

# Game Streaming Revisited: Some Observations on Marginal Practices and Contexts

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## ABSTRACT

The focus of this paper is on the spectating phenomenon of live streaming gameplay, which has been described as “marginal.” After reviewing important non-gaming factors capable of bringing game streaming from the analytical margins to the center, we discuss the larger context in which game streaming is embedded, plus its implications. Data were gathered via in-depth interviews with game stream viewers, analyses of game streaming-related forum posts, and an online survey. According to our observations, game streaming should not be viewed as only a game-related phenomenon or extended gameplay practice, but also as a type of cross-media entertainment involving multiple media consumption characteristics—a form of stage performance, a space for social interaction, and as entertainment similar to hosted variety shows and reality television. Consumers tend to move among multiple streaming activities serving assorted media functions in search of entertainment, with their identities changing according to personal time restrictions and social situations.

## Keywords

Game-streaming, live-streaming, spectatorship, streamer, media consumption, stream-viewing context, gendered streaming practice, multitasking

## INTRODUCTION

Watching video game streaming has become a popular leisure activity, with a growing number of players uploading their game images to the web for instant viewing. Young audiences are increasingly watching game streaming videos and using embedded chat rooms to interact with streamers and other viewers on platforms such as Twitch.tv and YouTube Gaming. Game researchers are actively engaged in studying this phenomenon, but to date most efforts have focused on streaming from a game-centered perspective. Specifically, researchers are showing a tendency to automatically assume that it is the game that plays a core role, with player identities at the center of viewer interest. Our concern is that this too-narrow approach to the phenomenon overlooks broader meanings associated with media consumption and cross-relationships involving contemporary game culture and other media forms. Our goals in this paper

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are to expand how the game-streaming phenomenon is understood, and to offer a broader perspective tied to viewing contexts, one that supports interpretations involving cultural significance based on current studies plus new data that we have gathered.

Game streaming (both live and post-game video broadcasts) has become an important aspect of gaming culture. While it is directly related to games and gameplay, a review of casual, non-competitive game-streaming practices reveals non-gaming or marginally associated elements that are worthy of closer examination, rather than dismissal as being irrelevant to game research. For example, we have found that game-streaming audiences consist of game players, former players whose interests have faded, potential consumers who do not yet consider themselves players, and non-players with weak gaming associations. Further, in many streaming situations game content and gameplay are less important than the personalities of streamers or the social ambience of chat rooms. Although some researchers have tried to understand these practices, their tendency has been to approach the topic in terms of simple viewer classification schemes rather than starting points for critical analysis.

This paper addresses the following core research questions: How should game streaming be analyzed, especially the phenomenon of passive watching? Should the activity be approached as a video gameplay extension, or as a new form of gameplay? Should it be viewed as a new culture for the gathering of game information by players, or as a new facet of the media industry, similar to reality shows and personal entertainment channels? What are its connections (if any) to self-branding and micro-celebrity? We will examine the roles and functions of games, live streamers, and viewers when considering these questions.

## **LITERATURE REVIEW**

Game streaming researchers have looked at the phenomenon as a form of media usage, as a cultural phenomenon, as community building, and as a marketing strategy, among other approaches. The first category is the most common—that is, analyzing game streaming in terms of stream styles, streamer characteristics, spectator motivation and gratification, or streamer-viewer interactions. Smith, Obrist and Wright (2013) have created three game stream categories based on competition type, from hardcore “e-sports,” to “speedrunning” attempts to break speed records, to informal and casual “let’s play” style. Based on time and effort investment, Walker’s (2014) continuum describes the most active streamers as installing supplementary technologies or software that support special effects, composite videos, and streamer comments. At the other end are passive streamers who broadcast their games from consoles without adding any effects or commentaries. Other researchers (e.g., Gros et al., 2017; Liao, 2017) have analyzed stream types according to their information, entertainment, or social functions. Sjöblom et al. (2019) apply the concept of affordance to study how popular streamers utilize Twitch tools for attracting cross-platform viewers.

