Negotiation of Meaning and Corrective Feedback in Face-to-Face and Computer-Mediated Interactions

Angelica Ribeiro

Texas A&M University**,** ribeiro475@hotmail.com

Abstract

This case study examines corrective feedback strategies in face-to-face (FTF) interaction versus text synchronous computer-mediated communication (SCMC) between a second language (L2) learner and a native speaker of English. The following research questions guide this study: (a) What corrective feedback strategies are used when negotiations occur in FTF and text-SCMC task-based interactions? (b) Which corrective feedback strategies lead to more opportunities for L2 learning through FTF and text-SCMC task-based interactions? The data collection consisted of a background questionnaire, an FTF task, a text-SCMC task, and an open-ended questionnaire. Negotiation instances and corrective feedback strategies were coded. Content analysis was used to analyze the open-ended questionnaire responses. Results indicated that the FTF mode promoted more negotiations of meaning and corrective feedback strategies, especially repetitions and elicitations. Results also demonstrated that the lack of particular corrective feedback strategies (e.g., recasts) and uptake may have impacted the opportunities for L2 development. Moreover, results provided evidence to support that text-SCMC could be an appropriate tool for language acquisition.

Keywords: computer-mediated communication, corrective feedback, negotiation of meaning, second language development, face-to-face interaction

Introduction

Technology is used so routinely that it has overtaken any hope for a lingering controversy about whether or not technology should be used in language teaching (Chapelle, 2014). However, how can technology be effectively used to teach language? González-Lloret and Ortega (2014) suggest that the combination of technology and language learning tasks is an effective way to teach a second language (L2). As Van den Branden (2006) defines, a language learning task is "an activity in which a person engages in order to attain an objective, and which necessitates the use of language" (p. 4). With that said, González-Lloret and Ortega support the implementation of tasks (e.g., jigsaw, decision-making) mediated by technologies because, when compared to a face-to-face (FTF) environment, technology may provide a safer risk-taking environment to L2 learners, motivate them to express themselves in the L2, and allow them to reflect and plan on the language use.

Computer-mediated communication (CMC) refers to "any real-time or delayed communicative transaction that occurs through the use of tools taking advantage of networked technology capabilities" (Lin, 2014, p. 123). CMC can benefit L2 development by including L2 language learning tasks and building opportunities for interaction and collaboration between interlocutors (González-Lloret & Ortega, 2014; Ozfidan, Machtmes, & Demir, 2014).). CMC can be synchronous (SCMC) and asynchronous (ACMC). While ACMC does not happen in real-time (e.g., emails), SCMC occurs in real- time (e.g., text-based or audio online interactions), which allows it to be compared to an FTF context.

Both FTF and CMC interactions are beneficial to L2 development. For example, interactions in both modes promote corrective feedback (Perdomo, 2006; Sauro, 2009), which is "an indication to a learner that his or her use of the target language is incorrect" (Lightbown & Spada, 2017, p. 216). Additionally, each mode has unique aspects that contribute to potential L2 development. The CMC mode promotes more metalinguistic awareness (Blake, 2000) and noticing of linguistic issues (Lai & Zhao, 2006), and provides adult L2 learners with more time to process feedback (Sauro, 2009) than the FTF mode. On the other hand, compared to CMC, FTF interactions are faster pace and lack paralinguistic cues (e.g., body language, facial expressions), therefore they may promote more negotiation of meaning, which facilitates L2 learning (Lai & Zhao, 2006). Despite both modes being beneficial to L2 development, there are

controversies in FTF and CMC research findings, such as the effectiveness of corrective feedback. In order to better understand the benefits of L2 learning in different contexts, this case study investigates corrective feedback strategies used in FTF and text-SCMC task-based interactions between a native speaker (NS) and an L2 learner of English.

Literature Review

The literature shows that FTF and CMC interactions are beneficial for L2 learning. However, there are controversies in research findings such as the effectiveness of particular corrective feedback strategies. In FTF, Loewen and Philp (2006) investigated the effectiveness of recasts—an implicit corrective feedback in which the interlocutor reformulates all or part of the learner's utterance, minus the error (Lyster & Ranta, 1997). Loewen and Philp analyzed FTF interactions and posttests from intermediate-level L2 learners in New Zealand. Results demonstrated that recasts benefited L2 learners at least 50% of the time, but the effectiveness of recasts varied based on their features. That is, when the recasts were less implicit, had fewer changes, and were shorter, the L2 learners understood and were more likely to use the corrective. Perdomo (2008) also found positive results for recasts in L2 learning through FTF interactions. In Venezuela, he focused on the effectiveness of recasts with L2 learners. The learners were randomly assigned to the control group, where they received explicit feedback, or treatment group, where they received implicit feedback (i.e., recast). The analysis of the pre- and posttest results showed that, in the FTF setting, recasts had a positive impact on learners' performance and were more effective than explicit feedback, especially with learners with a higher level of L2 proficiency.

