RETHINKING VIRTUAL EXCHANGE: EFL LEARNER AND TESOL TEACHER CANDIDATE PARTNERSHIPS

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This study examined English as a foreign language (EFL) participants' language development and learner autonomy via a virtual exchange. Although research has shown that virtually partnering second language (L2) learners with other L2 learners is beneficial to second language acquisition (SLA) (Lenkaitis, 2019), little research exists on the effects of connecting L2 learners with language teacher candidates through virtual exchange (Akiyama & Cunningham, 2018). Eight (*n* = 8) EFL learners from Colombia interacted with teaching English to speakers of other languages (TESOL) teacher candidates in the United States via videoconferencing for six weeks. Participants self-assessed their synchronous sessions and watched their recordings in order to reflect on their language development, as well as on what they specifically noticed (Schmidt, 1990) about their SLA. Results from quantitative and qualitative data showed not only that participants' awareness of their English development increased, but also that incorporating a virtual exchange into coursework is valuable for language development and learner autonomy.

Keywords: higher education, learner autonomy, second language acquisition, synchronous computer-mediated communication, virtual exchange

Technology has afforded many collaborative opportunities for the second language (L2) classroom (Reinders & White, 2016). It can be utilized in a variety of ways to enhance second language acquisition (SLA), including by connecting L2 learners with other L2 learners (Balaman & Sert, 2017; Kern, 2014; Lenkaitis, 2019; Lewis & O'Dowd, 2016) and providing authentic materials, such as podcasts, video clips, and online news (Tseng, 2018).

One strategy for employing technology to enhance language development is to integrate synchronous computer-mediated communication (SCMC) into the L2 course in order to connect L2 learners with other L2 learners in real time (Healey, 2016; Lenkaitis, 2019). In virtual exchanges,¹ learners from geographically different locations and cultural contexts can connect with one another (Belz, 2003); in addition, according to sociocultural theory (Lantolf & Thorne, 2006; Vygotsky, 1978) and interactionist theories (Gass, 1997; Long, 1996; Pica, 1991, 1994), face-to-face (F2F) interaction promotes SLA and learner autonomy (Holec, 1981; Lantolf & Pavlenko, 2000). Through SCMC, such as videoconferencing (Lenkaitis, 2019), what de Fornel (1996) terms a "virtual co-presence" (p. 50) between learners is created as they can interact with one another in a similar way as in a traditional F2F classroom. Because little research yet exists on virtual exchanges that partner L2 learners with teacher candidates (Akiyama & Cunningham, 2018), this study analyzes a virtual exchange that partnered English as a foreign language (EFL) learners with teaching English to speakers of other languages (TESOL) teacher candidates via videoconferencing. By focusing on an apprenticeship type of a virtual partnership, this study explores the benefits of having L2 learners practice their language skills with teacher candidates beyond the classroom walls.

Literature Review

Synchronous Computer-Mediated Communication

Developing spontaneous conversation skills can be difficult in the traditional classroom setting (Wilson & Starkey, 2009). Opportunities to interact and practice the L2 outside of the classroom benefit learners, as

communication skills can develop (Bueno, 2011; Chen, Ko, Kinshuk, & Lin, 2005; Kern, Ware, & Warschauer, 2004; Lenkaitis, 2019). Videoconferencing creates a "virtual co-presence" (de Fornel, 1996, p. 50) or a virtual face-to-face environment, in which learners are communicating in real time. Out of the 97 articles reviewed in the SCMC context for SLA (Sauro, 2011), however, only two (Wang, 2006; Yamada & Akahori, 2009) utilized videoconferencing.

In virtual exchange research, learners have utilized videoconferencing tools such as Skype (Kato, Spring, & Mori, 2016; Terhune, 2016) and Zoom (Bohinski² & Mulé, 2016; Lenkaitis, 2019; Lenkaitis, Calo, & Venegas Escobar, 2019). Even though virtual exchanges usually focus on connecting non-native speakers (NNSs) with native speakers (NSs), there is scant work on those exchanges being used in teacher preparation programs (Dooly & Sadler, 2013; Fuchs, Hauck, & Müeller-Hartmann, 2012). In a scoping review of literature, however, Akiyama and Cunningham (2018) noted that an apprenticeship can be created between foreign language (FL) learners and teacher trainees in an online setting.

