### Informal Language Learning Through an Online Community: A Netnography-Based Analysis of an L2 Japanese Subreddit

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Studies in computer-assisted language learning (CALL) tend to focus on L2 English, giving relatively less attention to other foreign languages (see S.-M. Lee, 2019; Shadiev et al., 2017). Moreover, few studies have examined the use of the popular online forum Reddit to promote language learning. To address these gaps in the research, this study examined an L2 Japanese subreddit to identify common language-learning behaviors among its members. Combining the netnography approach of Kozinets (2010) and the analytical framework of Isbell (2018), the study found that these subreddit members primarily used the online forum in three ways: 1) to discuss L2 graphological knowledge, 2) to share L2 learning experiences, and 3) to suggest L2 learning resources. However, use of the target language was rare, with 83% of the analyzed comments being solely in English. These results suggest implications for informal L2 Japanese learning and highlight the potential of online communities for fostering L2 learning and engagement.

CALL分野の研究においては、第二言語としての英語学習に焦点が当てられることが多く、その他の外国語が注目されることは比較的少ない(Lee 2019、Shadiev et al. 2017参照)。また、ソーシャルニュースサイトRedditがその人気の高さにもかかわらず、その語学学習目的での使用について調査した研究はほとんどない。そこで本研究では、Redditにおける一般的な語学学習行動について理解するため、第二言語としての日本語をテーマにしたsubreddit (Reddit内の交流のためのフォーラム)を調査した。Kozinets (2010)のネトグラフィの手法とIsbell (2018)の枠組みを組み合わせて分析した結果、オンラインコミュニティのメンバーはこのsubredditを、(1)目標言語 (日本語)の表記法についての議論、(2)学習体験の共有、(3)学習教材の提案、という3つの用途で使用していることが明らかになった。しかし学習の目標言語である日本語を使用することはまれて、分析したコンテンツの83%は英語のみで書かれていた。この調査結果は、授業外日本語学習への影響を示唆し、第二言語学習への取り組みを促進させるオンラインコミュニティの可能性を浮き彫りしている。

Ithough most second language (L2) research has focused on formal language learning, that is, learning that occurs within the context of the classroom (Richards, 2015), informal language learning is equally important (e.g., De Wilde et al., 2020; J. S. Lee, 2019; Sundqvist, 2019). Informal learning can be defined as "the sum of activities that comprise the time individuals are not in the formal

classroom in the presence of a teacher" (Gerber et al., 2001, p. 570). The ubiquity of technology in everyday life has made informal language learning a common social practice. For instance, research has shown that gaming (Sundqvist, 2019), mobile devices (Chen, 2013), social media (Alm, 2015), and video streaming (Wang & Chen, 2019) have all had a substantial impact on informal L2 learning. Within the field of computer-assisted language learning (CALL), another area of interest with regard to informal language learning has been online communities. Similar to their traditional counterparts, online communities have a common interest or goal, foster a high level of engagement, and share cultural norms, such as behavior, rules, and/or rituals (Sunstein & Chiseri-Strater, 2011). However, systematic reviews of the literature related to mobile-assisted language learning (Shadiev et al., 2017), context-aware technology-enhanced language learning (S.-M. Lee, 2019), technology-mediated vocabulary learning (Elgort, 2017), and Web 2.0 technologies (Wang & Vásquez, 2012) indicate that CALL until now has largely focused on the learning of English. In other words, the learning of other foreign languages has garnered far less attention in CALL research. Thus, the goal of the present study was to analyze an L2 Japanese online community and identify the ways in which its members used it for informal language learning. Specifically, taking the netnography approach of Kozinets (2010), otherwise known as a virtual or online ethnography, the study sought to better understand the online community by analyzing the kinds of activities its members engaged in and the language they used in Japanese language-focused interactions.

