



Focus on form in task-based L2 oral computer-mediated communication

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Abstract

This study has a twofold goal: to investigate whether task type has an effect on the number, focus, and outcome of language-related episodes (LREs) and to determine whether that effect is the same for video SCMC (VidSCMC) and audio SCMC (AudSCMC) groups. Intermediate Spanish learners participated in this study involving two jigsaw tasks based on two different picture stories. Participants were randomly placed in dyads and assigned to VidSCMC and AudSCMC groups. The dyads then performed a jigsaw task and a dictogloss task consecutively in a counterbalanced design. Repeated-measures ANOVA analyses were carried out to measure any possible significant differences in the number and nature of LREs by task and by group. The results revealed no difference in the number of LREs per task or CMC mode. However, significant differences were found in LRE foci per task. Finally, significant differences were also found in the number of unresolved LREs per mode. Results are discussed in relation to the pertinent literature.

Keywords: *Computer-Mediated Communication, Task-based Learning and Teaching, Telecollaboration*

Language(s) Learned in This Study: *Spanish*

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Introduction

Second language (L2) text-based synchronous computer-mediated communication (SCMC)¹ has grown enormously since the early 1990s in the field of computer-assisted language learning (CALL). Early research analyzed the characteristics of the discourse that this new mode elicited (e.g., Chun, 1994; Kelm, 1992; Kern, 1995). At the turn of the century, however, researchers started to investigate focus on form in SCMC (e.g., Blake, 2000; de la Fuente, 2003; Smith, 2003), given its key role in instructed L2 learning under an interactionist perspective. Proponents of this approach argued that interaction provided an optimal environment for L2 learning by allowing learners to focus their attention on linguistic form while attending to meaning (Long, 1991).

Closed-ended, two-way interaction exchanges such as jigsaw or dictogloss tasks have been used in computer-mediated communication (CMC) research (e.g., Smith, 2004; Yilmaz & Granena, 2010) for their potential to drive learners to focus their attention on linguistic forms in a meaningful context. A fair amount of this task-based research in the field of second language acquisition (SLA) has focused on language-related episodes (LREs) as a way to measure and operationalize attention to form (Leeser, 2004; Swain, 1998; Swain & Lapkin, 1995, 1998, 2001; Williams, 2001). According to these authors, LREs are instances in the conversation in which learners turn their attention to the meaning, form, or use of a lexical item or grammatical form in the context of the L2 task being carried out. In the SCMC strand of research, earlier task-based studies examined focus on form under the umbrella of negotiation for meaning (e.g. Blake & Zyzik, 2003; Fernández-García & Martínez-Arbelaiz, 2002). The reason behind this interest in negotiation for meaning is that it may provide opportunities for learners to focus on form. However, more recent studies have also examined LREs in task-based contexts (Yilmaz, 2011; Yilmaz & Granena, 2010).

As can be seen above, research in SCMC has advanced significantly in the past decades by investigating interaction and focus on form. However, this progress has been primarily one-sided, since oral SCMC, whether it be audio SCMC (AudSCMC) or video SCMC (VidSCMC), has been only sporadically investigated despite the pronounced growth in general use of video (and audio) conferencing apps such as Facetime, Skype, or Google Hangouts. Thus far, very few studies have explored oral SCMC (e.g., Bueno-Alastuey, 2011; Jepson, 2005; Kopf, 2012; Sykes, 2005; Yanguas, 2010, 2012); as a result, its applications in the L2 classroom and its implications for L2 learning remain largely untapped. Very interestingly, however, Yanguas (2010, 2012) found significant differences in the way AudSCMC and VidSCMC groups interacted and also in aural comprehension measures, meriting further investigation. Therefore, the study reported in this article investigates focus on form in task-based oral SCMC (AudSCMC and VidSCMC) comparing jigsaw and dictogloss tasks following trends established in the SLA field by Swain and Lapkin (2001) and in text-based SCMC by Yilmaz (2011).

Review of the Literature

Text-Based SCMC

CALL research into SCMC first began with a number of studies in the 1990s (e.g., Chun, 1994; Kelm, 1992; Kern, 1995). These studies originally focused on text-based interaction for distance learning purposes. While this SCMC mode certainly differed from face-to-face (FTF) interaction, some parallels could be drawn between the two. Both modes are synchronous modes and tend to be carried out in a more informal register than asynchronous forms such as e-mail or the exchange of written letters. Chun (1998) posited that SCMC might hold some advantages over FTF communication. She suggested that due to the impersonal nature and anonymity provided when communicating via text chat, interlocutors might feel less pressure than they would if communicating FTF. Additionally, they might feel less embarrassed about making mistakes and more open to participating in honest dialogue. Furthermore, because they were typing rather than speaking, learners were able to look back at what they and their partners had typed, thus affording them more opportunity to focus on form than would have been possible in FTF communication. From a qualitative perspective, these first few original SCMC studies (Beauvois, 1992; Chun, 1994; Kelm, 1992; Kern, 1995) analyzed the discourse produced by learners performing a variety of activities using InterChange, a local-area-network application that allowed for synchronous written communication. This research seemed to confirm previous claims regarding the potential benefits of networked computers in fostering discussion in the L2: more interaction opportunities were created, leading to more language production that was of a higher proficiency level and sophistication (Kern, 1995).

SCMC and Interaction

Later text-based SCMC research investigated negotiation for meaning under an interactionist perspective both under qualitative and quantitative paradigms. According to Long and Robinson (1998), “people of all ages learn languages best, inside or outside a classroom, not by treating the languages as an object of study, but by experiencing them as a medium of communication” (p. 18). This idea is central to the interaction hypothesis (Long, 1996), which posits that interaction in the target language on behalf of an L2 learner is instrumental in facilitating acquisition of the L2. When two or more interlocutors communicate, interaction occurs. Through this interaction, learners receive information about the target language and are exposed to examples of correct grammatical forms and language use from native speakers as well as higher-proficiency non-natives.

