L2 pragmatics and CALL

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Abstract

In order to develop pragmatic competence in a language other than our own (L2), it is important to have enough knowledge of the cultural norms of the target language and enough opportunities to interact with a wide range of speakers to deploy different speech acts, registers, levels of politeness, conversational moves, and the like. The limitations common in traditional face-to-face classrooms have brought researchers in the field of Computer-Assisted Language Learning (CALL) to recognize that technology can provide environments to expose language learners to a larger variety of sociopragmatic situations and contexts to test and develop their L2 pragmatic competence. This article presents a historical overview of the tools and digital spaces that have been explored for the teaching and the research of L2 pragmatics. Pedagogical practices that have evolved from presentational to more interactive are then briefly discussed. The article ends with a look into what the future may bring for the field of technology mediated L2 pragmatics.

Keywords: L2 Pragmatics, Interaction, CMC, Sociopragmatics, Pragmalinguistics

Language(s) Learned in This Study: Various


Introduction

The ability to comprehend social norms and use language appropriately is what we understand as pragmatic competence (Kasper & Ross, 2002) and is an essential component of communicative competence (Hymes, 1972). Being pragmatically appropriate when speaking to others is important for successful social interaction. A lack of pragmatic competence often results in communication breaks and negative judgments with undesirable impacts. This is as much true in our mother tongue (L1) as in any other languages we learn. But for language learners, this is a more common situation, and while pragmatic errors in a beginner L2 speaker may be attributed to a lack of linguistic competence, the same errors are seen as a negative reflection of their character (impolite, unfriendly, rude, etc.) from an advanced speaker (Thomas, 1983).

Learning another language means not only acquiring the linguistic resources to understand and talk to others, but also the ability to use those linguistic resources with real people, considering what is and is not appropriate in a certain context. Being pragmatically competent in an L2 means understanding the sociopragmatics (i.e., the social norms and regulations) of a speech community, as well as the appropriate language needed (i.e., pragmalinguistics) according to contextual factors. These factors can include who the participants are, their relationship (i.e., social distance, relative power, ranking of imposition), their common social, cultural, and historical knowledge, the physical context of the interaction, and the ongoing evolution of the interaction itself. Achieving pragmatic competence is not an easy task for L2 learners. More often than not, they do not have enough knowledge of the cultural norms of the target language and/or they do not have enough opportunities or access to interact with a wide range of speakers to deploy different speech acts (i.e., the actions performed by language), registers, levels of politeness, conversational moves, and so forth (Kasper & Rose, 1999). This is especially the case in a foreign
language teaching context where access to other speakers of the target language may be limited to the classroom space, interaction is restricted to teacher-student and student-student interaction, and exposure to certain speech acts and conversation sequences (e.g., refusals, disagreement, condolences, dares, invitations) is less common.

These limitations, common in traditional face-to-face classrooms, have brought researchers in the field of Computer-Assisted Language Learning (CALL) to recognize that technology can provide environments to expose language learners to a larger variety of sociopragmatic situations, as well as opportunities and spaces to test and develop their L2 pragmatic competence (Kim & Brown, 2014). As Sykes (2017) states “digital technologies have expanded the possibilities for human interactions in ways that were never before imaginable, further complexifying the teaching and learning of interlanguage pragmatics” (p. 119).

Something that characterizes research on L2 Pragmatics in CALL is the enormous variety of topics. Studies have focused on whether learners comprehend or produce (in writing or speaking) a variety of pragmatic features (e.g., speech acts, politeness, inference, interactional moves, identity) with or through the use of a variety of technologies and digital environments (e.g., computer-mediated communication tools, games, synthetic environments, social spaces), within or outside the L2 classroom. The research methods in technology-mediated L2 pragmatics are also as diverse as the foci and topics of the studies. Research designs include observational studies (i.e., focusing on classroom processes of intact classes) as well as interventional studies (i.e., investigating the effect of a treatment on the comprehension or acquisition of a pragmatic feature). The length of the studies also varies (as it does in all CALL research) from as little as one treatment, or one class period, to longitudinal studies of a few weeks or months. The variety is even larger for data collection and analysis instruments, since researchers are including quantitative and qualitative methods from experimental research in the fields of L2 pragmatics (e.g., discourse completion tests, judgment tests, role-plays) and applied linguistics in general (e.g., pre- and post-tests, reaction times, questionnaires, interviews, discourse analysis) to explore elicited data as well as naturally occurring data.

