Beyond Traditional Gaming: Understanding How Social VR Streaming Creates New Forms of Play

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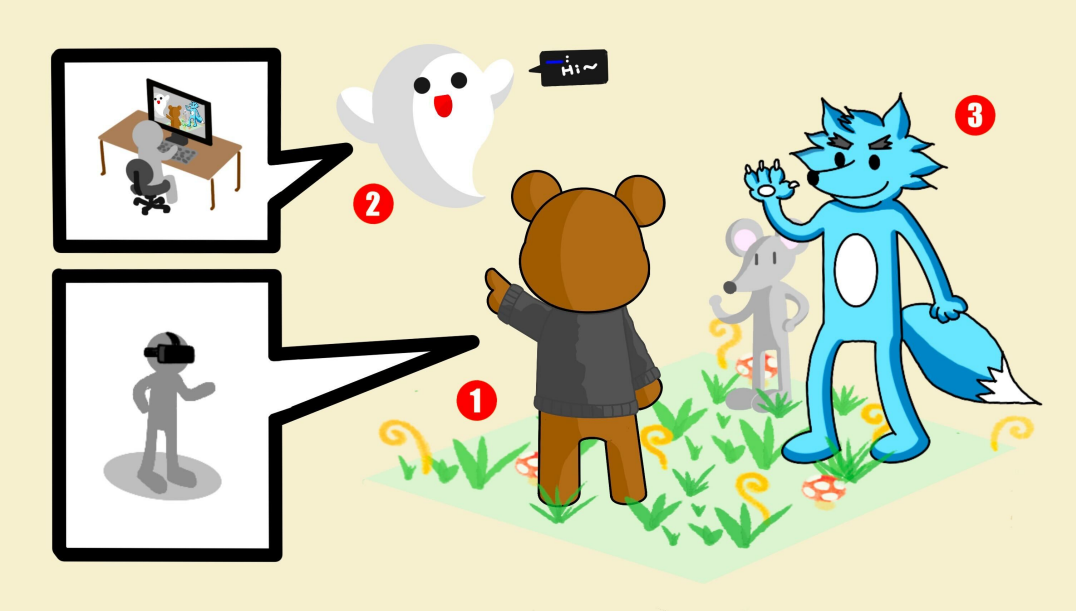

Figure 1: An example of streamer-audience "co-play" in social VR streaming. (1) A social VR streamer explores the VR space through their embodied avatar by wearing a VR headset. (2) This streamer's viewers outside VR control a secondary "spirit" character via the traditional 2D live streaming platform, which allows them to express emotions and send messages directly in the immersive VR space along with the streamer. (3) Other social VR players can interact with both the streamer and the viewers outside VR through this secondary "spirit" character.

Abstract

Social virtual reality (VR) streaming offers a unique lens into how play is evolving beyond traditional game formats. Through semi-structured interviews with 17 social VR streamers, we reveal how social VR streaming creates new forms of play that transcend traditional game structures by transforming mundane activities into playful performances, fostering emergent play patterns, and enabling direct audience participation to facilitate collaborative gameplay across realities. Our findings contribute to HCI literature on unstructured and participatory play and offer design implications for future games and streaming platforms that seek to support embodied presence, cross-reality engagement, and collaborative co-play.

CCS Concepts

• **Human-centered computing** → **Empirical studies in collaborative and social computing**.

Keywords

Social Virtual Reality, Live Streaming, Unstructured Play

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1 Introduction

As online experiences increasingly transition toward embodied and immersive virtual spaces like social Virtual Reality (VR), how such new interaction capabilities may further expand play experiences beyond traditional game contexts and structures becomes an emerging research agenda in HCI and game studies. For instance, recent studies have begun to explore how immersive VR interactions may transform game-related activities such as live streaming through embodied audience interactions, which creates innovative play experiences that bridge streamers with audiences across different realities [13, 15, 24]. One such example is **social VR streaming**, which refers to the emerging phenomenon where a social VR user conducts immersive social activities through their embodied, virtual avatar inside VR while simultaneously broadcasting their experiences as 2D video content to viewers on live streaming platforms outside VR [23–25] (Figure 1).