In this apprenticeship-type virtual exchange study, L2 learners receive lessons from the teacher candidates. For example, results from studies that included L2 learners of French (Mangenot & Zourou, 2007), German (Chaudhuri, 2011), and Spanish (Jauregi & Bañados, 2006; Lee, 2004) showed links to SLA. L2 learners improved their use of the target language by discussing real-world issues with teacher candidates. Not only did these projects demonstrate the benefits of partnering foreign language teacher candidates with language learners, but they also provided practical experience with web-based tools for teaching and learning. In Mangenot and Zourou (2007), French teacher candidates designed distance learning tasks for L2 French learners in which the main focus of study was the ways in which teacher candidates provided corrective feedback to learners in their asynchronous (non-real-time) tasks. Chaudhuri (2011) explored an apprenticeship partnering L2 German teacher candidates with students who were preparing for work abroad in a German-speaking part of Europe. In Jauregi and Bañados (2006), L2 Spanish learners from a university in the Netherlands were partnered with Spanish teacher candidates of Spanish from a Chilean university. In addition to synchronous video sessions, participants also used blogs to exchange ideas and reflect during a two-month period. Analysis of these data, along with questionnaires, showed positive aspects of the exchange and the way in which technological tools helped students discuss cultural topics and achieve course goals. Lee (2004) also examined L2 Spanish learners partnered with Spanish teachers. This study, conducted through surveys, interviews, and data from the exchange, found the experience to be most useful for the teachers. Although a goal of the project was not to focus on form, the Spanish teachers did help scaffold the L2 Spanish learners' speech. Even though only qualitative data had been used to investigate the effects of video SCMC, results did show that video SCMC supported students' language development.

Unlike these apprenticeship-type virtual exchange studies, the current study focuses on an EFL population in which language learners do not, or are not preparing to, live, work, or study in a community where English is a dominant language. As such, affordances to engage with English speakers outside the classroom are limited. The current study uses both quantitative and qualitative data to explore L2 learners' experience through several data points. In addition to focusing on gaps in the apprenticeship model of virtual exchange research, the study is also contributing to an ongoing conversation on how collaboration with technology leads to our understanding of L2 development, whether we are L2 learners or teachers. Technologies that are now available provide collaborative opportunities (Lewis, Cappellini, & Rivens Mompean, 2017; Reinders & White, 2016) that can partner L2 learners with teacher candidates through synchronous environments (Reinders & White, 2016). Continued research on SCMC such as Zoom videoconferencing (Bohinski & Mulé, 2016; Lenkaitis, 2019; Lenkaitis et al., 2019) must be explored to understand how technology can support SLA.

Learner Autonomy Theoretical Framework

Through learner involvement, reflection, and appropriate use of the target language (Little, 1991, 2004, 2007), autonomy can be realized for an L2 learner. Holec (1981) defines learner autonomy as being responsible for and taking charge of one's learning. Learner autonomy, however, is more than working

individually. It also includes components of working together and benefitting from the friendliness of SLA (Little, 1990) experienced through interaction (van Lier, 2008). Technology provides language learners expanded opportunities for autonomous learning, and SCMC promotes both facets of learner autonomy (Kessler & Bikowski, 2010; Lee, 2016; Little, 1991, 2007; Little & Brammerts, 1996) as the learner interacts individually with the course material as well as collaborates with another person in real time (Lenkaitis, 2019).

Echoing Lenkaitis (2019), in this study, learner autonomy is conceptualized through the collaborative lens (Lewis et al., 2017; Reinders & White, 2016) to examine how EFL learners develop autonomy when partnered with TESOL teacher candidates over the course of six weeks. In addition, autonomy underpins this study, as Little's (1991, 2004, 2007) pedagogical principles of autonomous learning (learner involvement, reflection, and appropriate use of the target language) are implemented in its design. This is done in the following ways: (a) participants were involved in the learning process and encouraged by their partnering TESOL candidates to take responsibility for their learning, (b) participants self-assessed their synchronous sessions by completing a weekly reflection and by watching the recordings of their SCMC sessions, and (c) participants used the target language-English-for the duration of the SCMC sessions and the weekly reflections.