It is not easy to aggregate results for such a large field and variety of research. This article attempts to extract and present some of the findings studies that employed technology and focused on L2 pragmatics have to offer so as to propose some lines of future research. The studies reviewed here come from the main journals\(^1\) in the fields of SLA and CALL, as well as other published materials (e.g., PhD dissertations). Given the space limitation, not all published research is included, but I hope the studies included serve to illustrate the historical evolution of the field of technology-mediated L2 pragmatics, including pedagogical practices that have evolved from presentational to more interactive. The article concludes with lines of future research to move the field forward.

**Historical Overview**

This overview is structured by technology or digital space, with technologies that produced earlier research such as text-based CMC and email first, progressing to more current innovations.

**Synchronous Text-Based Computer-Mediated Communication (CMC)**

The first studies of L2 pragmatics in CALL were mostly explorative and focused mainly on the comparison of CMC and face-to-face interactions to see whether the type of language generated was

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similar enough to those interactional aspects that were believed to lead to L2 acquisition (e.g., Negretti, 1999; Warschauer, 1996). These first studies showed that CMC provided opportunities for students to play a greater role in class discussion (e.g., managing discourse, suggest topics, request more information) than in face-to-face discussion (Chun, 1994). They also suggested that text-based CMC can be a positive environment with potential for L2 learning, including L2 pragmatics learning. The exposure to authentic L2 discourse and engagement with speakers of the L2 through, for example, telecollaborative projects, provides learners with explicit assistance and the possibility to observe and adopt sociopragmatic features of the target language (Belz & Kinginger, 2002; Cunningham, 2016). Studies also showed that learners follow quite idiosyncratic paths of development, highly dependent on their experiences during the interactions, the quality and amount of interaction, their rapport with their partners, and their own identities as speakers of the L2 (Belz & Kinginger, 2002; Gonzales, 2013; González-Lloret, 2008, 2011).

Studies of Synchronous CMC (SCMC) focusing on L2 pragmatics grew rapidly and the focus of investigation became more diverse, including the study of different speech acts, markers, mitigation devices, and the sequential organization of interaction. New studies confirmed that SCMC is effective to elicit pragmatic functions and various speech acts such as advice giving (Tsai & Kinginger, 2014). In addition, SCMC promotes interaction and collaborative learning, as well as provides learners with spaces to engage in interactional practices that are essential for the development of L2 pragmatic competence such as alignment with an interlocutor (e.g., Jenks & Brandt, 2013), organization of social presence (Vandergriff, 2013), construction of repair sequences (Tudini, 2013), and construction of identity (Liaw & English, 2017; Vandergriff, 2013). These studies demonstrate that L2 learners are capable of recognizing pragmatic norms and other pragmatic features such as implicature (Rafieyan et al., 2014), producing appropriate interactional acts and employing a multiplicity of resources, including multilingual resources (Abrams, 2013). Learners use strategies similar to those of native speakers in CMC to organize, develop, and maintain interaction (Tudini, 2010). Learners also prefer to maintain social interaction, while often ignoring linguistic problems, and they can employ complex, highly organized, and collaborative interactional work (Jenks & Brandt, 2013; Tudini, 2013). Interestingly, these results seem to be consistent through different languages and CMC technologies such as email (e.g., Kakegawa, 2009), Facebook, Skype, Twitter (Kim & Brown, 2014), blogs (Takamiya & Ishihara, 2013) and, as we will see later, even in multiplayer online games (Soares Palmer, 2010).