Several text-based SCMC studies have investigated L2 learning and other aspects of communication under this interactionist perspective (e.g., Blake, 2000; Blake & Zyzik, 2003; de la Fuente, 2003; Fernández-García & Martínez-Arbelaiz, 2002, 2003; Pellettieri, 2000; Smith, 2003, 2004). De la Fuente (2003), for example, compared the effects of SCMC and FTF interaction in the acquisition of L2 vocabulary. Results of this study showed that both FTF and computer-based written interaction seemed to promote written receptive and productive acquisition and retention of L2 target words. However, the SCMC mode was

shown to be less effective than FTF in promoting oral acquisition of the target words. In turn, Smith (2003) explored learners' L2 interaction in order to investigate whether they engaged in negotiated interaction when they encountered new lexical items and how this interaction differed from traditional FTF interactional patterns. Results revealed that negotiation for meaning did indeed occur in this SCMC context but differences in the interaction patterns warranted the need to expand the established pattern of interaction for FTF. Finally, Smith (2004) also investigated lexical acquisition in a SCMC context. The outcomes indicated that learners did negotiate for meaning when presented with unknown lexical items and those items that were negotiated were retained significantly better than those that were not engaged. The findings of this study, Smith argued, validated the interaction hypothesis because they showed a stronger link between negotiation for meaning in interaction and acquisition.

Focus on Form and Task Effects in SCMC

Regarding specifically the investigation of LREs in the text-based SCMC strand of research, some recent studies have used task-based research designs to investigate focus on form under this paradigm (Yilmaz, 2011; Yilmaz & Granena, 2010). The investigation of LREs came as an alternative to research on negotiation for meaning and was motivated mainly by Swain's studies (1995, 2005), as argued by Yilmaz (2011). LREs can be 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). They have been used in a variety of FTF and SCMC studies as an indication of focus on form through negotiation for meaning (e.g., Leeser, 2004; Swain & Lapkin, 1995).

A variety of different task types may be used to promote negotiation for meaning in interactive activities within the language classroom. Pica, Kanagy, and Falodun (1993) identified a number of tasks including, jigsaw, information-gap, problem-solving, decision-making, and opinion-exchange tasks. They posit that the most effective task type for fostering interaction and negotiation between language learners is one in which each interlocutor holds a portion of the information that needs to be shared in order to reach a successful outcome. In addition, both participants should have the same goal, and there should be only one possible acceptable outcome. Dictogloss tasks, such as the ones used in the current study, require learners to reproduce a text after they have listened to it twice. Usually, learners are allowed to take notes during the second time they listen to it. First described by Wajnryb (1990), these tasks have been utilized in L2 research in order to foster attention to linguistic form without isolating those forms from their meaningful context (Leeser, 2004).

Aside from their use in the classroom, each of the aforementioned tasks has also been implemented in L2 research studies within an interactionist framework. Researchers have examined the effects of task type within text-based SCMC in order to determine whether different types of tasks produce different results with regards to interaction among L2 learners. In one early SCMC study involving 50 native English-speaking students learning Spanish as an L2, Blake (2000) found that jigsaw tasks elicited the majority of the recorded negotiations for meaning. According to him, the overall results indicated that only a small percentage of the conversational turns taken consisted of negotiations for meaning. The data from Blake's study suggested that jigsaw tasks did, in fact, elicit more negotiations for meaning than the other task types, while information gap tasks elicited the fewest negotiations.

Another early SCMC study of negotiation for meaning by Pellettieri (2000) investigated three two-way information-gap tasks, a jigsaw task, and one task combining decision-making, information-gap, and open-discussion. While all tasks involved a synchronous discussion in the target language, both the jigsaw task and one of the information-gap tasks included a composition-writing component. Results of this study showed that each task elicited multiple negotiations with a range of 18 to 41 overall negotiations per task. However, Pellettieri (2000) did not provide a total number of turns or the percentage of turns that included negotiations for meaning. Unlike Blake's (2000) study, the jigsaw task elicited fewer negotiations than two of the three information-gap tasks as well as the combined task.

Smith's (2003) study examined the effects of task type with 14 dyads of non-native speakers interacting in

English in order to complete two jigsaw and two decision-making tasks. In contrast to the small percentage of negotiations found in Blake's (2000) study, Smith (2003) found that 34% of overall turns consisted of participants negotiating for meaning. Additionally, the results showed that decision-making tasks were more effective than jigsaw tasks in eliciting negotiation for meaning with a ratio of 78% to 22%. However, Smith points out that when target lexical items are factored out, jigsaw tasks seem to be more effective in eliciting what he refers to as *incidental negotiations*, or negotiations of non-target lexical items, accounting for a total of 60%. This number falls in line with results found in previous research such as the aforementioned studies by Blake (2000) and Pica et al. (1993).

Yilmaz and Granena (2010) examined the effects of task type on LREs with the completion of a dictogloss task and a jigsaw task by 10 ESL students interacting via MSN Messenger, a synchronous text chat application. The data were analyzed to determine the number and type of LREs. Results of the study showed that the dictogloss task elicited far more LREs than did the jigsaw task overall, with every dyad producing more LREs during the dictogloss task than during the jigsaw task. Lexical issues elicited over half of the total LREs for the dictogloss task, while lexical and grammatical issues were split 50–50 for the jigsaw task. The overall majority of LRE verbalization was explicit and most LREs were resolved correctly.