Based on her analysis of streamer content production, performance, and social engagement with audiences, Taylor (2018) has identified five streamer motivation categories: social connections, play experience transformation, creativity and performance, professional aspirations, and professional expectations. Streamers can assume several roles, including player, entertainer, teacher, analyst, marketer, tester, and content generator, as noted by Walker (2014). These streamer roles are all game-centered. Pellicone and Ahn (2017) assert that “the development of a unique attitude and persona as a gamer” is the key issue for game streamers, which is in contrast with Smith’s (2014) observation that many YouTube streamers construct their celebrity based on identity characteristics such as nationality.

Findings from audience motivation studies largely support the same above-described categories, especially streaming as a method for improving game skills, as leisure and entertainment, and as a platform for interacting with streamers and other viewers (Cheung and Huang, 2011; Gros et al., 2017). Some researchers have adopted a use-and-gratification perspective for studying viewing motivation. Sjöblom and Hamari (2017) used questionnaire responses to identify five types of viewer motivation: cognitive, affective, personal integrative, social integration, and tension release. Here and in other studies of streaming audience satisfaction and motivations, analytical frameworks have generally assumed or described all streaming participants as video game lovers and players, with the games occupying central positions in terms of performance and viewing. From our review of the literature, the primary focus of viewer classification is distinguishing among various degrees and types of player engagement as viewers, and organizing the watching behaviors of hardcore gamers, casual gamers, and everyone in-between for descriptive and analytical purposes. Our impression is that researcher perceptions of audience identities as players are relatively fixed, resulting in a tendency to describe all viewer motivations as game-related.

A few researchers have investigated stream-viewing behaviours from a meta-game perspective, with audiences collectively defining new games played by them and streamers, and with games actively being played by streamers considered sub-games. In addition to the famous event known as “Twitch Plays Pokémon,” the concept of “tandem play” as theorized by Consalvo (2017) represents a different meta-game type, one that captures characteristics that tend to be overlooked in studies involving media consumption approaches. Consalvo observes that the combination of stream-viewing and chat rooms facilitates the transformation of games (even single-player games) into a social activity involving geographically dispersed audiences, thereby serving functions similar to those associated with social television (Ducheneaut et al., 2008). In this sense, tandem play has similarities with the “vicarious audience play” category in Sutton-Smith’s (1997) private-to-public play spectrum, positioned between the more private “informal social play” (e.g., parties or travel) and the more public “performance play” (e.g., playing music, playing games for the game’s sake).

Streamer-viewer interactions have also been investigated. Anderson (2017) has observed that many streamers who use second computer monitor screens specifically for chat room messages are fully aware of their live audiences, thereby distinguishing them from the imagined audiences in traditional media as discussed in Litt (2012). In turn, audience members can use streamer reactions and eye movement toward the second screen to confirm that their comments and questions have been received and understood. Depending on the frequency of such interactions, a game being played during a streaming event may take a back seat to the streamer-viewer relationship. As Scully-Blaker et al. (2017) note, tandem play occupies a position between “playing along” and “playing for” a streamer’s audience. Once the number of viewers exceeds a threshold (thus reducing the potential for viable interactions), streamers may shift their roles to that of performers, and give most of their attention to playing for their audiences.

The literature contains other non-media-based streaming studies such as Gandolfi’s (2016) use of a multi-domain framework to analyze Twitch.tv production, consumption, and identification from the perspectives of cultural, game, and media studies. His research, based on the concepts of “circuits of culture,” “diffused audiences,” and “immersion,” represents an expanded perspective for interpreting game streaming. His conclusion is that Twitch streaming can be categorized as challenge involving “professionals,” exhibition involving “hedonists,” and exchange involving “companions.”

Cheung and Huang's (2011) study of e-sports and the live streaming of StarCraft is one of the few that considers streaming audience context. They identified nine personas based on viewer roles and watching categories: bystander, curious, inspired, pupil, unsatisfied, entertained, assistant, commentator, and crowd. All nine were observed during various StarCraft viewing situations and environments, including South Korean internet cafes, TV-based video game channels, and various online streaming platforms. They describe the presence of large numbers of casual players who prefer watching other gamers to playing themselves. Subsequent researchers looked at the roles of casual players and their communities in greater detail. Smith et al. (2013) used Cheung and Huang's persona classifications for their study of StarCraft live streaming, shifting their object of analysis from e-sports to less intense "let's play" gatherings when exploring the characteristics of casual player streaming communities and participant motivations.

