingual skills by examining the co-construction of knowledge in the interactions between learners during online collaboration. The comments the learners wrote exhibited translanguaging practices involving mostly French and Chinese (but also some English and Japanese) in 20% of their data, unlike blog posts which were mostly monolingual in nature. At the beginning, French learners tended to use their mother tongue more frequently than Chinese learners, who exhibited a more balanced bilingual behavior which was reversed during the second semester. As time went by, the researchers noticed an increase in the use of the target language among French students, but a decrease among Chinese learners. Both groups of learners felt more comfortable translanguaging and using their mother tongues during the second semester, particularly in a conversational context and during communication breakdowns, characterized by an increased involvement in task completion, meaning-making, and interaction.

Kötter (2003) investigated written SCMC (chat) interactions between groups of German and North American college students as part of a VE to understand the feasibility of using text (SCMC) rather than e-mail exchanges (CMC). The author analyzed instances of NoM and translanguaging and found that learners use different strategies for meaning negotiation but, more importantly, they use translanguaging to clarify the meaning of words, to try to convey something they did not manage to entirely convey in the FL, and to avoid conversation breakdowns.

Finally, Walker (2018) examined the affordances of translanguaging practices in a German/English VE where learners interacted online both synchronously and asynchronously to carry out collaborative tasks. Learners expanded their semiotic repertoires (translanguaging)



and contributed to the co-construction of meaning in a wiki and online meetings. During the synchronous online meetings, translanguaging occurred not only in relation to content and language, but also in negotiation of tasks and procedures, during exploratory talk, and when showing mutual support, contributing to the co-construction of meaning (Walker, 2018, p. 18).

The objective of the present article is to further our understanding of the role multilingual and multimodal elements play in FL interaction. Specifically, the aim is to assess the role that multimodality and linguistic repertoires play during NoM and in interactive feedback, an area which remains largely under researched as Ziegler and Phung (2019) note. To do that, it will explore the interactional nature of oral SCMC tasks and the way translanguaging and multimodality help scaffold learners' interactions.

The following are the research questions guiding the present research.

1. What are the characteristics of the LREs which include translanguaging and multimodality?
2. How frequent are translanguaging and multimodality when learners provide feedback, produce modified output or negotiate meaning during LREs?
3. What is the contribution of translanguaging and multimodality in helping repair utterances and successfully resolving LREs?
4. How does the interplay of translanguaging and multimodality instantiate in LREs?

## 2 | METHOD

### 2.1 | Participants

The participants in the present study were 36 college-level learners of Spanish ( $N = 18$ ) and English ( $N = 18$ ) as a FL. They participated in a tandem-telecollaboration VE between two higher education institutions, one in Spain and the other in Canada. The learners at the Spanish university were taking an advanced English language course, and the learners at the Canadian university were taking a high-intermediate Spanish language course. The learners in the Spanish institution were mostly bilingual Catalan-Spanish speakers except for one learner who was a Spanish speaker from Latin America. The learners at the Canadian institution were L1 English speakers, and most of them had a good command of French except for two who did not know French. Out of these two speakers, one was originally from an English-speaking region in East Asia and the other one was an English–Arabic bilingual speaker originally from the Middle East.

There were 25 female and 11 male students who were distributed among three age groups: 10 students (28%) aged between 18 and 21, 13 (36%) between the ages of 21 and 25, and 13 (36%) were over 25. Overall, the students at the Canadian university were slightly younger than the ones at the Spanish university: Most of the Spanish students ( $N = 12$ ) were over 25, whereas most of the students at the Canadian university were aged either 18 to 21 ( $N = 9$ ), or 21 to 25 ( $N = 9$ ), and only one was over 25.

Most of the participants reported having either an intermediate ( $N = 14$ , 39%) or an upper intermediate ( $N = 10$ , 28%) level of proficiency in the target language, and eight of them (22%) reported having an advanced level, two of them an upper beginner proficiency level ( $N = 2$ ) and two more a high advanced level ( $N = 2$ ). Among the Spanish learners, most of them placed themselves in either the upper intermediate ( $N = 9$ ) or the advanced ( $N = 7$ ) proficiency level group, whereas most learners at the Canadian university placed themselves in the intermediate

group ( $N=14$ ). This largely corresponded to their actual placement on the advanced and intermediate language courses being taken by each group at their respective institutions.