While this study certainly shed light on the nature and typology of LREs elicited in SCMC, Yilmaz and Granena (2010) admitted that the small number of participants presented limitations when attempting to generalize the results to the general population. The limitations of their study were addressed in a subsequent study by Yilmaz (2011) in which 54 students of English as a foreign language from two different classes completed the same jigsaw and dictogloss tasks. Results again showed that the dictogloss task elicited more LREs than did the jigsaw task, reaffirming the results of the previous study. Additionally, the dictogloss task elicited higher percentages of each LRE focus. The dictogloss task also elicited higher percentages of LREs that were solved (both correctly and incorrectly), while the jigsaw task elicited the majority of the unresolved LREs. However, most LREs were resolved correctly. Interestingly, the dictogloss resulted in higher percentages of all type categories except for metatalk, which represented the smallest number of LRE types. Requests for assistance were the most frequent type of LRE, followed by negative feedback and self-correction. These results are in line with other studies that suggest dictogloss tasks are more effective than jigsaw tasks at eliciting LREs, and specifically those that are solved correctly (e.g., Swain & Lapkin, 2001; Yilmaz & Granena, 2010). Yilmaz (2011) argued that this might have been due to the fact that dictogloss tasks required less attention and thus learners were able to divert more attention to focus on form.

Synchronous Voice-Based CMC: Audio SCMC and Video SCMC

While technological limitations originally restricted CMC to text-only interaction, recent improvements in audio/video capability, the increased availability of such technology for lower costs, and much faster Internet connection speeds have facilitated the implementation of oral SCMC in CALL settings. Both laptop and desktop computers, not to mention smartphones, are now widely equipped with microphones and cameras, while free user-friendly video chat programs such as Skype are available for download and use via the Internet (Yanguas, 2010). According to Bueno-Alastuey (2011), oral SCMC shares many similarities with FTF interaction. Because of this semblance, oral SCMC may be useful as a tool to foster interaction among learners and prepare them for real-life oral communication.

Research on oral SCMC, however, whether AudSCMC or VidSCMC, is exceptionally scarcer than research on text-based SCMC, which, as seen in the above review, has extensively covered very important aspects of L2 learning in the CALL field. Oral SCMC research has only produced a handful of studies that have addressed a variety of topics in diverse contexts and from different theoretical perspectives. Therefore, drawing any conclusions on the use and efficacy of oral SCMC in CALL becomes an arduous endeavor.

For instance, Jepson (2005), in one of the earliest studies to utilize AudSCMC in CALL research, aimed to explore the repair moves made by ESL learners chatting via AudSCMC and text chat in an online private English language school. Results showed that more negotiation for meaning occurred in conversations

using AudSCMC than those using text chat. While the study is limited by a number of factors, including its non-random participant sample as well as some technological issues, it was the first to suggest advantages of AudSCMC over text-chat, specifically regarding ability for correction of errors in pronunciation. Another early study in oral CMC (Sykes, 2005) compared SCMC, AudSCMC, and traditional FTF groups in the pragmatic acquisition of speech acts in synchronous group discussions. Results of the analyses by Sykes showed no significant difference on pragmatic development. However, the SCMC group outperformed all other groups in the complexity and variety of strategies used.

Bueno-Alastuey (2010) investigated a pool of Spanish ESL learners taking a class of English for specific purposes as part of their Agriculture major. Specifically, she investigated AudSCMC effects on pronunciation. She concluded that the oral SCMC used in the study was beneficial because it fostered the noticing of the gaps in learners' phonetic interlanguage and provided opportunities for the production of modified output.

In turn, Bueno-Alastuey (2011) measured the perceived benefits and drawbacks of this type of interaction by ESL Spanish college students using oral two-way information exchange tasks. A group of dyads interacting in English as an L2 via AudSCMC were compared with a FTF control group. The results indicated that the learners who participated in voice-based SCMC with interlocutors of a different L1 achieved a higher proficiency than the control group. Furthermore, the qualitative data suggested that participants in the experimental group felt more satisfied with their improvement via interaction as well as with the overall experience. The participants in this group also reported that they were much more likely to continue interacting in the L2 than the participants in the control group.

Interestingly, Bueno-Alastuey (2013) investigated whether the nature of the dyad has any significant effect on the quantity and type of LRE triggers, LRE responses, and modified output in AudSCMC. College-level ESL learners with different L1s were the participants in the study; different types of dyads were formed based on participants' L1 (Spanish-Spanish, Spanish-Turkish, or Spanish-English). Results of the study showed that the type of dyad affected the quantity and type of LRE triggers and LRE responses, as well as the nature of the output. Bueno-Alastuey concluded that the typical L2 classroom arrangement in which non-native speakers are found with the same L1 seems to be less conducive to learning than others in which native speakers are involved.

Studies by Yanguas (2010, 2012) compared different groups of dyads interacting in Spanish as a L2 via FTF, AudSCMC, and VidSCMC modes in order to complete a jigsaw task. On the one hand, Yanguas (2010) revealed differences in the way audio and video groups carry out negotiations. On the other hand, Yanguas (2012) showed that learners in the AudSCMC group outperformed all other groups in comprehension measures.

Like Bueno-Alastuey's (2011) study, Yanguas' (2010, 2012) studies also posit that oral SCMC may replicate many of the communicative features of FTF interaction. However, while results showed that all three modes fostered interaction and negotiation for meaning, the studies by Yanguas (2010, 2012) also suggested that groups communicating via AudSCMC were unable to rely on visual cues and body language and thus required more linguistic negotiation.