Sheen (2010), on the other hand, found that explicit feedback (i.e., metalinguistic clues) was more effective than recast in FTF interactions between a teacher and intermediate L2 learners. The researcher randomly divided the learners into a recast, metalinguistic clues, and control group. In the metalinguistic group, the teacher called learners' attention to their misuse of the target form (i.e., articles), corrected, and explained the errors. The analysis of pre- and posttests indicated that metalinguistic clues were more effective than recasts. Sheen concluded that the degree of the corrective feedback explicitness or the explanation of errors impacted that effectiveness of metalinguistic clues.

Studies have also found that recasts were not effective in L2 learning through FTF interactions (e.g., Jabbari & Fazilatfar, 2012). For example, Jabbari and Fazilatfar (2012) analyzed FTF interactions between teachers and beginner and high intermediate L2 learners in Iran. The study found that teachers mainly used recasts as opposed to other corrective feedback strategies, such as repetitions and metalinguistic clues. However, compared to other implicit corrective feedback strategies (e.g., clarification requests), recasts did not result in learner-generated repair, which indicates that learners are actively engaged in learning and leads to opportunities for L2 development (Lyster & Ranta, 1997). Instead, learners benefited more from corrective feedback in which signals were given to learners as a way to encourage them to correct their own linguistic errors.

Studies that examined corrective feedback in the CMC setting also found varying results. For example, Sauro (2009) and Monteiro (2014) discovered no statistically significant difference between the effectiveness of recast or metalinguistic clues in SCMC interactions. Sauro paired up high intermediate and advanced L2 learners with an NS and randomly assigned them to a recast, metalinguistic clues, or control group. Based on pre- and posttest results, the researcher observed that both recast and metalinguistic clues provided learners with gains in the target form (i.e., articles). Also, Monteiro's (2014) study's results indicated that both corrective feedback strategies were effective in developing learners' knowledge of regular simple past through voice-SCMC interactions between learners and the researcher. According to Monteiro, her results might be explained "by the fact that dyadic video-conferencing interactions are similar to laboratory interactions where feedback is controlled and individualized, making the corrective force of recast as much evident as that of metalinguistic feedback" (p. 69).

In contrast, Loewen and Erlam (2006) observed no statistically significant difference between recast or metalinguistic clues. Results demonstrated that neither corrective feedback strategy contributed to learning of regular simple past through text-SCMC interactions between the researchers and beginner L2 learners. Loewen and Erlam explained that such ineffectiveness was probably because L2 learners were not in the level of English proficiency to learn simple past or because a great deal of corrective feedback that they received was not provided immediately after their errors occurred.

In short, there are varying findings as to which context (i.e., FTF or CMC) benefits L2 development more in terms of promoting effective corrective feedback strategies. Therefore, further research is needed to investigate the effectiveness of corrective feedback strategies in FTF versus CMC interactions. With that said, the present case study examines corrective feedback strategies in FTF versus text-SCMC task-based interactions between an NS and an L2 learner of English. This study is guided by the following research questions: (a) What corrective feedback strategies are used when negotiations occur in FTF and text-SCMC task-based interactions? (b) Which corrective feedback strategies lead to more opportunities for L2 learning through FTF and text-SCMC task-based interactions?

Theoretical Framework

This study draws on the concept of negotiations and corrective feedback in SLA. Negotiations are found in conversational interactions (Lightbown & Spada, 2017) and can promote L2 acquisition (Ellis, 1991). Negotiations can focus on meaning or form. A negotiation of meaning is "an interactional sequence that arises when a problem in understanding occurs and there is a temporary communication breakdown leading to attempts to remedy it" (Ellis & Shintani, 2014, p. 342). A negotiation of form is "an interactional sequence where attention to form occurs even though there is no communication difficulty (i.e., when the problem is entirely linguistic)" (Ellis & Shintani, 2014, p. 342). Negotiations are done through different strategies which can act as corrective feedback (e.g., clarification requests, repetitions, recasts, metalinguistic clues).

Negotiations can be identified by a "trigger, feedback move and (optionally) uptake" (Ellis & Shintani, 2014, p. 249). According to Ellis and Shintani (2014), (a) the trigger is an utterance that has or is considered to have an error, (b) the feedback move is the corrective feedback, which is a response to the trigger to inform the interlocutor that there is something in his or her utterance that is incorrect or not clear, and (c) the uptake is the interlocutor's self-correction based on the feedback that he or she received.

Corrective feedback is a signal that informs the interlocutor that he or she needs to modify his or her output to match L2 norms (Ellis & Shintani, 2014). It can provide positive evidence (i.e., correcting the error) or negative evidence (i.e., not correcting the error) to indicate that the interlocutor's output needs modification. Corrective feedback can contribute to L2

acquisition "by providing learners with positive evidence of target language forms or by pushing learners to self-correct their errors" (Ellis & Shintani, 2014, p. 260). Learning may occur through corrective feedback if L2 learners notice the corrections that they receive and compare them to their errors to the target language norms (Ellis & Shintani, 2014).

There are several corrective feedback strategies, which can be categorized as input-providing or output-prompting (Ellis, 2012). Input-providing corrective feedback strategies provide L2 learners with the correct target form; explicit correction and recast are input-providing feedback strategies. Output-prompting corrective feedback strategies push L2 learners to correct their errors; elicitation and metalinguistic clues, clarification requests, and repetition are output-prompting feedback strategies (Ellis, 2012).

