## Taxonomy of the acoustic space of the streamed computer games

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Abstract:

Within the framework of international cooperation, the SAS Institute of Informatics is involved in the research of phenomena related to the behavior and communication of computer game players and their consumers - viewers on streaming platforms. The basic principles of communication, voice expressions, speech and text expressions of participants in parasocial communication on the Twitch streaming platform will be examined. Technological approaches for their identification and evaluation will be sought, and a technological concept for their measurement will be formulated. The project will propose a methodology using sentiment analysis to understand parasocial interactions. It aims to analyze the data (audio and text from Twitch) to see if this approach can reveal a possible correlation between the behavior and emotional expressions of the player (streamer) and the behavior of the viewer responding through chat messages. It will be investigated the hypothesis that some measurable characteristics of the streamer's behavior can have an effect on strengthening the viewer's addiction to playing on the Internet. This article is a first step towards the analysis of the audio side of streamed computer games, and its aim is to define a taxonomy of acoustic manifestations occurring in streamed gaming and to suggest possible avenues of their analysis. The taxonomy is realized from the point of view of sound source criteria, sound intention and acoustic characteristics.

Key words: computer games, taxonomy, acoustic manifestations, music, sounds, voice, emotions.

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