

Examining Discourse Patterns on Live Streaming: Is there potential for EFL learning?

Kyle Kreider
Tamagawa University, Japan
kkreider1993@hotmail.com

ABSTRACT

This study explores the role of Twitch.tv as a digital discourse environment that could have the potential for second language (L2) English learning through multimodal interaction. Through passive, participatory observation of live streams, including taking notes on interaction habits between viewers and content creators and conducting interviews with both a streamer and a viewer, the research identifies three key motivators of interaction on the platform: content, substance, and community atmosphere. The study classifies engagement into three patterns—parallel conversation, intersecting dialogue, and reaction—and examines their impact on learners' potential for language development. Findings suggest that small to mid-sized Twitch communities offer meaningful opportunities for English learners to access L2 input and interaction, making them viable resources for L2 learning, provided users are mindful of platform limitations and community norms.

KEYWORDS: EFL learning, discourse analysis, live streaming, online discourse

1. INTRODUCTION

In the ever-expanding age of information, where digital technologies are readily available to language learners worldwide, many instructors try to connect learners to communities and information aligned with their interests, both within and outside the classroom. Especially, the realm of online video and audio resources such as YouTube, Facebook, and Twitch.tv has provided consumers with hours of content to reinforce their L2 English education (Lin, 2010). Examined in this paper, Twitch.tv, a platform that primarily focuses on live video entertainment through video games or lifestyle

commentary, provides a unique opportunity to develop English language skills implicitly or explicitly through not just the audio-visual multimodal delivery but also entwines learner motivations to propel focus and involvement (Lin, 2010; Magasic, 2017; Sylvén & Löwenadler, 2022). Due to these factors, this study aims to observe the connections streamers and viewers create, how this engagement develops, and how these growing relationships can provide effective opportunities for L2 learners to observe and use high-frequency language with modern L1 English speakers.

2. LITERATURE REVIEW

In the modern digital age, there are copious studies examining not just the use of multimodal learning devices but also the incorporation of authentic realia in the process of L2 English development (Aldukhayel, 2023; De Wilde & Eyckmans, 2017; Kress, 2009; Lefever, 2010; Lin, 2010; Magasic, 2017; Sylvén & Löwenadler, 2022). While these studies draw important conclusions about the impact of modern technology on L2 learning, the following research, such as Sternberg (1987), Miura (2003), and Montero Perez (2022), has begun to examine how live-streaming multimodal input fosters connections between users and facilitates implicit language learning.

2.1 Audio-Visual -based L2 Learning

As far back as Sternberg (1987) the connection between CALL resources and language development has been examined. Specifically, video content that combines visual and auditory input supports implicit language learning because information involves multiple senses (Mayer & Fiorella, 2014; Montero Perez, 2022; Sternberg, 1987). Examining the connection between L2 development and the use of authentic video resources, Lin's (2010) study found that L2 English learners demonstrated gains in their language abilities, specifically in incidental vocabulary acquisition and comprehension, when exposed to these materials. The same study found a correlational link between proficiency level before the introduction of digital materials and gains in morpheme acquisition, with higher-proficiency students gaining much more from the content than lower-proficiency students.

Building on this research, other studies have sought to expand the observations on language learning following engagement with multimodal materials. Research on the link between streaming video resources and language learning has shown that familiarity with input content is crucial for achieving the highest L2 gains, as well as motivation to engage with the content (Magasic, 2017). However, an aspect that can complicate the educational support of authentic materials from live-streaming video is the modified nature of produced video content (Miura, 2003).

2.2 Digital Entertainment as a Resource

Aldukhayel (2023) observed modern platforms such as YouTube, where users can add comments under videos, which are unmodified, authentic forms of English speech where input is created in real-time. The study found that by utilizing these comments alongside the aural-visual content of the YouTube video, learners can improve their listening

comprehension through the support of video comments that paraphrase, reiterate, or otherwise provide detailed focus to language forms used in the video that may not have been otherwise understood. In addition, the study found that individual factors, such as willingness to communicate (WTC), have been observed to increase with the incorporation of digital content. Sunqvist and Wikström (2015) found quantitative language gain in the form of production of English with the extramural, or outside the classroom, incorporation of games as digital resources on learners through student questionnaires and English vocabulary tests. Studies (Aldukhayel, 2023; Peterson & Jabbari, 2022) have shown that when EFL learners use digital resources outside the classroom, such as games or social media, their confidence and motivation increase, while their anxiety and stress related to using English decrease.

Research (deHaan et al., 2010; Sylvén & Löwenadler, 2022) has found that the specific format of not just playing video games as a learning resource but observing others in a shared focus environment of video games has produced gains in vocabulary recollection, recall, and exposure to lower-frequency linguistic terms that are supported through rephrasing and visual aid. It is important to note that Sylvén and Löwenadler (2022) found that Let's Play videos, which are videos where a streamer plays a video game alongside visual footage of the game itself with live commentary, contained many inclusions of academic language, which became increasingly salient for the viewer to learn with coordinated patterns or reiteration and paraphrasing by the streamer, alongside high-frequency terms. With the combination of a visual aid, aural support, and cooperative decoding of form through streamer support, the Let's Play format of live-streamed gaming videos is described as a productive L2 environment, as well as non-threatening and anxiety-free, for learner vocabulary acquisition (Sylvén & Löwenadler, 2022).

2.3 Live Media Streaming

Considering the new digital material in the form of live-streamed video, Twitch.tv, which hosts one of the largest libraries of streaming content online, should be recognized as a form of media that students could be exposed to outside of class. With an average of 2.5 million viewers per week, and with four of the top five streaming categories being video game-related, there has been an observed need to analyze this avenue of language material for learners as a popular medium for natural English (Twitch channels & streamers statistics, 2019). With Twitch.tv's multimodal format of audio-visual input, streamer commentary, and live-stream chat comments, this form of digital resource used in studies such as Sylvén and Löwenadler (2022), were found to be effective for increasing academic vocabulary size, frequency, and as a supportive context for learning.

Headway has been made in the motivational factors that push learners to interact with the content through developed community participation, social interaction through chat, and the concept of copresence (Diwanji et al., 2020; Hilvert-Bruce et al., 2018; Pirker et al., 2021; Sjöblom & Hamari, 2017; Wulf et al., 2018). Copresence, defined by Diwanji et al. (2020), can be seen as the sensation or perception that one is acting and around others, completing tasks such as online video games on Twitch.tv within a social

environment, and was defined in the same study as a significant factor for interacting in a streaming community, be it commenting or reacting to others. Together, this concept of the relationship between the viewer, streamer, and community helps support a strong motivational factor for learners to interact with the content (Gandolfi et al., 2022; Pirker et al., 2021). Ultimately, as many second language acquisition studies have found, motivation is a significant determining variable in attention to detail, memory, processing, and involvement in development tasks within the classroom (Gulloteaux & Dörnyei, 2008, Hidi et al., 2004). Considering these variables, this study builds upon previous research on the viability of live streaming as a supportive tool in L2 acquisition and development.

