Modern language: Interaction in conversational NS-NNS video SCMC eTandem exchanges

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Abstract

This study investigates the interaction of native speaker–non-native speaker (NS-NNS) dyads engaged in conversational interaction as part of a video-based synchronous computer mediated communication (VidSCMC) eTandem language program. Previous work has indicated certain advantages of NNS-NS conversational interaction for language learning (e.g., Nakahama et al., 2001); however, this potential has not been tested empirically for interaction in voice-based synchronous computer mediated communication (SVCMC) platforms, despite their growing popularity among language learners (Yanguas & Bergin, 2018). Participants were 18 university students (9 L1 English-L2 Spanish; 9 L1 Spanish-L2 English) taking part in a VidSCMC eTandem language partnership between two universities, in the United States and Mexico. Building on previous interactionist work on synchronous computer mediated communication (SCMC), language related episodes (LREs) were analyzed for quantity, trigger type, initiator, reactive or preemptive status, instances of negotiation, and the provision of negative feedback. Results show a remarkably even distribution of LRE types and linguistic foci, with NSs and NNSs taking equal responsibility in promoting globally- and locally-focused target language (TL) comprehension and output through their engagement in LREs. These patterns are reflective of the simultaneously shared status of learner and expert by the members of NS-NNS eTandem exchange dyads. Results are discussed in light of the changing relationship between language and language learners brought on by modern technologies.

Keywords: Computer Mediated Communication, Second Language Acquisition, eTandem, Interaction

Language(s) Learned in This Study: Spanish, English


Introduction

SCMC has long been described as a transformative force for language learning (e.g., Ortega, 1997), most notably for its ability to provide opportunities for the kind of attention to form through meaningful interaction thought to be facilitative of second language acquisition (SLA) (Long, 1991, 1996). Since the turn of the century, a proliferation of studies has sought to explain and quantify SCMC’s ability to promote language learning through the operationalization of negotiation routines (Varonis & Gass, 1985) and the language related episode (LRE), defined as those parts of interactive exchanges where language learners “talk about the language they are producing, question their language use, or correct themselves or others” (Swain & Lapkin, 1998, p. 326). In line with the emergence of CMC technologies over time, this research has centered largely on text-based SCMC (e.g., Blake, 2000; Fernández-García & Martínez-Arbeláiz, 2003; Kötter, 2003; Lai & Zhao, 2006; Shekary & Tahirian, 2006; Rouhshad et al., 2016; Yılmaz, 2011), though recent work has started to investigate audio- and video-based SCMC modes (e.g., Bueno-Alastuey, 2013; Jepson, 2005; Yanguas, 2010, 2012; Yanguas & Bergin, 2018).

The increased availability and use of voice-based SCMC (SVCMC) technologies - whether audio (AudSCMC) or video (VidSCMC) - has transformed the relationship between language learners and SCMC
in recent years (Yanguas & Bergin, 2018). Access to these platforms is now commonplace for many students, not through desktops in university language laboratories but via laptops and smartphones carried on their person throughout the day. For learners in foreign language (FL) settings, the shift of CMC from text- to audio- and video-based platforms offers the possibility to engage with native speakers (NS) of the target language (TL) to “practice oral skills that they will need in the real world” (Yanguas, 2010, p. 86). This type of interaction allows learners to overcome many obstacles to oral TL development presented by traditional classroom study (Bueno-Alastuey, 2011), not least of all the impression that TL communication lacks authenticity due to the shared first language (L1) status of students (Zhao, 2005). To date, empirical research on the ability of AudSCMC and VidSCMC to foster interaction that is facilitative to SLA has been scant (e.g., Bueno-Alastuey, 2013; Jepson, 2005; Yanguas, 2010, 2012; Yanguas & Bergin, 2018), and has only rarely analyzed interaction between non-native speaker (NNS) students and their native speaker (NS) counterparts (e.g., Bueno-Alastuey, 2013).

One of the most common applications of SVCMC technologies is in remote dyadic language tandem partnerships, or eTandem exchanges (for overviews, see Lewis & O’Dowd, 2016; O’Dowd, 2016). Recent work has reported various linguistic and communicative benefits of eTandem exchanges (e.g., Akiyama & Saito, 2016; van der Kroon et al., 2015; Tian & Wang, 2010), though with few exceptions (e.g., Akiyama, 2014) this work has not taken an interactionist perspective. As in SVCMC research more broadly, such research has focused on exchanges that are closely controlled for task, and has not examined eTandem interaction that is conversational in nature (with the exception of Cappellini, 2016), despite the prevalence of this model of eTandem communication (Akiyama & Cunningham, 2018). Nevertheless, there is reason to believe that such eTandem interaction is particularly well suited to promote reciprocity and learner autonomy, the guiding principles of (e)tandem exchanges (Brammerts, 2001). Indeed, previous research has argued that face-to-face (FTF) interaction is especially conducive to acquisition due to participants’ shared status as both learner and expert (Fernández-García & Martínez-Arbelaiz, 2014), as well as the conversational nature of the interaction (Nakahama et al., 2001).

No study has yet explored the extent to which these benefits are available to language learners in SVCMC; however, this information would be invaluable to decision making around how to best take advantage of modern language learning technologies. The present study analyzes the interactional patterns present in the LREs of 18 L1 English-L2 Spanish and L1 Spanish-L2 English speakers participating in a VidSCMC eTandem language program. This application of LRE analysis to SVCMC builds on previous work, accounting for negotiation of meaning and negative feedback as they emerge from both preemptive and reactive LREs (Ellis et al., 2001), shown to be salient in non-task-based NS-NNS interaction (Fernández-García & Martínez-Arbelaiz, 2014; Nakahama et al., 2001).

