Exploring the Interface of Interlanguage (L2) Pragmatics and Digital Spaces

Julie M. Sykes¹ and Marta González-Lloret²

L2 Pragmatics and the Digital World

In a growing, multilingual world, learners across the globe need to be prepared for a society and a workforce in which most communication is with people in other places and, most often, mediated by technology. As a language learner, being able to use different modes of communication for remote participation, understanding authentic electronic discourses, and engaging in digital communities are essential for success in our technology-saturated world. Thus, expanding one’s language repertoire to adapt to a multiplicity of communicative contexts is fundamental.

Participating in a multilingual world is usually understood as being able to speak a language (i.e., having language fluency, and sometimes accuracy as well as complexity). We know, however, that being a competent speaker of a language involves more than being fluent. As González-Lloret (2019) points out, a capable speaker needs to engage in appropriate language use to effectively accomplish any communicative act. A speaker that is grammatically competent but inappropriate will be regarded as impolite or unfriendly (Thomas, 1983). This may have critical consequences, especially in high-stakes situations such as business interactions, formal introductions, and work interviews. Furthermore, the dynamic nature of human interaction requires speakers and listeners to shift their language use as the context, mood, or expectations of their interlocutor(s) change, making it a
complex endeavor. The development of such appropriate use (i.e., production and interpretation) of the language is what we understand as L2 pragmatics or interlanguage pragmatics. According to Björkman (2011) “the aim in real high-stakes interaction is to communicate in a practical and functional fashion and achieve the desired outcome. In such settings, one needs to acquire an appropriate pragmatic competence to achieve effectiveness in communication” (p. 923). With this volume we want to further demonstrate that foreign or second language classrooms (L2) that incorporate intentioned and fully-integrated technologies can be an excellent space for the development of both digital literacies and appropriate L2 pragmatics.

Digital technologies have a history of use in L2 pragmatic teaching, learning, and research. Sykes (2018) summarizes this work into five areas of research and pedagogical innovation, each addressed by the articles in this special issue.

1. **Increased availability of curricular materials via digital delivery mechanisms.** These materials include digital curricula currently available in Arabic (Ward, Escalante, Al Bayyari, & Solorio, 2007), Japanese (Cohen & Ishihara, 2005; Utashiro & Kawai, 2009), Russian (Furniss, 2016), and Spanish (Sykes & Cohen, 2006).

2. **Empirically-validated classroom intervention(s).** Numerous studies have begun to address the effectiveness of digitally-mediated instructional tools in the classroom. This work examines, for example, the role of computer-mediated communication (González-Lloret, 2008, 2009, 2014, 2016; Sykes, 2005; Taguchi, 2015) and digital games and simulations (Holden & Sykes, 2013; Sykes, 2005, 2013; Taguchi, Li, & Tang, 2017) in L2 pragmatic development.

3. **Augmented focus on ILP in telecollaboration.** Examination of the ways in which telecollaboration (i.e., communication between two interlocutors learning each other’s language) can contribute to L2 pragmatic development addresses explicit learning of pragmatic formulae (Belz & Kinginger, 2003; Cunningham, 2014, 2016; González-Lloret, 2008), longitudinal interaction and mediated communication (Gonzales, 2013; Jenks, 2012), learner corpora analysis (Belz, 2004; Furniss, 2016; Urzúa, 2013; Vyatkina & Belz, 2006), asynchronous communication (Li, 2013; Takamiya & Ishihara, 2013), stereotype avoidance (O’Dowd, 2016; Vyatkina & Belz, 2006), and L2 pragmatic comprehension (Rafieyan, Sharafi-Nejad, Khavari, Eng, & Mohamed, 2014).