3. RESEARCH METHODOLOGY

While Twitch.tv is recognized as one of the largest live-streaming platforms, very little research has been conducted on its application in L2 learning contexts, specifically through its unique features of live interaction with a streaming community and interest curation as a language-learning device (Marín et al., 2025). Therefore, this study will set out to observe live-streams on Twitch.tv, take notes of how and when interaction occurs on the platform, and collect data to answer the following research questions

RQ1: How does interaction occur between streamers and viewers on Twitch.tv?

RQ2. Are there any observed patterns of engagement between the streamer for the viewer on Twitch.tv?

RQ3. How potentially effective is live-stream video and chat in terms of interaction for L2 learners of English?

3.1 Context

As described in the literature review, Twitch.tv will be the environment in which this study will be conducted. The streaming site offers live-streamed video content with overlaid audio from the streamer providing the channel content. The site also offers a library of recorded videos. Alongside the live-stream, spectators can engage with the streamer and other viewers through the chat feature, which may include any language, as well as visual symbols.

For the purposes of the current study, the content of three streamers will be analyzed. These three streamers are CDawgVA, Premierto, and Yungmilkjuice, who have 1,400,000, 209,000, and 966 followers, respectively. These streamers were chosen because their content is primarily in English and they have either lived in or currently live in Japan. Due to this criterion, there is an increased recognition that these English L1 streamers may be recognizable to a Japanese audience and therefore suitable for Japanese English language learning because of familiarity. There is also the matter of followers who use Twitch.tv and voluntarily agree to receive updates or notifications about a specific streamer. The streamers vary in the number of followers to provide a balance between those with a wide audience and those who are more community-focused. Another important criterion is that these three streamers provide video game live-streaming content, which aligns with the previously studied digital research (e.g.,

deHaan et al., 2010; Sylvén & Löwenadler, 2022).

Given the nature of community-specific language on Twitch.tv, it is also necessary to detail the medium-specific language used throughout this study. Firstly, live-streaming refers to the broadcasting of audio and/or video content through a digital website in real time. The host transmitting the content is called the streamer, who provides real-time engagement with audiences who watch or digitally send comments, referred to as viewers.

3.2 Observations

To answer the research questions, three streams were selected for observation. An hour of observation time was standard for all observations, and the data was collected minute by minute for the entirety of the stream time. As the research observer, I chose to adopt a moderate-to-passive approach of participation in the streaming. This was because, for live-streaming observation, there is little difference between high-involvement practices, such as active or complete participation, given the nature of viewer access in Twitch.tv live streams. A viewer cannot easily play the game with the streamer or engage in conversation with them voluntarily. The major difference between high and low involvement within the live-streaming landscape depends on commenting within the chat. As Spradley (1980) described, as a more passive observer, cultural norms and patterns can be seen; these are part of what this study is trying to acknowledge within the relationship between viewer and streamer. The strategies laid out by Emerson et al. (1995) for passive-approach fieldnote collection were also followed. First, an objective description of the scene was recorded in jottings and initial field notes for the real-time stream. The dialogue was analyzed by copying the chat comments and recording the streamer's audio. After completing the real-time notes, the observations were characterized through reflection in order to view them holistically and identify recurring themes, patterns, and norms. The entire dataset can be accessed in Appendix A.

3.3 Interviews

One of the research project's focuses was to examine the relationship between streamers and viewers, analyzing their motivations for interaction. To achieve this, two interviews were conducted, one with a streamer and another with a frequent viewer of one of the content creators included in observation, lasting between 20 and 30 minutes. A set of semi-structured questions related to the research was asked by the interviewer alongside on-line improvised questions to collect further information concerning topics that arose. Throughout the interviews, field notes were taken on the interviewee's responses, annotated with their possible relevance to the research questions. The first interview was conducted with the streamer Yungmilkjuice to gather data from a content creator. Later, a second interview was conducted with a viewer, identified by the pseudonym AB, who described being primarily a viewer of Premierto, one of the streamers in the study, and occasionally of CDawgVA.

To gather sufficient data, the interview was conducted using open-ended questions, phrased in a manner such as "Tell me about..." or "How do you...?". As Hatch (2023) recommends, these questions can help guide the interviewee toward

responses that provide clear, realistic insights into community engagement and interactions with what viewers see on Twitch.tv. The data collected from both sides, streamer and viewer, can help triangulate conclusions on the interaction, observed patterns in the language, and examine the content that viewers tend to interact with during live streaming. The interview patterns followed three phases. First, I met with the interviewees face-to-face or over Zoom. The audio was recorded, and field notes were made in real-time. Then, a post-observation review was conducted to draw conclusions from the responses and reflect on their connections to the research questions (Appendix A). Before conducting the interviews, both interviewees provided written informed consent (Appendix B) that included contact information, the purpose of the study, the procedures, the time required, and the confidentiality rules for the information provided.

4. RESULTS

4.1 Transcription and Coding

To transcribe the interviews with Yungmilkjuice, the dictation function of Zoom was applied to generate a transcript of the entire conversation. For the second interview with AB, the audio was recorded and uploaded to an AI transcription tool (Restream.io) to generate a written transcript. Both transcriptions were checked against the audio for accuracy, and any discrepancies or mistakes were corrected. The next step was to isolate the interviewee's responses, as the raw transcription did not distinguish between the two. After the transcripts were cleaned, I attempted In-Vivo coding (Hatch, 2023) to identify terms that stood out in the unchanged dialogue. An example of this process is displayed in Table 1. However, I found that this approach became difficult for every response, as some longer responses could not be symbolized by a single word within them. In these cases, thematic coding (Saldaña, 2014) was applied to define the overall message or context of a response, and an example can be seen in Table 2.