This study draws on the concept of negotiations and corrective feedback in L2 development to (a) identify what corrective feedback strategies are used when negotiations occur in FTF and text-SCMC task-based interactions, and (b) which corrective feedback strategies lead to more opportunities for L2 learning through FTF and text-SCMC task-based interactions.

Methodology

Data Collection

This investigation employed a case study approach in order to examine FTF and text-SCMC interactions in L2 development in depth. As Mackey and Gass (2016) pointed out, "One advantage of case studies is that they allow the researcher to focus on the individual in a way that is rarely possible in group research" (p. 224). The current study collected quantitative and qualitative data. The qualitative data were collected to support the quantitative data by providing "information that [could] elucidate a trend, exemplify any variation in the data, or provide insights into results that [turned] out to be different from what was predicted" (Mackey & Gass, 2016, p. 356). The data were collected from two participants through four instruments: a background questionnaire, an FTF task, a text-SCMC task, and an open-ended questionnaire. Data were collected on January 29, 2016.

Participants

This study used purposeful sampling to select the participants. They were two females: one NS, Michele, and one L2 learner, Yara (both names are pseudonyms). Michele was a 49-year-old American woman and a monolingual English speaker. She worked as an executive

assistant at a university in the United States. Yara was a 38-year-old Japanese woman and stay-home mother who had been in the United States for four years. Yara had a B.A. in business economics from Japan and formally studied English in her home country for six years. The background questionnaire indicated that, in the United States, she mostly spoke Japanese, especially at home, but she occasionally communicated in English with her English tutor, tennis coach, craft tutor, and her children's teachers. Regarding Yara's L2 skills, she self-rated her speaking, listening, writing, and reading abilities in English as beginner. However, based on additional language proficiency assessment tools (i.e., Texas English Language Proficiency Assessment System (TELPAS) and Ventures placement test), Yara had an intermediate level of English proficiency in reading, grammar, speaking, and listening skills. TELPAS assessed speaking and listening skills, whereas the Venture placement test assessed grammar and reading skills.

According to the participants' self-rated computer skills, in a scale from beginner to proficient level (i.e., beginner, intermediate, advanced, and proficient), Yara and Michele considered their computer keyboard typing abilities as intermediate and proficient, respectively. The background questionnaire also showed that Michele had online written chat (using instant messaging) experience only in English, while Yara had online written chat experience in English and Japanese.

Instruments

The data collection consisted of four instruments: a background questionnaire, an FTF task, a text-SCMC task, and an open-ended questionnaire. The background questionnaire items addressed (a) general information about the participants such as their age, first language, and length of time in the U.S., (b) their English or foreign language learning background and skills, (c) computer keyboard typing skills, and (d) online chat experiences.

Having in mind that the purpose of a task-based language teaching is "to develop learners' communicative competence by engaging them in meaning-focused communication through the performance of tasks" (Ellis & Shintani, 2014, p. 135), the FTF and text-SCMC tasks were designed according to Ellis's (2003) criteria of a task. Ellis pointed out that a task-based language learning activity should (a) focus on meaning, (b) contain a type of gap (information-gap, opinion-gap, or reasoning-gap) that needs to be filled throughout the

interaction, (c) require learners to complete the task using their own knowledge, and (d) force learners to use the language as a tool to reach the task outcome. Based on those criteria, Willis (1996) listed that following types of tasks: listing, ordering and sorting, comparing, problem-solving, sharing personal experiences, and creative tasks. Having said that, the FTF and text-SCMC tasks implemented in the current study were a combination of a comparing and creative task, which required the participants to fill in information-gaps.

The FTF and text-SCMC tasks were similarly designed. Each of them consisted of four parts. Each participant received four scenarios (1, 2, 3, and 4) and two sets of 24 stickers (A and B). The stickers displayed non-high-frequency words. The words were identified as non-high-frequency words based on The Logic of English High Frequency Word List (Logic of English, 2015), which was chosen because it is a compilation of several high-frequency word lists.

In the first part of the task, Yara was asked to decorate two of the scenarios (1 and 3) with 10 stickers (from set A) on each of them, whereas Michele was asked to decorate the other two scenarios (2 and 4) with 10 stickers (from set B) on each of them. The participants were encouraged to be creative, meaning that the stickers did not have to necessarily be placed where they would normally appear. In order to balance both tasks in terms of vocabulary, both FTF and text-SCMC tasks involved two scenarios related to a house (i.e., living room, kitchen, bathroom, and backyard) and two scenarios related to places (i.e., hospital, restaurant, store, and fire station). Without seeing each other's work, each participant decorated one scenario related to a house and one related to a place in each task.

Second, the participants gave instructions to each other to decorate the two scenarios that they had not been asked to decorate in the first part of the task. In other words, initially, Yara decorated scenarios 1 and 3, and Michele decorated scenarios 2 and 4. Therefore, Yara gave Michele instructions on how to decorate scenarios 1 and 3, whereas Michele instructed Yara on how to decorate scenarios 2 and 4. The participants were asked to alternate giving instructions to one another without looking at each other's work.