Most learners reported having studied the target language for between 1 and 3 years ( $N=22$ ). The remainder of the students reported having studied the target language for between 4 and 6 years ( $N=6$ ), or for more than 6 years ( $N=6$ ). Only four out of the 36 students reported previously having taken part in a VE program.

## 2.2 | Procedures

Over the course of two and a half months, the VE required the learners to take part in three two-way open-ended communicative tasks which involved information exchange, decision-making, and comparison and analysis. The tasks were adapted from the Spanish university's regular semester-long syllabus and were carried out in pairs (a learner of English and a learner of Spanish) using a videoconferencing tool which allowed them to video record the conversations (Skype). The video recordings were sent to the researcher and to the language teachers at each institution for assessment purposes. The three tasks (see Appendix A), which varied in length but had to include at least 15 min of talk in each target language, were graded by language teachers at each institution (see the assessment rubric in Appendix B).

## 2.3 | Data treatment and analyses

A total of 761 LREs were transcribed, anonymized and coded for meaning negotiation, modified output, self-repairs, feedback, multimodality, translanguaging, and the successful or unsuccessful resolution of the episodes. Additional variables were added to further code instances of multimodality and translanguaging, identify the languages involved and the type of multimodal elements learners used in these episodes. That included coding the use of gestures, postures, gaze, and multiple digital and physical devices (mobile devices, computers, props, and notes) whenever they occurred. Earlier studies (McNeill, 1992) have shown that the gestures under scrutiny here are produced together with speech with a communicative intent. Therefore, out of the several categories which Krauss and Hadar (1999) discussed, the present study focuses on iconic and deictic gestures—representing meaning and pointing or signaling, respectively—to analyze the manner in which they may or may not aid in the meaning negotiation process. Seedhouse and Richards (2007) transcription conventions (see Appendix C) were used to transcribe the LREs. A portion of the data (75%) was recoded by a second coder to establish interrater reliability. The amount of agreement reached 0.92 percent in the first round and was calculated by a simple percentage of agreement. The LREs which showed discrepancies between the two coders were further discussed in detail until consensus was reached.

The data were treated from two different but complementary approaches. According to Creswell et al. (2007), mixed methods research “involves the use of both approaches in tandem so that the overall strength of a study is greater than either quantitative or qualitative research” (p. 29). Therefore, in this article, data will first be presented quantitatively using basic descriptive statistics to answer research questions 1–3 and then examined subsequently from a qualitative perspective to answer the fourth research question. The qualitative analysis involved examining the interactional nature of the tasks where both translanguaging and multimodality converge and contribute to the meaning negotiation, feedback and modified output instances. The analysis of gestures in interaction

was analyzed using CA conventions (Belhiah, 2013; Mori & Hayashi, 2006), whereas the analysis of LREs from a multimodal perspective (Lee et al., 2019) was done by analyzing turns including gestures, multilingual speech, and multimodal elements. The present article adopts both of these perspectives to illustrate the interplay of translanguaging and multimodality during LREs.

### 3 | RESULTS

The findings of the present study are presented in two different sections that focus on two different aspects. The first section provides an account of the presence, frequency, and characteristics of the translanguaging and multimodality observed in the LREs to answer research questions 1–3. The second section takes a more qualitative approach to examine how both translanguaging and multimodality contribute to the meaning negotiation process which takes place during LREs to answer research question 4.

#### 3.1 | Translanguaging and multimodality in LREs

The LREs' initial language was mostly Spanish ( $N = 517$ ,  $M = 0.80$ ,  $SD = 0.47$ ), with English being used as the starting language on fewer occasions ( $N = 224$ ,  $M = 0.29$ ,  $SD = 0.46$ ). The initiators were mostly Canadian learners ( $N = 491$ , 64%) and the episodes usually started when the learners were using their target language ( $N = 445$ , 58%).

##### 3.1.1 | Characterizing LREs involving translanguaging and multimodality

To respond to the first research question, which asked about the characteristics of the LREs that involved translanguaging and multimodality, and as can be seen in Table 1, out of the total number of LREs analyzed ( $N = 761$ ), learners used translanguaging in almost half of them, on 345 occasions ( $M = 0.45$ ,  $SD = 0.50$ ). Translanguaging involved mostly the use of Spanish and then English ( $N = 292$ ,  $M = 84.6$ ,  $SD = 36$ ), although in some cases the learner started in English and continued in Spanish in 13% of the LREs. Other languages or language varieties were used on nine occasions.