Table 1

Example of Round 1 In-vivo Coding Process with Yungmilkjuice

Question	Response	Round 1 Code
Tell me about your community	My community has come from, like, strangers to being best friends. My husband, I found through my community. They feel like family now. I've met a lot of them in real life now, and, you know, the more people who join, they're it's just like becoming a bigger family. And it's kinda crazy that some of these people I talk to on a more regular basis than, like, my friends that are live here in my same city. I talk to people from Twitch more than I do. So I don't know. They're just becoming, like, family. (Yungmilkjuice, lines 23 to 25)	Family, familial

Table 2*Example of Round 1 Thematic Coding Process with AB*

Question	Response	Round 1 Code
Tell me about the specific streamers you watch	Right now, I mostly watch, like, a show called Azul GG. And then I watch, Ludwig, and, I watch I don't know his Twitch name, but his name is Daichi Shimada. He is a Pokemon, streamer. But he's, all fully Japanese content. (AB, line 17)	Variety

Once each response was assigned a code, these were collected into the first round of code reduction. In this round, 25 different codes were created for Yungmilkjuice's responses, while 27 codes were collected from AB. The first-round codes for both participants are listed in Table 3, and at this point, many of the codes were repeated between them. The aspect of humor came up frequently between both respondents related to the enjoyment of the content. Atmosphere was also a common code between both when describing streaming content, what persuades viewers to watch, and the environment a creator wants to build. I then attempted to reduce these codes further in a second round of coding. A set of primary codes was arranged either from the first-round codes that could cover multiple topics, or a new theme that covered many of the previous codes. These new reduced codes can be seen for Yungmilkjuice in Table 4 and for AB in Table 5. The entirety of this coding process is presented in Appendix A along with the interview data for Yungmilkjuice and AB.

Table 3*First Round Codes for Interview Participants Yungmilkjuice and AB*

Participant	Codes
Yungmilkjuice	Personal humor, Popular culture, Atmosphere, Friends, Family, Digital Communication, Requests, motivation, nostalgia, gifts, Sales, mood, cozy, Reaction content, variety, creative, viewing, interaction, creation, personality, Flow, acknowledgment, large streamers, job vs hobby, professional
AB	Variety, Interests, Real life, interaction, community, humor, interests, levels of experience, relationship, information, connection, charisma, value, engagement, communication, audience, accessibility, personality, clips, motivation, togetherness, streamer experience Commentary, atmosphere, parasocial, mood, reaction

Table 4
Second Round Coding for Yungmilkjuice

Codes	Subcodes
Atmosphere	Cozy, Friends, Family, Nostalgia, Professional
Motivation	Mood
Interaction	Gifts, Requests, Acknowledgment, Reaction Content, Viewing
Modern Culture	Digital communication, Large streamers, Popular culture, Sales
Content	Variety, Creative, Job vs. Hobby, Flow, Creation
Personality	Humor

Table 5
Second Round Coding for AB

Codes	Subcodes
Content	Variety, Clips, Interests, Real life, Commentary
Streamer	Levels of experience, Value, Charisma, Information, Connection, Personality
Community	Interaction, Relationship, Engagement, Communication, Audience
Parasocial	Reaction, Togetherness
Atmosphere	Mood, Accessibility, Humor, Motivation

4.2 Themes

Between the two interviews, the final code reductions leave eight primary codes that represent the interactions between streamers and viewers. From these eight codes, the interview codebook was created (Appendix C). The codes revealed three major themes of motivated interaction that occur between streamers and viewers on Twitch.tv., being Content, Streamer, and Atmosphere. Table 1 and 2 (Appendix C) detail the finalized codes that represent the responses from the interviewees and the themes that these codes solidify, respectively. The themes helped illustrate how interactions occur in the live-streaming landscape and what a communicative viewer should recognize before joining the community.

4.3 Interaction motivated by Content

Content, on a surface level, refers to the entertainment or information provided by a streamer in the form of a digital video. This can be playing a video game as seen with Yungmilkjuice and Premierto, but also interactive material such as viewer-provided pictures to review, demonstrated by CDawgVA. The content connects to viewers' interests and can serve as the initial persuasive power that brings someone to the live stream in the first place, as AB describes (AB, lines 16 to 21):

Interviewer: Can you tell me about the content that you watch?

AB: So, on Twitch I, I've gone through a lot of phases but right now I mostly watch, like, Pokemon TCG content.

Interviewer: Mhmm.

AB: From, like, all languages. Usually live, over the board gameplay, which, which means like they have a camera pointing onto like the table.

Interviewer: They're not playing online?

AB: But, I watch that too. But, I've also, you know, been a fan of IRL [in real life] content, like, you know, walk with me, tough stuff, all this type of stuff, or variety content. It really depends on who I'm into at that particular moment, what I'm into.

On a deeper, communicative level, the substance plays the role in what shared focus the viewer, and the streamer will build their interaction around, as seen in an excerpt from AB (AB, lines 78 to 80):

Interviewer: How do you usually interact with the community

AB: I would say I'm not I'm not the most active chatter just because I usually have Twitch on in the background. So, so the way I consume Twitch is a bit different and in YouTube content anything you want to put under that umbrella. I'm usually passive in my engagement because I'm usually doing other stuff. But what, I, I'm usually involved in discussion or actively talking to like the streamer. Not like, I hope I'm not feeding in too much but like not parasocially particularly but just like he'll ask a question in chat and I usually if I know the answer I'll just be like hey you know what I mean? Or if like Chet is talking about something about the game like the thing is that like Azul, one of the things that really got me into him is that he started streaming he started co streaming live, the big live tournaments that they have for Pokémon.

AB: Like he would not be there in person, he would be at his home and then he would be commentating over their stream, right? And he would do that for these things called champions leagues and that is the big one in Japan. Okay. So I would be in Azul's chat at that event and I would be kind of like I don't want to say a liaison that's putting way too much I didn't do that much I'm not gonna say No like a co present kind of voice. Yeah and he'd ask a question about oh is this happening?

AB: I'd say yeah this is happening here. Whether he read them I'm not gonna sit here and act like, you know, he has he has read my messages out loud a few times, but I'm not gonna sit here and say every message I sent answering this question was acknowledged, right? Or even read, I don't know. But I would be like hey I'm watching this now, yeah it's doing this. Or there was one time there was a delay in the stream and I explained it in chat because I was at the event.

AB indicated that because the streamer AzulGG provided a shared focus of the tournament setting, AB felt comfortable in the interaction process as they had access to the environment as well. Content also influences the types of interactions that can occur between viewers and streamers, as not every subject lends itself to discourse between streamers and their communities. Yungmilkjuice describes this in the following excerpt (Yungmilkjuice, lines 44 to 45):

Yungmilkjuice: So, there are sometimes I, I wanna stream, but I care more to interact with the community. So, I'll put, like, a, like, a cozy game or something that doesn't really require my attention all that much. Something like marbles on stream [marble races], very interactive for the chat, but I don't really have to do anything. Mhmm. There are other games, like cozy games or, like, rhythm games.