4. **Extended research methodologies.** Extending data collection and analysis beyond elicited pragmatic formulae, technology has enabled the collection and analysis of expanded data sets, thereby increasing our understanding of learners’ abilities. Furthermore, these new
methodologies extend the field’s understanding of L2 pragmatics more generally by including a focus on corpus analysis with pragmatic tagging (Fung & Carter, 2007; Urzúa, 2013), technologically-mediated discourse completion tasks for added context (Roever, 2013), automatic scoring and genre analysis (Taguchi, Kaufer, Gomez-Laich, & Zhao, 2017), and metapragmatic analysis and real-time learner behavior (Sykes, 2013).

5. **Expanded digital contexts for human-to-human interaction and pragmatic awareness.** The advent of consistently emerging contexts for communication greatly increases the need for extended L2 pragmatic skills while interacting with others in the world. Distinct from the use of tools to learn pragmatic skills for face-to-face interactions, it is also critical to learn the pragmatic behaviors of those digital contexts (Scott, 2015; Sykes, 2019; Yus, 2010).

Each of the five areas summarized above represent ongoing work in the field of digitally-mediated, L2 pragmatic development. Still in its adolescence, the field is growing to include a wide variety of approaches and perspectives. The articles in this special issue represent these diverse perspectives, each offering new insights as well as ideas to catalyze additional work in the future.

**Emergent Technologies for Instruction and Assessment**

A key contribution of technological development has been, and continues to be, its role in classroom instruction and assessment of pragmatic abilities. This includes the creation of new materials for instruction and assessment as well as the evaluation of the effectiveness for learning L2 pragmatics). While current materials are available in a variety of languages—Arabic (Ward et al., 2007), Chinese (Taguchi et al., 2017), Japanese (Cohen & Ishihara, 2005; Utashiro & Kawai, 2009), Russian (Furniss, 2016), and Spanish (Sykes & Cohen, 2006)—they are still sparse and not integrated more broadly in L2 language curricula or classrooms. The use of digital technologies to create and evaluate materials for the teaching and learning of L2 pragmatics will continue to be essential in their development. Digital tools offer critical mechanisms for the delivery of L2 pragmatic content and learner interaction with the materials (i.e., multimedia capabilities, immersive game environments, virtual reality).

In this volume, Tang and Taguchi add to our understanding of the use of digital tools for L2 pragmatic instruction by exploring the use of a digital game, *Questaurant*, to teach formulaic expressions in Chinese. Based on previous literature suggesting games as optimal environments for language learning, the authors explored the usability of four gaming attributes—context, goals, feedback and interactivity—and their potential for teaching Chinese
formulaic expressions. To explore learners’ perceptions of these attributes, the authors created a game where the learner played the role of a robot working at a restaurant. In this role, they were asked to complete several quests by interacting with built-in characters in different social scenarios. The results of the interviews with students showed that learners liked the game and that all four gaming attributes contributed to the experience. The learners found the context of the game motivating because it immersed them into a situation, provided a purpose for using the language, and it was interactive and engaging. However, half of the participants did not perceive the goals as engaging and found the feedback limited (most of the students did not notice the implicit feedback provided by the built-in characters). The authors discuss implications for future research and design.

This study adds to a limited body of currently available research addressing the effectiveness of digital games for the teaching and learning of L2 pragmatics (Holden & Sykes, 2011, 2013; Sykes, 2009, 2013; Sykes & Dubreil, 2019; Taguchi et al., 2017). Combined, these studies only address three games (Croquelandia, Mentira, and Questaurant) and are not sufficient to present aggregating convincing results of how, or even if, these environments help develop L2 pragmatic abilities. Furthermore, the availability of emergent technological tools, such as virtual and augmented reality, further opens up the possibility for this type of work to be done. Continued work addressing the features which contribute to the learning of L2 pragmatics via digital games is needed as the complexities of available technologies continue to advance.