The interest in CMC has not declined. Recent studies of CMC (both synchronous and asynchronous) have expanded their methodological approaches to include Conversation Analysis. Abe and Roever (2019) for example found that proficiency level was a factor in the production of closing sequences during task performance using LINE (a messenger app). Although all learners were able to jointly accomplish the closing of the talk, only intermediate and advanced students were able to show sequential expansion, and only advanced students were able to manage participation frameworks. Most recently, Strambi and Tudini (2020) researched chat interactions between four female students of Italian and their male L1 Italian conversation partners. They found frequent uses of self-disclosure and direct questioning as interactional strategies that helped learners establish social relationships. According to the authors, eliciting and offering self-disclosure in CMC posed some challenges that “allowed learners to negotiate L2 politeness in an authentic but relatively safe environment, thus developing intercultural pragmatic knowledge” (p. 94). For a recent overview of L2 pragmatics in CMC, see Cunningham (2019).

**Asynchronous CMC: Email**

One of the first cross-cultural L2 pragmatic studies using technology was a comparison of emails written by Chinese EFL learners and US-American English speakers (Chang & Hsu, 1998). The authors found clear differences in how the two cultures understood email. While the Chinese English learners used email more as a formal letter (although their requests were much more direct), the American English speakers saw email more as a written memo.

Researchers’ interest in email spiked at the beginning of the 21st century, probably because it was the fastest growing form of communication. There were only 10 million email users in 1997 compared to
more than 4.6 billion email accounts in 2020 (Tankovska, 2021). The newness of email as a form of communication at this time was illustrated by Biesenbach-Lucas’ (2006, 2007) studies looking at levels of directness and politeness when requesting via email. In these studies, both native speakers and non-native speakers still had issues using email appropriately. They both used different levels of politeness according to the imposition of their requests, with learners using less successful strategies. Problems mitigating disagreement, using appropriate levels of politeness, and understanding power distribution seemed to be pervasive even among advanced learners and across languages (Al-Shalawi, 2011; Bloch, 2002; Ikeda, 2009). For example, Ikeda (2009) who studied the use of honorifics in email by learners of Japanese requesting information found that learners used a variety of resources to show the deference required in emails, but they still did not employ as many honorifics as native speakers in the same context. In spite of these difficulties, research shows that learners’ email use can improve with time as their understanding of the medium and the specific cultural constraints of the interaction improve (Chen, 2006).

Even when email has become a ubiquitous form of communication, studies are still finding that learners in this medium lack control of their politeness level, particularly in asymmetric interactions with interlocutors of higher power such as professors (e.g., Economidou-Kogetsidis, 2016). Learners’ emails also lack indirect strategies in spite of demonstrating strong pragmalinguistic control of these forms (Pan, 2012). It is interesting that there seems to be a preference for the use of direct strategies (e.g., like, want, need) and conventionally indirect query (e.g., is it possible…? can I…?) when requesting via email regardless of the learner’s L1 (Alcón-Soler, 2018; Félix-Brasdefer, 2012).

Although other technologies are attracting new research, the study of the L2 pragmatics of email continue. Recently, Dombi (2020) confirmed the previous finding that learners employ direct strategies and limited internal modifiers, and although they use formal address forms, they are not necessarily academic. Another recent study by Barón and Ortega (2018) investigated the effect of age on the production of requests via email. The findings showed a difference between younger (aged between 18-20) and older (aged between 30-40) learners when requesting in their L2 (English), but no difference for English speakers of that same ages. This suggests that there are other variables at play and more research is needed in this area. Most recently, Winans (2020) followed up on previous research on the politeness of requests via email. In contrast to previous studies, he found that although language learners used less (and less varied) syntactic modification in their email requests, they were, on average, judged more polite than the English speakers (consistently across six raters). As the author points out, this may well be because, as predicted by Biesenbach-Lucas (2007), learners today have had much more exposure to email and are, therefore, more familiar with the cyberpragmatics of the medium. It could also be that raters may be more accustomed to transactional emails written in English by multilinguals, or as a lingua franca, and perceived them as polite given the language level. As the author points out, this discrepancy in rater perception needs to be further investigated.