Yungmilkjuice: You know, if I'm feeling more like I wanna play with people, I'll pick, like, a multiplayer game or, you know, just pick up whatever I feel like in the moment, but it's really determined by my mood. And then once I decide what I'm going to do, you know, I just kinda think about things that have recently happened in my life as, like, top conversation points, how to keep my chat engaged with things I'm saying. And then once you go live, you know, you you have those things in the back of your head, but then it just whatever is happening, you're just kinda living in whatever the chat's talking about, whatever is happening in the game. So not too much conversation planning, but, you know, something.

Yungmilkjuice describes how content such as marbles on stream, by experience of doing it before, creates an environment conducive for conversation to flow with little work by the streamer. Meanwhile, other material such as multiplayer video game content, which includes playing a game with others when compared to playing a game by the streamer alone, creates a shared focus. However, as seen in this same excerpt, the content can be the streamer themselves, leading to a variable outside of the substance of the stream which motivates interaction.

4.4 Interaction motivated by Streamer

With the content of the stream providing the thematic focus for interaction, it is the streamer who is a driving force to set up opportunities for interaction and who converts one-time viewers into future members of their community. The streamer provides either the context for discourse or creates initial turns in the discourse themselves.

Yungmilkjuice describes this phenomenon in the following excerpt (Yungmilkjuice, lines 62 to 64):

Interviewer: Yeah. How do you, how do you usually interact with your audience?

Yungmilkjuice: I bully them, to be honest. Just picking on them or, you know, sometimes people make spelling errors. So, we like to call out the spelling errors or, you know, if somebody says something really crazy, we'll make a what is that called?

Yungmilkjuice: What is that called? Command. Command. Okay. Make a command for that person so you can just kinda, like, refer back to it or, you know, just we I would make fun of everybody.

Yungmilkjuice describes, through recognition of her own personality and how she regularly behaves, she initiates conversation through pointed jokes, which in turn

can lead to Commands created, which are specific visual pictographs that represent a specific meaning or emotion in the community, such as an image of the streamer laughing to symbolize a funny moment on stream. These Commands can then, in turn, be used by the community to interact with each other or with the streamer through a discourse that only the community is privy to. For example...

From the viewers' perspective, the streamer provides unique and varied entertaining commentary on the shared content focus that connects with them and brings them back. AB describes this phenomenon through his viewing of the streamer AzulGG (AB, lines 57 to 58):

Interviewer: ...I'm curious about why you chose this specific streamer to watch?

AB: So, I chose this specific streamer because I think his content is, well, he's the best in my opinion that, like, does content, and I think he's the funniest. I think he's the funniest guy, I think his content is the most informed, and he does like more varied stuff.

AB provides a detailed portrait of what brings them to the streamer: For his interests, AzulGG's character fits his own necessities of entertainment as well as information transference. Yungmilkjuice also describes this same situation that their own community explained to them (Yungmilkjuice, lines 107 to 110):

Interviewer: And I think my final question after all this is, how, in your streams, how much do you consider your audience?

Yungmilkjuice: I think it's, like, fifty-fifty. If I know that I wanna play something, to stream for people, I don't if, like, I want to do this, then I'm just gonna do I'm not really gonna think about whether or not, people care about what I play. Mhmm. But my chat has also said, like, you know, we don't really care what you play.

Yungmilkjuice: We're here for you. Like, they're not really necessarily there to see exactly what I'm doing or what I'm playing. And I think that's why they don't care that I just pick up a game and I'll stop and play something else because they're not really there for necessarily the game content. Of course, it helps, but they have suggested that they're more there just to be here to spend time with me. Now the newer viewers, they're probably there for the game, the gameplay.

Yungmilkjuice: But the, the people have been here for some years now. They're just gonna support regardless what I'm doing.

The streamer's personality and the format of interaction they offer determine the modes of communication and the discourse type, but it is the final theme of atmosphere that captures the intangible variable of motivation for viewers to engage with the community.

4.5 Interaction motivated by Atmosphere

No matter how opportunities for communication are provided by the shared focus of the content or the discourse initiated by the streamer, the variable of atmosphere persuades viewers to interact. This atmosphere, termed the surroundings in my code book, refers to the ambient emotional environment that exists between the subject and substance. This

atmosphere is co-created by both the streamer and the community that envelops them. Yungmilkjuice describes how they build their atmosphere with intent (Yungmilkjuice, lines 17 to 21):

Interviewer: What do you mean by [your content being chaotic good]?

Yungmilkjuice: Like, you can just be unhinged. You just say whatever. Nobody's gonna judge you. Just kinda like a open space for you to truly be yourself. You know, we might, like, pick on you or whatever, but it's just like a I like to describe it as, like, maybe, like, friends in a basement, like, in high school, hanging out in the basement, just letting loose, being free, and just doing whatever, saying whatever, and just having fun.

Yungmilkjuice: Friends in a basement. Okay. How I would say how what kind of things do you do to create that atmosphere? Well, my humor is very stupid, so I kind of just lead it. You know?

Yungmilkjuice: I start being stupid, and then people start saying stupid stuff because I'm being stupid. So really and, honestly, I, I, I have ADD. So, it, I just say and think whatever, and it just comes out. And so sometimes it doesn't even make sense that people are calling me out on it, things not making sense. And I don't know.

Yungmilkjuice: Just creates a fun environment, I guess. There's never a dull moment.

This emotional environment developed by streamers such as Yungmilkjuice is further supported and modified by the community that chooses to join, creating an accepted ambience or mode of discourse that can differentiate it from other streamers. AB describes AzulGG's atmosphere created by streamer and community (AB, lines 40 to 45):

Interviewer: So, with this community that you say you are part of right now, can you tell me about the community? How would you describe this community?

AB: So that's a really good question. How I, I would say the community is like pretty jokey.

Interviewer: Mhmm.

AB: So as well as an English speaker, obviously the community is pretty Pokémon TCG [Trading Card Game] centric. But it's pretty built on humor and jokes especially on his like Twitch side because he's streamed on Twitch and YouTube and so they'll often like make jokes. So, it's like have, like, more of his established viewer base, I'll say like me, but I don't talk in chat that often but more of us establish viewer base. We're often joking, talking about the game but it's like pretty irreverent, not like offensive or anything but just like you know just we're just having fun.

AB: Because you know what we can't provide him that much insight into the game he's you know Yeah so you know there's usually like a back and forth of banter with the chat but we're mostly just there

to enjoy. And then I would say the other half like newer viewers people coming in asking for advice about the game. And it's not super like community-centric in that way. You can really tell who's an established viewer and who's not. Because if they come in chat saying like, Azul what deck should I play?

AB: You know that they're not like that's not a question like it like I feel like I feel like the, the, I guess the established viewer is a lot meaner to the streamer if that makes sense but it's like banter basically.