Finally, Kopf (2012) reported on VidSCMC interactions between secondary-school learners of German in New Zealand. She investigated the effects of CMC on the development of verbal interactional skills and the negotiation for meaning process during two different learning activities. Results of this study suggested that learners used a variety of strategies and that task type influenced the amount of negotiation routines. Moreover, she concluded that video-conferencing had a positive impact on students' interactional abilities.

In short, there is a small, but growing, body of research that has investigated oral SCMC in different contexts under varying theoretical standpoints. No study to date, however, has explored focus on form and task type in oral SCMC. Therefore, the present study seeks to add to the oral CMC literature by investigating the effects of task type and SCMC mode (AudSCMC vs. VidSCMC) on LREs. As seen above, previous text-based SCMC studies have addressed task modality and focus on form in interactional contexts, but no

attempt has been made to extrapolate those results to the oral SCMC realm. Furthermore, only one other study (Bueno-Alastuey, 2013), which investigated the effect of type of dyad on LREs in Spain, has examined focus on form in oral SCMC. Current pedagogical and technological trends call for an update on the use and effects of audio and video implementation in L2 learning tasks, whether in or outside the classroom. Thus, the current study follows the paths established by Swain and Lapkin (2001) in the field of SLA and by Yilmaz and Granena (2010) and Yilmaz (2011) in text-based SCMC in order to investigate task-based L2 learner-to-learner oral SCMC in the U.S. university context. Specifically, answers to the following research questions are sought:

1. Is there an effect of task type or CMC mode on the number of LREs?
2. Is there an effect of task type or CMC mode on the focus of LREs?
3. Is there an effect of task type or CMC mode on the outcome of LREs?

Method

Participants

Data for this study were gathered during four semesters (Spring 2014–Fall 2015) at a private higher education institution in the western US. Six intact fourth-semester Spanish classes took part in this investigation. The final number of participants was 78 after a total of 18 students were excluded from the final sample due to participants' declaring Spanish as their native language or due to recording issues.

A brief questionnaire was administered before the study in order to gather participant information. In addition to basic personal information, the form collected participants' Spanish backgrounds and their attitudes toward the use of the technological tools involved. For a summary, see [Table 1](#) and [Table 2](#).

Table 1. *Participants' Background Information (N = 78)*

Category	Response
Class	
Senior	56.4%
Junior	24.3%
Sophomore	6.4%
Freshman	11.5%
Age (<i>M</i>)	19.1
Gender	
Female	75%
Male	25%
Spanish in High School (<i>M</i> # classes)	5
Spanish in College (<i>M</i> # classes)	1.9

Table 2. *Participants' Use of Skype and Google Documents*

	Use of Skype	Use of Google Docs
<i>Not Comfortable or Very Uncomfortable</i>	6.4%	2.5%
<i>Comfortable or Very Comfortable</i>	93.6%	97.5%

Materials

Before carrying out the tasks, participants signed the consent form and filled out the short background questionnaire mentioned above.

The tasks used in this study originally appeared in a book by Rollet and Tremblay (1975). This work is a collection of comic strips designed to elicit writing and speaking in young L1 learners and ESL learners. The two comic strips selected for the present study were also used in the studies by Yilmaz and Granena (2010) and Yilmaz (2011). In the current study, they were used both for the jigsaw tasks, in scrambled order, and for the dictogloss tasks, in written form.

In the first set of eight pictures, a young boy watches his mother as she pours the jam she has just made into a jar. He then sees how she places it out of his reach on top of a door casing. In the next picture, the boy asks her if she is leaving the house and she responds that she is going to the post office. After this, the boy's father is shown reading the newspaper in another room. The boy then places a stool on top of a chair and tries to reach for the jar of jam. Unfortunately, he cannot reach it because he falls off the stool making a big noise. In the last picture, we see how his father enters the room and sees his son on the floor crying; he wonders what has happened.

In the second set of eight pictures, another child is going fishing early in the morning. The boy is imagining catching three fish. He then catches those three fish and cooks one on the grill at lunchtime. The boy goes to the fish market with the remaining two fish. A man gives him some money in return. When he gets home he tells his father about his experience. The father then asks him what he would like to do with the money: "Do you want a soccer ball or maybe a fishing rod?" The boy answers that he wants neither; he says that he wants a rifle. In the last picture, the father is depicted as being disappointed with his son's choice.

The order of the pictures was scrambled for the jigsaw tasks, and each student (student A and student B) was given a set of four pictures from the story (student A: 1, 3, 5, 7; student B: 2, 4, 6, 8). The same comic strips were used for the dictogloss tasks: two texts were created based on the pictures (see [Appendix A](#)), following the method used by Swain and Lapkin (2001) and Yilmaz (2011). No specific language structure was targeted.

As in Yilmaz (2011), the text stories were created from the picture stories of the jigsaw tasks in order to control for possible content differences across task types. Three native speakers of Spanish were asked to write a story based on each set of pictures. These three versions of each set were then combined to create one story ensuring the same level of linguistic complexity.

These two picture stories were utilized in the present study because they have been found to be very similar in cognitive complexity measures (see Yilmaz, 2011). In terms of linguistic complexity, the texts created for the dictogloss tasks were analyzed in terms of T-units² and lexical diversity (LD).³ In addition, texts were also compared using the Fernandez-Huerta index (FHI),⁴ a very common test to measure readability in Spanish. Both texts had a similar number of T-units (Dictogloss 1 = 18; Dictogloss 2 = 17) and a very similar LD score (Dictogloss 1 = 59.8; Dictogloss 2 = 59.7). Regarding FHI, both texts tested in the *very easy* range (90–100) on the scale (Dictogloss 1 = 94.45; Dictogloss 2 = 94.06).