**Literature Review**

**Interaction and SCMC**

In line with the emergence of technologies, early CMC studies focused on text-based communication, citing its ability to overcome the historical divide between speech and writing through a merging of the interactional and reflective aspects of language (Warschauer, 1997). It was proposed that CMC “affords equal opportunities for participation to all members” involved in the interaction, the benefit being that “each learner [is] exposed to more input and thus would, theoretically, have more opportunities to get comprehensible input” (Fernández-García & Martínez-Arbelaiz, 2003, p. 115). Beyond the mere provision of comprehensible input, these studies highlighted “the potential for online interaction to increase the likelihood that learners would notice the gaps in their interlanguage” (Shekary & Tahririan, 2006, p. 559). These observations of CMC’s benefits are, in other words, underpinned by an interactionist approach to SLA. This approach “takes as its starting point the assumption that language learning is stimulated by communicative pressure” (Gass, 2003, p. 224), and subsumes aspects of the Input Hypothesis (Krashen, 1982) and Output Hypothesis (Swain, 1985; Gass & Mackey, 2006). Interaction serves to break down input to make it more comprehensible, a process “mediated by selective attention and the learner’s developing
L2 processing capacity” (Long, 1996, p. 414). Importantly, negotiation in interaction serves to direct learners’ attention to gaps between their interlanguage and the TL and may therefore be “essential for learning certain specifiable L1-L2 contrasts” (Long, 1996, p. 414). Finally, interaction may also require learners to produce “comprehensible output” whereby they attempt to match such L1-L2 contrasts, shifting from semantic to syntactic processing (Swain, 1985).

Broadly speaking, speakers’ interactional adjustments can be divided into two categories. The first, negotiation of meaning, is constituted by moves that are made by speakers “in order to repair or avoid communication breakdowns” (Kenning, 2010, p. 135, as cited in Bueno-Alastuey, 2013). Negotiation of form, on the other hand, refers to interactional moves (e.g., repairs, adjustments) made to comment on or modify language output perceived to be non-target-like, or otherwise in need of alteration, without any implication of misunderstanding or non-understanding (Bueno-Alastuey, 2013). Language related episodes, where learners “talk about the language they are producing, question their language use, or correct themselves or others” (Swain & Lapkin, 1998, p. 326), have frequently been used to operationalize these types of negotiation.

Research investigating LREs produced in SVCMC, in particular, has been scant. In an exploration of the benefits and drawbacks of AudSCMC, Bueno-Alastuey (2011) reported that students engaging in AudSMC (with different-L1 partners) demonstrated increased L2 use and time on task compared to FTF, same-L1 dyads, owing to AudSMC group’s perception of the communication as authentic. In a later study, Bueno-Alastuey (2013) looked at the effect of dyad type on the LRE patterns in task-based AudSCMC, whether NNS-NNS Same L1, NNS-NNS Different L1, or NNS-NS. Results showed that NNS-NNS Different L1 dyads yielded the highest quantity of LREs, followed by NNS-NS dyads, and lastly NNS-NNS Same L1 dyads. Bueno-Alastuey argues that “the most typical arrangement in FL contexts (NNS-NNS Same L1) seems to contribute the least to language acquisition,” and that the results also “challenge the myth of the native speaker being the most advantageous partner” (p. 555).

NS-NNS eTandem Interaction and Conversational Tasks

One of the most promising aspects of the rise of SVCMC technologies lies in their potential to provide language learners with the opportunity to engage in authentic, “real world” language use to which they would otherwise not have access (Bueno-Alastuey, 2011; Yanguas, 2010). This frequently takes the form of organized dyadic conversations between language partners separated by geographic location but united by SVCMC platforms – “eTandem” – whereby time is divided between conversation in each participant’s native and second language. Previous studies have examined a number of characteristics and potential benefits of eTandem exchanges, including comprehensibility development (Akiyama & Saito, 2016), learner perceptions on intercultural and linguistic development (Tian & Wang, 2010), scaffolding and role-taking (Cappellini, 2016), and the use of communication strategies (van der Kroon et al., 2015). Less frequent are studies taking an interactionist perspective to examine the benefits of the eTandem setup (e.g., Akiyama, 2014).

As in the case of other AudSCMC and VidSCMC, studies, interactionist analyses of eTandem exchanges have not yet explored conversationally-oriented communication less controlled by task. This is noteworthy given the prevalence of such eTandem exchanges relative to those designed around other task types. Akiyama and Cunningham (2018), in a synthesis of 55 telecollaboration projects, found that over half (n=29) of the projects investigated utilized an “Information Exchange” model, defined as the “least structured task type,” usually taking the form of “a discussion regarding cultural differences/similarities” (p. 56). Previous studies have shown that conversational FTF communication is fruitful for negotiation and the production of LREs (e.g., Fernández-García & Martínez-Arbeloa, 2014; Nakahama et al., 2001). Nakahama et. al. (2001) performed an analysis of negotiation of meaning in the FTF interaction of NNS-NS dyads in two different environments: a spot-the-difference information gap task, and a relatively uncontrolled and open-ended conversational activity. Results show a clear trend for higher mean levels of negotiation of meaning in the information gap activity as compared to the conversational interaction; however, whereas in the information gap task negotiation was focused “rather mechanically” on individual
lexical items, in conversational interaction the focus was “on aspects of overall discourse or textual coherence, the creation of shared schema and frame, the maintaining of face and the building of rapport” (p. 388). In tandem or eTandem exchanges, these beneficial characteristics may furthermore be aided by the fluid roles played by participants as both language learner and language expert (Cappellini, 2016; Fernández-García and Martínez-Arbelaitz, 2014).