**Extending Our Understanding of Learner Abilities and Classroom Practices**

The ability to document human interactional patterns via digital mediation continues to offer significant advantages for the study of L2 pragmatic development. Text chat, both synchronous and asynchronous, has been used to capture significant amounts of learner data, thereby enabling the analysis of various pragmatic abilities. This work includes the study of computer-mediated communication as a classroom intervention (i.e., Gonzales, 2013; Jenks, 2012; Sykes, 2005; Taguchi, 2015) as well as via telecollaboration in which learners communicate with native speakers of the language they are learning (Belz & Kinginger, 2003; Cunningham, 2016, 2017; González-Lloret, 2008, 2011, 2016; Liddicoat & Tudini, 2013; Tudini, 2013; Vandergriff, 2013, 2014). Drawing on a variety of perspectives, ranging from conversation analysis to the study of isolated pragmatic formulae, together, these studies suggest computer-mediated communication is an effective tool for the teaching and learning of a variety of L2 pragmatic components. Two studies in this volume further extend our
understanding of learner behavior when engaging in computer-mediated communication, more specifically, synchronous chat (Abe & Roever) and digital storytelling (García-Pastor).

The majority of work using synchronous text chat for L2 pragmatic development examines learner pragmatic abilities while completing specific language functions before, during, and after instruction. Here, Abe and Rover extend the use of text chat for learner analysis to better understand learners’ classroom interaction itself. In doing so, they demonstrate the use of synchronous text chat to investigate interactional competence in classroom tasks by proficiency level. The documentation and analysis of 97 participant-generated task closings from 53 Japanese learners of English highlights key interactional patterns by learners when completing classroom tasks of varying complexity. Utilizing a conversation analysis (CA) approach, Abe and Roever used time-stamped transcripts to analyze each series of posts (i.e., turns) in the participant-generated closings. Findings demonstrate that beginning-level learners used more abrupt closings in which they indicate reaching agreement on the task closing and then immediately terminate the task itself. In contrast, high-level learners demonstrated non-sequential closings with some extension of the interaction through a joke sequence or pre-closers. Mid-level learners demonstrated both abrupt closings and some pre-closing patterns, but also maintained adjacency in the closing sequence. The authors highlight the benefits of the text chat environment for data collection and analysis and indicate pedagogical potential of the use of chat transcripts as instructional tools for the classroom.

Abe and Roever’s contribution is significant for two reasons. First, it demonstrates the use of text chat technologies to enable the collection of data from 106 participants at three proficiency levels to gauge interactional patterns throughout developmental trajectories. Both the efficiency and accuracy of this type of data collection and analysis cannot be ignored. Future research should continue to explore the use of text chat, and other digitally-mediated, written forms, for data collection and analysis.

In addition, the article is a window into our understanding of learner behavior and interactional competence during classroom tasks. As we further our understanding of the role of digital tools in L2 pragmatic development, the use of the same tools to better understand the learners themselves is also imperative. As is seen in this study, text chat enables the collection of naturally occurring learner L2 discourse in the classroom context. While the tasks themselves were elicited, a typical notion in a language classroom, the data themselves indicate natural learner behavior that can be analyzed and used to improve pedagogical processes.

Macro-level learner behaviors can also be examined through computer-mediated communication. Drawing on an interactional view of pragmatics,
García-Pastor frames her chapter on identity development in L2 language through digital storytelling. From this perspective, identity is fluid and negotiated, and it is established in relation to other identity positions and social actors in interaction. In her article, the author uses Relational Dialectics Theory to examine 54 digital stories from 54 Spanish-speaking learners of English. In her analysis, García-Pastor demonstrates that digital storytelling is an effective context for the development of identity through enactment of connection and autonomy. As learners collaboratively tell their story and engage in episodes of conflict and resolution, their selection of topic, types of social bonds included in their stories, and other semiotic resources, such as narrative images, helped them build their own identities as well as those of the people in their stories. Among the resources used are pragmatic features such as self-oriented and other-oriented communicative acts, the use of upgraders and downgraders, and direct and indirect text; all essential for the construction of their identities in the digital stories.

García-Pastor’s article further extends the role of computer-mediated communication in understanding L2 pragmatic development and its relation to other related constructs, in this case, identity. This is important because it demonstrates the ways in which complex, interdisciplinary approaches to L2 pragmatics are facilitated by technological tools.

