AUDIENCE MEMBERS AS LANGUAGE BROKERS IN LIVE STREAMED GAMING SESSION

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ABSTRACT

In this paper, I use multimodal Conversation Analysis and the concept of language brokering to investigate how online audience participation resolves the lack of comprehension exhibited by a focal live streamer and helps him participate in ongoing interactions. The analysis illustrates how the live chat messages from the audience enable a focal live streamer to manage oral interactions with his co-players. More specifically, the focal live streamer either solicits repair or directs their gaze to the chat box where the audience enacts as language brokers online. The audience gives the focal live streamer two types of comments: (i) words they address and (ii) topics they yield. Various modes (e.g., spoken and written) and multilingual practices (e.g., code-switching, English translations) are employed within the interaction among participants in live streaming. With a greater understanding of the participation framework between a focal live streamer and his audience on live streaming, this paper highlights multimodal analyses of digital interactions where oral and written communications coexist.

Keywords: multimodal Conversation Analysis, live-streamed gaming session, digital interaction, audience participation, language broker, multilingualism

INTRODUCTION

As digital interaction becomes widely spread, more and more people engage in oral and written communication regardless of their location. Most digital interactions are either synchronous or asynchronous, following either written or spoken mode. However, one example of digital interaction that combines synchronous and asynchronous communication with different
modes (e.g., written and oral) is a live-streamed gaming session. Nowadays, people can live stream their gaming activities on streaming media, such as Twitch and YouTube, where the audience can send live chat messages on a chat box, which is a form of audience participation. Such modes of digital interaction that combine asynchronous and synchronous interactions (e.g., Choe, 2019; Licoppe & Morel, 2018) have not been studied as much compared to other forms.

As aforementioned, digital interaction unfolds opportunities for people to communicate both synchronously and asynchronously, using various modes (written vs oral). Asynchronous communication, Social Messaging Services (SMS) and Instant Messages (IM) for instance, provide users with online text-based communication (Rendle-Short, 2015). They exhibit intersubjectivity and self-repair among participants (Kulkarni, 2016). Written posts, such as Facebook posts (Ditchfield & Meredith, 2018) and group postings (Graham, 2016), are worth examining how people manage interaction and interplay between group and individual identities.

Synchronous communication, such as video-mediated interactions (business meetings, Skype etc.), has also been largely investigated. Video-mediated interactions exhibit specific turn allocations (e.g., Licoppe, 2017; Kim, 2018). Video-mediated consultations and meetings also provide substantial outcomes, such as noticing in a remote situation (Oittinen, 2020) and how embodied actions, such as gazing, involve interactions (Femø Nielsen, 2019).

Within digital interaction, mass audience participation is a frequently focused form in many studies. Mass audience participation occasionally happens in co-local settings, where people gather physically and discuss (Furukawa, 2016; Llewellyn, 2005). Social media provides a new way of mass participation, especially in text-based interactions. Giles (2021) analyzed text messages among various users including those toward celebrities on Twitter. Mass participation integrates text messages with a novel participation framework. Choe (2019) said that their audience sent text messages to a chat box in a Korean live stream called mukbang. This system guided live streamers to recruit audience participation, which established a novel participation framework. The participation framework is related to language brokering. Specifically, an addressee and a recipient interact but cause miscommunication. Then, they request a third person to participate in the interaction mainly through their gaze shift and reconstruct the participation framework (Traverso, 2019). That person may either reformulate or translate what the addressees say.
Such modes of digital interaction that combine various modes and asynchronous and synchronous interaction have not been studied as much compared to other forms (e.g., Licoppe & Morel, 2018; Choe, 2019). Thus, this paper draws on an internationally well-known streaming media, Twitch, focusing on a gaming session of an online multi-party shooting game, APEX LEGENDS. I will explore how not only the live streamers themselves but also the audience of the live streaming contribute to language brokering, where the third person gets involved in providing linguistic and sometimes cultural expertise (Bolden, 2012). In what follows, I first review some of the work on digital interaction, audience participation, and language brokering. Next, I present some examples of online audience participation to show how their live chat messages assist a focal live streamer to comprehend and participate in ongoing oral interactions. I then turn to the other action, which is yielding potential topics, and show how the audience’s comments contribute to a focal live streamer orally addressing these live chat messages.

BACKGROUND

Digital Interaction

According to Meredith et al. (2021), digital interaction includes, “any communication which takes place within a digital environment which is designed to facilitate a digital communication” (p. 6). In digital interaction, the boundaries between offline and online are porous (Blommaert, 2017). Graham (2019) elaborated that the blurring of online and offline patterns merges physically and geographically based boundaries and bridges the local with the global (p. 380). Nowadays, digital interaction has provided different types of “synchronicity” (e.g., synchronous or asynchronous) and “modality” (e.g., written or oral) (Jenks, 2014, p. 33). In terms of asynchronous and written modes, studies have looked at text chats. Online chat rooms are worth investigating text-based interactions on various platforms. Jenks (2009) investigated how participants managed after the talk overlapped on a Skype chat room, discovering that pauses were to reset floors and open the floor for re-bidding. Jenks and Brandt (2013) explored multinational and multiparty chat rooms. Checking names through a summon-answer sequence, greeting each other, and asking questions related to topics maintain mutual orientation in these chat rooms, which allows participants to establish participant framework and systematic adjacency pairs. Nguyen et al. (2022), in contrast, showed possibilities of oral and written
communication in video-recorded Skype sessions, where a participant makes use of voice and text channels to correct vocabulary and teach spelling. The Skype platform keeps chat box and web browsers available during the meeting, which allows students to maintain a mutual orientation toward collaborative assignments (Dooley & Tudini, 2022).