Little empirical evidence is available regarding the type of interaction produced in SVCMC environments, especially (and most notably) in conversationally-oriented NS-NNS eTandem interaction. The present study builds on previous work in interaction and SVCMC to answer the following research questions on the interaction found in NS-NNS dyads engaged in VidSCMC as part of a university language tandem program:

1. To what extent does conversationally-oriented NS-NNS interaction in VidSCMC eTandem conversations produce reactive and preemptive LREs?
2. What are the linguistic foci of the LREs produced in these interactions?
3. When LREs are triggered by non-target-like NNS utterances, in what proportion do these LREs produce negotiation and negative feedback?
4. When LREs contain negative feedback, what kinds of negative feedback are produced?

Methods

Participants

The participants in this study were 18 undergraduate language learners enrolled in a language tandem program as part of their regular semester coursework. Half of the participants (n=9) were L1 Spanish-L2 English speakers studying at a large public university in Mexico, while the other half (n=9) were L1 English-L2 Spanish speakers at a large public university in the United States. Students from both universities were required to take part in the eTandem program, and received academic credit for the completion of the conversations; however, participation in the research study itself was voluntary. Participants’ speaking proficiency fell roughly within the intermediate level. The L1 Spanish-L2 English participants were enrolled in an upper-intermediate English language course at the time of the study, while the L1 English-L2 Spanish speakers were enrolled in either the first or second course of their university’s Spanish major coursework (coming after the completion of the Spanish language requirement, equivalent to approximately four semesters of university language study). Students from the university in Mexico reported a variety of motivations for their enrollment in their English language coursework, and reported majoring in a variety of academic disciplines. Both groups, then, were “FL learners” following the classification of telecollaboration participant types given by Akiyama and Cunningham (2018). The mean age of students from the American university was 20, and 22 for students from the Mexican university.

Procedure

Tandem program administration was responsible for assigning a partner to each student. Students were required to complete four exchanges with their partner throughout the course of the semester. The first of these was asynchronous, and consisted of an introductory video (1-3 minutes in length) posted to the video exchange platform Flipgrid. The final three exchanges consisted of synchronous video call conversations. Students were permitted to use the platform of their choosing for these conversations (e.g., Skype, Zoom, FaceTime).

The eTandem program is presented to students as an opportunity to practice their target language (TL) with NS peers, and to foster personal and intercultural connection. Following the classification of telecollaboration task types outlined by Akiyama and Cunningham (2018), this can most closely be defined as an “information exchange task,” considered “the least structured task type…usually [taking] the form of a discussion regarding cultural differences/similarities” (p. 56). For each conversation, students are
instructed to speak for approximately thirty minutes in each language, though beyond this guideline the
nature of the conversation is left to the students themselves. For each exchange, a general topic is given,
along with a few suggested questions meant to stimulate conversation; however, students are not required
to follow these questions, and no other task is given. Students are reminded that it is not a problem for their
conversations to deviate from the given topic. Beyond this description and presentation of the exchanges,
no other specialized instruction or preparation is given to students entering the exchanges. In this way, the
exchanges, while being required as part of students’ coursework, function as a course supplement and are
not explicitly integrated into the rest of students’ course content. Furthermore, as they are scheduled by
students themselves and do not take place during regularly scheduled class time, they may be considered
“institutionally nonintegrated” (Aranha & Cavalari, 2014; Ramos & Pobbe de Carvahlo, 2018). After the
completion of each exchange, students are required to post a one-minute video to an internal online platform
in which they reflect on the conversation, giving information regarding topics discussed, and the perceived
challenges and successes experienced in their language use. These experiences were discussed informally
in class as a means of checking progress and satisfaction with the exchanges, but otherwise remained
external to course content itself.

For the present analysis, each participating tandem pair submitted one recording, from either the first or
second VidSCMC exchange of the semester, made during the fifth and eighth week of the semester,
respectively. The suggested topics for these conversations were “life in the city” (first exchange) and
“globalization” (second exchange). Within the required week, students completed the SVCMC exchanges
outside of class, at the date and time of their choosing. While participants were instructed to speak with
their partner for 30 minutes in each language, the length of recordings ranged from a minimum of 15
minutes to a maximum of 36 minutes, with an average length of 25 and 26 minutes for English and Spanish
conversations, respectively. As the shortest recording was 15 minutes long, the present analysis was
performed only on the first 15 minutes of each recording. Despite the video component of the conversations
themselves, only audio recordings of these exchanges were collected.