Third, the participants exchanged scenarios to compare and contrast them in order to find out if they followed the instructions correctly. Finally, the participants took turns as they collaboratively and orally created a story using all the scenarios.

The last instrument that was implemented in the current study was an open-ended questionnaire. It was created based on the idea that task-based interactions in L2 development should not only provide the participants with a learning experience, but they should also allow the participants to reflect on L2 learning (González-Lloret & Ortega, 2014). Therefore, the main purpose of the questionnaire was for them to reflect on their performance and L2 learning as they compared the FTF versus the text-SCMC tasks. The questionnaire items asked both participants to reflect on which task (FTF or SCMC) had been more difficult to complete and if they would recommend the tasks to L2 learners. The L2 learner was also asked about vocabulary and grammatical structures that she had learned in each task.

Procedures

After providing a written consent to participate in the study, the participants filled out the background questionnaire. Then, they completed the FTF and text-SCMC tasks. The participants performed the FTF task facing each other sitting at a table in the same room. Despite being able to see each other's faces, they were not able to see each other's scenarios or stickers. As for the SCMC task, the participants performed it in separate rooms using Skype text-messaging. They were not allowed to use the Skype video or audio functions since this study focuses on interactions between FTF versus SCMC using only text-messaging. To make sure the participants followed the task instructions, the researcher monitored them while performing the tasks. The FTF interactions were audio-recorded and later transcribed, and the chat logs were saved in a Word file. After the tasks were completed, the participants filled out the open-ended questionnaire.

Data Analysis

The data were analyzed quantitatively and qualitatively. Due to the nature of FTF (voice) and SCMC (text) tasks, the amount of time-on-task (i.e., the time the participants spent to complete each task) and language production were different between the two modes. Therefore, in order to be able to compare the participants' interactions in both tasks, the number of words in each task was counted so that the same number of words in both tasks would be analyzed. Also, the number of turns was counted. A turn was defined as the transfer of the floor from one interlocutor to the other (Rouhshad, Wigglesworth, & Storch, 2016).

After counting the number of words and turns, all the negotiation instances from the text-SCMC and FTF interactions were identified. The negotiations were identified by a "trigger, feedback move and (optionally) uptake" (Ellis & Shintani, 2014, p. 249). According to Ellis and Shintani (2014), (a) the trigger is an utterance that has or is considered to have an error, (b) the feedback move is the corrective feedback, which is a response to the trigger to inform the interlocutor that there is something in his or her utterance that is incorrect or not clear, and (c) the uptake is the interlocutor's self-correction based on the feedback that he or she received.

Having identified the negotiation instances, the negotiations and corrective feedback strategies were coded. The negotiation instances were coded for meaning and form. A negotiation of meaning was "an interactional sequence that [arose] when a problem in understanding [occurred] and there [was] a temporary communication breakdown leading to attempts to remedy it" (Ellis & Shintani, 2014, p. 342). A negotiation of form was "an interactional sequence where attention to form [occurred] even though there [was] no communication difficulty" (Ellis & Shintani, 2014, p. 342).

The corrective feedback strategies were coded based on the following categories used by Lyster and Ranta (1997): explicit correction, recast, elicitation, metalinguistic clues, clarification requests, and repetition (see Table 1 for definitions). Another researcher was trained in coding the data and asked to code 15% of the FTF and text-SCMC interactions. Percentage agreement between the two raters was 89%. Disagreements in coding results were discussed until a consensus was reached.

Table 1. *Definitions of Corrective Feedback Strategies*

Corrective feedback strategies	Definitions
Explicit correction	The speaker points out the error and provides a correction.
Recasts	The speaker reformulates all or part of the listener's utterance, minus the error.
Elicitation	The speaker uses one of the following techniques: (a) starts a sentence and pauses so that the listener completes it, (b) uses questions to elicit the correct form, or (c) asks the listener to reformulate his/her utterance.
Metalinguistic clues	The speaker asks questions or provides comments about the information that the listener is trying to convey.
Clarification request	The speaker asks the listener to repeat by saying sentences such as "Excuse me?" or "I don't understand."
Repetition	The speaker states his/her or the listener's utterance again.

Finally, the participants' responses to the open-ended questionnaire were analyzed qualitatively through content analysis (Slavin, 2007). The content of the participants' responses was examined to identify "information that [could] elucidate a trend, exemplify any variation in the data, or provide insights into results that [turned] out to be different from what was predicted" (Mackey & Gass, 2016, p. 356). In the following section, the results of the data analysis are presented.

Results

This study investigated negotiations and the use of corrective feedback in FTF and SCMC contexts between an L2 learner and an NS of English. The following research questions guided the study: (a) What corrective feedback strategies are used when negotiations occur in FTF and text-SCMC task-based interactions? (b) Which corrective feedback strategies lead to more opportunities for L2 learning through FTF and text-SCMC task-based interactions?