A type of digital interaction platform that combines both synchronicity and modality is online gaming. Studies have looked at online games where players use chat boxes, which are forms of text-based interactions. There is a type of online game that enables players to chat with teammates orally and via text in virtual game worlds, which is a Massively Multiplayer Online Role-Playing Game (MMORPG) (Moore et al., 2007). The first three letters, MMO (Massively Multiplayer Online), offer opportunities for users to communicate online, which allows for investigating how players collaboratively interact both orally and via text (Sjöblom, 2011). The availability of spoken and written communications encourages players to discuss in their second languages in a gaming context (Throne et al., 2009). Text chat clarifies addresses and recipients accomplishing turn-takings in MMO. Bennerstedt and Ivarsson (2010) uncovered the practice that participants in MMO used text chat to arrange group formation. Moore et al. (2006) showed that participants used their avatars and exchanged text messages to offer help and give pleasure. MMORPGs also allow players to collaborate via text messages. Greenfield and Subrahmanyam (2003) discussed that text chat could implement strategies to maintain coherence, such as repetition and selecting the next speaker via text (pp. 728-729). Nilsen and Mäkitalo (2010) argued that other strategies like reformulation were to maintain intersubjectivity and continue discussions (p. 101).

Likewise, digital interaction has exhibited a wide variety of research in terms of different types of synchronicity and modality, especially how participants interactively transmit messages. Yet, recent digital interaction that could encompass both written and oral communication simultaneously remains largely unexplored.

**Audience Participation**

Another important aspect of digital interaction is the various ways of audience participation, such as asking questions and producing vocal reactions. Audience participation has been studied more in co-local settings, such as music performances and other performative settings. One example of audience participation in co-local settings is a TV show. It provides the audience as
guest speakers with opportunities to discuss with celebrities (Furukawa, 2016). Another form of audience participation in co-local settings is verbal audience responses. Clayman (1993) analyzed audience responses preceded by booing illustrated affiliation and disaffiliation in various public discussions. Llewellyn (2005) examined buzzing moments in a public meeting and concludes it as justifying position-making (p. 703). In a musician’s live performance, audience members produce vocal reactions to the musician’s embodied actions and motions (Pehkonen, 2017). Functions of pre/post-speaker-completion heckles vary in giving new information and interrupting a speaker and involve a sequential placement (Mellvenny, 1996).

Several studies on classroom interaction include audience participation. Tůma (2018) examined audience comments, particularly presenters self-selecting audience members to elaborate in Q&A sessions in the undergraduate seminar presentation. Teachers employ techniques to invite student participation during whole classwork, such as using interrogative and co-constructive sequences between L2 teacher and L2 learner (Rusk et al., 2017). Students can play roles as audience members. They utter reactions such as hmm and keep eye contact to indicate elaboration (Tůma, 2018). Online audience participation is investigated to some extent (e.g., Licoppe & Morel, 2018; Choe, 2019). Despite massive analyses of audience participation in public discussions, performative settings, and classroom interactions, there have been fewer multimodal CA studies of audience participation on online platforms.

**Language Brokering**

Language brokering defined as an “endogenous method for solving understanding problems and thereby promoting intersubjectivity” (Bolden, 2012, p. 115) can occur in co-local settings (Traverso, 2019; Jansson & Wadensjö, 2016 etc.). Traverso (2019) investigated the sequence that transforming the participation framework enabled the third person to give translations for the purpose of filling in an epistemic gap. Murillo and Kam (2021) explored how language brokers played roles in supportive communication. Of more direct relevance to this paper, Bolden (2012) showed that participants enacted language brokers after soliciting repair, in which an addressee cast him/herself as potentially lacking linguistic expertise and turns to the participant acting as an intermediary between two languages. Jansson and Wadensjö (2016) investigated a caregiver enacting as a language broker for less mature children and observed the caregiver giving
translation, misaligning to invite competent language brokers (p. 284), requesting competent speakers for translation.

The sequence of language brokering initiates after embodied actions and utterances index assistance. Greer (2015) presented in his study that gaze shift indicated asking brokers to engage. Participants appeal to a broker when linguistic assistance is necessary. Repeating in a lower volume could be counted as appealing to a broker (Greer, 2015). Direct announcements from brokering seekers, such as, “I don’t speak French.,” signal linguistic assistance (Traverso, 2012). Multimodal and sequential analyses highlight plenty of ways participants enact and induce language brokering. Yet, there is less work on its analysis on online platforms.

Thus combining the various concepts of digital interaction, audience participation, and language brokering previously discussed, this study investigates how language brokering (Bolden, 2012) occurs in a live-streamed gaming session that combines different modalities in synchronous interaction.