Analysis

Language related episodes were defined as “any part of a dialogue where the students talk about the
language they are producing, question their language use, or correct themselves or others” (Swain &
Lapkin, 1998, p. 326). This characterization provides a useful umbrella under which to consider a broad
range of NS and NNS interaction about language. To provide a more detailed specification of interactive
moves involved in these LREs, the framework established in Varonis and Gass (1985) and utilized in
numerous studies on CMC (e.g., Bueno-Alastuey, 2013; Fernández-García & Martínez-Arbelaíz, 2002;
Shekary & Tahririan, 2006; Yanguas, 2010) was used. NS or NNS utterances that are the source of
misunderstanding are labeled “triggers”, while the “signal” is the utterance that draws attention to the
misunderstanding. A “response,” or series of responses, is then given until the LRE is resolved or otherwise
concluded. As in previous studies (e.g., Bueno-Alastuey, 2013; Nakahama et al., 2001), each LRE trigger
is coded as lexical, morphosyntactic, phonetic, or global. This last coding, global, is assigned when
linguistic focus cannot be identified, or appears to refer to overall meaning/expression. In Example 1 (see
Appendix for transcription key) for instance, the source of misunderstanding, on the part of the NS
interlocutor, cannot be specified as being due to a particular lexical, morphological, or phonetic item.

Example 1. Global NNS trigger (negotiation)

Student A (NNS): and they uh… I don’t know like they…a freeway like another freeway that is in
a second level↑
Student B (NS): I’m not sure
A: for the cars
B: so you have this street on the ground and like a bridge on top of it↑
A: yes something like that but it’s not a bridge it’s…
B: but like it’s its own road but it just goes over another one but like up a level↑
A: yes (hhh)
B: okay gotcha

LREs were further coded as reactive (RLRE) or preemptive (PLRE). Reactive LREs occur either as a response to a NNS non-target-like utterance (“NNS trigger”) or as a response to an utterance produced by the NS (“NS trigger”). Preemptive LREs, on the other hand, are not triggered by any particular utterance. Instead, they are initiated either as a NNS query regarding the TL, or as a NS utterance about the TL given without any NNS solicitation and not in direct response to any preceding NNS utterance (Ellis et al., 2001). PLREs may be initiated by either the NS or NNS. Both PLREs and RLREs were considered for both NSs and NNSs in order to account for the more collaborative nature of conversationally-oriented interaction (Nakahama et al., 2001), and in recognition of the negotiation patterns found previously in NS-NNS tandem exchanges (Fernández-García & Martínez-Arbelaitz, 2014).

**NNS Trigger**

When a NNS trigger initiated an LRE, the following NS signal (response to the trigger utterance) was coded as either negotiation or negative feedback. Negotiation refers to instances where interlocutors “indicate their non-understanding or misunderstanding by using indicators such as questions” or by “repeating a previous utterance with rising intonation” (Bueno-Alastuey, 2013, p. 548). Negotiation of meaning is distinguished from negotiation of form (Lyster, 1998), and refers only to those exchanges containing “clear evidence of communicative breakdown” that are “followed by an attempt to jointly reconstruct meaning” (Williams, 2001, p. 319) (see Example 2).

**Example 2. Negotiation of meaning (lexical)**

Student A (NNS): es bueno saber…también hay cognados↑ español inglés que muchas personas tratan a usar↑ (there are also a lot of cognates↑ Spanish English that many people try to use)

Student B (NS): como cosas incorrectas en inglés↑ (like things that are incorrect in English↑)

A: sí por ejemplo cuando una persona like la palabra “embarazado” se dice que una persona va a tener un niño…en inglés hay una palabra muy similar a “embarazado” que significa embarrassed pero… (yeah for example when someone, like, the word “embarazado” is used when someone is going to have a child…in English there’s a word that’s similar to “embarazado” which means “embarrassed” but...

B: sí (yes)

A: pero es una palabra que dice…un ejemplo…cuando una persona hace algo que…va a tener uh…es cuando una persona hace algo muy estúpido↑ (but it’s a word that says [sic]…an example…when someone does something that…is going to have uh…it’s when someone does something really stupid↑)

B: sí (yes)

A: las otras personas ven esta persona en una luz mala…so it’s like se siente no “embarazado” pero en inglés es embarrassed (other people see this person in a bad light…so it’s like they don’t feel “pregnant” but in English it’s “embarrassed”)

B: ah ya (hhh) aquí pasa mucho…pasa mucho cuando estamos hablando en inglés en nuestra clase y dicen put attention (ah ok [hhh] that happens a lot here when we’re speaking in English in our class and they say “put attention”)

Negative feedback is given when the interlocutor does not demonstrate any misunderstanding of the preceding utterance, but instead offers negative evidence in response to a non-target-like utterance (Oliver & Mackey, 2003). Negative feedback was coded as either recast or explicit correction. In contrast to
previous studies (e.g., Bueno-Alastuey, 2013), it was decided not to include prompts or elicitations in the analysis. Prompts, of which elicitation is one type, are characteristic of negative feedback found in the language classroom (provided by a teacher) (Lyster, 2004), and in NS-NNS peer interaction are largely indistinguishable from instances of negotiation of meaning.

A recast was defined as a “well-formed reformulation of a learner’s nontarget utterance with the original meaning intact” (Lyster, 2004) (see Example 3).

**Example 3. Recast (phonetic)**

Student A (NNS): yes (. ) yeah there are like one church for (. ) for I don’t know square↑ no…the blot↑

Student B (NS): a block↑

A: what↑

B: like a church every block↑

A: yeah! exactly (hhh) it’s like that

Explicit corrections were coded as those instances in which the NS interlocutor corrected a NNS utterance by explicitly indicating the source of the perceived error, sometimes via a metalinguistic explanation (Bueno-Alastuey, 2013) (see Example 4).