Indeed, we argue that social VR streaming represents a particularly novel context for understanding new forms of play beyond conventional game boundaries. First, social VR platforms like VRChat are not games in the traditional sense—they lack explicit goals, win conditions, or structured gameplay mechanics [33]. Yet, social VR users often derive collaborative play experiences from these environments through embodied interactions and social performance [14, 32]. Second, unlike traditional gaming or live streaming, which often follow structured objectives or rely on static webcam setups [22], social VR streamers generate content through immersive avatar embodiment, enabling dancing, role-playing, and improvised performance within the virtual environment for both other social VR users and their viewers outside VR [15, 23, 24]. This unique combination of embodied presence, audience interaction, and cross-reality engagement thus motivates us to investigate the following research question:

RQ: How do social VR streamers create new forms of "play" for both other social VR users and viewers outside VR?

Based on in-depth semi-structured interviews with 17 social VR streamers of different experiences levels, we make two primary contributions to understanding emergent play in new digital spaces. First, we expand existing theories of unstructured play by revealing how social VR streaming creates novel forms of "play" that extend beyond traditional game boundaries. Our findings demonstrate how play experiences can be dynamically extended across different realities and platforms, transcending the confines of individual games to encompass broader digital ecosystems where gaming, social interaction, and content creation converge. This bridged experience extends our understanding of play to help identify and capture more nuanced play behaviors that emerge across multiple digital contexts rather than within isolated game environments. Second, we contribute design insights for both game developers and streaming platform designers to better support audience-oriented live streaming. We identify critical design opportunities for creating game mechanics that enhance streamers' embodied presence, designing audience-oriented games that engage mass audience decision-making and discussion while watching, and introducing audience control mechanisms on live streaming platforms to facilitate remote co-play between streamers and audiences. By centering the uniqueness of social VR streaming, we hope to inform future work on designing more inclusive and adaptable systems that better support emergent, collaborative forms of digital play.

2 Related Works

2.1 Unstructured Games and Live Streaming-Oriented Gameplay

Contemporary research in game studies has begun to explore how play experiences emerge dynamically through interpersonal interaction and community formation, both inside and outside the game [4, 18, 19, 41]. Previous research on digital play has highlighted how player experience is shaped not only by formal game structure but also by the surrounding social ecosystem [8, 34]. Indeed, this reconceptualization situates play as an activity that is relational, performative, and often co-authored by multiple stakeholders, including players, audiences, and platform algorithms.

One of the clearest sites for studying emergent, non-traditional play is the genre of sandbox games such as Minecraft [1], Roblox [37], and Garry's Mod [39]. These games forego linear progression and tightly defined objectives in favor of open-ended, minimally structured environments that encourage experimentation, improvisation, and creative world-building [11, 26, 35, 46]. Rather than guiding players through a fixed narrative or skill-based challenges, sandbox games offer toolkits for creating and modifying virtual worlds, empowering players to shape the game according to their own values, goals, and social dynamics [11, 46]. In this way, sandbox environments support forms of play that are highly personalized, collaborative, and culturally expressive, often extending far beyond the original intentions of the game designers [2, 3]. These practices reflect a broader shift in digital play toward participatory, expressive, and socially contingent forms of engagement, where creativity and community take precedence over goal completion or skill mastery.

Beyond the gaming space, streaming platforms have also transformed gameplay into an interactive, performative medium that enables unique forms of play. Platforms like Twitch.tv and YouTube Live do not merely broadcast gameplay; they reconfigure play into a networked performance where streamers and viewers co-create the experience in real-time [22, 36, 43]. Streamers take on hybrid roles as players, entertainers, and community managers, often curating their gameplay for audience entertainment while improvising narratives, humor, or commentary [9, 10, 38]. For streamers, the goals of play often shift from competition or progression to entertainment, connection, or creative expression. Audience participation plays a key role in shaping these experiences. Viewers engage through live chat, reactions, polls, and monetary support mechanisms that often influence streamers' actions, decisions, and play styles [27, 30, 38]. In some cases, viewers are given direct control over aspects of the game or stream, such as voting on narrative decisions or triggering scripted events—further collapsing the boundary between player and spectator [22, 44]. These streams foster distinctive forms of enjoyment for viewers, who engage not just with the game but with the evolving social dynamics of the stream and the surrounding

community. As a result, play in this context becomes a co-authored performance, which is deeply shaped by social interaction, audience feedback, and the norms of the streaming community [28, 44].