## Literature Review Informal Language Learning Through CALL

Recent research on informal language learning has highlighted the potential of technology to enhance the learning process. Sundqvist (2019), for example, investigated the correlation between

out-of-class gaming and L2 English vocabulary acquisition. According to the results of that study, which involved over 1,300 L2 English learners, there was a clear link between gaming and L2 English vocabulary knowledge. In a study examining the Facebook practices of university L2 students, Alm (2015) found that advanced language learners benefited most from social media interactions in the target language, thus demonstrating the impact of proficiency in informal language learning. J. S. Lee (2019) conducted a study looking at the informal digital learning experiences of L2 English learners and found that the quantity and diversity of their practices played significant roles in the language learning process. Specifically, Lee found that those who engaged in informal digital learning more frequently had higher levels of L2 enjoyment and confidence. Additional results of this study showed that diversity in digital language learning practices was significantly predictive of speaking ability, productive vocabulary knowledge, learner anxiety, and TOEIC scores. These findings suggest that technology-mediated informal language learning has an influence not only on affective factors but also on L2 ability. Through the use of surveys, Chen (2013) concluded that L2 English students had positive perceptions concerning the use of tablets for informal L2 learning. In particular, the participants had favorable attitudes toward the usability, effectiveness, and satisfaction of using tablets for L2 learning in informal settings, thereby illustrating the positive views learners generally have toward the use of technology for informal language learning. Wang and Chen (2019) interviewed L2 English students who frequently watched English-language learning YouTube videos and had some interesting findings. On the one hand, the participants enjoyed using YouTube to learn English and thought it to be a more flexible and interactive language-learning method as compared to school-based approaches. On the other hand, they did not feel YouTube was a particularly effective way to study L2 English as compared to classroom-based instruction, as formal language learning typically involves carefully selected teaching materials and structured language-learning activities. These results highlight the affordances and limitations of technology use for the purpose of informal language learning. Lastly, in another study analyzing an online L2 learning community, Isbell (2018) found that members of a subreddit focused on L2 Korean demonstrated highly interactive patterns of learning through learner-initiated questions and detailed follow-up responses. The study analysis also revealed a clear

division of labor between expert and novice learners; that is, native speakers and advanced learners responded to the most difficult queries while simple questions were addressed by less proficient learners. However, members of the online community made little use of the target language, instead primarily using English to interact with the other L2 Korean learners. Specifically, Isbell found that over 90% of the written text in the study analysis was in English. Similar to Wang and Chen (2019), this finding shows that there are some trade-offs when using technology for informal language learning, namely limited target language use and development.

### Research questions

The studies detailed above highlight some of the unique affordances of using CALL for informal language learning. Nonetheless, there are still other areas that need to be addressed. First and foremost, studies in the CALL literature (e.g., Elgort, 2017; S.-M. Lee, 2019; Shadiev et al., 2017; Wang & Vásquez, 2012) predominantly involve L2 English. Consequently, there is a need to determine whether technology can support informal language learning in other foreign languages. Furthermore, despite Reddit's being one of the world's most visited websites (Alexa, 2020), research on Reddit in connection with L2 learning is scarce. In fact, to date, only Isbell (2018) seems to have examined Reddit in the context of foreign language learning. Lastly, while Thorne et al. (2009) claim that online communities provide spaces for interaction in the target language, Isbell (2018) suggests that interactions in L2-focused online communities are conducted primarily in the members' native language and/ or the predominant shared language; thus, more research is needed to better understand language use in L2 online communities. Using a netnography-based research design similar to that of Isbell (2018), the present study sought to understand the types of behaviors that are common among members of a Reddit-based online community focused on L2 learning. Specifically, the study addressed the following two research questions:

- 1. What activities do r/LearnJapanese subreddit members use to promote L2 learning through the online community?
- 2. What languages do r/LearnJapanese subreddit members use in Japanese language-focused interactions?

### Methodology

### Research Design

This study utilized an ethnographic research design to analyze how r/Learnlapanese subreddit members leveraged the online community for informal L2 learning. To be specific, the netnography framework developed by Kozinets (2010) was used. According to Kozinets (2010), a netnography is "a specialized form of ethnography adapted to the unique computer-mediated contingencies of today's social worlds" (p. 1). While similar to other ethnographic research in focusing on detailed observations of a community to obtain a greater understanding of its culture, a netnography is conducted exclusively online (Kozinets, 2010). Another important distinction between in-person ethnographic research and netnography-based research is that participation in an online community can be exhibited in ways that are unique to virtual environments (Kulavuz-Onal, 2015). For instance, participation in an online community can include original posts and replies. However, passive engagement, such as upvoting, downvoting, or reading, can also be considered a form of participation. Although this kind of participation, commonly referred to as "lurking," sometimes has a negative connotation (van Mierlo, 2014), as Ruthotto et al., (2020) assert, it can also be seen as a legitimate form of participation: "Lurking reflects a different learning style, where students choose to participate in a less formal, quieter way, yet may still engage deeply with learning materials and discussions" (p. 3). In this vein, the researcher joined the r/LearnJapanese subreddit and passively participated by regularly frequenting the online community to gain an understanding of its shared culture and behavioral patterns.

