Empowering Gamers with Hearing Disabilities The Artistic and Immersive Potential of Accessibility Options

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Accessibility options for users with various types and degrees of disabilities are increasingly implemented in digital games. Organizations promoting game inclusivity are being established (see The AbleGamers Foundation) and initiatives are being undertaken to support the development of facilities for users with special needs (see gameaccessibilityguidelines.com). Reflection on accessibility options in digital games has also been conducted in academic research for some time. Sociological and cultural studies have been published that discuss the spectrum of video game accommodations for users with various disabilities (Therrien 2012; LaRell Anderson C Schrier 2021; M. A. Wrzesińska et al. 2021; Heron 2022; Ellis et al. 2023). Ongoing reflections delve into inclusive game design and the prospect of integrating accessibility options into mainstream games (Westin et al. 2011; Langdon et al. 2014; Brown C LaRell Anderson 2021).

However, despite the developing discourse and the widely perceived need to implement accessibility options, few games use them comprehensively, which prevents immersion for people with disabilities (Aguado-Delgado et al., 2020). This may be due to limited reflection on the poetics and functionality of inclusive solutions. There is also a lack of tools typologizing accessibility options that would support the development process and sensitize creators to the use of specific applications.

The aim of my presentation is to analyze the usefulness of accessibility solutions for users with hearing disabilities and their reception. I will also check how specific accessibility options function in Polish digital games developed in the last decade (including *The Witcher 3: Wild Hunt*, *Cyberpunk 2077*, *Dying Light: Become Human*, *Frostpunk*, *The Medium*). This speech will be a summary of the research I am carrying out as part of a grant financed by the Polish National Science Center entitled "Accessibility options for users with hearing disabilities in Polish video games – preliminary studies". It was as part of this study that I was able to collect information from twenty deaf and hearing impaired gamers who shared information about their gaming practices. The conclusions of the study have not been published anywhere yet.

I will present my typology of accessibility options for people with hearing disabilities in video games and discuss their artistic and sense-making potential and possible impact on player's immersion. Next, I will cite anonymized user responses regarding the reception of specific inclusive solutions. I will focus on accessibility mechanics such as: transcription of dialogues, ambient sounds and gameplay sounds, communication support options (including pre-set phrases), implementation of optical effects simulating sound and controller vibration options. I will present the opinions of deaf and hard of hearing users who use the above-mentioned options and discuss how they relate to their functionality, as well as how they function in specific Polish games.

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To summarize, I will highlight best practices in inclusive design, as well as briefly discuss their artistic potential. I believe that a critical analysis of inclusive solutions used in games is crucial both for understanding the needs of disabled users, as well as the specificity of the medium itself. Accessible games often transcend the boundaries of the interactive medium, providing new avenues for artistic expression and introducing unique solutions in the realm of game practice. In this way, the gameplay experience becomes—and this is the most important thing—possible and satisfying for people with disabilities, but it can also turn out to be more immersive for everyone.

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