In summary, sandbox games and live-streamed gameplay have illustrated a broader shift in digital play from goal-oriented mechanics to open-ended, relational practices. Whether through collaborative building or audience-driven performance, play is now co-produced by players, viewers, and platforms. In particular, social VR streaming seems to extend all these dynamics into more immersive and embodied forms of participation, which we detail in the next section.

2.2 Social VR Streaming as an Emerging Digital Platform for Unstructured Play

Social VR platforms like VRChat enable users to interact through customizable avatars in immersive, three-dimensional environments designed for open-ended social engagement rather than structured gameplay. These platforms foreground embodiment, improvisation, and co-presence, offering a distinctive context where play emerges through shared social performance rather than fixed rules or objectives [12, 16, 24, 33]. In particular, social VR streaming has become a unique intersection of 3D Social VR and traditional 2D live streaming. Indeed, while live streaming as an established genre of digital performance has been studied extensively in HCI literature [9, 10, 22, 36, 38, 43], only a small body of HCI work has begun to investigate how streaming in social VR changes the way players and viewers interact in these novel spaces [23, 24, 31, 40, 45]. These platforms have enabled streamers not only to document gameplay but also to actively perform, socialize, and inhabit avatars in ways that blur the boundary between play and performance [15, 24].

This shift seems to foreground a more fluid, performative conception of play, and for social VR streamers, play becomes a new experience enacted with an audience rather than solely within a game system. Prior work has shown that streamers must simultaneously engage viewers on Twitch or YouTube while navigating immersive spaces through head-mounted displays and motion-tracked avatars, requiring an ongoing negotiation between in-world presence and external audience awareness [17, 24, 32, 45]. However, this negotiation is not only a constraint but also a creative site where novel forms of play emerge. Streamers curate their avatar performances, adapt behaviors based on audience feedback, and develop situational content that is improvisational and participatory in nature [5, 14, 16]. Viewers also do not merely watch; they suggest actions, initiate jokes, send digital gifts, and develop parasocial relationships that shape the direction and tone of the stream [15, 24]. This deepens the sense of mutual performance, where both streamer and viewer are involved in constructing the meaning and momentum of play. While prior research has examined virtual YouTubing and character-based performances [25, 29], social VR streaming introduces new layers of improvisation and embodiment that distinguish it as a unique site of play innovation.

In this paper, we build on this emerging body of literature to examine how social VR streamers actively reimagine play in non-traditional environments, which are not defined by competition, linear progression, or formal game mechanics but by social improvisation, identity exploration, and co-presence. By foregrounding play as an embodied and socially negotiated practice, we contribute to ongoing HCI conversations on how new media platforms expand the boundaries of play and performance in digital spaces.

3 Methods

Recruitment and Participants. This study was conducted as a part of a broader, multi-year research initiative on the live streaming practices of social VR users and received ethical approval from the university's Institutional Review Board (IRB). Participants were selected based on their experience of live-streaming within social VR environments such as VRChat. To recruit participants, first, we reached out to social VR streamers within our existing research networks to assess interest in participating. Second, we targeted public-facing social VR streamers across prominent live streaming platforms (e.g., Twitch), intentionally sampling creators with a wide range of follower counts—from under 1,000 to over 100,000—to capture variation in audience size and streaming experience (Table 2 in Appendix). Lastly, we adopted a snowball sampling approach, encouraging enrolled participants to refer other potential interviewees. Between October 2023 and July 2024, we conducted semi-structured interviews with 17 streamers engaged in broadcasting social VR content with varying levels of experience. To protect streamers' privacy, we refrained from collecting personally identifiable information and categorized their follower counts into broad ranges (<1,000; 1,000–5,000; 5,000–10,000; 10,000–50,000; 50,000–100,000; >100,000).

Interviews. Before the interviews, we provided all participants with a consent document via their preferred method of communication (e.g., email or Discord). We did not collect identifiable information (e.g., offline name) to protect participant privacy. Upon consent, interviews were then conducted via text or voice chat on Discord or Zoom based on participant preference. Interview questions were crafted using dialogic techniques designed to encourage participants to engage deeply with their responses [42]. Interviews began with introductions, basic demographic questions, and questions regarding their level of experience with social VR platforms (e.g., VRChat, RecRoom, and Horizon Worlds) and live streaming generally. Then, participants were asked about the social VR content they stream (e.g. *"What kinds of content you stream while in social VR?"*) and why they prefer this type of content (e.g. *"Why do you stream this kind of social VR content?"*). They were also asked whether their audiences preferred a certain type of content (e.g. *"What makes streaming this kind of content appealing to your viewers?"*) and their strategies to make content more enjoyable for their viewers (e.g. *"What are your strategies or methods for making streaming in social VR appealing to your viewers?"*). Interviews lasted 61 minutes on an average and participants were compensated with a $20 gift card upon completion.