Future research can extend the use of text chat and digital collaboration for classroom learning to better understand the ways in which learners engage with classroom tasks, interact with one another during these tasks, and, ultimately, develop their own multilingual identity. As such, it becomes possible to document and analyze naturally occurring, critical learning behaviors such as learner authentication (i.e., personal engagement, van Lier, 1996), peer feedback, and student/teacher interaction, and identity reflection. All of which utilize an understanding of varying L2 classroom pragmatic abilities to facilitate meaningful participation in institutional learning contexts.

**Digital Discourse(s) as L2 Development**

One of the principal reasons to learn another language is to be able to communicate with others. As proposed above, linguistic knowledge and even language fluency are not enough to be able to communicate in an appropriate and effective manner. With the continual emergence of online communities, the opportunities for human interaction and communication continue to expand at unprecedented rates (Thorne, Sauro, & Smith, 2015). As a result, the digital world is continually being created by, and creating, communication practices. As noted by Sykes (2019), “The heterogeneous composition of interlocutors, dynamically shifting discursive expectations, digitally sophisticated user
populations, and prolific appearance of sensitive topics present an unwieldy picture that can be difficult to operationalize, not to mention teach and learn in the languages one is learning. Despite this complexity, the digital world cannot be ignored” (p. 1). Thus, digital contexts become places where learners must be able to engage with others, not only to practice for face-to-face interaction, but also to develop the appropriate sociopragmatics of that community of speakers (norms of a community of speakers) and pragmalinguistic features (the language realizations of those social norms).

In this volume, Yeh and Swinehart’s chapter explores the communicative practices of Reddit, suggesting that online communities, understood as affinity spaces (Gee, 2004), are optimal places for the development of learners’ L2 pragmatics. Over the course of six weeks, 15 Chinese-speaking learners of English participated in a Reddit subgroup to learn to interact in the online space. Engaging in a Reddit subgroup of their choice, the learners first completed an analysis of the genre and the space and posted weekly. Through analysis of the posts themselves, the upvotes and downvotes, and a post questionnaire, the authors analyzed learners’ L2 pragmatic development. The results demonstrate that, over the course of the six weeks, students became aware of the cyberpragmatics (Yus, 2010) of the Reddit subgroup in which they were participating, paying attention not just to the content but to the social context and other participants’ reactions. While learners struggled to actively engage with other members of the Reddit community, the results indicate they were able to analyze their own pragmatic behavior, thereby successfully completing one of Yeh and Swinehart’s stated goals of facilitating the opportunity for learners to be autonomous and access language connections outside of the classroom.

Yeh and Swinehart offer insight into ways in which L2 learners can continue to build their L2 pragmatic repertoire, both through the exploration of a specific social media platform, as well through autonomous engagement with digital communities. With the continued expansion of communication via digitally-mediated platforms, these pragmatic skills will become increasingly important and should include a wide variety of digital platforms and broader digital discourse skills (e.g., hashtags as highlighted in Sykes, 2019). While it would be impossible to teach the specifics of every online community, Yeh and Swinehart’s article presents an example of how learners can begin to build these skills on their own, fundamental for their lifelong L2 development. As educators of global multilingual and digitally literate citizens, it is our responsibility to open windows and encourage our students to be life-long learners, thereby facilitating the development of critical L2 pragmatic skills necessary for success in a digital world. This chapter demonstrates that using the language classroom as a platform is an excellent way to ease students into
spaces that may otherwise seem scary or too unknown, and into which they most likely would never adventure on their own.

**Data Collection and Analysis**

In 2013, Taguchi and Sykes highlighted ways in which digital technologies can facilitate innovative approaches to data analysis. These include, for example, an increase in the use of corpus analysis with pragmatic tagging (Fung & Carter, 2007; Urzúa, 2013), automatic scoring and genre analysis (Taguchi et al., 2017), and metapragmatic analysis and real-time learner behavior (Sykes, 2013). Furthermore, as exemplified in Rockey, Tiegs, and Fernández in this volume, technologically-mediated discourse completion tasks can add context and interactive features, improving upon more traditional approaches (see also Roever, 2013).