Procedure

Participants met with the researchers at one of the two computer facilities on campus during their regular class time. After they had introduced themselves and all questions were answered, learners signed the consent form and completed a short background questionnaire.

At this point, random dyads were created and assigned to Skype audio (AudSCMC) or Skype video (VidSCMC) groups. Numbered Mac computers were allotted and e-mail addresses shared between dyad partners. Next, students created the required Google documents and shared them with their assigned partners using their e-mail addresses. In addition, each computer was logged in to a Skype account created for the study. Participants then established preliminary contact with their partners and ensured that the

connection was working properly. Once participants were ready, the researchers explained the instructions for both tasks (see [Appendix B](#)).

After these preliminary steps were taken, learners began performing the tasks. Tasks (Jigsaw 1 or Jigsaw 2 and Dictogloss 1 or Dictogloss 2) were alternated between classes and the order of tasks was counterbalanced in order to control for task order effects. [Table 3](#) shows the order of tasks, the total number of students per class, the number of dyads, as well as the number of students excluded per class. For the jigsaw task, learners were given either Form A, which contained pictures 1, 3, 5, and 7, or Form B, which contained pictures 2, 4, 6, and 8. Students were then asked to work in pairs to place the eight pictures in the correct order and to write a story based on the pictures. For the dictogloss task, the researcher read the story twice at a normal pace. The first time, learners were only able to listen; whereas during the second reading, they were allowed to take notes. For both tasks, participants were given a maximum of 10 minutes to share the information they had with their partners using Skype (see [Appendix B](#) for instructions). Participants then began writing the story in a Google document using Skype to communicate with one another. Based on the time taken by learners to perform the tasks in a pilot study, students were given a total of 35 minutes to complete each one. All Skype conversations were recorded using [Ecam](#). Once the participants had finished each task, they shared their document electronically with the lead researcher.

Table 3. Counterbalancing of Tasks and Dyads

Class 1	Class 2	Class 3	Class 4	Class 5	Class 6
Dicto 1	Jigsaw 1	Dicto 1	Jigsaw 1	Dicto 1	Jigsaw 1
Jigsaw 2	Dicto 2	Jigsaw 2	Dicto 2	Jigsaw 2	Dicto 2
(16 - 2)	(18 - 2)	(14 - 4)	(16 - 2)	(19 - 5)	(13 - 3)
<i>N</i> = 14	<i>N</i> = 16	<i>N</i> = 10	<i>N</i> = 14	<i>N</i> = 14	<i>N</i> = 10
Dyads					
3 Audio	4 Audio	2 Audio	3 Audio	4 Audio	3 Audio
4 Video	4 Video	3 Video	4 Video	3 Video	2 Video

Data Analyses and Coding of LREs

Learners may produce more LREs during the construction phase of the story as they try to convey their intended meanings (Leeser, 2004). Therefore, the story construction stage of every conversation was transcribed (i.e., Step 2 of each task, see [Appendix B](#)). In order to account for time differences across tasks in this part of the process (Jigsaw, $M = 17:44$; Dictogloss, $M = 16:40$), the first seven minutes of the conversations that took place during this step were transcribed. Following Leeser (2004) and Yilmaz (2011), an LRE was defined as any part of learner–learner interaction in which an interlocutor focused on the accuracy of (a) the meaning of a linguistic item, (b) the spelling or pronunciation of a word, or (c) a grammatical form. Interactions in which learners implicitly or explicitly corrected themselves or others in (a), (b), or (c) were also classified as LREs.

Two raters independently identified the LREs and coded them in the two categories investigated: LRE focus and LRE outcome. Inter-rater reliability was 95% and 92% respectively for each category. Raters discussed all cases in which they found disagreement until they were resolved. Results of these analyses produced three types of LREs by focus: lexical, grammatical, and orthographic. Lexical LREs focused on the meaning or pronunciation of a Spanish word, including prepositions (see [Example 1](#)). Grammatical LREs took place when learners discussed any syntactical or morphological aspect of any Spanish word or construction (see [Example 2](#)). Finally, orthographic LREs were those instances in which participants focused on how to spell words correctly in Spanish (see [Example 3](#)).

Example 1. Lexical LRE

Student A: No entendí...pero ¿dijo un banco? ¿Qué dijo? (*I didn't understand...but did he say "a stool"? What did he say?*)

Student B: No sé "un banco"...creo que dijo banco. (*I don't know "a stool"...I think he said a stool.*)

A: No sé, ¿qué es un banco? (*I don't know, what is a stool?*)

B: No sé. (*I don't know.*)

A: Ponemos... (*We put...*)

B: No tenemos que decir banco. (*We don't have to say stool.*)

A: OK.

Example 2. Grammatical LRE

B: Después salía... (*After that, she went out [imperfect form].*)

A: Pero yo pienso que es "salió". (*But I think it's "she went out" [preterite form].*)

B: ¿Salió? (*She went out [preterite form]?*)

A: Sí, salió. (*Yes, she went out.*)

Example 3. Orthographic LRE

B: ¿Cómo escribes "cayó"? (*How do you spell "cayó" [he fell]?*)

A: Pienso que es c a y... (*I think it is c a y...*)

B: OK

As in previous research (see Leaser, 2004; Swain, 1998; Yilmaz, 2011), our data showed three types of LREs as far as the outcome is concerned: unresolved, solved correctly, and solved incorrectly. [Example 1](#) and [Example 2](#) provide instances of unresolved LREs and LREs solved correctly, respectively. [Example 4](#) shows an instance of an LRE that was solved incorrectly.