Data Analysis. After the interviews were complete, recordings were transcribed for data analysis. We then utilized a thematic analysis approach [6, 7] to conduct an in-depth inductive qualitative analysis of the collected data. Following Braun and Clarke's [7] guidelines for thematic analysis, the first authors *closely read* through the participants' transcribed narratives line by line to identify information relevant to this study's research question to gain a

RQ: How do social VR streamers create new forms of "play" for both other social VR users and viewers outside VR?	Key Findings
1. Transforming Mundane VR Activities	- Embodied social affordances can transform mundane audience interactions into playful experiences. - Treating the camera as a proxy for the audience enables direct physical "contact" between streamers and viewers.
2. Emergent Rules and Playful Streaming Events	- Solo world exploration is transformed into shared adventure experiences between streamers and viewers. - Organized role-play events in open social spaces transform passive viewing into active audience participation.
3. Streamer-Audience Co-Play	- Pre-programmed audience interaction actions can directly affect streamers' embodied experiences. - Streamers can develop systems that allow innovative audience-streamer interactivity.

Table 1: Summary of key findings

full picture of social VR streamers' practices to create playful experiences for their audiences. The first authors then began an *iterative coding process* by assigning preliminary codes to identified information. All the authors then *combined the identified codes, eliminated redundant codes, categorized codes* into thematic topics related to our research question, and developed sub-themes. We also continued to *discuss, integrate, and refine themes* and sub-themes to streamline how social VR streamers create enjoyable and playful experiences for their audiences to best capture and represent our findings in relation to the research question. Next, all authors collaborated to *refine these themes* further and name the final set of themes along with identifying the most compelling quotes as examples. We then *produced the report* [7].

4 Findings

Using quotes from our participants, this section highlights how social VR streamers create new forms of *play* for both streamers in VR and viewers outside VR by leveraging social VR's unique interaction affordances combined with live streaming dynamics. We identify three key ways through which social VR streaming transforms social interactions into novel playful experiences. Our key findings are summarized in Table 1.

4.1 Transforming Mundane VR Activities into Playful Interactions

Our findings reveal how social VR streaming transforms seemingly ordinary virtual activities into memorable play experiences. P8 observes, *"When you stream in VRChat, all the breaks are off and I can just touch others, hang around, bounce around the room. When you see that many viewers are watching and laughing at the same time, those moments are so memorable."* In social VR streaming, the combination of embodied interaction in social VR and audience witness amplifies playful experiences for both streamers and viewers in two major ways.

Embodied Social Interactions as Unique Playability. The embodied nature of social VR allows streamers to create highly expressive interactions that audiences find entertaining. P1 explains, *"With (body) tracking, I can react more with my movements in VR. For example, if they say something silly or ask a silly question, I could move the camera in my face and make a silly face at them."* For streamers, the presence of audiences gives them more motivation to utilize embodied interactions. This positive feedback encourage them to not just talk to audiences, but to physically "play" with them, adding more playability than standalone social VR experiences.

This additional playability thus motivates social VR streamers to stream more social VR content compared to non-VR content. P5 notes, *"I stream my VRChat more, because viewers can closely see my body, my hands, and my eyes. It's more interactive."* This advantage becomes evident in how streamers can more freely exaggerate responses for audience entertainment. P9 also describes, *"I'll overdo things a little bit or I'll do something more physically. For example, when I clap I'll clap more excitedly about something."* By doing this, the embodied social affordances can transform mundane audience interactions into playful experiences, creating higher social play immersion for both streamers and audiences.

Creative Camera Interaction as Cross-Reality Play Proxy. With various tracking systems and the built-in camera system, social VR streaming introduces unique forms of playful interaction through creative camera manipulation. P6 describes, *"When they (audiences) are bullying me, I'll turn around, slap the camera, and be like, 'No, silence, chat. Be nice.'"* Similar examples include *"submerging camera into the water"* (P6) and *"stepping on the camera"* (P12). These actions treat the camera as a proxy for the audience, enabling direct physical "contact" between streamers in VR and viewers outside VR.