**Example 4. Explicit correction (lexical)**

Student A (NNS): está bastante temprano…bastante cerca (it’s pretty early…pretty close)

Student B (NS): pronto (soon)

A: pronto sí (soon yes)

**NS Trigger**

Language related episodes in which NNSs inquired after a preceding NS utterance, either to clarify meaning or form, were coded as NS triggers. As with NNS triggers, these are coded as global, lexical, morphosyntactic, or phonetic (see Example 5).

**Example 5. NS trigger (global)**

Student A (NS): is it hard to like (. ) do you smell any of the smoke or anything↑

Student B (NNS): uh…what↑ no like breathe↑

A: like what↑

B: I’m sorry can you repeat that↑

A: sure (. ) can you smell the pollution↑ does it make it so that you can’t see or anything↑

B: no it’s not that bad

**PLREs**

When NNSs made inquiries regarding TL use that were unprompted (not in response to any preceding NS utterance), these LREs were labeled as NNS PLREs. These were, perforce, focused on TL form, not meaning, and were therefore coded only as lexical, morphosyntactic, or phonetic in focus (not global) (see Example 6).

**Example 6. NNS query (lexical)**

Student A (NNS): ya no me gustan…wait cómo se dice fraternity and sorority (I don’t like them…wait how do you say “fraternity” and “sorority”)
Student B (NS): fraternidades↑ (fraternities↑)
A: fraternidades↑ ya okay . so no me gustan mucho (fraternities↑ okay so I don’t really like them)

PLREs were also initiated by NSs (“NS PLRE”) via comments regarding TL use that were not in reference to any preceding NNS utterance. These comments preemptively provided metalinguistic information on the TL with the purpose of aiding the NNS interlocutors in their comprehension of the upcoming NS utterance (see Example 7).

Example 7. NS preemptive comment (lexical)
Student A (NS): it’s a lot more…chill↑ do you know the word “chill” ↑
Student B (NNS): uh…show↑
A: chill↑ uh…it’s slang
B: no…I…I…how do you spell that↑
A: c-h-i-l-l
B: no I don’t know (. ) what is the meaning
A: uh ok (. ) it’s…something more relaxed↑
B: ah ok
A: so after school the activities you would do are more relaxed (. ) less stressful
B: ah ok ok yeah

Data from all student interactions were analyzed together, regardless of the language being used for a given part of the tandem exchange. A two-sample t-test confirmed that there was no significant difference between L1 Spanish and L1 English students for the total average number of LREs per interaction (t = 0.77; p = 0.45). After initial coding of LREs by the author, a second round of independent coding was performed by an additional researcher, after which 90% agreement was reached. Coding discrepancies were discussed until 100% agreement was reached.

Results

LREs by Initiation Type

A total of 144 LREs were produced across the 18 (9 in each language) 15-minute interactions, an average of 8.0 LREs per interaction (approximately one LRE every 1 minute and 53 seconds). Per pair, the total number of LREs ranged from a minimum of 4 to a maximum of 15, with a standard deviation of 3.1.

The LREs produced in these Spanish-English/English-Spanish language pairs were initiated in a number of ways, by both the NNSs and NSs, reactively and preemptively. The highest proportion of LREs is accounted for by those prompted by NNS triggers, at 40%. There is also a relatively high frequency of LREs prompted by NS triggers (27%), as well as those solicited preemptively by NNSs (24%). Native speaker PLREs represent the smallest proportion of all LREs (8%). In total, then, reactive LREs (NNS trigger and NS trigger) made up 67% of all LREs, compared to 33% for preemptive LREs (NNS query and NS preemptive). These data are given below, in Table 1, by dyad and language.
Table 1
Number and Proportion of all LREs

<table>
<thead>
<tr>
<th>Dyad/language</th>
<th>RLREs</th>
<th>PLREs</th>
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<tr>
<td></td>
<td>NNS trigger</td>
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<tr>
<td>EF-ENG</td>
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<td>4</td>
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<tr>
<td>Total SPAN</td>
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<tr>
<td>St. Dev.</td>
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</table>

Note. ENG=English; SPAN=Spanish.

**RLREs: Trigger type and linguistic focus**

There were also contrasts with regard to the foci of utterances that served as triggers for LREs (see Table 2). In the case of NNS-triggered LREs, a fairly even distribution is given among those arising from global (33%; n=19), lexical (33%; n=19), phonetic (21%; n=12), and morphosyntactic (14%; n=8) triggers. LREs resulting from NS triggers, on the other hand, are solely global (77%; n=30) and lexical (23%; n=9) in nature. In fact, although the total number of LREs arising from NS triggers (n = 39) is notably smaller than that of LREs arising from NNS triggers (n = 58), the former produce 11 more globally-oriented LREs than the latter.
Table 2
RLREs by Focus

<table>
<thead>
<tr>
<th></th>
<th>Global</th>
<th>Lexical</th>
<th>Morph. Syn.</th>
<th>Phonetic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNS trigger</td>
<td>19 (33%)</td>
<td>19 (33%)</td>
<td>8 (14%)</td>
<td>12 (21%)</td>
<td>58</td>
</tr>
<tr>
<td>NS trigger</td>
<td>30 (77%)</td>
<td>9 (23%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>28</td>
<td>8</td>
<td>24</td>
<td>97</td>
</tr>
</tbody>
</table>


NNS trigger RLREs: Negative feedback and negotiation

In response to NNS triggers, NS signals more often took the form of negative feedback (59%; n=23) than negotiation (41%; n=16) (see Table 3). However, the proportional relationship between negative feedback and negotiation varied, depending on the focus of the NNS trigger. For example, signals responding to non-target-like morphosyntactic and phonetic triggers show a clear preference for negative feedback over negotiation (at 88% and 67% of all cases, respectively). Meanwhile, when the non-target-like NNS trigger was a lexical item, the division was more even, with a higher proportion of negotiation (58%; n=11) than negative feedback (42%; n=8). Table 4 displays the proportion of negative feedback types that were employed by NS partners in response to these NNS triggers.