To further our understanding of ways in which technological tools can shape data collection and analysis, Rockey, Tiegs, and Fernández explore the feasibility of a technology-enhanced discourse completion task (TE-DCT) for examining non-verbal devices, more specifically, attention-getting in request sequences in first and second language speakers of Spanish. Using FlipGrid© to deliver a video prompt in the TE-DCT and to collect participant video responses, the analysis indicated the video-based TE-DCT was an effective mechanism for collecting and analyzing nonverbal attention getters from a pragmatics frame.

This article is one example of how new technologies can push research in the field of pragmatics to the 21st century, both by adding context to the data collection method and by facilitating the analysis of additional pragmatic features (e.g., nonverbal devices). While some exceptions exist, in comparison with other areas of applied linguistics, the field of L2 pragmatics is still using quite traditional methodologies and data collection tools. The field is moving towards more authentic data, which can now be much easier to access, store, and analyze, but, even with the advent of new technological capabilities, traditional instruments such as DCTs, role-plays, and questionnaires are quite common. These instruments have proven effective for the collection of some types of data and, as can be seen in Rockey, Tiegs, and Fernández in this volume, technology can help alleviate some of their shortcomings. DCTs are easy to administer and target data can be controlled while still allowing for production. However, we know that DCTs have important shortcomings and tend to generate data that is not very realistic (Golato, 2003), in part due to the lack of a clear and concise contextual information (Félix-Brasdefer, 2010). Given the dynamic nature of human communication, context completely determines the realization of a speech act. Features such as the relationship between the interlocutors, their common history, background, access to
common knowledge, physical context (e.g., whether it is raining or not), and purpose, are all essential to decide what we would say in a given situation, yet are often absent from written DCT protocols. Technology, as Rockey, Tiegs, and Fernández show, can help to provide a much clearer context for a more informed production of a speech act.

In addition to the improvement of DCT instruments, we also envision digital technologies to greatly enhance what can be captured, stored, and analyzed. This includes the use of telecollaboration tools to enhance the use of roleplays in the classroom by connecting learners remotely with a person with the desired characteristics for a more authentic data collection. While role plays are an excellent instrument to obtain spoken data in a simulated environment, where the researcher can control the prompt to force the production of a pragmatic feature, their lack of authenticity limits the ability to collect meaningful data. It does not matter how much we imagine our classmate to be an unknown, elderly person, the language and the pragmatics involved in the conversation are not going to be the same.

Furthermore, as computers are able to process an increasingly large amount of information, the use of technology to process large data sets and corpora with pragmatic tagging is a technical reality with implications for understanding larger sets of authentic speech. This will greatly facilitate our understanding of how learners’ L2 pragmatic development occurs (Vyatkina, 2013). Finally, the use of machine scoring and genre analysis can be applied to pragmatic elements of speech, helping to eliminate researcher bias in coding while also enabling the coding of larger data sets, critical to aggregating findings and reaching conclusions that can be applied across a wide variety of contexts. Still in initial testing phases, each of these approaches presents promising opportunities for future data collection and analysis.

**Looking to the Future**

The articles in this volume reflect the current state of technology and L2 pragmatics, each representing innovation in curricular development via digital tools (Tang & Taguchi), the role of technology in expanding our area of study (Abe & Roever; García-Pastor), digital discourses (Yeh & Swinehart), and new research collection and analysis tools (Rockey, Tiegs, & Fernández). They are a window into possibilities to come both from technological innovation and from evolution in the field of L2 pragmatics.