Research Questions

Literature has shown that technology affords learners the opportunities to practice their communication skills through SCMC (Bueno, 2011; Chen et al., 2005; Kern et al., 2004; Lenkaitis, 2019), which creates a "virtual co-presence" (de Fornel, 1996, p. 50) between learners. As noted, however, there is little research on virtual exchanges partnering L2 learners with teacher candidates (Akiyama & Cunningham, 2018). To provide such perspective, this study focuses on a virtual exchange that partnered EFL learners with TESOL candidates via videoconferencing to answer the following research questions (RQs):

RQ1: How do EFL learners reflect on their English development over the course of a six-week exchange? RQ2: Do learners exhibit traits that demonstrate development of learner autonomy?

Methodology

The learner autonomy framework was used for this study to examine the ways in which SCMC, via Zoom videoconferencing (https://zoom.us), facilitates EFL learners' autonomy during a six-week virtual exchange. Both quantitative and qualitative data were collected from weekly reflections and transcripts. All participant responses were unedited and reported in this article as such, except when clarification was needed. This exploratory research sought to analyze the affordances of a virtual exchange.

Participants

The study comprised eight (n = 8) total participants, all of whom were registered students for an EFL course at a Colombian university. The virtual exchange that partnered these participants with TESOL teacher candidates from a university in the United States was part of the participants' coursework. The main goal of the exchange for EFL learners was to communicate with teacher candidates on course content to organically develop their language skills (listening and speaking) during weekly SCMC sessions and consequently to reflect on their experience through weekly reflections (reading and writing). So that participants were able to organically develop their four language skills, no specific weekly topics were given throughout the exchange; instead, the TESOL teacher candidates that partnered with the EFL participants were simply directed to interact with the L2 learners. Throughout the interactions, weekly discussions covered a range of topics that included coursework, family, school, and work.

Weekly Procedures

EFL learners synchronously met with their TESOL teacher candidate partners for at least 15 minutes a week for six weeks via Zoom videoconferencing (Bohinski & Mulé, 2016; Lenkaitis, 2019; Lenkaitis et al., 2019). Participants were instructed to speak only in English with their international partner to maximize their exposure to the L2. After each Zoom session, the EFLs were asked to complete a weekly reflection via a Google Form. First, they were asked to self-rate their success in learning English as a result of their virtual exchange, using the following Likert-type scale: 0 = 0%, 1 = 20%, 2 = 40%, 3 = 60%, 4 = 80%, 5 = 100%; participants were invited to quantify their success in learning about their L2 into percentages. Participants then responded to this open-ended question: In what ways has your partner experience helped support your SLA?

After self-rating and answering the question, participants were then instructed to watch their recorded weekly Zoom session in order to reflect on their English skills. While watching these recordings, participants were asked to list details from their partner exchange they had noticed (Schmidt, 1990) about their English to reflect on their SLA. Finally, in the Week 6 reflection, participants were asked this question: Reflecting on your six-week telecollaborative exchange, how did it help you in developing as an L2 learner?

Results

Quantitative Data

Zoom sessions. All weekly Zoom sessions for the eight participants were reviewed to ensure that the SCMC sessions were completed as per instructions. It was confirmed that all participants completed weekly sessions for all six weeks of the virtual exchange and spoke only in English during the videoconferencing. A total of 20 hours, 38 minutes, and 13 seconds of recorded Zoom sessions were made by the eight EFL learners. On average, 3 hours, 26 minutes, and 22 seconds of SCMC meetings were completed by the eight participants per week; therefore, each participant was engaged in the virtual exchange videoconferencing activities for 25 minutes and 48 seconds per week.

Likert-scale type question. Statistics were completed through IBS SPSS Statistics 25.0. When reviewing means of the question to self-rate EFL learners' success in learning English as a result of a virtual exchange, results indicated that participants' perception of their success increased from Week 1 to Week 6. However, when means from Week 1 to Week 6 were compared through a t-test, no significant differences were found. Table 1 details the means and standard deviations for all six weeks of the virtual exchange for this self-rated question.

Week	Mean	Standard Deviation
1	3.63	0.92
2	3.75	0.71
3	3.75	0.71
4	3.75	0.71
5	3.88	0.64
6	4.25	0.71

Table 1.