DATA AND METHODS

Data

I will examine the live-streamed multiparty gaming session where audience comments are visible for gamers. The data for the presented paper consists of an approximately three-hour and twenty-minute gaming session live-streamed on November 8, 2021. To explore language brokering in the new mode of communication, I selected a multilingual team. The focal participants are three live streamers: Euriece (EUR) from Canada, Junichi Kato (KATO) from Japan, and Killin9Hit (KH) from South Korea. KATO is an L1 Japanese speaker while EUR and KH are L2 Japanese speakers. They are located remotely and meet up in a virtual space to play an online multiplayer shooting game called APEX LEGENDS (hereafter APEX) as a team. They audibly communicated with each other mostly in Japanese, which they all possessed minimal proficiencies, to achieve goals on APEX. The audience is also present and watches the gaming session online. EUR, KATO, and KH live-streamed the gaming session separately; therefore, each live streamer could only interact with their own audience.
The data was live-streamed on the streaming media called Twitch. The designs of streaming media enable the audience to type chat messages with emojis, emoticons, and words (Graham, 2019, pp. 384-385). The audience’s comments pop up on a screen either vertically (Figure 1) or horizontally (Figure 2). In the data, the audience’s comments run horizontally flowing from right to left on the screen.

Figure 1
*Comments Running Vertically*

![Comments Running Vertically](image1)

Figure 2
*Comments Running Horizontally*

![Comments Running Horizontally](image2)

The data comes from EUR’s perspective as his audience shares chat messages on his chat box more actively than that of KATO and KH. These chat messages are only visible to EUR and allow him to recruit his audience members as either addresses or respondents. EUR used two computer displays—one for showing the game screen (APEX) and the other for showing his live-streaming screen (Twitch). His webcam shows his face playing the game. EUR usually gazed at the main game; yet, when he began interacting with his audience, his gaze shifted to the chat box (gaze shift is highlighted with a red rectangular in Figure 3). I examined the embodied actions based on his posture exhibited through his webcam.
Figure 3

*Diagram of EUR’s Gaze Directions and the Location of Computer Displays*

Although the main purpose of the live-streamed gaming session was that EUR, KATO, and KH played APEX on the team, I selected cases where these live streamers carried out conversations whose topics were not gaming. These cases allow for investigations of where linguistic trouble emerges and how EUR manages it with the audience’s assistance.

**Method**

The transcripts adopt a three-tier format (Hepburn & Bolden, 2017). The first-tier structures a Romanized version of the Japanese, and the second tier represents a word-by-word translation and symbols used in morpheme-by-morpheme glosses of the first tier (Hoshi, 2021; Tsujimura, 1996). Moreover, a space below the third tier provides frame grabs of audience comments and the embodied actions participants employ. +sign is transcribed at the onsets of frame grabs above the first tier (Mondada, 2018). EUR’s gaze shift is indicated by the blue arrow (←) on the frame grabs. Finally, idiomatic English translations are provided at the end of each turn in the transcripts. The audience’s comments on frame grab relevant to ongoing conversations are also translated into English.

The following questions will be addressed through my analysis of the focal segments: 1) How does the audience interact with EUR (live streamer)? 2) How does EUR make use of language-related assistance brokered by the audience?
FINDINGS

In my data exploration, I found ten cases of language brokering where the audience provided language-related assistance to EUR. I will present analyses of three of these cases that significantly capture audience participation in reformulating and expanding topics of ongoing oral interactions and helping EUR engage with the other co-players. With the selected excerpts, I intend to show how EUR makes use of the audience comments that appear on the chat box and engages in a conversation with his co-players while simultaneously playing the game. In all these excerpts, EUR, KATO, and KH do not meet face-to-face and communicate via audio materials. The audience’s comments displayed in the frame grabs are not visible to KATO and KH.

In the first two excerpts, EUR made an explicit request to his audience to translate what KATO and KH are talking about. The audience reformulated and summarized KATO and KH’s utterances, as well as the background knowledge that was shared but not told in the conversation, via text message. This helped EUR to follow the ongoing oral interaction between KATO and KH (Excerpt 1) and to share his situation associated with the story KH presented (Excerpt 2). The audience members also provided potential topics on a chat box, which ended up with EUR addressing their comments orally (Excerpt 3).

Language Brokering to Comprehend a Storyline

This excerpt shows the first half of the interaction in which KH launches a story about his romantic relationship. I will examine how EUR requests the audience’s assistance and makes use of it to comprehend a storyline. Before the excerpt, EUR told KATO and KH that he maintained a long-distance romantic relationship. The first excerpt begins after KATO confirmed whether KH dated a Korean lady or not. The audience members post comments while they are listening to a live-streamed conversation between KATO and KH.
Excerpt 1

1. KH jibun no risunaa san nanka sasotte kekkon
   my GEN listener Ms. something invite.GER marry
   +fig 1.1

2. +shimashita
   do.did
   “I invited, like, my listener and married.”

Figure 1.1

3. AHA[BHA]

4. [ichaicha] shite
   flirt do.GEN
   “Flirting (with her)”

5. KATO haha[haha]

6. KH [!hahahaha:haha:]
   +fig 1.2

7. KATO +AHAHAHAHA=
“Huh?”

“Mr. Kato, I did somehow.”

Mr. Kato, I did somehow.
“I did something active, didn’t I?”

You have Jenn.

Hey.