Table 3
Negotiation vs. Negative Feedback in NNS-Trigger LREs

<table>
<thead>
<tr>
<th>Ne</th>
<th>NF</th>
<th>Morph. Syn.</th>
<th>NF</th>
<th>Phonetic</th>
<th>NF</th>
<th>Total</th>
<th>NF</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 (58%)</td>
<td>8</td>
<td>1 (13%)</td>
<td>7 (88%)</td>
<td>4 (33%)</td>
<td>8 (67%)</td>
<td>16 (41%)</td>
<td>23</td>
</tr>
</tbody>
</table>


Table 4
Negative Feedback Types (NNS-Trigger LREs)

<table>
<thead>
<tr>
<th>Recast</th>
<th>Explicit Correction</th>
<th>NF Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 (61%)</td>
<td>9 (39%)</td>
<td>23</td>
</tr>
</tbody>
</table>

Note. NF=negative feedback.

PLREs

In the case of both NS and NNS PLREs, the range of LRE type is limited (see Table 5), focusing overwhelmingly on lexical items.

Table 5
Preemptive LREs by Focus

<table>
<thead>
<tr>
<th></th>
<th>Lexical</th>
<th>Morph. Syn.</th>
<th>Phonetic</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNS</td>
<td>26 (87%)</td>
<td>1 (3%)</td>
<td>3 (10%)</td>
<td>30</td>
</tr>
<tr>
<td>NS</td>
<td>12 (100%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>12</td>
</tr>
</tbody>
</table>

Note. “Morph. Syn.”=morphosyntactic

As discussed by Ellis et al. (2001) and pointed out by an anonymous reviewer, NS PLREs do not necessarily
address a gap in the NNS’s TL knowledge (the NNS may already be familiar with the term or area of TL brought up by their NS interlocutor). Of the 12 NS PLREs found in the present data, half (n=6) could be said to clearly address a gap in NNS knowledge, while in the remaining 6 cases it was not clear whether or not the lexical item was already known to the NNS. **Example 8** displays one such instance, where it cannot be determined by the surrounding context of the conversation whether or not the NNS was already familiar with the lexical item in question. For an instance of a NS PLRE addressing a clear need on the part of the NNS, see **Example 7**.

**Example 8. NS PLRE (lexical)**

Student B (NS): tenemos como un sistema que se utiliza para los automóviles (.) entonces ese sistema te dice que dependiendo de las placas las placas son las cosas que te ponen en frente del carro y atrás del carro (we have a system that's used for cars (.) so the system tells you that depending on your license plates license plates are the things on the front and the back of the car)

Student A (NNS): okay

B: que dicen números y palabras y letras y dependiendo del tipo de placa que tienes puedes salir en la semana (.) por ejemplo tu coche puede circular o andar en la ciudad solo los lunes martes miércoles y jueves (they have numbers and words and letters and depending on the type of license plate you have you can drive on certain days (.) for example you can only drive on Mondays Tuesdays Wednesdays and Thursdays)

A: oh de verdad (oh really)

B: sí y los demás días no puedes (yeah and the rest of the days you can’t)

**Discussion**

The results from the present analysis highlight the myriad ways that language learners, together with their NS interlocutors, engage in LREs during a conversationally-oriented Information Exchange VidSCMC eTandem interaction. One of the most striking patterns in the results of this study is the generally even distribution of these LRE types. Both RLREs and PLREs played a prominent role in the way these speakers talk about language and language use, accounting for 67% and 32% of all LREs, respectively. Previous studies in SVCMC have focused on a much more limited range of LRE types, often exclusively accounting for those resulting from non-target-like NNS triggers (e.g., Bueno-Alastuey, 2013; Yanguas & Bergin, 2018). In the present analysis, NNS triggers accounted for less than half (40%) of all LREs.

The present results appear to substantiate what previous research has found for text-based SCMC (e.g., Blake, 2000; Fernández-García & Martínez-Arbelaitz, 2003; Yilmaz, 2011), namely that SCMC - in this case, VidSCMC - can “promote reflection on input and output as evidenced by metatalk, self-correction, and the provision of negative feedback” (Yilmaz, 2011, p. 126). As reported for text-based SCMC (Fernández-García & Martínez-Arbelaitz, 2003), this is often initiated by NNSs themselves through PLREs, here representing 24% (n=35) of all LREs. The focus of both NNS and NS PLREs was almost exclusively lexical (constituting 87% and 100% of these LREs, respectively). Nevertheless, PLREs often resulted in extended negotiation around TL use, providing NNSs with the opportunity to produce additional output, and also to receive additional comprehensible input in an environment where TL meaning is semantically transparent (Long, 1996). This is the case in **Example 9**, where a NNS’s question regarding a TL lexical item (“espectro” - intended to mean “spectrum”) necessitates additional NNS output over the course of several turns, until a mutual understanding is reached. This is also an example of the occasionally blurred lines between negotiation routines; after the NS provides a direct translation for the lexical item, the NNS follows up again to make sure his meaning is accurately communicated [it is not] and the two speakers continue to negotiate for meaning.
Example 9. NNS PLRE (lexical)