Example 4. LRE Solved Incorrectly

B: ¿Cómo escribes "pez"? (*How do you write "pez" [fish]?*)

A: p e s... (*p e s... [spelling it incorrectly]*)

A: Pez. (*Fish. [repeating the word]*)

Results**Research Question 1**

A repeated-measures ANOVA was performed to answer our first research question—aimed at exploring whether there were any significant differences in the number of LREs per task and per mode. Mode was entered as the between-subjects variable and Task, as the within-subjects variable (AudSCMC Dictogloss, $M = 5.63$, $SD = 1.77$; AudSCMC Jigsaw, $M = 6.57$, $SD = 1.57$; VidSCMC Dictogloss, $M = 6.10$, $SD = 2.04$; VidSCMC Jigsaw, $M = 5.60$, $SD = 2.11$). No significant differences were found for the number of LREs for Task, Mode, or the interactions between both variables. Results are shown in [Table 4](#).

Table 4. Repeated-Measures ANOVA on Number of LREs for Mode and Task

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Mode	1	1.270	1.270	0.369	.553
Task	1	0.975	0.975	0.245	.623
Task × Mode	1	10.206	10.206	2.569	.117

Research Question 2

The second research question asked if there were any significant differences in LREs' focus by Task or SCMC Mode. To answer this question, scores for each one of the LRE focus categories revealed in the analysis of the transcripts (i.e., lexical, grammatical, or orthographic) were submitted to separate repeated-measures analyses. Mode was entered as the between-subjects variable and Task as the within-subjects variable. Partial Eta squared (η^2) was reported as an estimation of effect size for ANOVAs: values of partial η^2 in the .01–.05 range indicate small effect sizes, values of .06–.13 indicate medium effect sizes, and values greater than or equal to .14 indicate large effect sizes (Green & Salkind, 2005). Results for each focus category are reported separately below.

Lexical LREs

Results for the repeated-measures ANOVA analysis on scores for lexical LREs (AudSCMC Dictogloss, $M = 3.11$, $SD = 1.56$; AudSCMC Jigsaw, $M = 4.84$, $SD = 1.34$; VidSCMC Dictogloss, $M = 3.70$, $SD = 1.42$; VidSCMC Jigsaw, $M = 4.30$, $SD = 1.34$) produced significant differences for Task only $F(1, 37) = 10.123$, $p = .003$, partial $\eta^2 = .22$.

Grammatical LREs

Results for the repeated-measures ANOVA analysis on scores for grammatical LREs (AudSCMC Dictogloss, $M = 1.63$, $SD = 0.50$; AudSCMC Jigsaw, $M = 1.11$, $SD = 0.94$; VidSCMC Dictogloss, $M = 1.45$, $SD = 0.76$; VidSCMC Jigsaw, $M = 0.55$, $SD = 0.60$) yielded significant differences for Task only $F(1, 37) = 20.073$, $p = .0001$, partial $\eta^2 = .35$.

Orthographic LREs

No significant differences were found in the repeated-measures ANOVA analysis carried out on the scores for orthographic LREs (AudSCMC Dictogloss, $M = 0.89$, $SD = 0.74$; AudSCMC Jigsaw, $M = 0.63$, $SD = 0.60$; VidSCMC Dictogloss, $M = 0.95$, $SD = 1.00$; VidSCMC Jigsaw, $M = 0.75$, $SD = 0.72$).

Research Question 3

Finally, in order to analyze if there were any significant differences in LREs' outcome by Task or SCMC Mode, three separate repeated-measures ANOVA analyses were performed on the scores for LREs solved correctly, solved incorrectly, and unresolved. As in previous analyses, Mode was entered as the between-subjects variable and Task as the within-subjects variable. Partial Eta squared (η^2) was reported as an estimation of effect size for ANOVAs. Results for each outcome category are reported separately below.

Correct LREs

Scores for correct LREs (AudSCMC Dictogloss, $M = 4.00$, $SD = 1.76$; AudSCMC Jigsaw, $M = 4.58$, $SD = 1.54$; VidSCMC Dictogloss, $M = 4.55$, $SD = 1.61$; VidSCMC Jigsaw, $M = 4.35$, $SD = 1.76$) were input into a repeated-measures ANOVA analysis. No significant differences were found.

Incorrect LREs

Results for the repeated-measures ANOVA analysis on scores for incorrect LREs (AudSCMC Dictogloss, $M = 0.74$, $SD = 0.45$; AudSCMC Jigsaw, $M = 0.95$, $SD = 0.52$; VidSCMC Dictogloss, $M = 0.80$, $SD = 0.52$; VidSCMC Jigsaw, $M = 0.60$, $SD = 0.50$) did not produce significant differences in the number of incorrect

LREs for Task, Mode, or the interactions between both variables.

Unresolved LREs

Results for the repeated-measures ANOVA analysis on scores for unresolved LREs (AudSCMC Dictogloss, $M = 0.89$, $SD = 0.57$; AudSCMC Jigsaw, $M = 1.05$, $SD = 0.25$; VidSCMC Dictogloss, $M = 0.75$, $SD = 0.44$; VidSCMC Jigsaw, $M = 0.65$, $SD = 0.59$) yielded significant differences for Mode: $F(1, 37) = 7.857$, $p = .008$, partial $\eta^2 = .18$.