The other languages involved were French, on six occasions, German, on two occasions, and in one case, it involved a discussion about the meaning of a lexical item in different linguistic varieties of Spanish, specifically, between Peninsular Spanish and Colombian Spanish.

Regarding the frequency of occurrence of multimodal elements and the types which can be identified, as displayed in Figure 1, there were fewer episodes involving multimodality ( $N = 60$ ,  $M = 0.08$ ,  $SD = 0.27$ ) than translanguaging. Multimodality mostly involved the use of devices (computers and phones in 49 cases), taking notes (on five occasions), using gestures (on five occasions) and in just one case, using props while they were interacting orally with their interlocutors on a videoconferencing tool. The use of more than one multimodal element simultaneously in the same LRE was also common.

The use of different devices mostly involved looking up words in an online dictionary in 27 out of the 49 cases, and writing something in the chat on 21 occasions. On two occasions, learners were observed showing their interlocutors something written on their phone screen by bringing the phone up to the webcam. One of the phone's uses was to show a word's translation from English into Spanish, and most of the uses of the videoconferencing tool's text chat feature

**TABLE 1** Languages involved in translanguaging

	<b>N</b>	<b>Mean</b>	<b>SD</b>
Spanish into English	292	84.6	36
English into Spanish	45	13	34
Involving other languages	9	3	16
Total	346		

involved writing down a word that the other interlocutor could not understand or was not sure how to spell. These uses occurred mostly during lexically triggered LREs and became part of the meaning negotiation process.

Translanguaging occurred most frequently when the trigger was a question from the initiator of the LREs to their partner, the more proficient speaker, about a lexical item in the target language, regarding the meaning of a word or how to pronounce it. These are preemptive (rather than reactive) LREs which are initiated by the learner without a communication breakdown (Loewen, 2005). A typical example would be the expression: *¿Cómo se dice X (en español)?/How would you say X (in Spanish)*. As can be observed in Table 2, this occurred at a very high rate ( $M = 0.66$ ,  $SD = 0.47$ ) and was closely followed in frequency by the use of the nontarget language when learners were trying to clarify the meaning of something they could not convey in the target language ( $M = 0.62$ ,  $SD = 0.47$ ). Following that, translanguaging was also very common ( $M = 0.61$ ,  $SD = 0.49$ ) in response to hesitations on the part of the less proficient speaker about a lexical item and expression, or the pronunciation of a particular word. Therefore, in these cases, it was the more proficient speaker who provided the lexical item their partner was looking for. Translanguaging during the provision of feedback was much less frequent ( $M = 0.33$ ,  $SD = 0.31$ ). During meaning negotiation, most translanguaging occurred during clarification requests ( $M = 0.16$ ,  $SD = 0.37$ ) or when providing follow-up explanations ( $M = 0.16$ ,  $SD = 0.36$ ), and on fewer occasions when asking follow-up questions ( $M = 0.11$ ,  $SD = 0.32$ ). Given that modified output is only considered as such when it involves only the use of the target language, modified output by definition cannot include translanguaging and was excluded from the analyses of this part of the data; it was only included when examining the use of multimodal elements.

As we can observe in Table 3, the LREs which included multimodal elements were used mostly in response to a question by the initiator of the LREs about a lexical item in the target

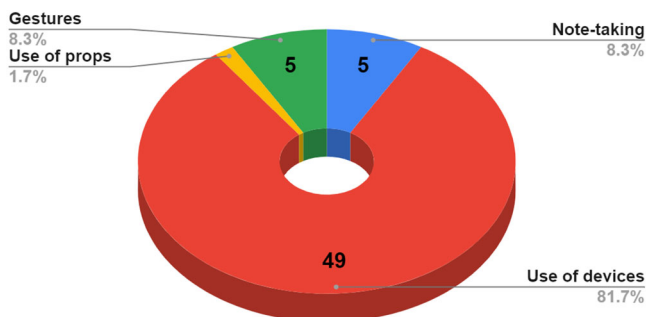
**FIGURE 1** Use of gestures and multimodality [Color figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