Participants also highlight how the camera functions not only as a physical proxy of streamer-audience interactions, but a social agency in VR space to support the audiences' presence. P1 points out how his audience engages in his communication with other social VR users, *"I can read out my chat to my friends and show them where my audiences are (camera position). [...] So my friends can also speak to them."* This demonstrates how immersive VR combined with streaming grants audiences tangible agency as visible participants in the immersive space, allowing them to feel more engaged in embodied social play.

4.2 Emergent Rules and Playful Streaming Events From Casual World Exploration to Organized Events

Beyond encouraging embodied expressions, the presence of audiences transforms how streamers approach social VR activities. According to our participants, while social VR alone is similar to user-generated content (UGC) gaming platforms (e.g., *"Social VR is almost like Garry's Mod"* - P2), they unanimously point out how their streaming can fundamentally transform the way they play social VR due to additional play objectives and performance responsibilities that emerge organically during streaming sessions.

World Exploration as Structured Content Creation. Social VR streaming transforms simple VR worlds navigation into shared adventure experiences. For example, P7 conceptualizes this activity as *"Taking my chat on an adventure."* For social VR streamers like P2 and P10, such casual exploration becomes a structured performance where they must actively seek out interesting content, maintain narrative momentum, and create engaging experiences according to their audiences:

"If chat was like, oh, there's a cool thing maybe you could check out, and I'd be like, okay, yeah, I'll go and take a look at that." (P2)

"I definitely take recommendations. If somebody's like, 'You should try this out.' I'll definitely go try that out, [...] my viewers like exploring and trying new things." (P10)

This shift from personal exploration to guided adventure represents a fundamental change in play motivation, as streamers are motivated to develop specific objectives around discovery, storytelling, and audience engagement that do not exist in solo play.

Organized Role-play Events with Customized Stream Rules. Beyond casual exploration, social VR streaming also facilitates organized events that transform open social spaces into structured role-play experiences for more playful watching experience. P2 illustrates this with a hotel themed role-play, *"We did a hotel roleplay that people play as visitors or staff. [...] When I played the head front desk attendant, my audiences suggested me funny questions for guests, [...] we then decided whether or not we would accept the guest and what kind of room suits the best."* This example demonstrates how social VR users and streamers create and adhere to specific roles with clear objectives (e.g., evaluating guests and making accommodation decisions) for theme consistency in their streams.

By creating various structured plays during streams, social VR streaming creates a more collaborative and goal-oriented environment for both streamers and viewers. This clear participation frameworks hence effectively encourage non-VR viewers to eventually enter the virtual world. For example, *"A lot of my viewer base really likes my VRChat streams, they'll chat with me, and they'll say, 'Oh, well, next time I wish I can go out of this world with you.' I usually tell them, 'Hey, if you're online, let's go.'"* (P6). This progression from watching to playing demonstrates how social VR streaming with organized, rule-based activities creates more accessible entry points for observers compared to unstructured social interaction. As viewers can understand specific ways to contribute and engage rather than navigating ambiguous social dynamics, social VR streaming is able to create a unique form of community building and play recruitment that bridge the gap between passive observation and active VR participation.

4.3 Streamer-Audience Co-Play as Novel Collaborative Play Experiences

Some social VR streamers have developed more advanced streaming solutions that allow audiences to gain direct control over social VR play while watching live streams, which could enable more direct "co-play" between streamers in VR and audiences outside VR.

Audience Interaction as Embodied Control in VR. Social VR streaming's open environment allows streamers to customize audience interactions tools such that streamer's virtual environment can directly respond to viewers. These tools range from audio like *"applause sound"* (P8) and *"scream sound"* (P10) to visual elements such as *"3D emoticons"* (P14) around the streamer's avatar to show audience support. Such systems transform passive viewership into active participation by giving audiences direct control over virtual content. Streamers have also developed systems that enable more physical interactions:

"When my audience trigger that gift, it not only creates a 'hug' emoticon, but can trigger a vibration on my haptic vest, like I am being hugged in real world." (P15)

"A steel tube will drop on my head with a very loud sound. I will cover my head with my hands and say 'ouch.'" (P16)

These interactions create a novel form of play where audiences can directly affect streamers' embodied experiences, giving viewers a direct control access similar to actual players.