As for the role of instruction in the performance of email requests, several studies (Chen, 2015; Eslami et al., 2015; Nguyen, 2018) demonstrate that instruction can help learners write more appropriate email requests; although improvement varies according to instructional method, and it is not equally effective for different parts of the request.

Other Forms of CMC

Toward New Technologies

In the first comparison of text-based chat and an emergent oral CMC, Sykes (2005) determined that students engaged in text-based CMC used a greater variety of pragmatic strategies (and more complex ones) to refuse an invitation than the students engaged in oral CMC. New advancements in technology brought about more studies describing the possibilities of audio and video CMC for the development of pragmatics (in line with other studies in CALL) and the expansion of CMC to a multitude of digital contexts and tools. In a relatively early example of a study using multimedia and in line with previous studies exploring addressivity, Kim and Brown (2014) investigated the development of Korean address
terms during a three-month period employing a variety of naturalistic digital contexts (selected by the students) such as Facebook, email, Skype, a blog, Twitter and KakaoTalk. The authors concluded that CMC provides learners with opportunities and occasions to use a wide range of address terms that would have not been available otherwise, allowing learners “to move beyond the linguistic patterns of institutional classroom interactions” (p. 279).

Recently, García-Gómez (2020) explored the impact of the mobile application WhatsApp on students’ overall pragmatic competence when interacting in groups of Spanish and English speakers in a content course using English as a lingua franca. About 75% of the utterances were classified as hostile interactions by the researcher and these were mainly due to the low esteem of the Spanish speakers when using English, their excessive and inappropriate use of colloquial language and slang, as well as the students’ poor time management skills. García-Gómez (2020) concluded that WhatsApp had a negative effect on students’ interpersonal relationships. They texted each other at all times of day and night, expected quick answers, and admitted not being reflective in the things they texted, which resulted in conflict and lack of politeness. This study is a perfect example of how technologies without a careful design of their use and without student training are not only inefficient but can also be detrimental for students’ pragmatic development.

**Immersive Synthetic Environments and Virtual Worlds**

In the 2000s, Julie Sykes (2009) pioneered the idea of immersive synthetic environments and games as spaces for learners to practice L2 pragmatic interaction. She developed and researched Croquelandia, a space to engage Spanish students with refusals and apologies (face-threatening acts) in a variety of contexts and with different interlocutors (e.g., a vendor, a professor, a roommate) without real social consequence since the interlocutors were all in-game characters. Through pre- and post-discourse completion tasks (DCTs), pre- and post-questionnaires, retrospective interviews, and more than 100 hours of in-game play data, Sykes (2009) found that learners increased their knowledge about the two speech acts, and they improved the use of pragmatic formulas (e.g., lo siento- I am sorry). However, learners did not experiment in the space as much as it was hoped and, although they had high motivation and they liked the activity, their pragmatic production did not increase substantially. The author states that although learners saw the possibility of restarting each interaction as many times as they wanted as a positive part of the activity, they rarely restarted quests and therefore deprived themselves of one of the most beneficial attributes of the game (Sykes, 2014).