These descriptions of atmosphere make it simultaneously prevalent across all accepted discourse in a live stream and cooperatively built over time, changing as more or fewer viewers join the community and engage with the environment. Therefore, atmosphere, unlike content or streamer, is something that the community can decide firsthand and assist the streamer with, and what the streamer needs to decide to support or avoid.

5. DISCUSSION

Over the course of conducting observations, interviews, and coding collected data, this study aimed to examine how interaction occurs through a digital medium like Twitch.tv, and how possible it is for a second-language English learners to engage in the discourse. By this point, interesting themes made themselves apparent, such as the necessary roles of content, streamer, and atmosphere in creating opportunities for interaction and acceptable discourse.

5.1 Constructing Interaction

The medium of Twitch.tv exists upon the communication between viewer and streamer, and the first research question collected data on how this interaction forms. The themes identified in this study were conceived with this question in mind and were compounded into an interaction motivated by the content choice, the streamer providing it, and the atmosphere developed by the combination of these elements with the community. These three factors, which I have labeled the substance, subject, and surroundings, respectively, comprise all the observed motivations behind interaction within a live stream.

The process of interaction begins, from the collected data, with a choice of content that is related to a viewers' interests or goals of receiving information. Echoing Diwanji et al. (2020) and their connections between Twitch.tv and the information behavior theory, content encapsulates the information that viewers are seeking, and the streamer provides packaged information. Once a viewer has decided on the content that fits their information needs, the streamer offers a mode of discourse through which the information is disseminated. This provided discourse environment is what persuades the viewer to continue interacting with the streamer, as they are motivated by interests and supported by a communicative style that they feel comfortable with. Long-lasting interaction and return to the discourse community are promoted by the atmosphere,

which the streamer constructs the base for, but is finalized by the community that forms around them.

In a live stream, interaction primarily occurs from the shared focus on the content. Initiation of communication can start from either the community watching or from the streamer if a conversation is directed at their viewers. Regardless, the substance can set a standard of thematic discourse that ties itself throughout, where even the streamer can be the content.

5.2 Patterns of Engagement

The data documented two major patterns of discourse between streamer and viewer. These two forms are conversation and reaction. The former refers to communicative interaction between the streamer and viewer, which can include a variety of shared focus dialogue. If the content is engaging for both parties, a type of copresent communication occurs, which I will refer to as parallel conversation rather than conversation or commentary (Wirman, 2018). This refers to a situation in which the interaction context is the same for both the viewer and the streamer, but they produce utterances that are not responses to each other but rather to the content of the live stream. Premierto demonstrated this during his observed stream, when the streamer and the audience were watching previous video game footage. Both made comments responding to the substance of the footage, but neither party produced responses reacting to the other.

The other form of copresent conversation that occurred was dialogue between the viewer and the streamer, which involved recognizing a shared focus, commenting, and then providing a direct response. This could occur on a one-to-one basis between viewer and streamer, or even on a streamer-to-audience level. This type of conversation could even expand into interaction between viewers and then back to the streamer. Due to the crisscrossing nature of dialogue, I will refer to it as an intersecting conversation rather than a cacophony or crowd-speak (Debray, 2025; Ford et al., 2017). While parallel conversations shared context but were not responses to an initial comment, the intersecting conversation begins within initialization, and its content can vary.

The final form of engagement was reaction, which is entirely separate from parallel or intersecting conversation. This is because a reaction involves almost no dialogue between the streamer and the viewer. While parallel conversation can include simultaneous reactions to the content from both the viewer and the streamer, the definition of reaction engagement I refer to here is when the community's written output consists solely of isolated comments related to the streamer or the content provided. This was primarily seen by the largest streamer included in the observations, CDawgVA. I recognized that the audience never engaged in direct interaction with the streamer or with each other, but consistently left comments about what they saw on screen and anything they thought connected. This form of engagement is the most distant and, as AB described, is the most prone to developing into problematic copresence in the form of parasocial relationships, promoting negative emotions of jealousy or anger. Wirman (2018) refers to this similarly as the "waterfall of text", but while this describes communication only through reading, reaction includes the verbal discourse that occurs in response to the text.

5.3 Potential for Language Learning

The data collected from this study can be used to build guidelines which, if followed, can allow a language learner to use Twitch.tv as a form of extensive reading and listening, alongside shared focus and content support.

Firstly, a learner needs to come prepared with knowledge of what they like and if they would like their lexis to also be related. If they have an interest in video games, then the learner will be exposed to familiar terms through the community and the streamer. But there is a variety of video games in the modern digital landscape, and if there is specific vocabulary a learner wishes to learn, the Twitch.tv catalogue of streamers is worth searching for specific video game groups. The applications of Sylvén and Löwenadler's (2022) study on Let's Play videos are not distant from Twitch.tv, with the added benefit of live interaction through the chat function and the inclusion of learner-sourced internal motivations.

Once an interesting streamer is found, the learner should check how the community and streamer engages in discourse as a silent observer. If the type of interaction, such as pointed humor of Yungmilkjuice or the experienced mentorship of AzulGG for AB, fits how the learner feels comfortable and what they wish to develop, then the viewer does not need to look any further. Through exposure over time, the learner builds knowledge of community jargon and discourse types to ready themselves for sharing the same digital point-of-view.

Finally, an L2 learner needs to recognize the limitations of the Twitch.tv platform as a communication platform. Streamers with small audiences, such as Yungmilkjuice, can create opportunities for interactions among their viewers, as comments appear in the chat box and remain on screen long enough to respond to. This ability seems to extend to moderate-sized communities such as PremierTwo, yet less frequently. At this audience size, intersecting or parallel conversations are more recurrent, which means that various communicative opportunities can still appear for a learner to practice with. However, there is a point between moderate and large communities where interaction is impossible. Streamers with a community the size of CDawgVA's would exist at the large end of the spectrum, and communication can only exist as a reaction, such as the viewers commenting on what they see the streamer doing, without any expectation of a response. Going into the digital landscape of Twitch.tv, if a language learner has this knowledge prepared, they can gain access to authentic L2 input in a variety of discourse types (streamer to viewer, or viewer to viewer), and practice written L2 production.

6. CONCLUSION

This study set out to gather data and examine it through the lens of three research questions. First, observe how interaction takes place on an internet platform that provides live video content and communication, such as Twitch.tv. A process is followed in which viewers initially choose content related to their interests (The Substance), return to a community because of the streamer (The Subject), and take the initiative to interact based on the atmosphere (The Surroundings).

Observing patterns was the second focus of this study and three major forms

of engagement were observed. Parallel conversation involved the streamer and viewer both sharing the same focus, but their utterances existed independent of each other. Otherwise, when they were dependent on each other, intersecting conversation occurred, meaning that the streamer and viewer were engaged in discourse, and this could continue among viewers as well. Reaction was the final form of engagement, where the content itself was the streamer, and the viewer made monologic utterances about what they viewed, excluding any other interlocutors.

