

Massively Multimodal Communication and Space: A Case Study of Video Game Livestreaming

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1. The Project

In recent years, there has been an increasing interest in the study of **multimodal communication** and the role of space in new media environments (cf. Beisswenger 2013; Naper 2011; Sindoni 2014).

Similarly, video game livestreaming is an emergent (social) media environment, which has gained a lot of general popularity over the past few years, but is still scarcely tackled in academic research (cf. Hamilton et al. 2014; Hope 2014; Kaytoue et al. 2012).

Thus, in combining the three research interests **multimodality**, **space**, **and video game livestreaming**, this study will help further advance the general research on multimodal communication in online spaces – a topic, which only recently gained the attention of researchers interested in digitally-mediated communication (cf. Berger, Jucker & Locher 2016; Herring 2015).



Fig.1: Different layers of space in a livestream broadcast

2. Background: Livestreaming

What is Video Game Livestreaming?

"In video game live streaming [...], streamers, those who broadcast streams, share live video content of their gameplay composited with a video feed of themselves in real life. Viewers of the stream communicate with the streamer and other viewers through chat. Meanwhile, streamers simultaneously engage in game play and communicate via audio and video" (Hamilton et al. 2014: 1315).

Communication in a Video Game Livestream

Video game livestreaming platforms often advertize themselves as having a community-centered approach to livestreaming, which highly fosters interactions between participants during the streaming sessions (cf. Hamilton et al. 2014).

During a streaming session, **broadcasters**, **viewers**, **and coplayers** can generally make use of a variety of tools (i.e. audio, text-, video-, and graphic-based) and modes (e.g. writing, speech, dynamic and steady images, and non-verbal communication) in order to communicate.

Space(s) in a Video Game Livestream

- Livestreaming platform as an online space in its own right
- Livestream feed as a merged space (see Fig.1)

3. Research Questions

Theoretical Research Questions:

- 1. What is going on with regards to verbal and non-verbal communication during video game livestreaming sessions (i.e. what modes and what channels of communication do participants use in order to communicate)?
- 2. How is space constructed, used, and referred to in a video game livestreaming environment?
- 3. How are the different layers of space navigated and connected? What modes (e.g. language, bodily conduct, images) play a role in this?

Methodological Research Question:

4. How can the communicative processes be transcribed in a meaningful way in order to analyze them within and across all communicative channels and spatial layers?

4. Data and Methodology

- a) Research Question 1: Communicative Modes & Channels of Communication
 - 18 broadcasts by 4 different streamers (first hour)
 - Ethnographic method: observation and content analysis

b) Research Questions 2 - 4: Twitch study

- 2 broadcasts by 2 different users from Twitch
- Data driven: Qualitative data analysis
 → coding broadcaster's interactional instances with MAXQDA
- *Theory driven*: Multimodal computer-mediated discourse analysis (MCMDA)

Voice-chat client Streamer Alerts anyone watching the broadcast

Fig.2: Possible channels of communication and modes on Twitch

Preliminary Findings 1 (see Fig. 2) Channels of Communication & Modes (RQ1)

communication (gestures, mimics etc.).

• A streamer can communicate through the modes of spoken and written language with all participants in the relevant chat rooms and with all actual viewers additionally through non-verbal

 Participants with an all access status can also communicate with the streamer and each other through speech and writing, while the others are restricted to writing in the text-based platform chat.

Preliminary Findings 2 (see Fig. 3)

Connection of Layers of Space (RQ 3)

The different spatial layers of a stream are connected and made relevant mostly by the streamers' multimodal behavior through the modes they use simultaneously while they take on different roles during a broadcast:

- As a host, they manage their actual and imagined audience by communicating with them via spoken and written language, static images, and bodily conduct.
- As a player, they play and organize the game in its various stages via spoken and written language and, of course, also their avatar.
- As an entertainer, they keep the stream interesting by providing commentaries on their gameplay, making jokes etc. via spoken language and bodily conduct.
- As a moderator, they control and steer chat and player-toplayer conversations via spoken and written language and static images.
- As a navigator, they direct the attention of the viewer to what is relevant at any given point during the stream via spoken and written language, static images, and bodily conduct.



Fig.3: Streamer Roles (host, player, entertainer, moderator, navigator)

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