Two studies exploring the virtual environment Second Life for its potential for L2 pragmatics learning are Pojanapunya and Jaroenkittiboworn (2011) and Peterson (2012). Pojanapunya and Jaroenkittiboworn (2011) studied how Thai students of English produced closing sequences in the virtual environment. The results showed that although learners were interacting through avatars and did not need to be concerned about face-saving, they frequently performed pre-closings such as informing their interlocutors of the need to leave or agreeing on future encounters before closing the sequence by saying good-bye. Peterson’s (2012) study showed how EFL learners in Second Life employed interactional resources used in face-to-face interaction (e.g. production of utterances to signal interest, attention, and encouragement) and created and maintained interpersonal relationships by frequently exchanging information and deploying positive politeness strategies (e.g., the use of greeting and leave-takings, humor, and colloquial language). These two studies demonstrate how learners borrow pragmatic conventions from the real world and bring them into the virtual world, which suggests that virtual environments allow for a close reproduction of face-to-face interactions and can be used as spaces for practice. As Sykes and Dubreil (2019) state, virtual environments can overcome existing obstacles to pragmatic instruction such as the limited availability for authentic context for practice and the provision of timely feedback, but “research-based environments and tasks are fundamental to their success for learning L2 pragmatics both in and out of the classroom” (p. 395).
Digital Games

Video games may be particularly beneficial for L2 learning because they provide an immersive social environment with interactive dialogues (Young et al., 2012). As research on games became popular in CALL, Soares Palmer (2010) showed the potential of World of Warcraft for L2 pragmatic socialization by looking at general speech acts such as greetings, leave-takings, requests for help, suggestions, refusals, as well as those more specific to the game such as mass invitations, negotiation for allocation of resources, consolations, and gendered interactions. The findings showed that, even when there was no significant grammatical improvement, learners were able to successfully integrate themselves in a community of players, adopted several pragmatic moves integral to the game, and increased their pragmalinguistic repertoire of greetings and requests for help. Similar to Sykes’ (2009) learners, the participants in this study failed to master apologies and felt they still had not mastered more delicate speech acts such as consolations. Interestingly, Soares Palmer (2010) also found that gendered interaction was an important factor in the exposition to and acquisition of pragmatics, and it was affected by the offline gender of the player as well as the gender of their character.

In a series of studies, Piirainen-Marsh and Tainio researched the development of several L2 pragmatic features of two Finnish young adults engaged in playing Final Fantasy. They demonstrated how these players were able to organize their interaction through the use of their bilingual resources (Piirainen-Marsh, 2010) and other resources such as lexical and prosodic repetition and collaborative turn-sequences with game characters (Piirainen-Marsh & Tainio, 2009). They also demonstrated how the way the participants interacted and socially organized their game play changed over time (Piirainen-Marsh & Tainio, 2014).

Within digital games, two investigations into place-based games give us a glimpse of their possible uses for L2 pragmatic instruction. Holden and Sykes (2012) developed and researched the mobile game Mentira for learners of Spanish, targeting the learners’ choice of pragmatically appropriate language when interacting with in-game characters to collaboratively solve a mystery in the Albuquerque neighborhood of Los Griegos. Their research on the use of the game shows that the technology was effective in engaging learners with sociopragmatic features of the language. Also, using a place-based game, ChronoOps, Hellermann et al. (2013) showed how learners collaborate and coordinate movement and talk around a mobile device. The data also shows that the device is essential to how the participants organize the interaction and how they communicate with each other. Place-based games and mobile technologies in general are areas of research that have just began and are in dire need for more research.

Finally, it is worth mentioning the research by Tang and Taguchi (2020) of a scenario-based game, Questaurant, designed to teach Chinese formulaic expressions. In this game, the L2 learner plays the role of a robot who works in a restaurant in a Chinese-speaking community and needs to complete several quests by interacting with other in-game characters. An interesting finding from their research is the importance of testing the game design in order to really appreciate whether the pedagogic choices implemented to increase learning are actually effective. In their case, although the game included explicit (metapragmatic) and implicit (built-in characters’ facial expressions) feedback to maximize learning, students only paid attention to the explicit metapragmatic feedback (increasing their pragmatic awareness), missing the less salient implicit feedback that was given through the facial expression of the in-game characters.