Hamilton, Garretson and Kerne (2014) looked at the significance of live streaming as an interactive platform—that is, a virtual third place for players to develop shared identities from stream content and collective experiences. In addition to serving as a mechanism for sharing game processes, streaming also offers spaces for open communication, with audiences encouraged to form and invest in participatory communities. Hamilton et al. discuss distinctions among various streaming-focused communities in terms of technology usage (emphasizing the combination of gameplay and IRC chat channels), and how different streamer-audience interaction types create a sense of heterogeneity in communities marked by intimate-versus-large scale and amateur-versus-professional dichotomies.

Another analytical perspective involves the commercial potential of game streaming and consumer cultures. Deng et al. (2015) discuss game streaming in terms of game marketing or as a tool for developers to collect feedback for improving gaming experiences. Other researchers have studied if and how viewing behaviors result in game purchases (Gros et al., 2017), and reasons why viewers are willing to "tip" streamers by subscribing to their channels or making financial donations (Liao, 2017).

In most game-streaming studies, center stage is occupied by texts (e.g., game-specific genres and content), technology (e.g., social TV), and actors (e.g., performers, spectators, and chatrooms) rather than streaming contexts. While the findings described in this section are relevant to game studies in general, one drawback of focusing too much on player identity and video game usage is the potential for discounting marginal viewers and viewing practices. The presence of marginality does not alter the fact that most viewers are also active players who benefit from watching streaming games; they might help clarify the larger social contexts of media consumption in which the streaming phenomenon is embedded. Combined, the research approaches described in this section reveal the structural contexts of streaming, and similarities between game streaming and other forms of media consumption.

## **RESEARCH METHODS AND DATA COLLECTION**

Information sources consisted of in-depth interviews with game-streaming viewers conducted in 2017 and 2019, game streaming-related posts accessed from online forums in January 2019, and responses to an online survey conducted in April 2019. Although all information was directly linked to the behaviors of game-streaming viewers, each method served additional functions: game forum posts helped us identify topics reflecting the major concerns of viewers, survey construction and responses helped us narrow our research framework, and interviewees helped us understand stream-viewing contexts in detail.

Online discussion forums were used as a platform for understanding a broad range of practices tied to streaming, streamers, and the viewer community. Our main sources were PTT (Taiwan’s most active BBS forum) and the Bahamut web forum, using “(watch) live streaming” as our primary search term. We manually removed invalid links and articles on unrelated topics such as upcoming events (e.g., channel openings, lucky draws) and technical announcements (e.g., font modifications, hardware upgrades). Our final body of data consisted of 66 discussion threads (57 from PTT and 9 from Bahamut) occurring between April 2015 and January 2019, which we used for discourse analysis. The majority of posts (original and replies) used in this study appeared in 2017 and 2018. Popular posts attracted dozens or even hundreds of responses.

For the online questionnaire, we sent out invitation emails with a link to the survey URL. Game website visitors were invited to participate, and some participants reposted our invitations on other social media platforms. We collected 236 usable surveys (163 female, 73 male). The respondents’ age distribution was skewed toward young adults: 127 were between the ages of 18 and 24, 78 between 25 and 30, 26 between 31 and 38, and 5 between 39 and 54. Of these, 62 (26.3%) described themselves as serious players, 78 (33.1%) as former serious players but current casual players, and 96 (40.7%) as casual players.

Among the interviewees, 36 (22 male, 14 female) were recruited via game-related clubs based at universities, local game forums, or online survey respondents. We tried to create a diverse sample in terms of experienced stream participants, casual watchers, and light users. Interviewee ages ranged from 18 to 30. Each interview lasted between 60 and 90 minutes. Interviews started with personal playing/stream-watching history questions, followed by more specific inquiries regarding stream-viewing contexts and how individuals interpret their usage.

We found that these data sources complemented each other and allowed for an expanded scope of streaming game viewing experiences, which in turn helped us understand the larger media consumption contexts in which game-streaming culture is embedded.

## **FINDINGS AND ANALYSIS**

In this study, we try to bring those appeared in marginal sights into the center for examination, and to put a special emphasis on understanding the various contexts of streaming game viewing. The term “marginal” does not refer to rarity or abnormality, but to analytical positions outside the usual parameters associated with mainstream game research. We believe that, with the presence of a fuller context of stream viewing behaviours, we can fill in some overlooked elements of stream spectatorship and have a better understanding of game streaming in general.