Euriece, be careful. English meals taste bad.

Cherry boy.

Figure 1.4

12 KATO wahahahaha soo nan [da]= so NOM P

“I see.”

13 KH [↑risunaa] san ni: [ano:] listener Ms. DAT well

“The listener, well.”

14 KATO [AHAAAAHA]

15 KH >jibun no ie ni shootaishite my GEN house DAT invite.did.GER

16 [moratte,] receive.GER

“I invited (a listener) to my house.”

17 EUR [haha TRANSLATE] +TRANSLATE [TRANSLATE]
Figure 1.5

18 KATO

[HAHAHA] un

"Yes."

19 KH issho [ni nanka]

together GEN something

"Together, like."

+fig 1.6

20 EUR [translate] (. ) +huh?

Figure 1.6

21 KATO HAHAHA
22 (1.6)

23 KH jibun ano: furaido chikin de shoobu
I well fried chicken CP match

24 kakemashita ne
bet.did IP
“Well, I put a lot of energy to win her with fried chicken.”

25 KATO hahaha soo nan da: ii ne.
so NOM P good IP
“I see. Sounds good.”

eur +fig. 1.7 +fig. 1.8

26 KH +uchi no ie de nanka furaido +chikin tabenai
my LK house CP something fried chicken eat.NEG

Figure 1.7
Figure 1.8

27  ワイ と
   や   な＝
   “Don’t you eat fried chicken or something in my house? Like,”

28  KATO  =HAAHAA

Figure 1.9

KII says, “I invited my listener and married.”

For sure.

Amazing lol

He seems to marry his fan.

Funny.
29  KH  message send.GER because since then
     "I texted her. Because since then,"
30  KATO  is so NOM P
     "Oh, I see."
     +fig 1.10
31  EUR  INT
     "I see."

Figure 1.10

+fig 1.11

32  KATO  wife beautiful P thing IP
     "Your wife is beautiful, isn’t she?"
Figure 1.11

33   KH   tada maa
    but well
   “But well,”

34   KATO  yappa ne: soo yannai to ne:
     expected IF so do.must CON IP
   “As expected, I know you have to actively do that. Otherwise,”

35   KH   soo ssu yone
    so COP IP.IP
   “Right.”

36   (2.4)
   +fig 1.12

37   EUR   +hahaha
In the first segment, KATO and KH laugh at KH’s answers, “jibun no risunaa san sasotte kekkon shimashita” and “ichaicha shite” with a loud voice, a rising tone, and elongation. Their laughter lasts for 4.3 seconds, which may attract EUR with the ongoing oral interaction as he solicits repair by saying “e?” EUR’s audience shares their knowledge of KH’s story with him via live chat messages. Indeed, the audience shifts their topic after KH initiates his turn in line 2. EUR’s audience finishes talking about past conversations like, “アメリカの飯はまずい (American meals taste bad.)” and “勃起もするわ (I do erect.)” before a small blank appears (Figure 1.1). When laughter moves the onset of oral interaction along (Glenn, 2013) from line 5 to line 10, EUR’s audience comments on laughter via live chat message. They send semiosis to demonstrate laughter (‘www’ meaning laughing out loud in Japanese) (Figure 1.1). Moreover, the audience notices something from KH’s story by saying, “あ (Oh.)”, which stands in the first position as a change-of-state token and informs KH’s story coincides with when a mental event occurs in the audience members (Heritage, 2018, p. 161). The change-of-state token, thus, presents the audience members have sufficient knowledge of KH’s story. Based on the evidence that EUR shifts his gaze to a chat box in line 8 (Figure 1.3), he orients toward the live chat messages sent from his audience. The audience starts to share information, such as “イギリスの飯はまずい (British meals taste bad.)” and “ジェンおるやん (You have Jenn.),” which may index their membership knowledge (Figures 1.3 and 1.4).
The second segment shows that EUR requests his audience for translation by using verbal and nonverbal cues while KATO and KH engage in oral interaction from line 9 to line 16. EUR’s orientation toward the live chat messages sent from his audience makes a novel participation framework observable. Although separate participation frameworks frequently appear in gaming interaction (Piirainen-Marsh, 2012), live streaming features a participation framework where live streamers can interact with their audience. The audience enacts as language brokers for EUR after he vividly signals assistance. While KH continues telling the story of dating his wife in lines 15 and 16, EUR exclaims the request, “TRANSLATE TRANSLATE” gazing at the chat box (Figure 1.5) in line 17. His request for translation overlaps with the continuing intonation of sharing the story in line 16, which seems that KH has not completed his TCU. This fact becomes strong evidence that the request directs EUR’s audience. Furthermore, EUR’s gaze shift index initiation of language brokering (Greer, 2015); however, most of his audience still co-construct the stance toward KH’s story, sending www and, “なんだその結婚の仕方はw (What the hell is the way to get married lol)” (Figure 1.5). EUR requests, “translate” again and solicits repair, “huh” in line 19. Gaze shift (Figure 1.6) rather directs to his audience sending messages on a chat box. Moreover, EUR pats his headset (Figure 1.6), demonstrating that he treats the ongoing oral interaction as a trouble source.