Student A (NNS): especialmente en los Estados Unidos que uh...no es una cuestión de ser blanco o oscuro u otra cosa (.) es más como un spectrum↑ espectro↑ sabes cómo se dice spectrum↑ (especially in the United States it’s not a question of being white or dark or anything else [.] it’s more of a spectrum↑ espectro↑ do you know how to say “spectrum” ↑)

Student B (NS): espectro (spectrum)

A: espectro↑ yeah did that make sense↑ (spectrum↑ yeah did that makes sense↑)

B: hmm no entiendo muy bien cómo ligas “espectro” a lo demás (hmm I’m not sure how you’re connecting “spectrum” with everything else)

A: es que (.) en los Estados Unidos (.) no sé de México hay...muchos casamientos interraciales y por eso el color de piel y las raíces de una persona↑ son más variados↑ (so [.]in the United States [. ] I don’t know about Mexico there are...a lot of interracial marriages and because of that skin color and people’s race↑ are more varied↑)

B: hmm

A: y por eso es como un espectro de etnicidad↑ y no funciona decir soy de Noruega (.) es más como soy de México Perú Noruega y Alemania (and that’s why it’s like a spectrum of ethnicity↑ and it doesn’t work to say I’m from Norway [. ] it’s more like I’m from Mexico Peru Norway and Germany)

B: (hhh) sí sí sí (yeah yeah yeah)

A: y con tiempo creo que eso va a seguir y en unos cientos años todos van a tener raíces tan variados que no van a ser tanta (.) no va a haber tanta discriminación (and in time I think that’s going to continue and in a few hundred years everyone is going to have such diverse roots that it’s not going to be so (. ) there isn’t going to be as much discrimination)

B: ya ya te entiendo (okay I understand)

Over a quarter of all LREs (27%; n=39) in the present analysis resulted from NS triggers, the majority (77%; n=30) of which were global in nature (the exact lexical, phonetic, or morphosyntactic item causing misunderstanding could not be identified; see e.g., Example 5). NNS signaling of misunderstanding of NS utterances provides opportunities for the noticing of L1-L2 contrasts (Fernández-García & Martínez-Arbelaitz, 2007), and here indicates an active NNS role in authentic, meaning-driven conversation. Language related episodes triggered by non-target-like NNS utterances, the focus of much previous work on AudSCMC and VidSCMC interaction (e.g., Bueno-Alastuey, 2013; Yanguas & Bergin, 2018), were also prevalent in the interactions of the present analysis, accounting for the highest proportion of LREs overall (40%; n=58).

Several factors appear to be responsible for the patterns in LREs produced in the NS-NNS conversations reported on by the present study. The first is task, which merits comparison to previous SVCMC interaction work. Yanguas and Bergin (2018) reported no significant effect for task in AudSCMC and VidSCMC conversations, arguing that “the oral nature of the tasks may mitigate the potential differences in learners’ performance in terms of LREs” (p. 75); however, this may be due to the similarity between these two tasks (dictogloss and jigsaw), both of which closely guide speakers’ conversations via goal-driven communication in which speakers must either recreate, or piece together, a pre-determined story. In both tasks, this resulted in the majority of LREs being lexical in focus, as “overwhelmingly…learners’ main concern is vocabulary when performing these tasks” (Yanguas & Bergin, 2018, p. 75). The pattern of LREs in the present study, by contrast, are far more evenly distributed in terms of their linguistic focus, with the highest proportion of NNS trigger LREs at 33% (global and lexical; n=19 for each). The high percentage of globally focused NNS trigger LREs, in particular, has been shown to be characteristic of conversationally-oriented FTF interaction (Nakahama et al., 2001).
The present results suggest that patterns from conversationally-oriented FTF interaction are likewise manifested in one of the most common setups for university eTandem exchanges, namely the kind of low-structure Information Exchange task (see Akiyama & Cunningham, 2018) employed in the present study. Furthermore, the LRE patterns evident here in the Information Exchange task quite clearly reflect the fundamental principles of tandem exchanges: reciprocity and learner autonomy (Brammerts, 2001). Each learner actively contributes “knowledge and skills that the other person wishes to acquire” (reciprocity) (Cziko, 2004, p. 27) while simultaneously maintaining a degree of control over how and when to engage in different aspects of this learning (learner autonomy) (Brammerts, 2001). This is evident not only in the number and variety of linguistic foci of LREs, but also in the degree to which each learner takes an active role in initiating LREs. Of the four types of LREs considered here, distribution is remarkably equal between those that require NNS initiative to engage in an LRE (NS trigger and NNS PLRE, a combined 51% of all LREs, n=70), on one hand, and those that require some form of NS initiative (NNS trigger and NS preemptive, a combined 48% of all LREs, n=74), on the other. This is perhaps best exemplified by the interest of NSs in aiding their partners in TL comprehension and correction. Not only was there a higher incidence of negative feedback provided by NSs than previously reported for SVCMC; NS partners also went out of their way to preemptively ensure their interlocutors’ comprehension (see Example 10).