Means and Standard Deviations for EFL's Self-Rating of Success in Learning English

Qualitative Data

Open-ended questions. NVivo 12 for Windows was used to analyze qualitative data and discern patterns. Answers to the open-ended questions from weekly reflections indicated that the virtual exchange supported learners' positive perceptions of their SLA. After the completion of word frequency records³ from Weeks 1 to 6, four themes emerged from the EFL learners' data: confidence, practice, self-awareness, and specific skills. Table 2 details the definitions of each theme, while Table 3 provides examples of each theme as indicated in participants' open-ended answers.

Table 2.

Themes from Open-Ended Answer	rs and Their Definitions
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Theme	Definition	
Confidence	When the participant wrote that he or she had increased confidence with using the	
	English language.	
Practice	When the participant mentioned this, his or her other overall English language skills	
	improved because of practice.	
Self-awarene	When the participant pointed out that he or she became more aware of his or her English	
SS	language learning process.	
Specific skills	fic skills When the participant noted that he or she made improvements in a specific area or are	
	related to language. These instances included, but were not limited to, grammar,	
	listening, pronunciation, and vocabulary.	

Table 3.

Theme	Weekly Reflection Example	
Confidence	Week 3	
	Making me feel confident with my english skills (Participant 1).	
Practice	Week 2	
	I think I've had a successful experience so far because I've been able to talk and practice my language and this way improve my skills (Participant 2).	
Self-awarene	Week 4	
SS	I have been able to know some mistakes I usually make, so now I can try to stop doing	
	them (Participant 8).	
Specific skills	Week 1	
	She helped me improve my listening skills and helped me learn some new vocabulary	
	(Participant 3).	

Examples of Each Theme in Open-Ended Responses

Note: Examples given are verbatim from weekly reflections. Unless for clarification, responses were not edited.

Recorded Zoom sessions. EFL participants were asked to watch their recorded sessions and comment on what they had noticed about their language development. Word frequencies completed on these qualitative data through NVivo 12 for Windows showed three emerging themes from participants' reflection about these recordings: pragmatics, self-awareness, and specific linguistic skills. Table 4 details the definition of each of these themes, while Table 5 illustrates examples from participants' reflections on themes through quotes from Zoom session transcripts.

Table 4.

Themes from Zoom Session Reflections and Their Definitions

Theme	Definition	
Pragmatics	When the participant noticed that he or she had a problem with L2 pragmatics and	
	indicated an issue with using appropriate language when speaking with his or her	
	teacher candidate. Instances included, but were not limited to, courtesy and	
	conversational style.	
Self-awareness	When the participant pointed out increasing awareness of a positive or negative aspect	
	of his or her English skills as a result of watching the recorded session.	
Specific linguistic	When the participant noted specific language errors. Instances included, but were not	
skills	limited to, grammar, pronunciation, and vocabulary.	

Table 5.

Theme	Example of Noticing	Zoom Example
Pragmatics	Week 2 As non-native people it is difficult to know how to communicate properly and be educated according to the situation (Participant 6).	Week 2—14:34 You will be more polite or more coherent on how to use this language and speak to other people (Participant 6).
Self-awareness	Week 5 I didn't thought that I could sound as an advance speaker (Participant 1).	Week 5—11:51 <i>I can see in the way you speak that you're an advanced speaker</i> (teacher candidate partner of Participant 1).
Specific linguistic skills	Week 3 I don't use the right tense of the verbs sometimes I was supposed to say spoke because I was talking about the past (Participant 2).	Week 3–4:54 and I speak not to fast (Participant 2).

Examples of Each Theme in Zoom Sessions

Note: Examples given are verbatim from weekly reflections and transcripts. Unless for clarification, responses were not edited.

Week 6—Final reflection. After using NVivo 12 for Windows to complete word frequencies on participants' overall reflection on the virtual exchange, a common thread emerged in all participant written responses: the virtual exchange was a practical way for participants apply what they were learning in class and practice their English language skills. Examples are: "It helped me in my knowledge of some topics and practicing class concepts such as stress units, pauses, speaking skills, among others" (Participant 2) and "As a language learner it helped me to be more confident while speaking and I could put to practice all the concepts from class" (Participant 8).