Discussion

The tasks and oral SCMC modes used in this study produced no significant differences in the number of LREs produced by learners; both types of tasks (i.e., jigsaw and dictogloss) in either mode (i.e., AudSCMC or VidSCMC) led learners to produce a similar number of LREs. As mentioned previously, a few studies (Blake, 2000; Pellettieri, 2000; Smith, 2003; Yilmaz, 2011; Yilmaz & Granena, 2010) investigated task effects in SCMC. However, none of these studies was carried out in an oral SCMC context and only Yilmaz and Granena (2010), Yilmaz (2011), and Bueno-Alastuey (2013) operationalized focus on form using LREs. Blake (2000) found that learners performing jigsaw tasks in written-based SCMC focused on form more often (i.e., there were more negotiation-for-meaning episodes) than learners carrying out tasks such as information-gap, decision-making, or opinion tasks. Along those same lines, Pellettieri's (2000) descriptive study suggested that task type is of utmost importance in determining the amount and quality of negotiation produced in a written network-based environment. In turn, Smith (2003) compared jigsaw and decision-making tasks and found that the latter produced a significantly higher number of negotiation episodes. Also in a written SCMC setting, the studies by Yilmaz and Granena (2010) and Yilmaz (2011) found significant differences in the number of LREs produced when comparing jigsaw and dictogloss tasks.

Contrary to written-based SCMC studies, our study shows no significant differences between tasks in the number of LREs produced. Nonetheless, our results support the outcomes of the study by Swain and Lapkin (2001) in which they found no significant differences between tasks in the degree of attention paid to form when in a FTF context. It could then be argued that modality (oral vs. written) may play a role in how learners interact in the L2. The oral nature of the tasks may mitigate potential differences in learners' performance in terms of LREs. Although Swain and Lapkin (2001) hypothesized that, given the right circumstances, dictogloss tasks should elicit more instances of focus on form, their results in an oral context did not support those claims, and neither do ours (in an oral SCMC setting). Further favoring an argument along these lines, Williams (1999) found a very similar number of LREs produced by learners at each proficiency level in a FTF study.

Finally, Bueno-Alastuey (2013) investigated quantity and type of LREs at different proficiency levels using a two-way information task only. She did not, however, focus on differences within each proficiency group, and thus it was difficult to compare her results to those of the present study. It appeared that the greater content or meaning focus in the jigsaw task—argued by Yilmaz (2011) as preventing learners from allocating attentional resources to form—did not apply in this particular context.

Our second research question investigated differences in LRE focus between tasks and oral SCMC modes. Our results support other studies in which the main source of negotiation for meaning or LRE focus is of a lexical nature. Overwhelmingly, the present study shows that learners' main concern is vocabulary when performing these tasks. Furthermore, our results show a significant difference between tasks in the number of lexical LREs and the number of grammatical LREs. On one hand, learners produced a significantly higher number of lexical LREs in the jigsaw task. On the other hand, results show that learners in the dictogloss task produced a significantly higher number of grammatical LREs when compared to the jigsaw task. These results confirm results from past studies in which vocabulary meaning has been the main concern of participants when performing L2 tasks in written-based SCMC contexts (e.g., Blake, 2000; Pellettieri, 2000; Smith, 2003; Tudini, 2003). Upon examining those studies (that actually used the same type of tasks as the present study), we found mixed results. Yilmaz (2011) did not find a significantly higher

number of lexical LREs in either task, but numbers of lexical LREs were indeed higher than grammatical or orthographical LREs. Swain and Lapkin (2001) found no significant differences between lexical and morphological LREs produced in the jigsaw and dictogloss tasks. Contextual differences among studies make it a challenging task to draw definitive conclusions, but our results seem to confirm that vocabulary is the main source of focus on form regardless of the task. However, more studies should be carried out with the same type of tasks in similar contexts in order to confirm these conclusions. Let us bear in mind that participants in the study by Yilmaz (2011) were college-level ESL learners of differing proficiency levels with Turkish as the L1, whereas the participants in the study by Swain and Lapkin (2001) were Grade 8 Anglophone students of French in an L2 immersion program.

Finally, regarding the outcome of the LREs produced by learners in this study, no significant differences were found between tasks for either correct, incorrect, or unresolved LREs. Interestingly, however, a significantly larger number of unresolved LREs were found in the AudSCMC. These results are contrary to Yilmaz's (2011) study in which he found significant differences between the outcomes of LREs elicited in the two tasks: learners carrying out the dictogloss task were able to correctly solve more LREs whereas participants in the jigsaw task left more LREs unresolved. On the contrary, Leeser (2004) found a higher percentage of unresolved LREs in low-proficiency-level dyads performing an oral passage reconstruction task similar to the dictogloss task used in this study.

Unlike the present study, none of these previous works compared modes of communication. Nevertheless, given their results, it seems possible to argue that mode might be a key factor in the production of episodes in which learners focus on form. Previous studies that did indeed compare modes of communication have shown differences in terms of aural comprehension of target vocabulary items (Yanguas, 2012) and in the amount of linguistic elaboration used in the negotiation routines by AudSCMC groups. This has led to more routines with partial or negative outcomes (Yanguas, 2010). Our results here support those of Yanguas (2010), in that the AudSCMC group had more instances of non-communication than the VidSCMC group, which provided visual resources that could be used to aid the conversation. Unlike that study, we have not analyzed the number of turns per LRE but the positive outcome of such unresolved LREs could be the increased quantity of L2 used (Yanguas, 2010); this should be further investigated.

Limitations and Future Research

This study has certain limitations that should be addressed in future studies in order to build a clearer picture of how L2 learners interact and focus on form in an oral SCMC context. First of all, a qualitative analysis of the LREs produced by learners would provide very valuable information as to how students interact when performing communicative tasks of the kind investigated in this study. Also, LREs should be examined and compared during all phases of the task in order to gain a complete picture of the processes involved. Furthermore, proficiency level should also be included as a variable in the research design of the study so that we can investigate how learners at different levels of proficiency focus on form in this context. Finally, it would be very useful and revealing to include the investigation and analysis of the written product. In this manner, the relationship between the written outcome and learners' interaction could be explored.