The participants clearly produced more language in the FTF than in the text-SCMC context. As they completed the task, they produced 1,959 words in the FTF mode in the span of 31 minutes as opposed to 861 words in the text-SCMC mode in the span of 64 minutes. In order to be able to compare the participants' performance in both tasks, the FTF data was limited to 861 words to match the total words produced in the text-SCMC task. Therefore, the results presented in this section are based on the 861 words produced in the text-SCMC interaction and the first 861 words produced in the FTF interaction.

As illustrated in Table 2, since Yara (L2 learner) and Michele (NS) were asked to alternate during the tasks, they had similar percentage frequency of turns in both modes (49% and 51%, respectively). However, the percentage frequency of words produced by the participants in FTF and text-SCMC modes differed. Michele produced more words than Yara in both contexts. In the FTF context, Michele spoke 14% more words than Yara and in the text-SCMC context, she typed 10% more words than Yara. When comparing the amount of language that each participant produced in each mode, Yara produced 2% more words in the text-SCMC mode than in the FTF mode, whereas Michele produced 8% more words in the text-SCMC mode than in the FTF mode.

Table 2. *Language Production in FTF and Text-SCMC*

	FTF			Text-SCMC		
	Yara	Michele	Total	Yara	Michele	Total
Turns	78 (49%)	80 (51%)	158 (100%)	31 (49%)	32 (51%)	63 (100%)
Words	373 (43%)	488 (57%)	861 (100%)	389 (45%)	472 (55%)	861 (100%)
Time			31 minutes			64 minutes

As for the negotiations, combining FTF and text-SCMC modes, 30 negotiations were identified. The participants negotiated more in the FTF than in the SCMC context. Ninety percent ($n = 27$) of the negotiations happened in the FTF context; only 10% ($n = 3$) of the them occurred in the text-SCMC context. As shown in Table 3, most of the negotiations ($n = 29$, 96%) were of meaning as opposed to form ($n = 1$, 4%).

Table 3. *Negotiations of Meaning and Form in FTF and Text-SCMC*

	Negotiations of form	Negotiations of meaning	Negotiations initiated by Yara	Negotiations initiated by Michele	Total negotiations
FTF	1 (4%)	26 (96%)	18 (67%)	9 (33%)	27 (100%)
Text-SCMC	0 (0%)	3 (100%)	3 (100%)	0 (0%)	3 (100%)

Extract 1 shows an example of a negotiation of meaning between Yara and Michele that occurred in the text-SCMC mode. Yara triggered the negotiation by using the words "pressure mathine." In the following turn, Michele indicated that she needed more clarification on what Yara meant by pressure machine and navigator by stating "i thought you were calling the navigator the pressure machine i dont know what the navigator was." Yara then said, "Navigator means the man inform," implying that navigator was not a machine, but a person.

Extract 1 (Text-SCMC):

Yara: Is this a pressure mathine? *[trigger]* This is in the right room on the third floor. We are done!

Michele: uh oh...i thought you were calling the navigator the pressure machine i dont know what the navigator was *[corrective feedback: clarification request]*

Yara: Navigator means the man inform.

Michele: oooh. ok thanks

The percentage frequency of initiation of the negotiation episodes differed between the participants. The presence of a trigger indicated the start of each negotiation episode. Table 3 shows that Yara initiated most of the negotiations. In the FTF context, she started 67% ($n = 18$) of the negotiations and in the text-SCMC, she started all of them.

As the participants negotiated for meaning and form, they applied 39 corrective feedback strategies to reach a common understanding. As illustrated in Table 4, most of the corrective feedback was implemented in the FTF context ($n = 36$, 92%), and the most frequent strategies used were repetition ($n = 16$, 41%) and elicitation ($n = 11$, 28%).

Table 4. *Corrective Feedback Strategies*

	FTF	Text-SCMC	Total of corrective feedback strategies in both modes	Used by Yara	Used by Michele
Explicit correction	-	1 (33%)	1 (3%)	-	1 (4%)
Recast	-	-	-	-	-
Clarification request	4 (11%)	1 (33%)	5 (13%)	3 (23%)	2 (8%)
Metalinguistic clues	6 (17%)	-	6 (15%)	2 (15%)	4 (15%)
Elicitation	10 (28%)	1 (33%)	11 (28%)	4 (31%)	7 (27%)
Repetition	16 (44%)	-	16 (41%)	4 (31%)	12 (46%)
Total	36 (100%)	3 (100%)	39 (100%)	13 (100%)	26 (100%)

Out of the two participants, Michele applied more corrective feedback strategies. She implemented all the strategies except for recasts. Michele used 34% more strategies than Yara, especially the following strategies: repetition, elicitation, and metalinguistic clues (see Table 4). Below is an extract from the interaction between the participants to illustrate the implementation of a corrective feedback strategy. In extract 2, Yara's words "bread can" triggered a communication breakdown. Michele then used elicitation as a corrective feedback strategy to push Yara to produce the correct target word.

Extract 2 (FTF):

Yara: Okay. My turn. This is a bread can. *[trigger]*

Michele: It's a what? *[corrective feedback: elicitation]*

Yara: Bread can. Bread case. It's like uh… It is white color.