Analysis and Discussion

In response to this study's research questions, data are discussed using Little's (1991, 2004, 2007) pedagogical principles of autonomous learning, achieved here through Zoom: learner involvement, reflection, and appropriate use of the target language.

Learner Involvement through Zoom

It was evident that learners were engaged in the videoconferencing activities for the six weeks of the exchange, during which all SCMC sessions were completed. Videoconferencing through Zoom created a "virtual co-presence" (de Fornel, 1996, p. 50) and afforded learners the opportunity to have F2F interaction via technology; in addition, EFL learner participants could collaborate (Reinders & White, 2016) with TESOL teacher candidates to enhance the process of SLA (Balaman & Sert, 2017; Kern, 2014; Lewis & O'Dowd, 2016; Lenkaitis, 2019). In line with other apprenticeship-type exchanges (Chaudhuri, 2011; Jauregi & Bañados, 2008; Lee 2004; Mangenot & Zourou, 2007), the current study also showed that learners were engaged through interacting with teacher candidates and course content.

Not only did this study's qualitative data show that EFL learners were taking charge of their own learning, but that the data also suggested that they benefitted from the interactive aspects of SLA by becoming their own learning "agents" (Lantolf & Pavlenko, 2000, p. 162) in their own language development. For example, in Week 5, Participant 7 commented on the cordiality of the exchange by noting that "It has helped me to

practice my English and to have a new experience in which I put into practice what I have learned. She helped me by telling me about my flaws in the language." Additional qualitative data illustrated that the virtual exchange experience was highly valuable for EFL learners. As an example, commenting on her overall virtual exchange experience, Participant 6 stated: "It helped me a lot because I could share and discuss all the concepts given in class with someone outside my class, who had no knowledge about what I saw in class, so I had to explain what I learned." This statement clearly illustrates how working with a teacher candidate partner provided this L2 learner with additional hands-on experience beyond the classroom.

Learner Reflection through Zoom

EFL learners were able to reflect on the virtual exchange by answering, in writing, an open-ended question and watching their weekly recordings. By interacting with the course material as well as his or her partner (Lenkaitis, 2019) on macro (an overall virtual exchange experience) and micro (weekly activities via Zoom and Google Forms) levels, participants were able to reflect (Little, 2004) on both the individual and collaborative facets of learner autonomy (Kessler & Bikowski, 2010; Lee, 2016; Little, 1991, 2007; Little & Brammerts, 1996) and notice (Schmidt, 1990) details about the interaction with their partner and their individual learning processes. Participants felt "more confident" (Participant 1) with their English skills, as they had "the obligation to speak english ones a week" (Participant 4). EFL learners received "good feedback about . . . mistakes" (Participant 3) from teacher candidates, which allowed them to become more aware of their "failures with the language" (Participant 7). Nevertheless, this alertness to errors did not stop participants from "being more spontaneous" (Participant 6) and "finding new ways to express" themselves, as teacher candidates did "not judge" (Participant 7). Participant 7, for example, also "noticed ... that [my partner] didn't judge my English, she helped me by correcting me and encouraged me to keep learning." Therefore, this study suggested that the virtual environment provided EFL learners with the opportunity to autonomously learn and develop their L2 language skills (Lenkaitis, 2019) in the more informal conversational atmosphere created through Zoom.

The viewing of the recorded SCMC sessions allowed participants to use video as a tool for self-development (Walshe & Driver, 2019). Through the reflective process, EFL learners became more self-aware and noticed things about their speech that they hadn't realized before. For example, after watching his recorded Zoom sessions, Participant 8 noted that "I tend to [stress] the verbs when I speak. This is a detail that I had [never] noticed and that I do unconsciously, I have to try to stop doing it." She continued, "I invert words in questions for example instead of saying What are we ...? I said What we are ...?," and came to the realization that "I have to practice to talk more fluently." Participant 3 reflected on the use of expressions in English by noting: "I don't use as much expressions in english as I do in Spanish. Through the session, I actually understand the expressions when people use them but sometimes I feel I don't know how to use them so I avoid them." Reflections such as these showed why the teaching and learning of idioms is important for SLA (Zimmerman-Edison, 2015). Although Zoom meetings helped support "communication skills" (Participant 6) and knowledge about "cultures" (Participant 5), learning expressions in the L2 will better support L2 learners' language development and knowledge of the target language and culture (Samani & Hashemian, 2012).

