

Interpersonal expression of personality across different game genres

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Introduction

This study explores how motion capture (mocap) technology enhances the development and expression of interpersonal traits and emotions across various video game genres. Mocap captures subtle non-verbal cues—such as facial expressions, gestures, and body language—enriching characters by conveying complex emotions and traits. These non-verbal behaviors are crucial for shaping characters' personalities in virtual spaces (Oh Kruzic et al., 2020; Saberi et al., 2021).

Non-verbal Communication in Games

Mocap enhances character development by adding realism to movements and expressions. Game mechanics and narrative structure shape character traits, while mocap deepens the portrayal of emotions. Different game genres are characterized by socially important features (Goddard & Muscat, 2017), and this research focuses on genres where character interaction and narrative are central, showcasing how mocap improves interpersonal expression and communication.

Personality Expression Across Game Genres

More specifically, in RPGs, character development is closely linked to interactions with other characters. For instance, in *The Witcher 3: Wild Hunt*, Vesemir conveys emotions like sorrow and responsibility through subtle mocap-driven reactions. These interactions shape his character, highlighting the importance of social dynamics in RPGs.

Similarly, Action-adventure games merge intense gameplay with emotional storytelling. In *The Last of Us: Part II*, where deeper dimensions have been added to the characters focusing on the nuances of human behaviour and narrative (Anderson, 2022), characters like Joel show emotional complexity through micro-expressions and body language captured by mocap. These expressions, such as fear and moral conflict, make the narrative and character choices more immersive.

Additionally, Simulation games like The Sims 4 allow players to control characters' personalities. Players assign traits like creativity or clumsiness, and mocap brings these traits to life through everyday gestures. These games focus on personal expression and realistic behaviours, enhanced by mocap.

On the contrary, Visual novels like Phoenix Wright: Ace Attorney prioritize narrative over realistic movements. Though mocap is less prominent, character development is driven by dialogue and choices. Static images and subtle animations still convey character identity, offering a more abstract form of expression. Static character images, sound effects, background art and music are the main means of expressing the aesthetics of these games (Goddard & Muscat, 2017).

In Survival horror games, the experience of horror films using interactive media is conveyed, and participants control the fate of the protagonist, while they are given the flexibility of multiple actions, and it is required by design to cover as many options as possible, so as not to reduce the scary experience (Vachiratamporn et al., 2013). Such a game is Silent Hill 2 that places characters under psychological stress and protagonist James's guilt and fear are reflected in his movements and posture through mocap. This technology amplifies the emotional intensity, making players feel the fear alongside the character.

In fighting games like Mortal Kombat 11, mocap captures the intensity of combat, from punches to grimaces of pain or triumph. Characters' emotions, such as rage or joy, are expressed through physical actions, providing insight into their personalities beyond fighting mechanics.

Finally, Strategy games like XCOM 2 involve decision-making that reveals character traits. Mocap is used to animate characters' reactions, such as relief or determination during missions. Though mocap plays a lesser role, it still contributes to the portrayal of leadership and emotional responses in high-stress scenarios.

Conclusion

Analyzing how characters express themselves and interact offers multiple dimensions of research in video games, blending psychological and theatrical elements. Mocap technology not only enhances personal expression but also reveals how personality is communicated and shaped within the game world. This study underscores the importance of mocap in making characters more lifelike and emotionally engaging across a variety of game genres.

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