As for Yara, she implemented all the strategies except for explicit correction and recast. Below is an extract from their FTF interaction to exemplify corrective feedback strategies used by Yara. In extract 3, Yara used a clarification request to indicate to Michele that she had not understood her utterance ("There is a man climbing out of the hole, on the ladder."). Then "red hat" triggered Yara to use repetition as she once again tried to understand Michele's utterance ("The man with the red hat.").

Extract 3 (FTF):

Michele: There is a man climbing out of the hole, on the ladder. *[trigger]*

Yara: Uh, sorry. Uh, I don't understand. Please uh repeat. *[corrective feedback: clarification request]*

Michele: Uh-huh. The man with the red hat. *[trigger]*

Yara: Red hat? Oh, okay. *[corrective feedback: repetition]*

Michele: He's inside a hole with a ladder.

Regarding uptake, no uptake move was identified in the text-SCMC or FTF interactions. The lack of uptake moves shows that the L2 learner did not self-correct her output or used the correct form or vocabulary based on the feedback received.

Even though the participants reached an agreement of understanding in the end of the negotiations, they did not complete the tasks 100% successfully. After giving each other instructions on how to decorate the scenarios, there were six (out of 40) differences between the participants' scenarios in the text-SCMC context and 12 (out of 40) differences in the FTF context. However, it is important to mention that language issues may not have been the only cause of those differences. Some differences may also have been caused by lack of details in their instructions.

Based on the open-ended questionnaire, both participants agreed that task 1, which was performed in the FTF context, was more difficult than task 2, performed in the text-SCMC context. Yara mentioned that task 1 was challenging because it was hard for her to orally express herself. However, task 2 was easier because she had time to think before typing and she was more confident in her writing skills since it was the focus of her English classes in Japan. As for Michele, she reported that task 1 was more difficult because it was a challenge to understand

some of the words pronounced by Yara. Therefore, task 2 was easier to her because Yara's pronunciation was not a barrier since they communicated via text-messaging. Furthermore, Yara indicated that she learned new English vocabulary and grammatical structures (e.g., prepositions) through the task-based interactions.

Furthermore, the participants made clear that they would recommend both tasks (as implemented in this study) to L2 learners. Regarding task 1 (FTF), Michele suggested that it would be appropriate for L2 learners because it would force them to communicate and negotiate for meaning. Yara indicated that task 1 would benefit L2 learners because it would give them the chance to practice their speaking skills. In terms of task 2 (text-SCMC), Michele recommended it because it is a fun exercise and L2 learners would feel more comfortable using the text-SCMC mode. As for Yara, she would recommend task 2 as it would give L2 learners the opportunity to type their thoughts and ideas before they orally expressed them. Based on her own experience, it is easier to learn an L2 if learners write ideas down before they share them out loud.

In summary, as the participants completed the tasks, negotiations mostly occurred in the FTF context. Most of the negotiations was initiated by Yara. As Michele and Yara negotiated for meaning, which occurred more frequent than for form, they implemented various corrective feedback strategies such as clarification requests and repetitions. Although no uptake move was identified, Michele and Yara succeeded in their interaction since they completed most of the tasks correctly.

Discussion

This study investigates interactions between an L2 learner, Yara, and an NS, Michele, focusing on (a) what corrective feedback strategies are used when negotiations occur in FTF and text-SCMC task-based interactions, and (b) which corrective feedback strategies lead to more opportunities for L2 learning through task-based interactions.

Based on the data analysis, the FTF mode promoted more negotiations between the participants. According to Michele's reflection on the tasks and the fact that Yara initiated more negotiations, Yara's (mis)pronunciation may explain why most of the negotiations occurred in FTF as opposed to text-SCMC context. Negotiation of meaning was the most frequent type of negotiations found in both modes. Regarding corrective feedback strategies, elicitations, metalinguistic clues, clarification requests, and repetitions were identified in both modes.

Explicit corrections were only found in the text-SCMC mode and recasts did not occur in either context. These observations led to three main findings.

First, even though more opportunities for learning were created in the FTF interaction, they were not fully explored. Having in mind that negotiations developed in interactions may contribute to L2 acquisition (Ellis, 1991), Yara had more opportunities to improve her L2 skills in the FTF mode because it promoted more negotiations than in the text-SCMC mode. Ninety percent of the negotiations were found in FTF as opposed to 10% in text-SCMC. Rouhshad, Wigglesworth, and Storch (2016) also found more negotiations in FTF than in text-SCMC. However, high frequency of negotiations does not necessarily result in L2 development. Based on Long's (1996) Interaction Hypothesis, Ellis and Shintani (2014) pointed out that "negotiation could assist acquisition—through the feedback that learners received when their errors led to communication problems and through the modified output they produced when learners self-corrected" (p. 9). In other words, corrective feedback and uptake are important elements for negotiations to lead to potential L2 development. Despite the fact that 39 corrective feedback strategies occurred in the 30 negotiations found in the data, no uptake moves were identified. Loewen and Erlam (2006) also found a lack of uptake moves in their investigation of corrective feedback in SCMC. In contrast, Loewen (2005) and Chen and Eslami (2013) not only identified instances of uptake in their studies, but they also found that successful uptake (i.e., the incorporation of the corrective feedback received) was a predictor of L2 improvement. Therefore, if Yara had implemented uptake moves, they would probably have enriched the chances to develop her L2.