As noted by Creswell and Poth (2018), ethnographic research focuses on the "values, behaviors, beliefs and language of a culture-sharing group" (p. 90). In the context of the current study, only two of these were addressed: behavior and language. To this end, the top 100 posts from the online community within a one-year period were analyzed to gain knowledge about its members' common types of behavior. In addition, comments from 10 randomly selected Japanese language-focused posts, namely posts that related to specific aspects of the Japanese language, including grammar, vocabulary, pronunciation, or graphology, were examined to better understand the communal role of language. Only such explicitly language knowledge-related posts were designated for analysis, as these were more likely to include the use of L2 Japanese than ones focusing on study tips, language study experience, or other aspects of L2 learning. The comments from these

posts were analyzed with respect to the specific languages used (English, Japanese, or both) as well as the number of words written in each language.

### r/LearnJapanese Subreddit

Reddit is a website that hosts online forums, the majority of which consist of interest-based online communities called subreddits. The current study examined the r/LearnJapanese subreddit. As of September 2020, it had over 296,000 members, making it one of the largest online communities of L2 learners on all of Reddit. (For comparison, the primary L2 Spanish, L2 Chinese, and L2 Korean subreddits then had 126,000; 89,000; and 83,000 members, respectively.)

As mentioned previously, Sunstein and Chiseri-Strater (2011) identify online communities as having three common traits: 1) a shared interest, 2) high levels of engagement, and 3) common cultural elements. The r/LearnJapanese subreddit clearly exhibits all three of these characteristics. First, its members share a common interest, namely in the Japanese language and culture. Next, their high levels of engagement are evidenced by the number of daily posts (typically 20-30 per day) and the fact that popular posts often receive more than 200 comments and 1000 upvotes. Additionally, although actively posting and commenting members make up only a small proportion of the overall community, the number of posts and comments during a given time period does not take into account lurking, another form of engagement (Ruthotto et al., 2020). Lastly, the community has shared cultural elements. For instance, the subreddit has a list of rules that are displayed prominently on the site (e.g., no trolling or hostile behavior, no posting of copyrighted content). The community members also share common behaviors, which will be made evident in the analysis and discussion below.

### **Data Collection and Analysis**

Due to the large number of posts the r/Learn-Japanese subreddit receives, only the top 100 posts within a one-year time period (April 13, 2019 – April 12, 2020) were analyzed. Top posts were defined as those receiving the greatest number of upvotes minus downvotes during this time period, indicating that they were of the most value to other members of the community and suggesting that they might provide the most representative snapshot of model community behavior. Key details about each post, namely the date, title, and name of the poster, were recorded in an Excel spreadsheet. The posts were also coded and analyzed according to a set of

criteria developed by Isbell (2018) to better discern the most common types of member activities. Each post was coded under one of the following categories: 1) language knowledge, 2) language practice, 3) learning discussion, or 4) translation request. As noted earlier, language knowledge referred to posts directly relating to various aspects of the Japanese language. Posts coded under language practice were those either sharing or requesting L2 learning resources, such as mobile apps related to language learning or L2 Japanese YouTube channels. Learning discussion posts were those describing study tips, L2 learning experiences, or stories related to L2 motivation. While part of the analytical framework. translation requests (either from the learner's L1 into lapanese or vice versa) did not appear in any of the posts analyzed, most likely due to the fact that specific types of translation requests were prohibited by the community.

After the initial coding, secondary coding was conducted to more accurately reflect the content of each post (see Appendix for full analytical framework). As mentioned previously, comments from 10 posts were chosen for additional analysis to gain deeper insight into how language is used in the online community. These posts were selected at random using a random number generator at random. org. Comments from these posts were analyzed in terms of the language(s) used and the number of words written in each language.