TABLE 2 Most common translanguaging occurrences

	Mean	SD
Translanguaging to ask about pronunciation or meaning of a lexical item	0.66	0.48
Translanguaging to clarify the meaning of something they could not convey in the target language	0.62	0.47
Translanguaging to provide the lexical item or pronunciation the interlocutor is looking for	0.61	0.49
Translanguaging to provide feedback	0.33	0.31
Translanguaging during reformulations	0.12	0.32
Translanguaging during clarification requests	0.16	0.37
Translanguaging during follow-up explanations	0.11	0.32
Translanguaging during follow-up questions	0.05	0.22

language. They were usually asking their partner, the more proficient speaker, the meaning of a word or how to pronounce it ( $M = 0.55$ ,  $SD = 0.50$ ), the so-called preemptive LREs. The use of multimodal elements was also frequent in response to hesitations on the part of learners due to doubts about a lexical item or expression, or the pronunciation of a particular word ( $M = 0.43$ ,  $SD = 0.50$ ). The presence of multimodal elements during the production of modified output occurred mostly when lexical modified output was produced ( $M = 0.63$ ,  $SD = 0.10$ ), when reformulations were used ( $M = 0.13$ ,  $SD = 0.34$ ), and during modified phonetic output ( $M = 0.10$ ,  $SD = 0.30$ ), but rarely when morphosyntactic modified output was produced. During meaning negotiation, most multimodal elements occurred during clarification requests ( $M = 0.22$ ,  $SD = 0.42$ ), follow-up explanations ( $M = 0.23$ ,  $SD = 0.43$ ), follow-up questions ( $M = 0.23$ ,  $SD = 0.43$ ), and finally when asking negotiation questions ( $M = 0.12$ ,  $SD = 0.32$ ). However, multimodal elements during the provision of feedback were very rare ( $M = 0.17$ ,  $SD = 0.38$ ).

### 3.1.2 | Translanguaging and multimodality during LREs

The second research question inquired about the frequency in which translanguaging and multimodality were present when learners provided feedback, produced modified output, or negotiated for meaning during LREs. Table 4 displays the translanguaging instances which occurred at higher rates when learners produced meaning negotiation ( $M = 0.42$ ,  $SD = 0.49$ ), but which were less common during the provision of feedback. Multimodal episodes, which were much less common overall, were slightly more common during meaning negotiation and during the production of modified output. If we compare this with the episodes where both translanguaging and multimodality occur, we see that the combination of both does not occur during the provision of feedback or during meaning negotiation. The provision of feedback occurred mostly in episodes where there was no use of translanguaging or multimodality ( $M = 0.46$ ,  $SD = 0.50$ ).

The third research question was aimed at determining how translanguaging and multimodality contributed to repairing learners' nontarget-like utterances and successfully resolving LREs. The data reported in Table 5 include self-repairs (as opposed to no repairs or unsuccessful repairs) and resolutions where LREs were understood (as opposed to not understood or not noticed). During LREs in which translanguaging occurred, learners repaired their

TABLE 3 Most common multimodality occurrences

	Mean	SD
Multimodal features to ask about pronunciation or meaning of a lexical item	0.55	0.50
Multimodal features to provide the lexical item or pronunciation the interlocutor is looking for	0.43	0.50
Multimodal features when clarifying the meaning of something	0.22	0.42
Multimodal features during lexical modified output	0.63	0.49
Multimodal features during reformulations	0.13	0.34
Multimodal features during phonetical modified output	0.10	0.03
Multimodal features during morphosyntactic modified output	0.05	0.22
Multimodal features during clarification requests	0.22	0.42
Multimodal features during follow-up explanations	0.23	0.43
Multimodal features during follow-up questions	0.12	0.32
Multimodal features during feedback	0.17	0.38

nontarget-like utterances quite often ( $M = 0.66$ ,  $SD = 0.66$ ). Self-repairs were even more frequent in utterances where multimodality occurred ( $M = 0.75$ ,  $SD = 0.44$ ) and when translanguaging and multimodality co-occurred ( $M = 0.75$ ,  $SD = 0.44$ ), but were less frequent when neither translanguaging nor multimodality occurred ( $M = 0.63$ ,  $SD = 0.48$ ).

Similarly, when translanguaging occurred, the linguistic issue which caused the episode was mostly understood by the interlocutor and, thus, the episode was resolved successfully most of the time ( $M = 0.92$ ,  $SD = 0.27$ ) and almost equally in episodes which involved multimodal features ( $M = 0.91$ ,  $SD = 0.28$ ). However, when both translanguaging and multimodality occurred simultaneously, there was an even higher chance that the episode would be successfully resolved ( $M = 0.95$ ,  $SD = 0.22$ ), which contrasted with a slightly lower rate of resolutions in episodes where neither translanguaging nor multimodality occurred ( $M = 0.90$ ,  $SD = 0.29$ ).