### **A. Four streaming-game viewer types**

Based on evidences drawing from various sources of our data, we identified four types of viewers in terms of the functions provided by stream spectatorship.

#### *(1) Play-centered*

The first category consists of viewers who regard game streaming as an extension of gameplay, and who use live streaming or edited stream video in the same manner as game guides, walkthroughs, strategy guides for finding solutions when players are stuck in a game—in other words, the main motivation is observing streamer skills and learning game knowledge. Viewers usually watch with intense concentration, in many

cases taking notes for later referral. Their style is more “leaning forward to study” than “sitting back and watching.” This category also includes players searching for communities interested in less popular games, and those interested in exhausting all possible options for the endings of certain games.

## *(2) Fan-based*

For some viewers, games played by streamers are part of a wider ACG (Anime, Comic and Games) culture rather than an individual player activity. For others, specific streamers are the primary reason for watching—viewers identify with the streamers in the same manner as any devoted fan of a celebrity. In both cases the emphasis is on culture, admiration, or adulation rather than the brand of game being played.

In some cases game streaming provides alternative access to storylines shared across television, films, novels, comics, and other media platforms. For example, 《殺戮の天使》(星屑 KRNRN, 2015) was originally a video game that was later adapted to both manga comic and TV animation formats (Kadakawa, 2018). In one forum post, the writer expressed interest in a story, but could not decide whether to watch the game-streaming or animation version.<sup>1</sup> In another, a user described his watching of streaming games as the equivalent of watching films, and his subsequent playing of the games as “film re-plays.”<sup>2</sup> Some posters stated that they were less interested in the game than the storyline,<sup>3</sup> and therefore took advantage of game streaming to save time and effort in satisfying their curiosity.

As stated above, many fans of individual streamers show no interest in the specific games being played. Connie,<sup>4</sup> a 21-year-old interviewee, replayed videos featuring one male streamer between 4 and 5 hours a day, keeping the audio in the background when studying or doing other activities—even when sleeping. She told us, “He plays Playerunknown’s Battlegrounds, I don’t. But I so love his silky voice and his flirtation with another male teammate. He is my cup of tea!” When asked to compare her habit to other media consumption experiences, she answered clearly, “It’s just like watching a BL<sup>5</sup> drama!”

Activities of fan culture are commonly found among viewers as well. Our questionnaire included an item asking respondents to name activities they do while watching streaming gameplay. A small number (9 of 218) said they drew pictures of streamers or memorable moments in the streaming process, and later sent them to the streamers or posted them on the streamers’ fan pages to share with others. An interviewee, Patrice proudly said, “There are moments when you are chatting with friends and certain terms pop up in conversation, you immediately recognize each other as fans of LNG (a popular Taiwanese streamer), because only LNG-viewers know those terms.”

## *(3) As vicarious audience play*

In this category, although it is the game that brought viewers to watch streaming, the functions streaming served are various to different viewers. Some have economic concerns: facing a fast-paced new game market, players can use game streaming as a tool for product testing, purchases, and playing decisions. For those who cannot afford expensive games or consoles, or who believe that they will never make sufficient in-game purchases to win,<sup>6</sup> watching streamers play the games they are interested in is an acceptable alternative. Other game-streaming watchers perceive streamers as player substitutes when they feel physically tired, scared by a horror game, or unsure about their ability to play well on their own. We also found evidence of “crowd-sourced play”—that is, participants using chat rooms to collectively decide how individual games should proceed (as described in detail in Scully-Blaker et al., 2017). Viewers in

this category are not concerned about improving their playing skills or advancing their statuses, but about less demanding passive entertainment alternatives. Streaming serves here as a quasi-gaming experience.

We also found some younger viewers who seemed to be motivated by a need to acquire social capital. As Lin and Sun (2016) note, gameplay is a popular conversation-starter and basis for maintaining social connections—especially among online strangers, but also in real-life interactions. When reviewing online forums and interview transcripts, we noticed comments such as “I pretend that I’ve been playing games so I can keep up with friends when the topic comes up” and “You don’t have to play it yourself to have opinions about a game.”<sup>7</sup>

#### *(4) As background media usage*

According to our survey data, streaming game-watching regularly occurs in multitasking contexts, with stream channels playing in the background and receiving sporadic attention from viewers. Among the 218<sup>8</sup> respondents, exactly one-half reported watching streaming while eating meals, 86 (39.4%) while checking smartphones or browsing computers, 61 (28%) while studying, doing homework, or when performing other work tasks, 59 (27%) while playing games, 33 (15.1%) while chatting with friends, 19 (8.7%) while doing household chores, and 17 (7.8%) doing miscellaneous tasks requiring little concentration. In most of these situations, the streamer’s game skill is not of the viewers’ concern.