Interactive Automated Dialogues

One of the innovations that are starting to be explored for their potential for L2 pragmatic development is interactive automated dialogues or Spoken Dialogue Systems (SDS). According to Timpe-Laughlin et al. (2017), these SDS provide environments effective for L2 pragmatic learning because they allow for the design of specific pragmatic foci, provide learners with authentic and relevant input, promote observation and reflective skills, provide opportunities for interaction, and offer feedback and assessment. In this line of research, Sydorenko et al.’s (2018; 2020) studies of video-based simulations, in which students needed
to record a request for a letter of recommendation, show that learners modified their content and language forms by not only following the models they observed, especially sociopragmatic strategies such as appeasers, disarmers, and grounders, but also by eliminating inappropriate strategies that did not appear in the models. In addition, students stated that the program helped them notice pragmatic features and helped them develop confidence. Similar results were found by Taguchi et al. (2017), who investigated the potential of video scenarios to promote comprehension and production of Chinese formulaic expressions. Through pre-, post-, and delayed post-tests they found significant gains in the learners’ knowledge of formulaic expressions, which was maintained after two weeks. The amount of both sociopragmatic and pragmalinguistic errors also decreased but significantly more for sociopragmatic errors. As in previous studies, the authors also found a large variation in the degree of learning among students. Most recently, using a humanoid robot named NAO in a Persian preschool, Minoo and Nafiseh (2020) found that children exposed to the robot significantly increased their pragmatic requesting and thanking performance. Also focusing on requests, Timpe-Laughlin and Dombi (2020) investigated the request strategies of L1 Hungarian and Japanese learners of English when engaged with a SDS. According to the authors, the system can provide input and opportunities for oral practice while providing learners with systematic feedback that can take into account the types of pragmatic errors to foster learners’ awareness of their pragmatic moves and provide individualized feedback.

Social Networks

Finally, a few studies have been conducted on the potential for L2 pragmatic learning through social media platforms. Two studies, by Reinhardt and Ryu (2013) and Blattner and Fiori (2011), investigated the potential of social networks, mostly Facebook. Reinhardt and Ryu (2013) found that Facebook aided in the development of sociopragmatic awareness of the use of Korean honorifics while Blattner and Fiori (2011) found that through observation-based activities using Facebook for a semester, learners of Spanish were able to identify the sociopragmatic norms of greetings and leave takings in Spanish, as well as the pragmalinguistic routines associated with them. Using the social forum Reddit, Yeh and Swinehart (2019) explored whether engagement facilitated ESL learners’ cyberpragmatic awareness. The results show that learners did not achieve a lot of interaction with other members and this was frustrating and demotivating for them. In spite of this, learners became aware of patterns of interaction important to be successful on the site and the norms of the community. The authors proposed a cycle of observation, participation, and analysis as a useful tool to facilitate L2 learners’ interactions in any type of online community.

Corpus-Based L2 Pragmatics

Corpus-based L2 pragmatics has a long-standing tradition of research. Early studies include those by Vyatkina and Belz who created Telekorp, a corpus of English-German telecollaborative interactions, to study the development of learners’ L2 pragmatics and also to be used as a pedagogic tool for learners’ analysis of their own language and that of expert speakers (Belz & Vyatkina, 2008). Other examples are the longitudinal multimedia (audio and video) corpus collected at Portland State University, the Multimedia Adult English Learner Corpus (MAELC), that facilitated studies of different pragmatic features such as the use of ‘no’ in refusals (Hellermann, 2009) or the Michigan Corpus of Academic Spoken English (MICASE) which has been annotated for pragmatic features such as discourse style and several speech acts (e.g., disagreement, humor, sarcasm, requests) (Maynard & Leicher, 2007). Recently, Bardovi-Harlig et al. (2017) found that both the use of teacher-prepared corpus materials and learners’ direct engagement with a corpus had a positive effect on learner’s comprehension and oral production of pragmatic routines for agreement, disagreement, and clarification, with teacher’s developed materials leading to significant improvement of the use of pragmatic routines. The authors attribute the finding to the way the materials were presented and highlight the importance of providing guidance and directing learners’ attention to the pragmatic features as well as including a variety of activities. For more on pragmatics in learner corpora see Vyatkina (2013) and the International Journal of Corpus Linguistics and Pragmatics.
Pragmatic Instruction