Participant 6 also noticed that he "repeated the word *like* . . . in a very short time." This statement and other data showed that EFL participants used their L2 for such pauses and fillers, which is contrary to what was discerned in Lenkaitis (2019). In that study, instead of using their L2 for pauses and fillers, L2 learners turned to their native language for these language nuances. On the one hand, the data from Lenkaitis's study could suggest that EFL learners were developing their use of pauses and fillers throughout the virtual exchange with the teacher candidates; it could also indicate, however, that additional teaching to advance using pauses and fillers in the L2 is necessary (Basurto Santos, Hernández Alarcó, & Pablo, 2016) if they were being used repeatedly.

Learner Use of Target Language through Zoom

It was apparent that EFL participants used the target language for all six weeks of the virtual exchange, as seen with the over 20 hours of SCMC sessions. "By doing Zoom session [I] practice a language that is not talked . . . in Colombia daily" (Participant 5). Thus, interacting with TESOL teacher candidates through F2F virtual meetings (de Fornel, 1996) promoted SLA and learner autonomy. Furthermore, by providing a real-world application of course content, EFL learners were motivated to learn and became more confident (Tseng, 2018), which was incorporated into their self-rated success in learning English throughout the virtual exchange.

The increase in EFL learners' perception of their success from Weeks 1 to 6 suggested that the virtual exchange format, which had partnered them with teacher candidates, also supported their language development. During the six weeks, through the completion of Zoom sessions and weekly reflections using Google Forms, participants had the opportunity "to apply" (Participant 5) what they were learning in class and were able to "look [at] language as an structure not just a language" and recognize that "there is a lot behind english and communication" (Participant 1). Not only were participants able to focus on "class concepts such as stress units, pauses, speaking skills, among others" (Participant 2), but also they learned that "people communicate differently depending on the person they are addressing" (Participant 6). "With the help of . . . partner[s]" (Participant 8), the SCMC sessions allowed EFL learners to utilize the target language. The Zoom technology that partnered L2 participants with teacher candidates provided a collaborative opportunity (Lewis et al., 2017; Reinders & White, 2016), where EFL learners were able to "practice all the concepts from class" (Participant 8) in order to "become more knowledge on the language" (Participant 8) and "improve . . . fluency" (Participant 3).

Conclusion

Incorporating technology into L2 coursework (Lenkaitis, 2019) was an invaluable experience for participants' reflection on their SLA. Through a six-week virtual exchange, EFL learners were able "to practice . . . English" (Participant 7) and "be more fluent" (Participant 2). Rethinking virtual exchange to partner EFL learners with TESOL teacher candidates allowed participants "to have a new experience . . . [and] put into practice what . . . [they] have learned" (Participant 7). Therefore, this study's results showed that implementing technology into the EFL curriculum created authentic discourse through SCMC sessions (Lenkaitis, 2019). In this way, these sessions allowed EFL learners to interact with TESOL teacher candidates and self-examine their perceptions of their SLA as they supported autonomous learning.

By providing access to authentic conversation with TESOL teacher candidates, EFL learners were able to reflect on their English development through recorded Zoom sessions, and as a result, this study examined their language development and learner autonomy. Because most of the data were self-reported, future studies on these apprenticeship-type exchanges should include other types of assessment for learner development. In any event, incorporating technology into coursework is valuable to L2 learners (Lenkaitis, 2019), and virtual exchanges should continue to be re-envisioned to explore how EFL learners interact individually in the English language and collaborate with TESOL teacher candidates. By rethinking and expanding virtual exchange to include EFL learners and TESOL teacher candidate partnerships through the use of SCMC videoconferencing, learners will have the opportunity to both interact with teacher candidates and self-assess their recorded synchronous sessions as they develop their language skills and learner autonomy.

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Notes

¹Telecollaboration, online intercultural exchanges, and teletandem are all types of virtual exchanges. Virtual exchange is a term that is becoming more common to use when describing an exchange that partners those from different cultural contexts and geographic locations (O'Dowd, 2018).

²Before her marriage and the resulting name change, Lenkaitis had used her maiden name, Bohinski, for publications.

³Word frequencies determined the most frequent words used in participant responses.



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