This seems to indicate that multimodality aids learners in repairing their nontarget-like utterances, but both translanguaging and multimodality seem to contribute equally to the LRE's being understood. It is the co-occurrence of both translanguaging and multimodality together that seems to make a larger contribution to the episodes being resolved, in contrast to what occurred in episodes where neither of the two variables were present.

To answer the fourth research question, the following section provides a closer qualitative look at instances in which both translanguaging and multimodality co-occurred, which, according to what we just observed, seems to play a special role in the production of modified output, the use of repair sequences and the successful resolution of LREs.

### 3.2 | The interplay of translanguaging and multimodality in the meaning negotiation process

The excerpt presented subsequently was chosen as an illustrative and representative example that displays the type of interplay translanguaging and multimodality exert during the meaning

negotiation process that takes place during LREs. This example corresponds to an LRE which has a lexical trigger and focuses on NoM around a lexical item.

Excerpt 1 shows how learners use translanguaging involving three languages and iconic gestures around a lexical item simultaneously. The use of gestures, gaze and head movements framed by the computer screen and the videoconferencing tool window continues throughout the episode, combined with constant translanguaging between Spanish and English, until the episode gets resolved with the aid of an additional mobile device (the phone screen) as a text support.

Excerpt 1

Dyad 21. Videoconferencing on the computer from their room (00:11:35-00:12:15).



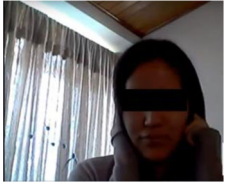

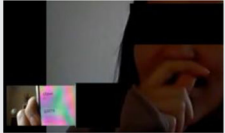

Turn	Transcript	Multimodality
1	J: <i>Yo tengo un(.) a claw.</i> ((He makes the sign of a claw with his => finger)) [I have a]	
	L: ((She repeats the sign of a claw))	
2	J: A:: L: ((She shakes her head, signaling she doesn't understand))	
3	J: <i>En francés es una griffe?</i> ((She places her hands on her ears to adjust her earbuds))=> [In French it's a claw]	
4	L: I don't know e::	
5	J: Un e::	
6	L: <i>Gancho?</i> [hook]	
7	J: ((He looks it up on the online dictionary on his phone)) <i>It's a claw, un garra?</i> ((pronounces it /gara/)). <i>Ge a erre a. Garra?</i> ((pronounces it /gara/)) [a claw?] L: ((She lifts her eyebrows and tilts her head, signaling she doesn't understand and laughs))	
8	J: ((He brings his phone up to the screen and shows her the word on his phone)) => L: Ah::: Okay! Yes, garr(.) (What. why...?)	
9	J: <i>Tengo un garra de oso polar?</i> [I have a polar bear's claw]	
10	L: A::: ((Lifts her eyebrows indicating surprise)).	

TABLE 4 Feedback and negotiation during language-related episodes

	Feedback			Negotiation		
	<i>N</i>	Mean	<i>SD</i>	<i>N</i>	Mean	<i>SD</i>
Translanguaging	24	0.11	0.32	93	0.42	0.49
Multimodality	11	0.05	0.22	21	0.09	0.29
Total	214			224		
Translanguaging + multimodality	38	0.05	0.22	9	0.22	0.42
Total	40					
Other	181	0.46	0.50	119	0.30	0.50
Total	396					