For the field of technology-mediated L2 pragmatics to grow we need to continue examining each area with an understanding of L2 pragmatics as interactional in nature and culturally and contextually bound. This increases the complexity, but also widens the possibilities for investigation and classroom
implementation. First, interactional pragmatics focus on interaction as the main place of pragmatic development. In this view, pragmatic meanings “do not inhere in linguistic conventions but result from participants’ ongoing, contingent interpretive work during jointly pursued practical activities” (Kasper, 2009, pp. 278–279). Understanding L2 pragmatics in this way implies teaching our students to know how to handle the interactional practices of a conversation (i.e., the potential mechanisms for turn taking or conversation closings), rather than learning long lists of speech act formulae or understanding explicit explanations of politeness markers use. Moreover, we envision digital spaces (e.g., telecollaboration, digital games) as an optimal environment to practice and develop this skill set. Second, L2 pragmatics that are culturally and contextually bound mean that contextual factors such as social distance, relative power, ranking of imposition (Brown & Levinson, 1987), as well as factors that underlie sociocultural interactive principles that help manage people’s basic interactional concerns such as face, rights, obligations, and task achievement (Spencer-Oatey & Jiang, 2003) are socioculturally based, and influence how people interpret and produce language according to a culture and/or a specific context, including digital contexts. As Thorne (2003, 2016) has argued before, many forms of communication that are mediated by technology can be seen as a case of double intercultural communication: that of the culture(s) of the participants and the culture of the digital space and tool used.

The field of L2 pragmatics should consider both moving forward with an extended look that goes beyond the learning of pragmalinguistic formulae towards an approach focused on the dynamic nature of language in a changing world. For example, in a project currently underway, Sykes, Malone, Forrest, and Sağdıç (in press) have piloted a simulation-based assessment designed to capture and measure a learners ILP profile across multiple dimensions of pragmatic performance—knowledge, analysis skills, subjectivity, and awareness. In doing so, they utilize the affordances of digital simulations to teach and assess an interactional model of L2 pragmatic abilities.

In addition, a currently underexplored area in which interactional pragmatics is highly relevant, is that of human–machine interaction. As González-Lloret (2019) points out, Google has looked into the field of pragmatics recently for the development of their Google Duplex to make their artificial intelligence system (that makes reservations at restaurants and hair salons) sound more natural and human-like including disfluencies, silences, and latches. Without a doubt, the field of human–machine interaction will be one of the areas that will evolve quickly and that will require a clear understanding of not only our cyberpragmatics (Yus, 2001) but our sociopragmatic and pragmalinguistic choices as humans interacting with non-human systems.
As we look towards the future, we also want to advocate emergent innovation by studying technologies which are in development (e.g., virtual reality, personalized mobile systems, augmented reality, real time translation), rather than those that are proven in the marketplace. We recognize the challenge of this approach since most L2 pragmatics researchers are not technology experts; however, the immense potential to transform our understanding of L2 pragmatics warrants immediate consideration. In many cases, by the time a tool has caught the attention of applied linguists, it has become obsolete or evolved into a new context, making the classroom application outdated. Thus, we are strong advocates of collaborations and partnerships with companies and agencies focused on technological innovation to ensure the potential for language is realized at the front end, rather than after the tool is well used in the market. While far from being a solution that is fully operationalized, the connection of cutting-edge technological development with cutting-edge pragmatics research is sure to yield valuable results and is a laudable goal for the future.

Finally, regardless of how much technological innovation is incorporated into L2 pragmatics research, only full integration of pragmatics in the L2 language classroom will make a significant difference to how learners perceive the importance of the pragmatic components of language. Currently, the teaching of pragmatics in most foreign language classrooms is practically nonexistent, or reduced to a few anecdotal explanations of when to use certain semantic formulae or the teaching of a few politeness forms. Therefore, language learners do not see it as relevant, and are often surprised when they first experience a miscommunication with an interlocutor, not because of their language ability but because of their missing pragmatic repertoire. Digital spaces are a tool to facilitate further incorporation of L2 pragmatics in classrooms, giving them the importance they deserve in the learning of another language.

References


Taguchi, N. (2015). Instructed pragmatics at a glance: Where instructional studies were, are, and should be going. *Language Teaching*, 48, 1–50. https://doi.org/10.1017/S0261444814000263