Advanced Co-Play and Sophisticated Social VR Participation by Audiences. Beyond simple control options, some streamers have even developed their own streaming systems that enable audiences to engage in creative decision-making and direct social participation within VR environments.

For example, P17 describes his innovative "tangible chat" system: *"The map can process chat messages into 3D models in real time [...] Whenever they say something good and interesting, I can turn around, grab that specific chat and stick it onto my 'wall of fame', and when ever they say something naughty, I can use that chat as a towel and then throw it into a trash bin."* Moreover, such system allows audiences to creatively type characters to make objects. As P17 elaborates, *"They can use characters to make swords or guns, [...] sometimes we have the 'most outrageous chat competition' to see who makes the most funny or scary thing by just typing."* By transforming text messages into manipulable virtual objects, audiences can make creative contributions to streamers' environments and enrich their play options (e.g., throwing chat into trash bin or holding a sword typed by audiences). In this sense, social VR streaming becomes a shared decision making space, creating a high play engagement for both streamers and viewers.

Another example of direct audience control involves controlling characters within the social VR space through chat on the live streaming platform. P9 describes her innovative approach: *"I allow my chat and my audience to play as an extra character."* In her system, audiences can control a "spirit" that floats around her avatar, enabling them to express emotions and interact directly with other VR users:

"Every so often they'll let me know, 'Hey, we'd like to be able to express this emotion or this expression. Do you think you could add one?' I'll try my best to add it as quickly as I can. [...] I think the viewers are participating in building the characters, because it makes the character more complete in some sense. [...] Other people in social VR are aware of this spirit and will talk to them. [...] They can also see my viewers' mood, like'who is so happy?'" (P9)

This creates a genuine collaborative social presence where audiences contribute to character development and can interact with other VR users through controlled entities. In P9's case, audiences are not only co-present with her in the VR space but also as her co-players to directly interact with other users in VR through her avatar body. As a result, social VR streaming creates entirely new forms of play where remote audiences can independently build

personal connections with other VR users, turning viewers into co-players in social VR along with the streamer.

5 Discussion and Future Work

In this section, we discuss how our findings have important implications for both game design and streaming platform design, as they reveal how play experiences can be extended and enhanced through coordinated efforts across different technological ecosystems.

First, our findings reveal how social VR streaming fundamentally transforms streamers' own play experience, preventing boredom even during traditionally mundane game activities. The combination of VR embodiment affordances and audience presence creates performance motivations that fill down times (e.g., waiting, walking, or standing) with purposeful audience interactions. In this sense, unlike sandbox games where creativity emerges from tool-based construction, our findings show that social VR streaming generates sustained play motivation through witnessed embodied expression, where the mere presence of an audience transforms routine virtual activities into performative content. This phenomenon transcends existing work on unstructured games [3, 4, 11] that typically rely on building mechanics or environmental manipulation to create engagement. This is especially valuable for addressing traditional gaming's challenges where repetitive or slow-paced sessions can feel tedious. This suggests that future game designers can **amplify players' embodied presence** by making their movements more obvious to others, such as through social witness cues (e.g., ambient indicators for audiences and other players) to enhance social engagement during traditionally boring gameplay segments like loading screens, travel sequences, or grinding activities.

Second, our findings demonstrate how streamers transform unstructured social VR environments into goal-oriented and socially dynamic activities. By presenting frequent choices, exploration paths, and social interactions to audiences, streamers create opportunities for viewers to move away from passive viewership into active participation in VR activities. This aligns with contemporary live streaming studies where audience interaction with decision-making can foster viewer autonomy and engagement through mechanisms like audience polls [38, 44]. Yet, our findings point out that meaningful decisions emerge from free negotiation between streamers and audiences rather than predetermined game options. This highlights how specific game content can facilitate audience participation in live streaming. Therefore, we suggest new **live streaming-oriented game designs** that consider streamer improvisation and communication possibilities to enhance audience engagement through entertaining decision-making opportunities and collaborative narrative construction mechanisms. Rather than designing games with fixed mechanics, developers could create systems that facilitate emergent, collective choice-making and audience input integration.