The episode starts (1) with the use of the target language, Spanish, and of an iconic hand gesture by Josh (a pseudonym, henceforth “J,” the learner from the Canadian institution), who uses the hand gesture to symbolize the word “claw” which he does not know in Spanish. Lola (a pseudonym, henceforth “L,” the learner from the Spanish institution) mirrors his use of the gesture but fails to understand its meaning and shakes her head, signaling she does not understand (2). Hoping to use a word that may be closer to the Spanish target lexical item, J provides the French equivalent of the word he is looking for (3), at which point L places her hands over her ears to adjust her earbuds in an attempt to concentrate and hear the word properly. However, she fails to understand the French equivalent and uses her target language to express this (4). Then, as J is about to try his chances in Spanish (5), L takes a guess based on the iconic symbol he used at the beginning and asks (6) whether the lexical item he is trying to convey is *hook* (*gancho*, in Spanish). J proceeds to look up the word in the online dictionary using his phone and provides the lexical item in Spanish (*un garra*) (7) but misses the right gender (*garra* is feminine in Spanish) and pronounces it with an alveolar tap [r], more typical of an intervocalic position in English, rather than the alveolar trill [r] in Spanish. Consequently, L does not understand what he is trying to say and indicates so by lifting her eyebrows, tilting her head and laughing. Finally, J brings his phone up to the webcam and on the computer screen we can read the word *claw* in English along with its Spanish equivalent, *garra* (8). Finally, she understands what he means, uttering multiple confirmation words (“Ah, okay! Yes”) and looks puzzled trying to understand why he would have a claw at home. Finally, he explains in the target language: *Tengo un garra de oso polar?* (*I have a polar bear’s claw*) (9), which she understands lifting her eyebrows to indicate surprise (10).

## 4 | DISCUSSION

Considering overall numbers, translanguaging instances are more common than multimodal elements. Canadian students, in particular, use translanguaging more often than their Spanish counterparts to clarify something they could not understand, a message they could not convey or to ask for the meaning of a word, a finding similar to Kötter (2003) who found that American students preferred to switch into English rather than paraphrasing in the L2. However, the functions of translanguaging instances and the use of multimodal elements during LREs draw a



TABLE 5 Self-repairs and resolutions in language-related episodes

	Self-repair			Resolutions			Total
	N	Mean	SD	N	Mean	SD	
Translanguaging	220	0.66	0.66	317	0.92	0.27	345
Multimodality	45	0.75	0.44	55	0.91	0.28	60
Translanguaging + multimodality	30	0.75	0.44	38	0.95	0.22	40
Other	251	0.63	0.48	357	0.90	0.29	396

more complex and intricate picture. To determine how each element contributes to meaning negotiation in LREs and the interconnections between the two requires the adoption of a more nuanced approach. The lack of earlier studies examining both elements jointly in oral interaction contexts—Kötter (2003) examined only written SCMC interactions—makes it particularly difficult to link the findings of the present research to earlier work on LREs. The fact that most occurrences of translanguaging and multimodality occurred during lexically triggered LREs or when a lexical item was being discussed is consistent with earlier research that indicated that lexically triggered LREs lead to more negotiation and modified output (Akiyama, 2014; Blake & Zyzik, 2003; Canals, 2020; B. Smith, 2004; Yanguas, 2010). Given that most translanguaging instances and multimodal elements revolve around asking or clarifying the meaning of a lexical item and providing the sought-after lexical item, it would be expected that they all happen during lexically triggered LREs. Additionally, but in contradiction with existing literature linking multimodality with higher feedback rates (Ziegler & Phung, 2019), the fact that translanguaging and multilingual elements rarely occurred during the provision of feedback seems logical given that when providing feedback learners usually focused solely on their dominant language, which was the target language of the other half of the learners participating in the study.

Multimodal elements are quite frequent when learners produce modified output which indicates that multimodal elements contribute to the lexical retrieval process, as Krauss and Hadar (1999) suggested. Multimodal elements and the combination of both multimodal elements and translanguaging are more frequent during self-repairs. The present study's findings indicate that, during meaning negotiation, the use of translanguaging was particularly frequent, whereas the use of a combination of multimodal elements and translanguaging was more frequent during LREs that were successfully resolved. This is confirmed by Yanguas and Bergin (2018) who also observed a higher rate of resolutions in the video chat than in the audio chat, indicating that the quality and focus of the interaction may have been affected by modality. Similarly, Warschauer (1995) and Freiermuth and Jarrell's (2006), in two studies comparing FTF and online communication, concluded that learners in FTF settings have greater difficulties sustaining interactions in the L2 whereas online discussions and text chats provided more processing time and contributed to scaffolding more robust conversations and enhanced willingness to communicate.

The benefits of the co-occurrence of translanguaging and multimodality in video conversations can also be explained by the theory of salient features by Ziegler and Mackey (2017), which in this case is particularly enabled by SCMC. Translanguaging and multimodal elements increase learners' ability to notice target items and gaps between their interlanguages and the

target language. In Ziegler and Mackey's (2017) words, "we can speculate that it [SCMC contexts] may be more facilitative of noticing certain target forms than FTF interaction" (p. 86). Similarly, Yanguas and Bergin (2018) also argue that regardless of whether gestures aid oral communication, they do seem to signal an upcoming communication problem. In fact, Zheng et al. (2017) also found that translanguaging was more common when the tasks involved the manipulation and decisionmaking about several (virtual) objects.