This explains the comments of some viewers equating live game streaming consumption with watching television or listening to radio. In one post, the commenter described live streaming as a “second screen” that was only worth his attention when something that was obviously interesting was taking place<sup>9</sup>—one of many pieces of evidence indicating that our respondents mostly used the audio portion of streaming games as background sound, which distinguishes it to a certain degree from television consumption. “I use it as background when I am doing something else, and only switch to see what’s happening when I hear excited voices.” This is a common practice of “listening” game-streaming described by many viewers.

This multitasking aspect of watching streaming games has several roots, including busy school or work schedules, long workdays, and fractured leisure time, all of which have the effect of turning enthusiastic players into passive consumers. We heard comments such as, “I feel bitter when I can only play a little bit every day,” “When playing plot-oriented games I could barely remember the story I played last time, so I stop playing.” These comments are in line with Juul’s (2010) observation regarding the increased popularity of less-demanding casual games that are easier to fit into daily life schedules. Watching others stream their games requires even less effort than participating in casual gameplay, so it becomes a logical choice for busy and tired players.

A second root of media multitasking is the idea that as long as technological affordance allows it, consumers fill in as much media usage as possible at any given time. A typical comment in this regard came from Eugene, a 33 year old cram school teacher: “I don’t want to waste time only watching streaming” (meaning that he can handle other tasks at the same time). There are a lot of activities in games that do not require intense concentration—for example, collecting resources or moving between environments. These low-activity time periods allow stream viewers to pay attention to other tasks.

The third root is the strong desire for social companionship: we found that avoiding a sense of loneliness is a strong motivator for watching live streaming. According to our questionnaire data, more than one-fifth (50/236) of the respondents cited “feeling

lonely, not wanting to feel alone” as a reason for viewing. As Connie told us what brought her to stream-watching,

I used to have meals with my family until I went to university and lived in a dorm. Everybody has different schedules, and it’s inevitable to eat alone sometimes. That’s how I started watching game streaming. I always choose streamers who are loud and lively, and who like to chat with viewers.

Patrice said that her “stream listening” habit began during her senior year of high school:

In the study hall all my classmates were busy preparing for the National College Entrance Examination. Many of them wore earphones. Nobody talked. You feel such pressure. So I listened to streaming—it was de-stressing, and gave me a sense of company with real people.

Note that while the four types of streaming viewers have distinct characteristics, none are mutually exclusive or fixed. For example, the viewers in the vicarious audience play category may feel a sense of dissonance when the streamer cannot execute gameplay at levels that meet the expectations of the viewers. When that happens, they may shift to other categories such as play-centered. In a forum discussion thread with the topic heading “Watching streamer play Detroit: Become Human,” a poster complained that the streamer’s game decisions did not match his expectations or perceived requirements; the resulting frustration motivated him to purchase the game and “play it the right way.”<sup>10</sup>

## **Gendered Game Streaming Practices**

Gender, an important factor across all of the above categories, affects both streamer performance and viewer behaviors. Our focus in this paper is on the latter. In Taiwan, game streaming is characterized by male culture. Similar to other male-dominated spheres, it is easy to find examples of sexualized female streamers, sexist comments with demeaning language and stereotypes, and “locker room talk” in streaming communities on a regular basis. Such toxic culture has quite different impacts on male and female viewers. Male viewers often remain unaware of its existence because they are accustomed to such culture.<sup>11</sup> For example, Eugene, a male interviewee, describes sexist streamer comments and chat room exchanges as “vibrant and de-stressing.” Many male viewers look for attractive female streamers as watching targets, and such channels are frequently referred to as “chick streams” or “boob-watching streams.” In these situations, a female streamer’s body (or part of it) is the main object for the male gaze rather than her gameplay, and the roles of sexualized female streamers are more like reality show participants who attract the “peeping” and scrutinizing attention of male viewers. However, unlike reality show celebrities, most female streamers can be approached for real-time interactions, and are willing to personally respond to greetings or comments from audience members. Some are even willing to add the names of individual viewers to their LINE groups for later one-to-one interactions, especially if those viewers are donors. One interviewee, GunBro, enthusiastically described his feelings when interacting with an attractive streamer:

This is a nerd’s confession. We nerds are targets of scorn by girls in everyday life. But in streaming chat rooms, I feel like we [the female streamer and I] are the same, we are all gamers ... Some male fans like to instruct them how to play the game, “You can do this here, and later you can do that” and she will kindly reply “thank you, I will try my best!” In real life when you see a hot chick, she will not give a damn, she will most likely say, “Who the hell are you?” But when you are here with a hot chick, discussing games that no

outsiders care about ... the chick might even respond to you, and you feel so good—“That’s a hot chick listening to me!”

We observed two primary strategies among female viewers in response to sexist culture: leaving and ignoring. Some simply admit that they cannot tolerate the sexist culture and stop watching game channels altogether. Yvonne, an interviewee, told us:

I used to voice my discomfort and protest mildly when it really went too far, such as when a streamer modified a game to a rape plot, or when some very misogynist remarks were made. But I no longer do that, it’s exhausting and I was overwhelmed by anger. I am here to be entertained. The moment I protested, the air froze. It ceased to be entertaining, so I just quit visiting.

In comparison, another common response is to ignore it. “Men are like that. I have no problem with that, my brain activates the auto-filtering function when I see something like that,” said Shannon, a 34-year-old interviewee. Some others applied a compromising strategy that distinguishes the act of the streamers from the audience dialogue in chat rooms, they watch streams with chat room windows closed/hidden.

Chat room interactions can get quite boisterous for male viewers, but the chat room culture is often alienating and antagonizing for a large part of female audience. Many of them tend to be withdrawn from active participation. Claire, an interviewee, made a further claim that the male-dominated culture doesn’t really matter “because girls don’t really watch streaming.” She was specifically referring to “girls’ games” that are neither skill-intensive nor viral topics for conversation, and thus there is no need for video walkthroughs or stream-watching. She cited two popular pink games to prove her point: *Miracle Nikki* (奇蹟暖暖), a dress-up mobile game, and *Love and Producer* (戀與製作人), a dating simulation game. Claire asked, “Why do you need to watch streaming for such games?”

## **B. Structural stream viewing contexts**

The four stream-viewing types discussed above reflect a wide range in central-to-marginal importance for the games themselves. We then examined the contexts in which these various viewing behaviours occur, and identified structural factors that enable or encourage viewing.

### *(1) Changing media consumption patterns*

Our findings raised a new question: why choose game streaming over television or radio if the purpose is background sound/images? Our evidence suggests that accessibility, quality, and diversity are important considerations for this alternative leisure form. We found several discussion threads addressing the question, “Why watch live streaming?” In almost every post we saw the same complaints: other entertainment forms are boring or low-quality, and television has limited choices and fixed schedules for content that is mostly aimed at older audiences. According to our observations, a large number of young, single individuals in Taiwan who are not living with their parents are choosing to live without cable TV subscriptions, and when they do own TV sets, they are frequently used in support of video gaming. But we also found that watching television holds little interest even among those study participants who are still living with their parents. One interviewee made this typical comment: “My father watches news channels, my mother watches Japanese entertainment channels. My first pastime choice is turning on the computer, not the TV.” If our data are any indication, computers and live streaming are increasingly becoming default leisure devices and viewing modes for adolescents and young adults. Exactly one-quarter (59/236) of our

questionnaire respondents agreed with the statement, “Watching live streaming has become a habit.” Whether or not it serves as the focus of attention or as background information depends on time, situation, and personal routine.

### *(2) Always connected, never alone*

The background consumption of game streaming fits with Sherry Turkle’s (2011) description of an “always-on, always connected” generation culture. The ubiquitous connecting technologies we enjoy have resulted in an increasing inability to tolerate being alone. In this context, game streaming provides a remedy for modern anxieties, that watching game streaming is something one can do when one has long periods of empty time, and a solution for feelings of loneliness when there’s no one to talk to, or even when you are among a crowd but still feel alone. In addition, According to our interviews, the desire to be in the company of others is also a primary motivation for streamers to start their own game-streaming channels—that is, a way to overcome the sense of loneliness that comes from playing a game alone.