Third, our work also highlights how social VR streamers are inventing customized systems to let non-VR audiences directly influence in-VR experiences as a new form of co-play. Through programmable redeems, haptic triggers, and virtual object control, spectators become active participants that shape environments, affect streamers' bodies, and even roleplay alongside them. These emergent systems extend cross-reality gaming research (e.g., screens attached to VR headsets [21], floor projections [20]) to shift focus from co-located multiplayer setups to mass parasocial co-play. Our findings show how asymmetric yet collaborative interaction enables meaningful audience participation at scale. However, current setups require substantial technical effort by streamers. To reduce this burden, both game developers and streaming platforms should collaborate to support participatory infrastructure. For example, traditional games could **integrate spectator interaction systems** for low-stakes choices (e.g., changing cosmetics, controlling secondary characters, browsing inventory and in-game quests), enhancing engagement without disrupting gameplay. Simultaneously, streaming platforms could provide built-in tools for audience-to-game interactions, such as standardized APIs for viewer polls that directly influence gameplay elements, simplified redeem systems that trigger in-game events, and real-time audience sentiment analysis that can be more easily accessible and customizable for specific streaming needs.

In this sense, our study opens up new questions about the creative and improvised play practices emerging in social VR streaming, particularly in the absence of conventional game mechanics or objectives. For future work, we plan to expand our focus to investigate audience engagement and perspectives in social VR streaming, which can offer valuable insights into how social VR environments might be redesigned to support richer, more enjoyable experiences for both streamers and spectators. In doing so, we plan to analyze platform analytics (e.g., chat activity and engagement metrics of streams) and conduct interviews and surveys with viewers of social VR streams to better understand how they perceive and participate in these forms of play. We also aim to investigate how different levels of audience interactivity—from passive observation to real-time in-world control—shape social dynamics, narrative development, and engagement. This can help identify design thresholds where interactivity enhances rather than disrupts play, offering concrete guidance for participatory system design across immersive and non-immersive platforms. Taken together, we seek to contribute to deepening our understanding of how social VR streaming functions not only as entertainment, but as a space for community-driven experimentation with the boundaries of play.

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A Appendix

P#	Gender	Age	Sexuality	Ethnicity	Social VR Platform	Streaming Platform	Number of Followers	Other Non-VR Content Streamed	Experience of Social VR	Experience of Social VR Streaming
P1	Man	25	Straight	Hispanic	VRChat	Twitch	<1,000	N/A	5 years	4 years
P2	Trans Woman	26	N/A	White	VRChat	Twitch	<1,000	Video Games	3 years	2 years
P3	Woman	26	Bisexual	N/A	VRChat	Twitch	1,000-5,000	Video Games & Online Commentary	6 years	2 years
P4	Man	18	Straight	Asian	VRChat	Twitch	<1,000	Video Games	3 years	2 years
P5	Woman	22	Bisexual	White	VRChat	Twitch	1,000-5,000	Video Games	1.5 years	10 months
P6	Man	33	Bisexual	Black	VRChat	Twitch & YouTube	1,000-5,000	3D Modeling & Video Games	6 years	3 years
P7	Non-Binary	36	Bisexual	White	VRChat	Twitch & YouTube	1,000-5,000	Art & Video Games	1.5 years	3 years
P8	Gender Fluid	26	Demisexual	N/A	VRChat	Twitch & YouTube	1,000-5,000	Video Games	2 years	5 months
P9	Woman	28	Lesbian	White	VRChat	Twitch	10,000-50,000	Video Games	5 years	5 years
P10	Non-Binary	31	Biromantic Asexual	White	VRChat	Twitch	1,000-5,000	Video Games	2 years	2 years
P11	Man	29	Pansexual	White	VRChat	Twitch & YouTube & Kick	10,000-50,000	Video Games	5 years	5 years
P12	Non-binary	22	Bisexual	N/A	VRChat	Twitch & YouTube	1,000-5,000	Video Games	5 years	3 months
P13	Man	30	Straight	Asian	VRChat	Bilibili	1,000-5,000	Video Games	2 years 8 months	9 months
P14	Woman	24	Straight	Asian	VRChat	Bilibili	10,000-50,000	Video Games	2 years 4 months	7 months
P15	Gender Fluid	31	N/A	Asian	VRChat	Bilibili	10,000-50,000	Video Games	5 years	3 months
P16	Man	20	Straight	Asian	VRChat	Bilibili	1,000-5,000	Video Games	1 Year 2 months	3 months
P17	Man	23	Straight	Asian	VRChat & Horizon Worlds	Bilibili & Tiktok	>100,000	N/A	2 Years 6 months	3 months

Table 2: Participants' offline demographics & online social VR streaming experiences. *N/A means participant information not provided.*