Example 10. NS preemptive (lexical)

Student A (NS): and Minneapolis is one of the Twin Cities↑ do you know what that means↑
Student B (NNS): twin↑
A: twin yeah
B: yeah
A: so there’s two cities that are right next to each other↑ that uh (.) sort of make up one giant city
B: oh ok
A: which is fun because you can go to both cities and see all the different stuff in both of them
B: (hhh) oh ok I get it

In Example 10, the NS first checks her NNS’s comprehension preemptively, and continues to provide additional clarification and elaboration even after the NNS has indicated a familiarity with the target lexical item itself. It is after this negotiation that the NNS confirms comprehension.

On the whole, the learners in these exchanges demonstrate a clear shared goal of engaging in collaborative language learning. Furthermore, their progress toward this goal is aided by a mutual awareness of a shared status as both language learner and language expert. As noted in previous work on FTF tandem exchanges, this awareness stands in stark contrast to classroom interactions or other communicative environments “where the [NNS] is permanently positioned as a second language learner or user” (Fernández-García & Martínez-Arbelaitz, 2014, p. 102). Instead, Fernández-García and Martínez-Arbelaitz argue “the role of learner is particularly fluid,” allowing for a “more equally distributed management of the conversation”. The importance of interchangeable role-taking and mutual scaffolding has also been highlighted in previous work on eTandem exchanges in particular (Cappellini, 2016). While the scale of the present study is not large, the results suggest quite clearly that these collaborative – sometimes “crossed” (Cappellini, 2016) – roles are manifested in SVCMC eTandem interactive patterns, owing to both the nature of conversationally-oriented interaction and the characteristics of tandem exchange more broadly.

Conclusion

The current ubiquity of AudSCMC and VidSCMC platforms – and students’ familiarity with them – belies their novelty in SLA research. Few studies have investigated interactional patterns in AudSCMC and VidSCMC, due in part to the precipitous rise of these technologies over a short period of time. Less than a
decade ago, Bueno-Alastuey (2011) described SVCMC as a “new medium” (p. 426). Not long before that, in an exploratory study, Lee (2007) affirmed that “none of the participants had used desktop videoconferencing prior to the project” (p. 638). In contrast, 94% of the participants in a more recent study by Yanguas and Bergin (2018) reported being “comfortable or very comfortable” using Skype, a common SVCMC platform. All of the participants in the present study reported being familiar with a variety of VidSCMC platforms. While access to SVCMC technologies is not uniform worldwide, it is growing quickly for university students (Silver, 2019).

The results of the present study demonstrate the ability of modern SVCMC technologies to promote conversational interaction that is facilitative to language learning. These results furthermore point to the particular ability of (e)Tandem interaction to allow language learners to engage with NSs on equal footing in a relatively unstructured, conversationally-oriented Information Exchange task. The present study has quantified these conversational characteristics via LRE analysis, showing the even distribution of LRE engagement and initiation on the part of NNSs and NSs. The ability of language learners to participate in such NS-NNS tandem exchanges, previously thought of as unique to contexts such as study abroad (Fernández-García & Martínez-Arbelaitz, 2014), is a promising opportunity that points to a sea change in the relationship between traditional FL learners and their TL use.

Limitations

The present study investigated VidSCMC conversations, but was only able to collect and analyze audio data. Future research on video-based eTandem exchanges would do well to account for participants’ use of gestures and other video-specific affordances in interaction. This study was likewise unable to account for other communicative strategies employed by participants related to modern technologies, such as looking up words on their computers or phones in order to aid their language comprehension and production. Such resources will likely continue to become more common in this type of interaction, and their influence on the nature of LRE production should be accounted for. Finally, future studies should investigate the influence of personal factors (e.g., motivation, more precise measures of proficiency) on variation in interactional patterns.

Notes

1. It should be noted that conversation recordings were only collected for these two exchanges, and that each pair only recorded a single exchange. No additional recordings/data (i.e., from the third exchange) were excluded from the analysis.

2. Topic suggestions for each exchange are decided collaboratively between instructors at the two universities involved, before the start of the semester.

3. Participants utilized several audio recording programs in order to capture the audio data without any video capture. This most commonly included audio recording tools provided within the video chat platforms themselves. No participant reported previous experience in eTandem exchanges; however, all participants reported being familiar with these VidSCMC platforms prior to the study.

4. This data refers only to those instances where the exact item causing the LRE could be identified, meaning that global NNS triggers are not included here. When global LRE triggers are included, the overall proportion of negotiation and negative feedback changes to 60% and 40%, respectively.

References


Ortega, L. (1997). Processes and outcomes in networked classroom interaction: Defining the research agenda for L2 computer-assisted classroom discussion. *Language Learning and Technology, 1*(1), 82–93. [http://dx.doi.org/10125/25005](http://dx.doi.org/10125/25005)


**Appendix. Transcription Key**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>.</td>
<td>Pause (0-2 seconds)</td>
</tr>
<tr>
<td>…</td>
<td>Pause (two or more seconds)</td>
</tr>
<tr>
<td>↑</td>
<td>Rising intonation</td>
</tr>
<tr>
<td>“ ”</td>
<td>Implication of alternate meaning or metalinguistic reference</td>
</tr>
<tr>
<td>(hhh)</td>
<td>Laughter</td>
</tr>
</tbody>
</table>

**About the Author**

Tripp Strawbridge is Assistant Professor of Spanish Studies in the Department of Modern Languages and Literatures at Santa Clara University. His research focuses on SLA in study abroad, L2 proficiency development, and language learning technologies.

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