Conclusion

In conclusion, the current study set out to investigate whether there were any significant differences among L2 Spanish learners in terms of LREs when performing two different communicative tasks (jigsaw vs. dictogloss) in two different SCMC modes (VidSCMC vs. AudSCMC). This study revealed no significant differences in the number of LREs, but the type of LREs did depend on the task that the learners worked on: lexical LREs in the jigsaw task and grammatical LREs in the dictogloss task. Furthermore, SCMC mode affected the LRE outcome regardless of the task type. Contrary to Yilmaz (2011), we found no significant differences between tasks in the number of LREs elicited. Further oral SCMC studies need to be

implemented, but it appears that the oral nature of the interaction might mitigate potential task effects, corroborating the results of Swain and Lapkin (2001). As in past SCMC studies, lexical LREs are the most common, but we have shown significant differences between tasks in the characteristics of LREs and in LRE outcome according to SCMC mode.

As other studies in the FTF and SCMC literature have shown that learners do indeed focus on form and produce LREs when interacting in the L2 in those modes (e.g., Leeser, 2004; Yilmaz, 2011), we have shown this to be the case in oral SCMC as well. From an interactionist perspective, focusing on form (i.e., attending to language form and meaning in context) is a key concept that allows learners to build their L2 while attempting to communicate, as we do in the real world. Adding to the scarce amount of oral SCMC research in the CALL field, we have evidenced that this oral medium of communication can be used in the L2 classroom to foster interaction and focus on form. Pending further studies that confirm these results, the significant differences shown might be of use in the L2 classroom in order to target vocabulary or grammatical goals in an interactional setting.

Notes

1. Throughout this article, the term *SCMC* refers to *text-based SCMC*, unless explicitly stated otherwise (e.g., *oral SCMC*).
2. A T-unit is defined as a minimal, independent, terminable clause that has all modifying phrases attached to it (Larsen-Freeman, 1991).
3. $LD = \text{Number of different words} \div \text{Total number of words} \times 100$.
4. $FHI = 206.84 - (0.60p) - (102f)$. f = clauses, p = words. The test can be accessed [online](#).

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Appendix A. Task Texts

El dulce de fresa

La Sra. Pérez preparaba dulce de fresa en la cocina mientras su hijo la observaba. Cuando terminó, ella puso el dulce de fresa encima de la despensa, lejos del alcance de Simón. Entonces, su mamá salía a la calle y Simón le preguntó, “¿a dónde vas mamá?” “Voy a la oficina de correos, hijo,” dijo.

Su mamá no estaba en la casa y su papá estaba en la sala leyendo las noticias; Simón pensó que era el momento perfecto para probar el dulce de fresa. Sin embargo, como era muy bajo, no podía llegar con solo un banco.

Entonces, puso una silla enfrente de la despensa. Después, colocó el banco encima. Simón subió y trató de coger el dulce de fresa, pero justo cuando estaba a su alcance, el banco empezó a moverse y Simón se cayó al suelo. Cuando se golpeó contra el suelo, empezó a llorar. Cuando lo oyó, el Sr. Pérez le dijo, “¡ay Simón! ¿Qué hiciste?”

El pescador

A las siete de la mañana, Luis fue al río con su caña de pescar. En cinco horas y media pescó tres peces grandes. Como Luis tenía hambre, preparó uno a la parrilla. ¡Fue delicioso! Decidió llevar los otros dos pescados al mercado para venderlos.

Cuando regresó a su casa, explicó a su papá que le habían pagado por sus peces. Su papá estaba muy orgulloso. Ofreció llevar a Luis a la tienda de artículos deportivos. Le preguntó, “Hijo, ¿qué quieres comprar? ¿Quieres una pelota, una nueva caña de pescar...?” Luis respondió, “no papá, no quiero ni una pelota, ni una nueva caña de pescar.” “¿Qué quieres comprar entonces?” dijo el papá.

“¡Quiero comprar un rifle!”, respondió Luis. El papá de Luis se puso serio y preguntó, “¿por qué quieres un rifle, hijo?” Luis sonrió y exclamó “¡Papá, ya soy un hombre de negocios! ¡Quiero comprar un rifle para poder cazar más animales y ganar más dinero!”

Appendix B. Task Instructions

Jigsaw Task

You and your partner are going to work together in order to write a story based on the comic strips below. These comic strips have a total of eight pictures of which you only have four (your partner has the remaining four). The goal of this activity is to combine these pictures in order to create and write a story.

There **are two different stages** in this task:

1. First, using Skype, and without looking at each other’s pictures, you will tell your partner what pictures you have. You should now discuss what you think the right order of the eight pictures is and how to order them to create a story. You have a maximum of 10 minutes to complete this first step.
2. Once you finish Step 1, use Skype in Spanish to discuss the development of the story and write it in a Google word document; you can both write simultaneously on the same document. You will have a maximum of 25 minutes to complete this step and write the story. When you are finished, you will share the document with the researchers.

Dictogloss Task

You and your partner are going to work together in order to reconstruct a story to which you are going to listen while it is read aloud. The goal of this activity is for you and your partner to reconstruct the story as closely to the original as possible. You will listen to the story twice. You will be able to take notes only the second time.

After listening to the story, there are **two different stages** in this task:

1. Use Skype to speak in Spanish to your partner about the notes you have taken to determine how they are going to help you remember and write the story. You have a maximum of 10 minutes to complete this first step.
2. Once you finish Step 1, use Skype in Spanish to discuss the development of the story and write it in a Google word document; you can both write simultaneously on the same document. You will have a maximum of 25 minutes to complete this step and write the story. When you are finished, you will share the document with the researchers.

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