EUR’s oral request and gaze shift in the earlier segment guide his audience to attribute them to a lack of comprehension. Live chat messages coming after his request are possible to build another turn-taking system. In other words, schisming, in which two turn-taking systems are constructed in different parties (Egbert, 1997), occurs. The oral request and gaze shift become a “schisming-inducing turn” (Egbert, 1997, p. 3). The audience summarizes and translates the oral interaction in which KATO and KH engage by saying for instance, “KHの嫁はリスナーだったんだって (Quote, “KH’s wife was a listener.”)” and, “ファンと結婚したらしい (He seems to marry his fan.)” (Figures 1.7 and 1.8). They also say, “listener hunter KH” (Figure 1.8) or “KH married his viewers” (Figure 1.9), although both of them do not necessarily translate the episode KH employs fried chicken to represent a funny invitation for a date. EUR shifts his gaze to a chat box and displays his understanding by saying “hee” in line 31. Hee is a news-receipt token that can be free-standing and becomes an expression of assessment of the news (Mori, 2004, p. 1181). Based on the audience’s comments and the timing of his utterance, it is likely that EUR qualifies these comments as language brokering.
In the last segment, EUR’s audience keeps enacting as language brokers. They reassure him “マジだよ (For sure.)” that their summary is accurate and offer him an English translation, “KH married to his listener” (Figure 1.11). The audience sends not only a summary but also a reaction like, “下衆な笑い方草 (Creepy ways to laugh lol)” (Figure 1.12), which may relate to him producing laughter in line 37. Based on his gaze shift to a live chat and orientation toward his audience, his laughter is likely to show he comprehends a storyline.

In the first excerpt, the audience participation indirectly assists EUR to resolve the lack of comprehension and follow the ongoing oral interaction. The audience members enact as language brokers after EUR requests help in the second segment of the excerpt. Instead of KATO and KH, the audience summarizes and translates KH’s story via live chat messages. Consequently, the audience’s comments contribute to EUR’s understanding of a large picture of the story.

Participating in Oral Interaction after Language Brokering

The following excerpt shows the second half of the story KH presents. I will examine how EUR elicits his situation by using his audience’s assistance. The second excerpt begins after KATO and KH discussed the story that KH dated his wife in his house. Same as the first excerpt, EUR continues requesting his audience for assistance.
Excerpt 2

38 KH >jitsuwa< sono: sono hi nanka sakkaa shiai
actually that that day something soccer game

39 ga atte
NCM exist.GER
“Actually, there was, something like, a soccer game on that day.”

40 KATO ua: ou ou ou
woc yeah yeah yeah
“Wow. Yeah.”

41 KH chuugoku to kankokuno
China with South Korea.GEN
“South Korea against China.”

42 KATO +UN
yes
“Yes.”

Figure 2.1

+fig 2.2

43 EUR +hahaha
married his *shichoosa*.

That suck lol

**Figure 2.2**

44 KH kunino daihyoo sen ga atte

*country.GEN representative match NOM exist.GER*

+fig 2.3

45 sakkaa shiai minagara +nanka

*soccer game watch.GER something*

“The representatives had a game. Watching the soccer game, like,“

**Figure 2.3**

46 (4.4)

+fig 2.4

47 EUR [+haha]
48 KATO  [shina] wa: oshi:=
          die so close
        “Fxxk off. Oh, close.”
49 KH     =uwa oshii majide
          INT close for.real
        “Oh, really close.”
50 KATO   ato ippatsu.
          left one shot
        “One more shot.”
51 EUR    fa:ji:def [hahaha]
          for.real
       “Really?”
52 KH     [tada sonna ni]
          but that DAT
        “But that’s.”
53 KH     nani [yuurisu]=
          what Euriee
54 KATO   [haha]
55 KH     =rikai deki mashita=*
          understand can did
        “What? Did you understand, Euriee?”
EUR’s audience provides EUR with summaries and English translations on his chat box. Nonetheless, there is a gap in topics among KATO, KH, and EUR’s audience. KH launches the episode about the soccer game between Team China and Team Korea by saying, “jitsuwa sono hi nanka sakkaa shiai ga atte” from line 38 to line 39. When KATO and KH talk about the soccer game, EUR’s audience offers him information about KH like, “リスナー手を出した” (Reached out to listener), and, “視聴者と結婚した” (married with his shichoosha),” and their reaction to the episode KH is sharing like, “ひっでえwwww (That suck lol).” Some of the comments include an English translation, “KH’s wife was a listener,” although they do not say anything about the soccer game (Figure 2.1). EUR orients toward the audience’s comments and produces laughter in line 41 (Figure 2.2). Based on the orientation toward a live chat, it is possible that he laughs at the comments KH married his listener instead of the story he orally presents.