The qualitative analysis of a specific LRE, where both translanguaging and multimodality co-occurred, allowed us to observe the interplay between all these elements in a given interaction. In this interaction, we can see how oral (translanguaging involving Spanish, English and French), visual, and textual elements coexist and how learners use gestures, multimodal elements, and translanguaging strategically as "embodied completions" to secure mutual understanding (Belhiah, 2013). We could observe the use of a hand gesture as an iconic mime, according to McNeill, (1992) categorization of gestures. This iconic gesture served as a substitute for speech and helped the lexical search (Negueruela & Lantolf, 2009; Wesp et al., 2001), lexical retrieval (Krauss & Hadar, 1999), and in providing comprehensible input (B. Smith, 2004), which triggered the beginning of the meaning negotiation process.

The use of the icon was insufficient in retrieving the lexical item in either language: The learner of Spanish could not produce the target word and the learner of English could not understand the English or French versions of the word with the aid of the iconic symbol. However, the gestural representation could still serve a cognitive function. According to Krauss et al. (1996), it could serve to keep the conceptual properties of the "sought-after lexical entry in memory during lexical search" activated (p. 421) and perhaps create a mental image of the word during the lexical search (Wesp et al., 2001).

Given that the interplay between translanguaging (Spanish into English and into French) and gestural information did not succeed, the interlocutor resorted to other means of reaching an understanding by making a guess (the use of *gancho* or "hook"), which in his amplified model B. Smith (2003) referred to as "testing deductions." The initiator of the episode then decided to exploit the affordances of the tools at his disposal. He used an online translator first and, when that failed, resorted to spelling the word, after which he managed to finally provide a textual aid by means of another tool, the smartphone's screen, showing the translation of the lexical word through the webcam. Therefore, the learner, once he had found the target lexical item he was looking for, resorted to several actions, not to compensate for his lack of competence—at that point he knew the target word—but rather to get his message across to his interlocutor. In doing so, he resorted to the means at his disposal to amplify the meaning of the lexical item (Belhiah, 2013) integrating semiotic and linguistic resources with embodied resources.

In light of the results, we could observe the use of multiple devices to support the meaning negotiation process, thereby showing the affordances as well as the constraints that technological tools play in elucidating meaning. We have seen how learners negotiated for meaning by alternating speech and writing in the chat window of the videoconferencing tool or on their smartphones, similar to Sindoni (2014). Head, face, and eye expressions were used to indicate lack of understanding and surprise therefore reinforcing the verbal cues and aiding L2 comprehension. This particular use of gestures or "non-understanding visualized through facial expressions" was also noticed by Wang (2006), who drew attention to the potential of videoconferencing tools to aid understanding in interactions between interlocutors—in his case between researchers and participants and in our case among peers. Lee et al. (2019) also emphasize what could be deduced from the quantitative data and observed in the excerpt

above: “the meaning contained within L2 gestures frequently duplicated or emphasized the linguistic portion of the message, rather than adding new information” (p. 27).

## 5 | CONCLUSIONS AND LIMITATIONS

The findings of the current study allowed us to observe how gestures play a role in providing comprehensible input to L2 learners and their production of modified output, something deemed pivotal for the development of the target language (B. Smith, 2004). It also showed how learners respond to the affordances and constraints of the tools at their disposal in their dialogic practices. The present study contributes to the growing body of research (Belhiah, 2013; Lee et al., 2019; Özyürek, 2014) which envisions language as an embodied, multimodal, and holistic practice in which the interplay between gestures, gaze, multimodality, and multilingual repertoires reinforces speech, helps disambiguate meaning and contributes to meaning-making during meaning negotiation. In turn, the use of translanguaging and multimodality themselves provides an environment facilitative of NoM and interaction in oral SCMC.

At the same time, we could observe that translanguaging plays an important role in scaffolding learning while showing the productive ways in which learners use multiple and varied linguistic resources. There is a need for more research examining these issues in oral SCMC as part of the VE or tandem telecollaboration. For instance, analyzing oral interactions in English-lingua-franca VEs to be able to compare different interlocutor groupings.