Second, the lack of explicit corrections and recasts as corrective feedback strategies may also have impacted the opportunities that Yara had to improve her L2. According to Ellis (2015), explicit corrections and recasts can provide input because they inform L2 learners the correct form and vocabulary that they should use. Therefore, explicit corrections and recasts provide positive evidence (i.e., the error is corrected). On the other hand, repetitions, clarification requests, metalinguistic clues, and elicitations can promote output because they encourage L2 learners to correct their own errors (Ellis, 2015). Therefore, these corrective feedback strategies provide negative evidence (i.e., the error is not corrected). Having said that, although negative evidence may also facilitate language development (Lyster, 2001), the lack of positive evidence

or input-providing corrective feedback encouraged Yara to mainly use her own knowledge in the negotiations, which could also have limited the quality of potential opportunities for L2 acquisition. The reason for the lack of explicit corrections and recasts is unknown. Nevertheless, knowing that the participants did not have a teacher-learner relationship or did not know each other, they may have avoided input-providing strategies thinking that it would be impolite to correct each other's errors.

Finally, although the text-SCMC interaction did not provide many negotiations when compared to the FTF interaction, there is still evidence to support that text-SCMC could be an appropriate tool for language acquisition. Yara reported that she felt more comfortable during in the text-SCMC task as opposed to the FTF one. According to González-Lloret and Ortega (2014), when compared to an FTF environment, technology may provide a safer risk-taking setting to L2 learners and motivate them to express themselves in language learning tasks. Additionally, Yara indicated that she learned new L2 linguistic aspects. She could have noticed new L2 form and vocabulary through the input and corrective feedback that she received during the text-SCMC interaction. That argument is supported by Loewen and Reissner's (2009), Eslami, Mirzaei, and Dini's (2015), and Kung and Eslami's (2015) studies which found that incidental noticing led to language learning. Moreover, Yara shared that text-SCMC allowed her time to think before expressing herself. That shows that text-SCMC provides L2 learners with time to apply self-regulating strategies (e.g., plan, revise, and edit their output before sharing it) (González-Lloret & Ortega, 2014). It is important to allow L2 learners to implement self-regulating strategies because they have "the potential to make learners active participants in their own learning, which is necessary to achieve advanced-level, L2 skills" (Winke, 2014, p. 286).

Conclusion and Recommendations

To better understand the benefits of task-based interactions in L2 development, this study investigated negotiations and corrective feedback strategies in FTF and text-SCMC interactions. Even though more negotiation episodes were found in the FTF than in the text-SCMC mode, no uptake moves were found in either mode. Corrective feedback and uptake are two important moves that can enrich the potential development of L2 (Ellis & Shintani, 2014). Therefore, a high number of negotiation episodes may not necessarily lead to potential language learning.

With that in mind, teachers should encourage L2 learners to use the corrective feedback and apply it in their language use.

This study also presented evidence to support that text-SCMC could be an appropriate tool for L2 learning. Both participants reported that text-SCMC provided a more comfortable setting for an interaction. Furthermore, Yara indicated that text-SCMC allowed her time to use self-learning strategies and that she learned some new L2 linguistic aspects. Therefore, teachers should engage learners in text-SCMC task-based interactions as a way to improve their L2.

This study's findings also suggested that FTF and text-SCMC modes should complement each other to enrich the L2 learning environment (Chun, 1994; Warschauer, 1996). For example, L2 learners could perform a text-SCMC task, which requires writing and reading skills, and then a similar task in FTF, which requires speaking and listening skills. As a result, target linguistic aspects would be reinforced and L2 learners would be exposed to them in all four language skills.

In addition to the small sample size and the need for a more precise tool to assess the learner's English proficiency level, the methodology design might be a limitation of the current study. For instance, there might have been more negotiations of form if the tasks had required the participants to focus on particular linguistic aspects. Also, the participants might have applied more input-providing corrective feedback strategies and uptake moves if the tasks pushed them to implement them. Future studies should consider investigating a larger sample size and implementing tasks that require participants to focus on particular linguistic aspects and encourage them to apply uptake and feedback (especially input-providing) moves. Despite the limitations, this study still contributes to the literature on language learning in FTF and CMC contexts by investigating the effectiveness of corrective feedback strategies in task-based interactions in L2 development. Further research on interactions in FTF and CMC modes is needed for teachers to better understand how L2 learners can best benefit from each mode.

References

Blake, R. (2000). Computer mediated communication: A window on L2 Spanish interlanguage. *Language Learning & Technology*, *4*(1), 120-136.

Chapelle, C. (2014). Afterword: Technology-mediated TBLT and the evolving role of the innovator. In M. González-Lloret & L. Ortega (Eds.), *Technology-mediated TBLT: Researching technology and tasks (pp. 324-333)*. Amsterdam, The Netherlands: John Benjamins.

Chen, W., & Eslami, Z. (2013). Focus on form in live chats. *Educational Technology & Society*, *16*, 147-158.