In spite of a several metanalyses suggesting the benefit of pragmatic instruction (Jeon & Kaya, 2006; Plonsky & Zhuang, 2019; Taguchi, 2015), as well as several volumes including research on the instruction of L2 pragmatics (e.g., Taguchi & Roever, 2017), the teaching of L2 pragmatics is hardly ever present in L2 classrooms or textbooks (Ren & Han, 2016). Moreover, when pragmatic information is included, the instruction is reduced to cultural side notes (e.g., how to greet in a Japanese business meeting) or as part of grammatical explanations (e.g., what form of a verb to use for formal or informal commands in Spanish).

Some of the first efforts to bring an awareness about pragmatics through technology to the language classroom were websites showcasing videos, activities, sociopragmatic explanations, and pragmalinguistic examples. The Center for Advanced Research on Language Acquisition (CARLA) created two of the first examples of such materials: Dancing with Words for the study of Spanish speech acts and Strategies for Learning Speech Acts in Japanese for learners of Japanese. Other examples of web materials can be found in Utashiro and Kawai (2009), who designed and developed a web application using DiscourseWare that incorporated videos of native speakers with awareness-raising, analysis, and production activities to teach Japanese reaction tokens. Similarly, Furniss (2016) built a website using Weebly to teach Russian routine formulas through video, corpus excerpts, and a variety of activities. For a recent overview of instructional material development in L2 pragmatics see Tatsuki (2019).

Although places of knowledge, such as these sites, are extremely useful and can lead to pragmatic development (as it was the case for Utashiro and Kawai, 2009 and Furniss, 2016), we know that learners need to interact with others in order to learn to use pragmatics effectively and appropriately (much like language itself). The evolution of technology from a more presentational Web 1.0. towards a more interactive Web 2.0 has facilitated such an engagement. However, it is essential to remember that technology does not bring authentic, rich, and effective communication automatically (Vandergriff, 2013); We need to develop pedagogic interventions that maximize the potential of the technology as well as sound methodological choices for its inclusion in the classroom (González-Lloret, 2019). Research on instructed L2 pragmatics has laid the foundation to develop such pedagogically-sound interventions.

In technology-mediated environments, several studies have confirmed that instruction helps improve students’ pragmatic production in email communication (e.g., Alcón-Soler, 2018; Chen, 2015; Eslami et al., 2015; Nguyen, 2018) and CMC (e.g., Li, 2019; Li et al., 2018). Between implicit and explicit instruction, it seems that explicit instruction is more effective (Eslami et al., 2015; Gu, 2011) although the operationalization of explicit instruction varies greatly between studies (e.g., consciousness-raising activities, explicit metapragmatic explanations, identification form-focused activities, feedback, and/or a combination of several of these). In addition, other variables may be at play in the effectiveness of implicit or explicit instruction (Sydorenko et al., 2020). The most recent published metanalysis on L2 pragmatic instruction by Plonsky and Zhuang (2019) suggests that explicit instruction is more effective than implicit instruction, and instruction that includes feedback and practice is the most effective. This is an area that would certainly benefit from more research. For a recent overview of technology-enhanced L2 instructional pragmatics, see Blyth and Sykes (2020).