The viability of live-stream content for L2 learners was the final research focus, and it appears possible that digital material on Twitch.tv could be used. Specifically, medium to small-sized communities of live streamers are best for language learning, as they offer realistic chances to consume extensive input and produce output that is recognized and attracts responses from others, when compared to a large streaming community seen with CDawgVA, where communication is only between the content creator and viewer. A limitation is reached between moderate to large streamer communities when communication breaks down, and only reaction output is acceptable discourse. The learner, therefore, must recognize this caveat before engaging, while also focusing on content aligned with their interests for intrinsic motivation, and be provided opportunities to participate at their own pace.

This study provided insight into popular digital resources, but it is not without limitations. This research only observed three content creators on the platform, with an hour of observation conducted for each channel. A clear picture of how general interaction occurs on the platform can be gained from more observations of various streamers, especially those with audience sizes between those used in this study. Further interviews with current L2 learners who are engaged in the observed Twitch.tv communities would have provided valuable insight into the gains they felt from being involved in discourse, how they engage, and when. Additionally, not all streamers observed were interviewed, as only one of them responded to the contact. Gaining more insight into streamer interaction choices within moderate or large communities would help support further definitions of parallel and intersectional conversations and reactions. A viewer from each of these communities would also have provided important data, while this study was able to contact only one. With varied viewer opinions on engagement, further conclusions on copresence and parasocial relationships could be gained.

This study developed important portraits of how individuals interact on Twitch.tv. However, further research could be done into the specific language used by the community and streamers. These quantitative results would provide further support for the viability of vocabulary acquisition through live streaming and detail the specific off-list or high-frequency terms that learners could be exposed to. Without this data, the specific language learner gains discussed in this study should be viewed with caution, but they still represent a setting that can provide learners with easy access to timely language and engaging material.

DECLARATIONS

Data availability statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Disclosure of interest

The author reports no competing interests to disclose.

Funding

No funding was received for the purposes of undertaking this research.

Ethical approval and informed consent statement

This research was performed in accordance with the principles stated in the Declaration of Helsinki. All participants provided written informed consent to participate in this study. This research was also approved by the research ethics committees at Temple University, Japan.

REFERENCES

- Aldukhayel, D. (2023). The benefits of social media comments to L2 listening comprehension. *Sage Open*, 13(2). <https://doi.org/10.1177/21582440231171320>
- Debray, C. (2025). Co-constructing community and sociability in game streaming chats. *Discourse, Context & Media*, 66, 100894. <https://doi.org/10.1016/j.dcm.2025.100894>
- deHaan, J., Reed, W. M., & Kuwada, K. (2010). The effect of interactivity with a music video game on second language vocabulary recall. *Language Learning & Technology*, 14(2), 74–94. <https://doi.org/10.125/44238>
- De Wilde, V., & Eyckmans, J. (2017). Game on! Young learners' incidental language learning of English prior to instruction. *Studies in Second Language Learning and Teaching*, 7(4), 673–694. <https://doi.org/10.14746/ssllt.2017.7.4.6>
- Diwanji, V., Reed, A., Ferchaud, A., Seibert, J., Weinbrecht, V., & Sellers, N. (2020). Don't just watch, join in: Exploring information behavior and copresence on Twitch. *Computers in Human Behavior*, 105, 106221. <https://doi.org/10.1016/j.chb.2019.106221>
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). Writing up fieldnotes II: Creating scenes on the page. In *Writing Ethnographic Fieldnotes* (pp. 66–79). The University of Chicago Press.

- Ford, C., Gardner, D., Horgan, L. E., Liu, C., Tsaasan, A. M., Nardi, B., & Rickman, J. (2017). Chat speed OP PogChamp: *Practices of coherence in massive Twitch chat*. In Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems (pp. 858–871). Association for Computing Machinery. <https://doi.org/10.1145/3027063.3052765>
- Gandolfi, E., Ferdig, R. E., & Clements, R. (2022). Streaming code across audiences and performers: An analysis of computer science communities of inquiry on Twitch. tv. *British Journal of Educational Technology*, 53(6), 1688–1705. <https://doi.org/10.1111/bjet.13207>
- Gulloteaux, M. J., & Dörnyei, Z. (2008). Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation. *TESOL Quarterly*, 42(1), 55–77. <https://doi.org/10.1002/j.1545-7249.2008.tb00207.x>
- Hatch, J. A. (2023). *Doing qualitative research in educational settings* (2nd ed.). State University of New York Press.
- Hidi, S., Renninger, K. A., & Krapp, A. (2004). Interest, a motivational variable that combines affective and cognitive functioning. *Motivation, Emotion, and Cognition*, 103–130. <https://doi.org/10.4324/9781410610515-11>
- Hilvert-Bruce, Z., Neill, J. T., Sjöblom, M., & Hamari, J. (2018). Social motivations of live-streaming viewer engagement on Twitch. *Computers in Human Behavior*, 84, 58–67. <https://doi.org/10.1016/j.chb.2018.02.013>
- Kress, G. (2009). *Multimodality: A social semiotic approach to contemporary communication*. Routledge.
- Lefever, S. (2010). English skills of young learners in Iceland. *Ráðstefnurit Netlu*, 1–17.
- Lin, L. (2010). A video-based call program for proficient and less-proficient L2 learners' comprehension ability, incidental vocabulary acquisition. *Educational Media International*, 47(3), 199–216. <https://doi.org/10.1080/09523987.2010.518812>
- Magasic, M. (2017). Learning through watching: Streaming video in L2 English. *The JALT CALL Journal*, 13(3), 199–209. <https://doi.org/10.29140/jaltcall.v13n3.j219>
- Marín, A., Carrillo-Durán, M.-V., & Sevilla-San-Miguel, J. (2025). *Live-streaming phenomena on Twitch*. *Icono 14: Comunicación y Tecnologías Emergentes*, 23(2). <https://doi.org/10.7195/ri14.v23i1.2195>