Chun, D. (1994). Using computer networking to facilitate the acquisition of interactive competence. *System*, *22*(1), 17-31.

Ellis, R. (2003). *Task-based Language Learning and Teaching.* Oxford: Oxford University Press.

Ellis, R. (2015). *Understanding second language acquisition*. Oxford, UK: Oxford University Press.

Ellis, R. (1991, April). The interaction hypothesis: A critical evaluation. Paper presented at the Regional Language Centre Seminar, Singapore.

Ellis, R., & Shintani, N. (2014). *Exploring language pedagogy through second language acquisition research.* New York, NY: Routledge.

Eslami, Z., Mirzaei, A., & Dini, S. (2015). The role of asynchronous computer mediated communication in the instruction and development of EFL learners' pragmatic competence. *System- An International Journal of Educational Technology and Applied Linguistics*, *48*, 99-111.

González-Lloret, M., & Ortega, L. (2014). *Technology-mediated TBLT: Researching technology and tasks*. Amsterdam, The Netherlands: John Benjamins.

Jabbari, A. A., & Fazilatfar, A. M. (2012). The role of error types and feedback in Iranian EFL classrooms. *International Journal of English Linguistics*, *2*(1), 135-148.

Kung, W., & Eslami, Z. R. (2015). Learners of different language proficiency levels and incidental focus on form in synchronous text-based discussion. *International Journal of Computer-Assisted Language Learning and Teaching*, *5*(3), 42-59.

Lai, C., & Zhao, Y. (2006). Noticing and text-based chat. *Language Learning & Technology*, *10*(3), 102 -120.

Lightbown, P., & Spada, N. (2017). *How languages are learned (4th Eds)*. Oxford: Oxford University Press, United Kingdom.

Lin, H. (2014). Establishing an empirical link between computer-mediated communication (CMC) and SLA: A meta-analysis of the research. *Language Learning & Technology*, *18*(3), 120-147.

Loewen, S. (2005). Incidental focus on form and second language learning. *Studies in Second Language Acquisition*. *27*, 361-386.

Loewen, S., & Erlam, R. (2006). Corrective feedback in the chatroom: An experimental study. *Computer Assisted Language Learning*, *19*(1), 1-14.

Loewen, S., & Philp, J. (2006). Recasts in the adult English L2 classroom: Characteristics, explicitness, and effectiveness. *The Modern Language Journal*, *90*, 536-556.

Loewen, S., & Reissner, S. (2009). A comparison of incidental focus on form in the second language classroom and chatroom. *Computer Assisted Language Learning*, *22*(2), 101-114.

Logic of English: Combining the Science of Reading with the Joy of Learning. (2015). *High frequency spelling lists.* Retrieved from *https://www.logicofenglish.com/spelling-lists/high-frequency-words*

Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W.C. Ritchie & T. K. Bathia (Eds.), *Handbook of research on second language* (pp. 413-468). San Diego, CA: Academic Press.

Lyster, R. (2001). Negotiation of form, recasts, and explicit correction in relation to error types and learner repair in immersion classrooms. *Language Learning*, *51*, 265-301.

Lyster, R., & Ranta, L. (1997). Corrective feedback and learner uptake: Negotiation of form in communicative classrooms. *Studies in Second Language Acquisition*, *20*, 37-66.

Mackey, A. & Gass, S. (2016). *Second language research: Methodology and design.* New York, NY: Routledge.

Monteiro, K. (2014). An experimental study of corrective feedback during video-conferencing. *Language Learning & Technology*, *18*(3), 56-79.

Ozfidan, B., Machtmes, K., & Demir, H. (2014). Socio-cultural Factors in Second Language Learning: A Case Study of Adventurous Adult Language Learners. *European Journal of Education Research, 3* (4), 185-191. doi. 10.12973/eu-jer.3.4.185

Perdomo, B. (2008). Effectiveness of recasts in the teaching of EFL. *Asian EFL Journal*, *10*(2), 155-166.

Rouhshad, A., Wigglesworth, G., & Storch, N. (2016). The nature of negotiations in face-to-face versus computer-mediated communication in pair interactions. *Language Teaching Research*, *20*, 514-534.

Sauro, S. (2009). Computer-mediated corrective feedback and the development of L2 grammar. *Language Learning and Technology*, *13*(1), 96-120.

Sheen, Y. (2010). Differential effects of oral and written corrective feedback in the ESL classroom. *Studies in Second Language Acquisition*, *32*, 203-234.

Slavin, R. (2007). *Educational research: In an age of accountability*. Boston, MA: Pearson.

Van den Branden, K. (2006). *Task-based language education: From theory to practice.* Cambridge, UK: CUP.

Warschauer, M. (1996). Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal, 13*(2), 7-26.

Willis, J. (1996). *A framework for task-based learning.* Harlow: Longman.

Winke, P. (2014). Formative, task-based oral assessments in an advanced Chinese-language class. In M. González-Lloret & L. Ortega (Eds.), *Technology-mediated TBLT: Researching technology and tasks (pp. 263-293).* Amsterdam, The Netherlands: John Benjamins.