#### Results and Discussion

# RQ1: What activities do r/LearnJapanese subreddit members use to promote L2 learning through the online community?

Out of the top 100 posts that were made in the r/LearnJapanese subreddit between April 13, 2019, and April 12, 2020, only 17 of them were created by the same member or user. The remaining 83 were all made by different users, which indicates that contributions to the online community are made by a variety of members and not just a select few. As shown in Figure 1, the posts were fairly evenly distributed among the three primary codes, with language knowledge being the most common (39%), followed by language discussion (32%), and language practice (29%). These findings resonate with Isbell's (2018) research, wherein language knowledge was the most common type of post in an L2 Korean subreddit.

Figure 1
Breakdown of the Top 100 Posts on the r/Learn
Japanese Subreddit



Among the 39 posts coded under language knowledge, those sub-categorized under graphology (21) and vocabulary (8) made up nearly three-quarters of the total. Example posts coded under this category included "The most frequent 777 kanji give you 90% coverage" (graphology), "Visualizing Zipf's Law in Japanese Kanji" (graphology), and "25 Japanese Words You Can Use in Every Day [sic] Conversation (Abroad in Japan)" (vocabulary). The graphology finding is not surprising, given that L2 learners of Japanese often struggle with learning its three separate writing systems. In fact, Everson (2011) posits that a character-based writing system such as Japanese "presents special challenges for learners whose L1 employs the Roman alphabet" (p. 251), which is significant since the primary language used on the subreddit is English. Similarly, vocabulary plays a particularly important role in learning L2 Japanese. According to Koda (1989) and Komori, Mikuni, and Kondoh (2004), as compared to the typical 30% demonstrated in Bernhardt's (2005) compensatory model, vocabulary knowledge accounts for a much larger percentage of the variance in L2 reading proficiency. The difficulties involving these two aspects of L2 Japanese learning (graphology and vocabulary) may have contributed to the high number of upvotes among members of the subreddit for posts related to these topics.

Most language discussion posts were related to learning experience, which accounted for 23 out of the 32 coded under this theme. Examples post titles in this sub-category included "Since I don't have anyone to share this with: I finally reached my years-long goal of being able to play video games in Japanese!" and "私は日本語能力試験4級に合格しました! I passed the JLPT N4!!" The second most common language discussion posts related to study tips, such as "WARNING: Being able to enjoy anime, manga and games in Japanese is a much bigger task

than you probably imagine (Advice for beginners)," of which there were eight. These posts highlight members' use of the online community to share their language achievements with others, suggesting that the subreddit was not merely a space for L2 learning but also an outlet for expressing relevant feelings and experiences. The abundance of study tip posts testifies to the supportive nature of the online community in that members took the time to share L2 learning advice so that others could learn from their experiences.

Lastly, the language practice posts most commonly included offers, such as the recommendation of language learning apps or helpful YouTube channels, which made up the majority (26 out of 29) of the entries coded under this category. Example offer posts included "For the people stuck at low intermediate. 日本語の森[nihongo no mori]a japanese learning channel fully in japanese" and "Genki Vocab apps on iOS and Android are free for a limited time." The popularity of these posts further illustrates the solidarity and reciprocity among members of the subreddit. In other words, the high level of engagement found in these posts suggests that members of the online community were eager to support each other in their L2 learning, and in turn, those who shared these resources were given positive feedback in the form of upvotes. The remaining three posts coded under language practice related to specific L2 Japanese requests, such as a post entitled "Looking for interesting Japanese concepts/ phrases." One explanation for the relative rarity of these types of posts is that members of the community already share an abundance of resources; thus, requests related to topics that have been previously covered are seldom needed.

# RQ2: What languages do r/LearnJapanese subreddit members use in Japanese language-focused interactions?

As shown in Table 1, the majority of comments were written exclusively in English, accounting for 83% of the total number analyzed. Next most common were those utilizing both English and Japanese (13.9%). Japanese-only comments made up but a small percentage (3.1%). Word counts in each language followed the same trend; that is, the proportion of English eclipsed that of Japanese, 95.2% to 4.8%. These results are in line with the findings of Isbell (2018), who also found that L2 learners predominately used English as a mediating tool to study the target language in online communities. A possible explanation for the limited use of the target language is that the majority of active members within L2-focused online communities are those of beginner-level proficiency. This notion is supported by a comment from an r/LearnJapanese subreddit member in one of the analyzed discussion threads:

I think certain people don't understand that a subreddit is a place where people constantly come and go. It's not like a classroom where you stay with the same people and have more or less the same progress. The majority of posts here will always be from absolute beginners, and that's how it should be.