Euriece is likely to rely on these live chat messages to comprehend what KH says considering his orientation toward his audience’s comments. Despite Euriece orienting toward his audience’s comments, they seldom translate the episode Kato and KH are talking about. This segment also shows that Euriece gets ready to share his comments after he shifts his gaze back and forth. When KH shares what he did with his wife while they were watching the soccer game by saying, “sakkaa shiai minagara nanka,” in line 45, the audience’s comments become massive. EUR’s audience sends their reaction to that story via text, such as, “リスナー食い (Eat listeners.),” and, “ファン食い (Eat fans.).” Some of them type their view of Euriece’s laughter
like, “クソ笑うやん (You laugh a lot).” Others still enact as language brokering by sending an English translation, “KH made his listener his wife.” and their knowledge of KH’s wife, SOM chan like, “SOMちゃんはリスナーは知ってた (I knew SOM chan was a listener)” (Figure 2.3). EUR moves to a vacant room and returns his gaze to a gaming screen (Figure 2.4), and then produces laughter in line 47. Considering his continuous gaze shift, he is likely to laugh at the live chat messages sent by his audience. His gaming action, likewise, indexes that he stops playing for a moment and prepares his speech with the audience's comments. Yet, KATO and KH contribute to the gaming interaction so intensively from line 48 to line 50 as to let the laughter pass.

In the end, EUR’s participation may be enabled by various sources in this segment. His audience not only has given him English translations but has summarized KH’s story and information about his wife so far. This text-based language brokering may result in Euriece uttering the interjection “maji de” to produce newsworthiness with a laughing voice followed by laughter in line 51. KH allocates turns to invite EUR to the oral interaction. While KATO and KH have allocated turns to each other until line 51, KH nominates EUR in the next turn in line 52 to let him join the interaction. Turn allocation highlights that EUR seldom interacts with KATO and KH unless he is called for. Gaps in Japanese competencies may trigger EUR to engage less actively in oral interaction.

Audience participation is likely to fill in that gap. After KH solicits a repair for Euriece by saying nani in line 53, Euriece remarkably shares his personal experience associated with KH’s story from line 56 to line 57. In this utterance, Euriece is searching for the word shichoosha (‘listener’), which is extracted from the earliest audience’s comments. KH utters the interjection “e” ending with a rising tone to index newsworthiness in line 56, which conveys that KH’s mental state is changing. Although he keeps calling the loanword, “risunaa,” in the first excerpt, he reformulates it after Euriece utters shichoosha. Euriece’s word choice urged by his audience’s comments perhaps influences oral interaction.

In the second excerpt, audience assistance offers opportunities for EUR to engage with his teammates. Text-based language brokering plays a crucial role in helping EUR orally address his situation. EUR frequently shifts his gaze from the chat box to the gaming screen, which indicates that he relies on his audience as language brokers and prepares his speech. KH’s story inspires
EUR’s audience, considering that the flow of their comments fluctuates in each figure. Audience participation pushes Euricide to join the ongoing interaction in the end.

**Language Brokering to Produce Relevant Topics**

In the third excerpt, I will examine how the audience members enacting as language brokers produce relevant topics and help EUR address their comments. In this excerpt, EUR, KATO, and KH talk about food culture since they were living in different countries (Canada, Japan, South Korea). Before the excerpt, KATO asked KH whether people eat sashimi (a slice of raw fish) in South Korea. As soon as KH gave an affirmative response and further described the customs in South Korea, KATO asked EUR whether people eat sashimi in Canada. The excerpt begins with EUR answering KATO’s question. Same as in the previous two excerpts, EUR’s audience frequently types comments while they are listening to the live-streamed interaction.
Excerpt 3

60  KATO  kanada wa.
Canada TOP
“How about Canada?”

61  (1.5)
+fig 3.1

62  EUR  +so[no:]
that
“Um.”

Figure 3.1

63  KATO  [sashimi] sashimi sashimi

64  KH  haha [nama].
raw
“Raw.”

65  EUR  [un: sashimi wa (2.0) <tabe( )te>
well sashimi TOP  eat.GER
+fig 3.2

66  +tabete muzui ( . ) ;ore=
eat.GER difficult  me
“Well, it is difficult for me to eat sashimi.”
Figure 3.2

67  KATO =etabete [muzui.]
     eat.GER difficult
   “It is difficult to eat.”

68  KE  [a annari] tabe nikui rashii desu ne
      rarely eat hard seem COP IP

69  nanka.=
    something
   “It seems it is hard for him to eat, like,”

70  KATO =A:::
    ah
   “Oh.”

71  EUR ye[ah yeah]

72  KE  =[namazakana wa]
    raw fish TOP
   “Raw fish.”

73  (1.7)
    +fig 3.3

74  EUR +sashimi.
    sashimi
   “Yeah, yeah. Sashimi.”
yakizakana wa doo daroo na
grilled fish TOP wonder will Q

"Yes yes yes."

yuuurisu o fa FIRE FIRE [fish]=
Euriece

I guess you can’t eat raw fish.

Figure 3.3

75 KATO >un un un<.
yes yes yes
“Yes yes yes.”

76 KH yakizakana wa doo daroo na
grilled fish TOP wonder will Q

77 yuuurisu o fa FIRE FIRE [fish]=
Euriece

78 KATO ["fire fish"]

79 KH =suki?
like
“How about grilled fish? Euriece, fire fish. Do you like it?”

80 EUR >fire fish wakannai<.
know.NEG
“Don’t you understand fire fish.”

81 KH tabenai?
eat.NEG
“Don’t you eat it?”

82 EUR tabenai.
eat.NEG
“I don’t eat it.”
84 **KATO**

+*nani* *kuu no? MIKU?
what eat Q meat
"What does he eat? Meat?"