A clear limitation of the current study is the lack of additional means of clarifying what the use of gestures meant for the learners participating in the VE. The use of focus groups or individual interviews using a stimulated recall procedure could shed more light on the motivations for using certain gestures or translanguaging. This could also allow future studies to include learners’ interpretations of the multimodal elements, gestures, and translanguaging practices used. The nature of the VE did not allow data to be gathered for an extended period of time, which could have also provided data to understand how these practices developed over time among the pairs once they had become more fluent in the use of multimodal elements, perhaps creating idiosyncratic practices as interpersonal relations prospered.

The present research indicates that the interactions occurring in VEs foster meaning negotiation which is amplified by the use of multimodal elements and translanguaging leading to enhanced noticing, self-repairs, and comprehension, all potentially beneficial for L2 development. As already indicated, there is a need to investigate VEs where English acts as a lingua franca and between speakers with different language backgrounds. In fact, earlier studies investigating interactions between English learners and proficient speakers of English in a nontandem-based VE (van der Zwaard & Bannink 2014) yielded different results from those of the present article. Van der Zwaard and Bannink (2014) noticed fewer instances of NoM but they reported many more nonunderstandings during videoconferencing sessions compared with chats. In another article using the same corpus, van der Zwaard and Bannink (2016) reported that the prevalence of nonoccurrence of negotiation was putting task completion at risk.

Regarding possible pedagogical implications in FL settings, the present study enriches current knowledge of educational practices by providing additional evidence of how learners benefit from interactional practices while carrying out oral tasks in SCMC settings as part of VEs. The relationships learners establish in a tandem-based VE, rather than inhibiting the use of NoM, noticing and feedback, seem to provide a safe context where both interlocutors have a

similar status as learners and experts, therefore fostering an atmosphere of trust that reduces the possible face-threatening effects found in other studies (van der Zwaard & Bannink 2014).

Additionally, this article's findings, by underscoring the importance of the interplay between gestures, multimodality, and multilingual repertoires to meaning-making in dyadic interactions between learners, contribute to raising awareness of the importance of prompting their use in online language tasks. This has direct implications for task designers, who could consider the need for students to actively use all these resources in their interactions with other learners when designing oral interactive tasks in FL teaching contexts. The need to incorporate gestures, multimodal, and multilingual repertoires should perhaps be made explicit to the learners in task instructions and not be penalized or discouraged by assessment practices. This is particularly important in SCMC contexts, where the affordances and constraints of the tools at our disposal must be constantly evaluated for their suitability to facilitate rather than hinder oral interaction and successful meaning-making between learners.

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## APPENDIX A: DESCRIPTION OF THE MANDATORY TASKS AND LINKS TO THE TASK INSTRUCTIONS

### Task 1

<https://drive.google.com/file/d/1FvVkvM4VtMqyPIIpr4znStmgJo83QsTm/view?usp=sharing>

### Task 2

<https://drive.google.com/file/d/1pa2HZZo1yb5JskjRqdWniKPI1fE2kSSP/view>

### Task 3

<https://drive.google.com/file/d/1OIqKU-hm79owSGnKP1Mfu1HSUEVCguEX/view>

## APPENDIX B: RUBRIC USED TO ASSESS THE ORAL INTERACTION BETWEEN PARTICIPANTS IN THE STUDY

<https://drive.google.com/file/d/1XoGIMirDDqtFCsSgSlVkuG6zB6aTVkmW/view?usp=sharing>

## APPENDIX C: SEEDHOUSE AND RICHARDS (2007) TRANSCRIPTION CONVENTIONS USED

Meaning	Convention
Use of languages other than English	<b>bold</b>
Initial of speaker	L capital letter
No gap between two turns	=
Short pause	(.)
Pause marked by seconds	(3.)
Rising intonation	?
Animated/emphatic tone	!
Lengthening of the vowel	e: e::
Full stop indicating falling intonation (final)	.
Especially loud sound or stressed word	CAPITAL
Marked shift into higher or lower pitch	↑↓
Utterance noticeably quieter than surrounding talk	* *
Smiley voice	J
Unclear unintelligible speech	()
Transcriber doubt about a word	(guess)
Nonverbal action or editor's comments	((A is looking at B))
Lapse of time	[...]
Languages	Transcription in English; Bold in Spanish