- Mayer, R. E., & Fiorella, L. (2014). *The Cambridge handbook of multimedia learning*. Cambridge University Press.
- Miura, H. (2003). Problems in movie-based EFL classroom: Teacher's role and appropriate tasks. *Teaching English through Movies: ATEM Journal*, 8, 43–55. https://doi.org/10.24499/atem.8.0_43
- Montero Perez, M. (2022). Second or foreign language learning through watching audio-visual input and the role of on-screen text. *Language Teaching*, 55(2), 163–192. <https://doi.org/10.1017/s0261444821000501>
- Peterson, M., & Jabbari, N. (2022). Digital games and foreign language learning. *Digital Games in Language Learning*, 1–13. <https://doi.org/10.4324/9781003240075-1>
- Pirker, J., Steinmaurer, A., & Karakas, A. (2021). *Beyond gaming: The potential of Twitch for online learning and teaching*. In Proceedings of the 26th ACM Conference on Innovation and Technology in Computer Science Education V. 1 (pp. 74–80). Association for Computing Machinery. <https://doi.org/10.1145/3430665.3456321>
- Saldaña, J. (2014). Coding and analysis strategies. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (pp. 580–598). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199811755.013.001>
- Sjöblom, M., & Hamari, J. (2017). Why do people watch others play video games? An empirical study on the motivations of Twitch Users. *Computers in Human Behavior*, 75, 985–996. <https://doi.org/10.1016/j.chb.2016.10.019>
- Spradley, J. P. (1980). Doing participant observation. In *Participant Observations* (pp. 58–61). Thompson Learning, Inc.
- Sternberg, R. J. (1987). Most vocabulary is learned from context. In M. McKeown & M. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 89–105). Lawrence Erlbaum.
- Streams Charts PO. (2023, March). *Live streaming platform comparison: Twitch vs YouTube ...* Streams Charts. <https://streamscharts.com/platforms>
- Sundqvist, P., & Wikström, P. (2015). Out-of-school digital gameplay and in-school L2 English vocabulary outcomes. *System*, 51, 65–76. <https://doi.org/10.1016/j.system.2015.04.001>
- Sylvén, L. K., & Löwenadler, J. (2022). Let's play videos and L2 academic vocabulary. *Digital Games in Language Learning*, 93–108. <https://doi.org/10.4324/9781003240075-1>

org/10.4324/9781003240075-6

Sylvén, L. K., & Sundqvist, P. (2012). Similarities between playing *World of Warcraft* and CLIL. *Apples – Journal of Applied Language Studies*, 6(2), 113–130.

Transcribe Audio to Text. (2025). *Restream*. <https://restream.io/tools/transcribe-audio-to-text>

Twitchtracker (2019). *Twitch channels & streamers statistics*. <https://twitchtracker.com/statistics/channels>

Wirman, H. (2018). *The discourse of online live streaming on Twitch: Communication between conversation and commentary* (Doctoral dissertation, The Hong Kong Polytechnic University). <https://doi.org/10.13140/RG.2.2.17315.07203>

Wulf, T., Schneider, F. M., & Beckert, S. (2018). Watching players: An exploration of media enjoyment on Twitch. *Games and Culture*, 15(3), 328–346. <https://doi.org/10.1177/1555412018788161>

APPENDIX A

Streamer Utterances 1

This data details all the collected statements verbally said by the CDawgVA throughout the observed live broadcast on February 12th. It begins with banter between the streamer and a guest and develops into reacting to photos supplied by viewers of their fridges for judging.

Kreider, K (2025) Utterance 1 Notes Feb 12th, 2025, from Twitch.tv
https://docs.google.com/spreadsheets/d/e/2PACX-1vSHecdjSnBp4pS27cyRn2qIiP71iMOSaP0lKwlzacC7Q_o9ZSDnU4akch7uDZ8BGB1gkVi9ovlCvUx1/pubhtml?gid=1536154154&single=true

Streamer Chat 1

The comments collected from the viewers of CDawgVA during the hour of observation time. Details the environment of interaction within a large audience, taking the form of reaction to streamer, their guest, and the viewer-sourced photos.

Kreider, K (2025) Chat 1 Notes Feb 12th, 2025, from Twitch.tv
https://docs.google.com/spreadsheets/d/e/2PACX-1vSHecdjSnBp4pS27cyRn2qIiP71iMOSaP0lKwlzacC7Q_o9ZSDnU4akch7uDZ8BGB1gkVi9ovlCvUx1/pubhtml?gid=1536154154&single=true

Streamer Utterances 2

The collected verbal data from the streamer Premierto throughout the observed live broadcast of February 11th. It begins with interaction between the streamer and audience concerning personal life and continues into video game content.

Kreider, K (2025) Utterance 2 Notes Feb. 11th, 2025, from Twitch.tv
https://docs.google.com/spreadsheets/d/e/2PACX-1vSHecdjSnBp4pS27cyRn2qIiP71iMOSaP0lKwlzacC7Q_o9ZSDnU4akch7uDZ8BGB1gkVi9ovlCvUx1/pubhtml?gid=227206592&single=true

Streamer Chat 2

The comments that the audience made throughout the hour of observation on the streamer Premierto on February 11th. The chat depicts the interactive engagement between streamer and viewer, and includes examples of viewer-to-viewer conversation on Twitch.tv

Kreider, K (2025) Chat Notes 2 Feb. 11th, 2025, from Twitch.tv
https://docs.google.com/spreadsheets/d/e/2PACX-1vSHecdjSnBp4pS27cyRn2qIiP71iMOSaP0lKwlzacC7Q_o9ZSDnU4akch7uDZ8BGB1gkVi9ovlCvUx1/pubhtml?gid=415939064&single=true

Streamer Utterances 3

The data collected from all verbal content provided by the streamer Yungmilkjuice throughout an hour long observation on February 18th. The collection includes examples of streamer interaction with a small audience, extended interaction between viewer and streamer, as well as streamer choices for entertaining subject matter.

Kreider, K (2025) Utterance Notes 3 Feb. 18th, 2025, from Twitch.tv
https://docs.google.com/spreadsheets/d/e/2PACX-1vSHecdjSnBp4pS27cyRn2qIiP71iMOSaP0lKwlzacC7Q_o9ZSDnU4akch7uDZ8BGB1gkVi9ovlCvUx1/pubhtml?gid=415939064&single=true

Streamer Chat 3

The collection of comments made by the viewers of Yungmilkjuice throughout the observed stream on February 18th. The chat details how a small audience interact with a streamer and copresent engagement with provided content.

Kreider, K (2025) Chat Notes 3 Feb. 18th, 2025, from Twitch.tv

https://docs.google.com/spreadsheets/d/e/2PACX-1vSHecdjSnBp4pS27cyRn2qIiP71iMOSaP0lKwIzacC7Q_o9ZSDnU4akch7uDZ8BGB1gkVi9ovlCvUx1/pubhtml?gid=989741105&single=true

Interview 1

The streamer Yungmilkjuice is a 31-year-old female from the United States of America and has been a part-time streamer for approximately four years. The interview includes the streamer's opinions on interacting with their community, how they choose content to stream, the atmosphere they attempt to build and the close relationships they have formed.