---

**Figure 3.4**

85 (3.7)

86 **KATO**

*oni*ku
HON.meat

---

**Figure 3.5**

87 **KH**

+*niku* [janai] desu *kane* yappa
meat TAG.NEG COP Q.IP as expected

---

88 **KH**

[niku *tabe]*ru *n* janai *kana?*
meat eat NOM TAG.NEG IP.Q
“I guess he eats meat. I guess so.”

90 KATO [hu:n]
    INT
    “I see.”

91 KH did you like meat?

92 (1.8)

93 EUR meat?=

94 KH =no [fish]?

95 EUR [UN]
    yes

96 (2.6)

97 EUR hahaha

98 +fig 3.6

98 +(2.3)

Figure 3.6

99 EUR HAHAHAHA

100 EUR makkumakudonarudodebu.
    Mc McDonald fatie

“Yes. McDonald’s Fatie.”
EUR’s audience members, KATO, and KH all begin to help EUR answer the question. In line 60, KATO nominates EUR as the next-turn speaker by asking him about Canada, where he has epistemic primacy. Since EUR hesitates to respond in line 62, Kato and KH provide utterances to assist Euriice by self-repairing “sushi sushi sushi” in line 63 and addressing a candidate word “nama” in line 64. EURice shows a struggle but answers difficulty to eat sashimi from line 65 to line 66. EURice’s audience anticipates that EURice would not prefer sashimi using their membership knowledge. They first greet EUR, “おい (Hey.),” and say, “ユーリスが嫌いなやつ (That’s what EURice doesn’t like).” After EUR says, “tabete muzui ↓ore,” his audience gives reactions to sushi and the English translation of sashimi via live chat messages (Figure 3.2); yet, EUR does not direct his gaze to a chat box and account for these audience comments.

The second segment shows that KATO and KH keep assisting EUR, which could see that the live streamers prioritize the progressivity of the talk rather than look at the audience’s comments. KH attempts to assist EUR more actively than KATO. He self-selects his turn and produces reformulation from line 66 to line 67. The reformulation also directs not only KATO but to EUR, who displays affirmation with KH’s reformulation in line 68. EUR’s audience, in contrast, shares sympathy with not eating sashimi like, “生は無理かもね (I guess you can’t eat raw fish.),” and disaffiliating stances toward sashimi like, “刺し身アンチ (Anti sashimi.),” as well as “Euriice刺し身4 (sashimi fxxk; 4 comes from a Japanese word, shi, meaning death)” (Figure 3.3). While the substantial gap in line 72 allows EUR to direct his gaze to a chat box, he does not warrant his audience’s reactions as language brokers.

Code-switching plays a role in allocating turns in the third segment. Moreover, candidate understanding may continue oral interactions. KH shifts the topic from sashimi to grilled fish in line 74 and allocates the next turn to EUR by saying, “yuurisu fa FIRE FIRE fish,” in line 77 and, “suki?,” in line 79. KH code-switches from Japanese to English in line 77 to ask EUR his
question. However, EUR receives translation as a trouble source and solicits repair by saying, “fire fish wakannai,” in line 80. KH gives a candidate response, “tabenai?,” instead of repairing in line 81. A substantial gap allows EUR to draw KH’s repair as a candidate understanding in line 82. Audience participation follows the candidate understanding made by KH and EUR in line 82. EUR directs his gaze at a chat box where the audience members send various reactions like sympathizing with difficulties and recommending eating grilled fish. Some of them attempt to give English translations, such as boiled fish (Figure 3.4). However, these translations do not accurately translate grilled fish. Less accurate language brokering causes unsuccessful language assistance (Greer, 2015, p. 11), which is likely that the audience’s comments are not helpful for EUR. In the massive number of live chat messages commenting on different views, EUR seems expected to select ones useful for him instantly in live streaming.

In the last segment, EUR’s audience and KH guide EUR to produce a relevant topic. In addition to audience participation, silences enable KH to code-switch and EUR to shift his gaze to live chat messages. KATO joins the oral interaction by shifting the topic, “nani kuu no? NIKU?,” in line 83. He also uses a substantial gap for self-repairing like, “oniku¿,” in line 84. KH draws KATO’s self-repair as his curiosity about the food culture in Canada in line 85. EUR’s audience send English translations and questions about grilled fish as usual (Figure 3.5). Moreover, some of them yield topics related to meat, such as makku (abbreviated McDonald’s in Japanese) and poteto (‘French fries’) (Figure 3.5). Topics yielded by EUR’s audience direct to him at the end of the excerpt. The substantial gap in line 91 allows KH to formulate a question in English to EUR. EUR does not recognize that he is asked a question considering the 1.8-second silence but receives the English reformulation by repeating meat in line 93. He then overlaps with the closing of another question from KH and exclaims a positive minimal response in line 95. The 2.3-second silence in line 98 enables EUR to direct his gaze to a chat box (Figure 3.6) and produce exclaimed laughter. His gaze shift warrants audience participation. His audience produces topics (makku, poteto, and niku to poteto in Figure 3.5) via live chat messages. Then, EUR addresses some of them, such as makku, makudonarudo (‘McDonald’s’), and debu (‘fattie’), in line 100. Unlike the first two excerpts, the upshot of relevant topics indirectly assists EUR to speak up in the interaction.
In the third excerpt, potential topics yielded by the audience impact the oral interaction among live streamers. Rather than English translations, EUR’s audience sends their reactions to his utterances. Nevertheless, his audience plays roles as language brokers when EUR shifts his gaze to request help. The audience members provide him with relevant topics so that he can associate them with meat. Warranting these topics seems to display a new trait of online audience participation.