Future Research

New technologies emerge every day with their own pragmatic rules, and these evolve and change as their users interact with them and with others through them. Yus (2019) points out a progression of pragmatics research linked to different stages of engagement with technology that has moved from the creation of online identities towards a physical-virtual convergence where people’s online identities are the same as their offline selves. If this is the case, engaging our students with technology in the L2 is more important than ever since it is probably through technology that they are going to establish many social links and it is in online spaces that they are going to develop their identities as L2 speakers. How we present
pragmatics to our learners can greatly help (or hinder) the development of their L2 identities. Traditionally, using one’s L1 sociopragmatics in the L2 was seen as negative transfer. However, this needs to be reconceptualized within a new paradigm of translanguaging practices. Kulavuz-Onal and Vásquez (2018) and Piirainen-Marsh (2010) are excellent examples of research accounting for the bilingual resources of participants who orient to different languages and other semiotic resources to organize their communication and establish their identities.

One area of L2 pragmatics research that will likely increase in the near future is that of multimodal analysis of L2 data since the visual aspect of communication is becoming more and more prominent and a large amount of how we communicate is non-verbal. According to Smith and Anderson (2018), image-sharing sites (i.e., Snapchat, Instagram) are now the most popular forms of social media, especially among young internet users. This was also evident by the recent boom in popularity of TikTok with 738 million downloads in 2019 (Iqbal, 2020). Here, L2 pragmatics research can benefit from existing investigations that have laid the foundation of relational work in multimedia and explored methodological issues such as the need to use categories developed especially for multimodal interactional analysis (Bou-Franch & Garcés-Conejos Blitvich, 2018). In this line, L2 pragmatic research could explore to what extent L2 learners can infer and interpret the implicature of emoticons in an L2 (González-Lloret, 2016; Vandergriff, 2014); whether a variety of multimedia enhances pragmatic comprehension (Taguchi et al., 2016); whether the combination of picture and text in a meme brings interpretations that are not possible from one or the other separately; or the potential that new multimodal platforms such as Twitch have for teaching, learning, and researching L2 pragmatics.

As new technologies become more available in educational settings, we will need research about their potential for L2 learning and for L2 pragmatic learning. Some technological innovations that have started to appear in L1 pragmatic studies but still not, to my knowledge, in studies of L2 pragmatics are: eye-tracking (e.g. Parodi et al., 2018 for the study of anaphora) and EEG (electroencephalogram) (e.g. Egorova et al., 2013 for the study of the speech acts of naming and requesting). Another innovation with great research potential is immersive virtual reality (VR) for L2 learning. Although research already exists on the use of VR for language learning (Blyth, 2018), there are no studies, to the best of my knowledge, on its applications for the learning of L2 pragmatics.

Another area worth future research is that of phatic communication in L2. Essential to establishing social relationships, phatic communication sustains social connections. It serves to maintain channels for communication to establish and maintain “social bonds between individuals over and above the exchange of information and hence do not necessarily express any particular thought nor aim to exchange facts about the world” (Vetere et al., 2009, p. 178). As Yus (2019) points out, many technologies today have become phatic in the sense that their purpose is mostly to establish and maintain human relationships, and these technologies (e.g., Facebook, Twitter, WhatsApp, Instagram) demand constant supply and exchange of messages. To my knowledge, there are still no investigations in L2 technology-mediated pragmatics focusing on phatic communication. Connected to this social use of language, more research that explores social networks, the resources unique to these spaces, and how these are understood (or not) and appropriated (or not) by L2 speakers is needed.

Lastly, as we interact more with intelligent systems (e.g., Siri, Alexa, major airlines), pragmatics will play a bigger role. As multilingualism is accepted as the norm rather than an exception, how systems interact in pragmatically appropriate ways with multilingual humans (and the other way around) will probably generate an important field of investigation. Technologies that seem quite sophisticated in their interactional practice, and even those that seem to make language learning superfluous such as real time machine translation (e.g., Google Pixel Buds) are still not capable of accounting for sociocultural differences or language that diverges from direct translation (e.g., implicature, irony, humor) (Blyth, 2018). This opens interesting opportunities for the development of such systems as well as research venues for how we can harness their possibilities for the teaching and learning of L2 pragmatics.
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