Kreider, K (2025) Interview Notes 1 Feb. 18th, 2025, over Zoom

https://docs.google.com/spreadsheets/d/e/2PACX-1vSHecdjSnBp4pS27cyRn2qIiP71iMOSaP0lKwIzacC7Q_o9ZSDnU4akch7uDZ8BGB1gkVi9ovlCvUx1/pubhtml?gid=1304144487&single=true

Interview 2

“AB” is a 22-year-old male currently living in Japan. They are a self-described viewer of Twitch.tv content, including Premierto and CDawgVA. Their interview lasted approximately 30 minutes and includes insight into how viewers choose content, what draws them to specific streamers, and the different motivations that propel interaction on the digital platform.

Kreider, K (2025) Interview Notes 2 Feb. 26th, 2025

https://docs.google.com/spreadsheets/d/e/2PACX-1vSHecdjSnBp4pS27cyRn2qIiP71iMOSaP0lKwIzacC7Q_o9ZSDnU4akch7uDZ8BGB1gkVi9ovlCvUx1/pubhtml?gid=1304144487&single=true

APPENDIX B

Informed Consent Form

Spectator eSports: Twitch and English Vocabulary Acquisition Consent Form

For questions about the study, contact Kyle Kreider

Home address: Saitama-ken, Saitama-shi, Kita-ku, Oaza, Shimo-Ochai 1085-7, Kasa Primavera Yono 201, 338-0002, Japan

Telephone: 070-4813-6503

Cell-phone number: N/A

Email address: kkreider1993@hotmail.com

This consent form explains the study. Please read it carefully, and ask questions where you do not understand. If you do not have questions now, you may ask later. I understand that consent is a negotiated process and I am prepared to modify this form according to your comments and/or advice.

PURPOSE OF THE STUDY

The purpose of this study is to examine the relationship between live-streaming hosts and their audiences. This means to identify the language used by hosts and viewers and analyze the communication patterns that occur. This is an effort to describe the usefulness of live-streaming content for language learning in terms of language use and motivations.

PROCEDURES

The participant will be asked to answer questions provided by the interviewer concerning the topic of study.

TIME COMMITMENT

The participant will be required for 20 to 30 minutes for an interview.

RISKS AND BENEFITS

There are no known risks to participating in this study. The benefits that you may gain from this study are:

1. You will have the opportunity to reflect more deeply on your own experiences and perhaps come to a better understanding and appreciation of those experiences.
2. You will have the opportunity to share your experiences for the possible benefit of others.

CONFIDENTIALITY

Your individual privacy will be maintained in all written and published work and presentations resulting from the study. Confidentiality of records identifying the participants will be maintained by the use of pseudonyms. The data gathered will not

be used for any purpose other than academic (i.e., publications, presentations/papers at conferences, dissertation). All data collected during this study will be kept in digital files on my personal computer, not open to access.

VOLUNTARY PARTICIPATION

Participation is voluntary. You have the right to notify me at any time not to use certain data source (e.g. personal email/conversation) and the right to refuse to answer particular questions, as well as the right to discontinue your participation in this study at any time.

PARTICIPANT STATEMENT

I have read the explanation provided to me. I have had all questions answered to my satisfaction, and I voluntarily agree to participate in this study.

SIGNATURE OF PARTICIPANT AND DATE

RESEARCHER STATEMENT

I certify that I obtained the consent of the participant. I understand that I must give a signed copy of the informed consent form to the participant, and keep the original copy for 3 years after the completion of the study.

SIGNATURE OF RESEARCHER AND DATE

APPENDIX C

Table 1
Finalized Code Book with Definitions and Examples

Code	Definition	Example
Content	The participant mentions qualities of the Twitch.tv live-stream, such as the mediums of conversation it includes or what it offers for the viewer in terms of entertainment	“So, on Twitch I, I’ve gone through a lot of phases but right now I mostly watch like Pokemon TCG [Trading Card Game] content.” (AB, line 17)
Streamer	The participant mentions qualities of the content creator, and the connection they feel with them. This could include subjective qualities of personality or the instructional value they hold	“He’s always in it and he’s always giving insightful commentary on his choices but he’s also not like too taking it too seriously.” (AB, line 150)
Community	Denotes of how the body of viewers describes themselves, the streamer describes them, or the relationship between audience and provider	“And it’s not super like community centric in that way. You can really tell who’s an established viewer and who’s not. Because if they come in chat saying like, Azul what deck should I play?” (AB, line 44)
Parasocial	Refers to the descriptions of co-presence, or the pseudo-relationship built between streamer and viewer through a digital medium	“You feel like they have some they feel some of a way about live wanting to be in Japan or or already living in Japan and I feel like CDawg viewers are kind of like that.” (AB line 166)
Atmosphere	The participant described the emotional landscape of the live-stream content. Either how the viewer feels within or what the streamer wishes to provide.	“I like to describe it as, like, maybe, like, friends in a basement, like, in high school, hanging out in the basement, just letting loose, being free, and just doing whatever, saying whatever, and just having fun” (Yungmilkjuice, line 18)
Motivation	Refers to participant mentions of drivers for them to interact within stream, or how the streamer creates the environment and chooses content	“You know, if I’m feeling more like I wanna play with people, I’ll pick, like, a multiplayer game or, you know, just pick up whatever I feel like in the moment, but it’s really determined by my mood” (Yungmilkjuice, line 45)
Interaction	The participant mentions the forms or functions of communication within the community as well as between streamer and audience	“I bully them, to be honest. Just picking on them or, you know, sometimes people make spelling errors. So we like to call out the spelling errors or, you know, if somebody says something really crazy, we’ll make a what is that called? What is that called? Command. Command. Okay. Make a command for that person so you can just kinda, like, refer back to it or, you know, just we I would make fun of everybody.” (Yungmilkjuice, line 63)

Modern Culture	References the medium of Twitch.tv live-streaming and communities as a popular feature of greater global culture.	“Well, I would say first, just chatting to each other and other people’s streams in my stream and then Discord. And then, of course, we started playing games and watching stuff together and then planning meetups, and then we exchanged phone numbers and stuff.” (Yungmilkjuice, line 60)
----------------	---	---

Table 2
General Themes

		Interaction motivated by...		
		Content	Streamer	Atmosphere
Definition	Describing the process of interacting in the community influenced by content matter provided		The qualities of the live-stream provider and the decisions they make for the subject matter they broadcast.	The emotional responses and environment that is built by the community. Also, how the viewers of the streamer feel it.
	Addresses decisions made to choose substance offered for viewing body		How the provider describes themselves and what they offer for the viewer.	This can refer to mood, feelings, entertainment qualities, or relationship sensed by both viewer and streamer.
Subtitle	The Substance		The Subject	The Surroundings