Game streaming is unique in that it can be consumed as either a “live” product or as video-on-demand. It has elements of “a human touch” and social ambiance, but its interactions are generally void of any sense of needing to interact. Individuals lacking the skills or energy to build their own social networks, spectators interested in joining existing social networks, or those with weak socializing needs all feel comfortable as streaming game consumers. Those with sufficient interest can join in chat room activities; others can put streams in the background while enjoying live in-person interactions with like-minded people. These practices reflect a changing structure of game market: in-game interactions declined sharply as the previously dominant massively multiplayer online games (MMOGs) gave ways to mobile games. To some extent, game streaming fills the need for social interaction in this evolving gaming environment.

One chat room thread that caught our attention had the heading, “Is the high number of Taiwanese stream spectators exaggerated?” Many responders commented that lively chat room interactions were a primary attraction for them. We read comments such as “Pretending to have friends,”<sup>12</sup> “Just follow the roar of the chat room, and you’ll feel like you have lots of friends,”<sup>13</sup> and “If you’re alone and lonely at home, feeling cold, turn on the streaming channel and pretend to chat with the streamer.”<sup>14</sup> One post in particular was echoed and endorsed by a large number of forum users:

The reason for watching live streaming is to overcome loneliness. Your colleagues like to play politics at work, and after work you have nothing to talk about with your family. When online games were popular, at least I could talk with guild members about how good a specific day was. Now mobile games prevail, and every game seems like a console game. Even if it’s a PVP game, it’s difficult to talk to your opponents on a mobile phone, and they seem like various NPCs . . . In the end, in addition to walking the dog, my most anticipated moments are watching live streaming.<sup>15</sup>

### *(3) Efficient and affordable telecommunications service*

A media consumption culture based on “substituting game-playing with game-watching,” “substituting stream-watching with stream-listening,” and using streaming as background sound requires a well-established and affordable telecommunications infrastructure. In general, Taiwanese enjoy accessible, affordable, and reliable high-speed internet service, with most local service plans offering unlimited data at prices ranging from US\$6 to \$16 per month.<sup>16</sup> These low rates and ubiquitous wi-fi service

are important reasons why game streaming in Taiwan can be used as a regular entertainment alternative. Shannon described how her habit of watching game streaming changed during the five years she worked in other countries as a masseuse:

When I was in Taiwan, I watched streaming a lot. But when I worked in Australia, the wi-fi connection speed was slow, and the connection was less than reliable. With an AUD\$30 monthly fee and limited data plan, I couldn't possibly watch streaming, so I played mobile games instead. You don't need a good connection to play mobile games. When I had to occasionally download games or a few popular videos that everyone was talking about, I just went to Starbucks to use the free wi-fi and downloaded them.

Watching game streaming was even more of a luxury when she moved to Japan, where data charges are much more expensive. She resumed watching on a regular basis once she returned to Taiwan.

#### *(4) Increased social importance of video games*

The efficient and affordable internet service, along with an increasingly important role of video games in social lives of young Taiwanese, provide fertile ground for a blooming game streaming community. Game streaming offers an ongoing source of information for different groups of individuals to chat about, especially adolescents interested in discovering and participating in the latest-and-greatest video game sub-cultures. We heard one typical remark confirming Consalvo's (2007) description of the importance of "gaming capital"<sup>17</sup> among adolescents: "There are three ways of acquiring social status in high school: excellent grades, good at sports, and experts in gameplay." As the importance of gaming capital (as a form of social capital) continues to grow, game streaming is increasingly viewed as a cost-effective method for accessing game-related information, especially as a flood of new games creates a large demand for updated information. Another concern for Taiwanese viewers is localization—many popular games are not localized for the Chinese language. Some interviewees admitted that their interest in trying new and popular games was inhibited by a lack of language skills (mostly English or Japanese), and that they did not feel comfortable playing by themselves. Watching streamers play is a sensible and accessible alternative.

## **CONCLUSION**

For more than a decade we have been witnessing a significant growth in mobile game play. Many people feel that they don't have time, energy and money to keep up with new games. Watching game streaming serves as an attractive alternative because it does not demand constant focus, and can be done concurrently with other activities. As a result, a gaming culture as "watching-substituting-playing" and "listening-substituting-watching" has emerged.