DISCUSSION

The present study investigated how Euriece recruits his audience members as language brokers in a live-streaming context. Language brokering is by no means a practice limited to co-present settings. In fact, live chat messages exhibit real-time brokering on the internet, which displays that language brokering is particularly relevant for novice Japanese speakers like Euriece. Euriece’s audience summarizes a portion of ongoing conversations and offers English translations to help him engage in oral interactions (Excerpts 1 and 2).

It is worth noting that the involvement of the audience demonstrates two turn-taking systems: (i) orally between live streamers and (ii) both orally and written between a live streamer and audience through a live chat box, which Euriece undertakes by shifting his gaze to the chat box when he receives language brokering. Gaze shift initiates interaction with the audience in a live-streaming context, which is a mark of schisming (Egbert, 1997). Schisming could occur in interaction within this framework: (i) live streamer-live streamer and (ii) live streamer-audience. In other words, two participation frameworks, which are commonly seen in gaming interaction (Piirainen-Marsh, 2012), are observed. Another turn-taking system starts when Euriece reacts to his audience’s comments orally; simultaneously, Kato and KH engage in their own interactions. Euriece can switch his stance from overhearers to addresses/recipient. In this context, this situation empowers him to engage with his audience by orally requesting translation and relying on his audience’s comments running on the chat box as his response to KH. Findings of schisming feature the template of live-streamed interactions, making the audience’s roles more conspicuous. Live streamers utter and react showing their eligibility to participate in oral interactions. These findings expand previous studies of social media and gaming interactions.
However, challenges remain in how the messages in a live chat from the audience are taken up by Euriece since the audience’s comments run randomly; thus, Euriece is expected to select useful and suitable comments as support for his oral interactions with other live streamers. Although the oral request for translation and gaze shift can build, “schisming-inducing turns” (Egbert, 1997, p. 3) in the excerpts, the observation has a limitation to determine whether Euriece and his audience establish turn-taking systems altogether. While additional research is needed, it is likely that as linguistic resources are visible to a novice language user (Euriece), a speaker relies on these resources, providing further evidence that audience participation can engage in language brokering on an online platform.

In addition, the presence of two languages (English and Japanese) used in interactions between Euriece and his audience mainly occurring through live chat, gaze, and oral interaction can be seen as a form of ‘multilingualism’ (“groups and individuals to engage on a regular basis in space and time in everyday life”) (Franceschini, 2009. pp. 33-34). In all the excerpts, the audience sends linguistic resources including reactions, reformulations, and translations in both English and Japanese. Although I do not see how these live chat messages relate to Euriece, it is plausible to assume that Euriece’s gaze shift and utterances coming after that could verify these live chat messages as assistance to engage with Kato and KH. It is apparent that KH distinguishes between English and Japanese depending on to whom his utterance directs. KH speaks to Kato in Japanese; yet, he often code-switches from Japanese to English to speak to Euriece. While additional research is needed, the gap in linguistic competencies makes distinguishing linguistic repertoire visible. KH may contribute to determining to whom he talks in a situation where participants cannot recognize each other.

I would suggest that my study also offers evidence of online audience participation—not so much in terms of summoning questions (Llewellyn, 2005) and producing vocal reactions (Pehkonen, 2017) but in terms of how audience participation generates topic suggestions which are demonstrated when the audience starts providing topics (e.g., _makudonarudo; niku to poteto_) which makes Euriece engage with Kato and KH more actively (Excerpt 3). Thus, online audience participation has the potential to generate topic suggestions. In line with the multimodal CA approach, this form of audience participation focuses observations firmly on the interaction rather than the speaker.
Overall, this study has proposed that the live-streaming context enables the merging of different modalities (written and oral) in digital interaction between audience members via live chat and online game live streamers with one function of online audience participation as ‘language brokering’. Digital interaction allows for opportunities to establish novel participation frameworks and augment in situ interactions between various participants. These findings suggest the further expansion of researching language use in social media, which is a worthwhile topic for future research.

REFERENCES


**APPENDIX A**

*Transcript Convention* (Hepburn & Bolden, 2017; Mondada, 2018)

. falling intonation

? rising intonation
rising contour  
↑ rising tone  
↓ falling tone  
: elongation  
£ laughing voice  

ahaha laughter  

haha laughter  

wahaha laughter  

= latching  

[word] overlapping  

>word< speedy talk  

<word> slow talk  

word emphasis  

WORD exclamation  

○word○ small voice  

+ onsets of frame grabs  

*Japanese Grammar Grossing* (Tsujimura, 1996; Hoshi, 2021)

COP copula  

CON conjunction  

DAT dative  

GEN genitive
GER gerund
HON honorific
INT interjection
LK linking particle
NOM nomination
PLU plural
PST past tense
TAG tag question
Q question
P particle
CP case particle
IP interactional particle
TOP topical particle

Participants
EUR Euriece
KATO Junichi Kato
KH Killi9Hit