

Digital Ethnography of Cross-Cultural Communication in Multiplayer Competitive Games: Game Design, Multimodality, and Cultural Dimensions

Zilong Wang

University of Glasgow
Glasgow, G12 8QQ, Scotland, UK
Zilongwang828@gmail.com

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Expanded Abstract

Online games such as *Apex Legends* (Respawn Entertainment, 2019) and *Valorant* (Riot Games, 2020) are dynamic virtual spaces where players from diverse cultural backgrounds interact, collaborate, and compete (Kahn et al., 2015; Taylor, 2009). These games offer a unique opportunity to explore how cultural differences manifest in gameplay and how players adapt their communication styles across various game genres. Previous research emphasizes the role of multiplayer games as environments for cultural exchange and identity negotiation, underscoring their potential to bridge cultural divides through interaction and collaboration (Boellstorff, 2008; Taylor, 2009). However, many existing studies focus on single-game contexts or static cultural frameworks, often overlooking the dynamic and multimodal nature of cross-cultural interactions in online games (Sato, 2024; Brückner et al., 2018). This study addresses these gaps by employing longitudinal digital ethnography to examine cross-cultural communication in multiplayer games, focusing on multimodal communication tools, game design elements, and localization practices. By observing player interactions over six months across multiple genres—MOBA, FPS, and Battle Royale—this research highlights the complexities of cultural adaptation and collaboration in virtual environments, offering actionable recommendations for creating culturally inclusive gaming experiences.

This study uses three complementary methods to investigate cross-cultural communication in multiplayer online games: longitudinal digital ethnography, random teammate matching, and multimodal interaction analysis. Longitudinal digital ethnography tracks how players' communication strategies evolve over time, providing insights into how players adapt to diverse team dynamics (Boellstorff, 2008). Random teammate matching simulates authentic, spontaneous interactions between players from different cultural backgrounds, allowing the study of how players collaborate and communicate in unscripted scenarios (Kahn et al., 2015). Multimodal interaction analysis examines how players use a combination of visual, auditory, and textual tools—such as pings, emotes, and voice chat—to overcome cultural and linguistic barriers. This approach draws on Kress and van Leeuwen's multimodal theory (2001), which explains the study's theoretical foundation incorporates Hofstede's cultural dimensions (2011) to explore individualistic and collectivist tendencies in player behavior, Hall's high- and low- context communication framework

(1976) to interpret implicit versus explicit communication styles, and Hong et al.'s dynamic constructivist theory of culture (2000) to analyze the situational activation of cultural identities during gameplay. These frameworks guide the interpretation of how players negotiate cultural differences in multiplayer games, offering a comprehensive understanding of cross-cultural interaction in virtual environments.

Preliminary observations suggest that cultural backgrounds significantly influence how players communicate and collaborate in multiplayer games. For example, players from collectivist cultures might prioritize team harmony and mutual support, often relying on implicit, nonverbal tools like emotes and pings to maintain cohesion. In contrast, players from individualist cultures may focus on personal achievement and competition, favoring explicit verbal instructions, such as voice chat, for coordination. Similarly, some players may minimize communication entirely, prioritizing individual performance, such as aiming or scoring, over collaborative strategies. These tendencies align with the theoretical frameworks of high-context and low-context communication (Hall, 1976) and the cultural dimensions of individualism and collectivism (Hofstede, 2011), providing a basis for further exploration in diverse gaming environments.

Game design elements, such as team-based objectives and predefined character roles, mediate these behaviors by shaping cross-cultural interaction dynamics. For instance, players who value competition over collaboration may view team roles as secondary to personal goals, while others view them as integral to team cohesion. The decision to engage or avoid communication could reflect both individual preferences and broader cultural influences. Localization practices also shape how cultural elements are perceived within games. While effective localization enhances accessibility and engagement (Carlson and Corliss, 2010), it may unintentionally reinforce stereotypes or fail to fully capture cultural diversity, as seen in varied receptions of JRPGs across different regions (Brückner et al., 2018).