Table 1
Language-Focused Analysis of Member Comments

	English-only comments	Japanese-only comments	English/Japanese comments	English words	Japanese words
Post 1	47	17	3	1,443	160
Post 2	207	1	17	12,470	164
Post 3	153	6	25	6,459	350
Post 4	76	0	16	2,132	67
Post 5	85	0	9	3,321	34
Post 6	47	5	27	1,367	378
Post 7	101	1	16	2,268	82
Post 8	94	2	9	2,731	119
Post 9	37	2	26	1,414	334
Post 10	117	2	13	2,647	124
Total	964	36	161	36,252	1,812

#### Conclusion

As technology becomes more and more interwoven into the fabric of everyday life, so does the need to examine technologies that can be used for informal language learning purposes. This is particularly true for foreign languages other than English, as is evidenced by their underrepresentation in the CALL literature. As such, using the netnography-based framework developed by Isbell (2018). the present study analyzed an L2 Japanese subreddit to evaluate common behaviors among its members. The findings showed that posts related to Japanese language knowledge received the most attention within the online community, thus suggesting that members of the subreddit use the community to gain useful knowledge about the target language, namely graphology and vocabulary, two known areas of difficulty for L2 Japanese learners (Everson, 2011; Koda, 1989; Komori, Mikuni, & Kondoh, 2004). Posts related to learning experience and the sharing of L2 resources were also popular, accounting for 23% and 26%, respectively, of those analyzed, implying that the subreddit meets a social and emotional need (i.e., to share L2 experiences and achievements) as well as an intellectual one (i.e., for L2 learning). Furthermore, other findings revealed that target language use was rare, with active community members using mainly English to discuss different aspects of Japanese. These results suggest that the majority of them may be novice language learners rather than advanced.

Based on the results of the study, a number of inferences with pedagogical implications can be made. The first is that L2-focused online communities such r/LearnJapanese abound with rich practices and behaviors that promote learning of the target language and culture. Another is that online communities can serve dual purposes as a space not only for obtaining L2 knowledge but also for sharing learning experiences with other learners. Additionally, even in formal instructional settings, the r/LearnJapanese subreddit could be recommended to L2 Japanese students who have few opportunities to interact with other Japanese users, such as those in contexts outside of Japan, whose interactions in Japanese may be limited to within the classroom. Moreover, the subreddit could also be beneficial for students who have completed formal language instruction and are no longer taking classes, as it would allow them to maintain their L2 ability or continue their learning. These suggestions can also be applied to other L2s, as Reddit is home to many online communities focused on the learning of foreign languages.

While the results of this study highlight how online communities can promote L2 learning

among their members, several limitations also need to be mentioned. First, no actual L2 learning gains were measured; the data presented here simply show how the L2 learning process can be enhanced through membership in an online community. Thus, it would be wise to conduct a study examining the relationship between L2 learning outcomes and participation in online communities, much like other studies on technology-mediated informal language learning (e.g., J. S. Lee, 2019; Sundqvist, 2019). Additionally, this research was conducted primarily from an etic perspective; that is, the data analysis was based on observations alone, with no direct interaction between the researcher and the community members. As such, it would be informative to hear from members of the subreddit themselves through forum discussions, surveys, or even interviews, much like in Isbell's (2018) study, in order to gain a deeper understanding of the online community and its members.

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artificial intelligence in language education.

### Appendix

### Analytical framework used for coding (Isbell, 2018)

### 1) Language Knowledge

- A. Requests
- B. Shares
- iii. Grammar
- iv. Vocabulary
- v. Pragmatics
- vi. Pronunciation
- vii. Graphology
- viii. Discourse
- ix. Culture
- x. General
- xi. Misc.

### 2) Language Practice

- A. Offer
- B. Request
- i. Reading
- ii. Listening
- iii. Speaking
- iv. Writing
- v. Grammar
- vi. Reading & Writing
- vii. General

### 3) Learning Discussion

- A. Study Tips
- **B.** Experiences
- C. Motivation

### 4) Translation Request