Game streaming should not be viewed as only a game-related phenomenon or extended gameplay practice, but also as a form of cross-media entertainment involving multiple motivations for media consumption: as a form of stage performance, an environment for social interaction, or a form of entertainment similar to hosted variety shows or reality television. Consumers can move among multiple streaming activities involving different media functions to find various sources of pleasure, with their identities changing according to personal time restrictions and social requirements. Consumers include game players looking for new strategies, spectators encouraging their favorite tournament players, game shoppers interested in finding out if a game fits their needs, "secondhand" players interested in watching others play as a means of alleviating their

addictive needs, lonely individuals longing for human interaction, or multi-taskers looking for low-effort entertainment.

Following changes in the direction and degree of audience concentration, game-streaming roles regularly move between central/front and background positions. At certain times consumers pay full attention to a game being streamed as if it were a console game screen activity, at other times they treat it like background radio or television, or as just an open window competing with others for attention on a computer screen. While a specific game might be important in terms of streaming consumption, its meaning is not limited to its content or the implications of playing experiences for other gamers. It can also provide material for casual interactions with online strangers or real-life friends. Streamer roles are equally diverse: at different times they serve as providers of game information, as exhibitors of special techniques, as entertainers, as micro-celebrities, or as product testers. It is therefore important to approach the game-streaming phenomenon as one part of the larger media consumption environment, but one with specific social and cultural meanings and contexts that support an understanding of locality and cross-cultural/social differences associated with game streaming.

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## ENDNOTES

<sup>1</sup> [sqe123456z, https://www.ptt.cc/bbs/C\\_Chat/M.1534102821.A.920.html](https://www.ptt.cc/bbs/C_Chat/M.1534102821.A.920.html)

<sup>2</sup> <https://www.ptt.cc/bbs/Steam/M.1505005021.A.4C2.html>.

<sup>3</sup> [https://www.ptt.cc/bbs/C\\_Chat/M.1470196291.A.D75.html](https://www.ptt.cc/bbs/C_Chat/M.1470196291.A.D75.html).

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<sup>4</sup> We use pseudonyms for all interviewees mentioned in this article.

<sup>5</sup> Boy's Love (BL) is a genre of fictional media originating in Japan that features homoerotic relationships between male characters. Some BL comic/animation publishers hire voice actors in an attempt to create audio dramas.

<sup>6</sup> *Hearthstone* is often mentioned in this context.

<sup>7</sup> lkk0752, [https://www.ptt.cc/bbs/C\\_Chat/M.1512566737.A.A52.html](https://www.ptt.cc/bbs/C_Chat/M.1512566737.A.A52.html)

<sup>8</sup> This question was added to the questionnaire later, and thus only have answers from 218 respondents. The first 18 respondents did not answer this question.

<sup>9</sup> tommy123310, <https://www.ptt.cc/bbs/LoL/M.1513097607.A.9D0.html>

<sup>10</sup> ss8901233, [https://www.ptt.cc/bbs/C\\_Chat/M.1527510642.A.890.html](https://www.ptt.cc/bbs/C_Chat/M.1527510642.A.890.html)

<sup>11</sup> There are exceptions to this observation; for example, our interviewee Charles said that he could no longer enjoy watching as the interaction got too sexist and vulgar.

<sup>12</sup> bbbgggttt999, [https://www.ptt.cc/bbs/C\\_Chat/M.1492172818.A.4E8.html](https://www.ptt.cc/bbs/C_Chat/M.1492172818.A.4E8.html)

<sup>13</sup> w60904max, [https://www.ptt.cc/bbs/C\\_Chat/M.1492179347.A.895.html](https://www.ptt.cc/bbs/C_Chat/M.1492179347.A.895.html)

<sup>14</sup> davy012345, [https://www.ptt.cc/bbs/C\\_Chat/M.1512566737.A.A52.html](https://www.ptt.cc/bbs/C_Chat/M.1512566737.A.A52.html)

<sup>15</sup> <https://www.ptt.cc/bbs/LoL/M.1513097607.A.9D0.html>

<sup>16</sup> Based on mid-May market information and exchange rate.

<sup>17</sup> "Gaming capital" refers to the skills, equipment, and experience that help players become and be acknowledged as experts.