These findings highlight multiplayer games as transformative spaces for cultural exchange. By integrating longitudinal digital ethnography and cross-cultural communication theories, this research emphasizes the need for adaptive multimodal tools—such as customizable pings and culturally neutral emotes—and authentic localization practices that avoid reinforcing stereotypes. These insights contribute to inclusive game design, fostering collaboration and equitable representation in global gaming ecosystems.

To better understand cross-cultural communication in global multiplayer games, this study critiques static, nation-based frameworks that often reduce cultural identity to rigid binaries like individualism versus collectivism. Existing research tends to overlook how players dynamically negotiate meaning, identity, and cooperation in highly multimodal and interactive environments. Competitive games like *Valorant*, involve real-time voice, text, gestures, and shared tactical routines, creating spaces where cultural orientations are flexibly enacted rather than fixed. Players around the world — including those from collectivist or individualist cultural backgrounds — routinely switch between cooperation and individual performance depending on the context, challenging traditional cultural dimension theories.

To move beyond essentialist understandings of culture, this study draws on Gee's (2003) concept of affinity spaces, which reframes online games not as cultural battlegrounds but as fluid environments where individuals engage based on shared practices and goals. Similarly, Dovey and Kennedy's (2006) theory of game cultures situates meaning-making

within hybrid networks of media, design, and player agency. These perspectives emphasize practice over origin, and interaction over identity, helping recontextualize online games as emergent cultural spaces where communication and collaboration are continuously co-constructed. Future cross-cultural research in game studies must therefore adopt more empirical, multimodal, and interaction-based approaches to capture the complexity and dynamism of cultural experience in digital play.

REFERENCES

- Bialas, Mateusz, Shoshannah Tekofsky, and Pieter Spronck. 2014. Cultural Influences on Play Style. Tilburg Center for Cognition and Communication.
- Boellstorff, Tom. 2008. *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*. Princeton University Press.
- Brückner, Stefan, Yukiko Sato, Shuichi Kurabayashi, and Ikumi Waragai. 2018. "Exploring Cultural Differences in Game Reception: JRPGs in Germany and Japan." *Proceedings of the 2018 DiGRA International Conference*, 1–16.
- Carlson, Rebecca, and Jonathan Corliss. 2010. "Imagined Commodities: Video Game Localization and Mythologies of Cultural Difference." *Games and Culture* 6 (1): 26–50.
- Dovey, J. and Kennedy, H.W., 2006. *Game Cultures: Computer Games as New Media*. Berkshire: Open University Press.
- Gee, J.P., 2003. *What Video Games Have to Teach Us About Learning and Literacy*. New York: Palgrave Macmillan.
- Hofstede, Geert. 2011. "Dimensionalizing Cultures: The Hofstede Model in Context." *Online Readings in Psychology and Culture* 2 (1).
- Hong, Ying-Yi, Margaret W. Morris, Chi-Yue Chiu, and Veronica Benet-Martínez. 2000. "Multicultural Minds: A Dynamic Constructivist Approach to Culture and Cognition." *American Psychologist* 55 (7): 709–720.
- Kress, Gunther, and Theo van Leeuwen. 2001. *Multimodal Discourse: The Modes and Media of Contemporary Communication*. London: Arnold.
- Jenkins, Henry. 2006. *Convergence Culture: Where Old and New Media Collide*. NYU Press.
- Kahn, Adam S., Cuihua Shen, Li Lu, Rabindra A. Ratan, Sean Cory, Jinghui Hou, Jingbo Meng, Joseph Osborn, and Dmitri Williams. 2015. "The Trojan Player Typology: A Cross-Genre, Cross-Cultural, Behaviorally Validated Scale of Video Game Play Motivations." *Computers in Human Behavior* 51: 121–130.
- Schwartz, Shalom H. 1992. "Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries." *Advances in Experimental Social Psychology* 25: 1 – 65.
- Sato, Yukiko. 2024. "Cross-Cultural Game Studies." In *Encyclopedia of Computer Graphics and Games*, 485–490.
- Taylor, T. L. 2009. *Play Between Worlds: Exploring Online Game Culture*. MIT Press.
- Murray, Janet H. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. MIT Press, 2012.