

When Localization Meets Game Design: Strengthening Collaboration

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EXTENDED ABSTRACT

Today, video game localization has become indispensable to the international dissemination and commercial success of digital games. Yet despite its centrality, localization is still predominantly conceptualized as a downstream linguistic task—what Chandler and Deming (Chandler & Deming, 2011) describe as an add-on layer applied after core development is finished. This marginalization persists even as industry and academic work increasingly emphasize the centrality of cultural, semiotic, and experiential considerations in game creation (Mandiberg, 2015; O'Hagan & Mangiron, 2013).

This becomes particularly visible when considering how localizers interact with game systems. Players, as Hurel (2020) emphasizes, benefit from deep “grips” on the game: they directly engage with a multimodal artefact in which text, mechanics, interface, and audiovisual signs operate together. Localizers, by contrast, often receive decontextualized text strings or partial documentation. They must therefore infer strategies of guidance, reconstruct systemic logic, and make design-relevant decisions under conditions of informational scarcity (Houlmont, 2025). This situation not only increases the risk of ludic or cultural incoherence, but also obscures the fundamentally design-oriented nature of localization work.

Greater integration of localization into the design pipeline mitigates these issues. Game design documents, for instance, contain crucial information about mechanics, branching logic, difficulty curves, and narrative roles that can be leveraged by localization teams (*ibid.*). Access to such documents enables localizers to understand the distribution of video game contingency, identify ludic dependencies, and preserve guidance strategies in adapted versions. However, as Rivas-Ginel (2023) notes, such access remains inconsistent even for in-house localization teams.

This paper advances the argument that localization is not simply adjacent to game design, but structurally akin to it. I contend that localization practice and game design share common operations, competences, and forms of capital, and that recognizing this proximity is essential both for improving production workflows and for crafting pleasurable, culturally situated play experiences. The contribution develops a pedagogical approach for teaching localization to game designers precisely on the basis of this conceptual overlap.

Anchored in an intersemiotic view of games, the approach draws on insights from structural, pragmatic, and cognitive semiotics alongside foundational work in game

Proceedings of DiGRA 2026

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studies (Aarseth, 2015; Caillois, 2009; Crawford, 2002; Henriot, 1983; Huizinga, 1980; Juul, 2011; Salen & Zimmerman, 2003; Zubek, 2020). These perspectives collectively describe games as meaning-making systems shaped by contingency, guidance, and interpretative processes—elements that localization actively manipulates. From this standpoint, localization becomes a design activity that reconfigures semiotic cues, adjusts uncertainty, modulates affordances, and reconstructs player-facing meaning across languages and cultural contexts.

To ground this claim, the paper merges two conceptual tools. First, the literacy framework developed by Fastrez and Philippette (2017), structured around reading, organizing, navigating and writing media, offers a lens through which design and localization can be understood as parallel processes. Both activities require professionals to interpret systemic structures, reorganize information, and produce coherent semiotic outputs. Second, the notion of gaming capital (Consalvo, 2009; Krywicki & Dozo, 2022) highlights the specialized knowledge needed to decode and create meaning in games. While localizers and designers draw on similar capital, they traditionally do so with unequal access to information.

In response, the contribution proposes a pedagogical approach to embed localization literacy within game design education. This approach teaches designers to understand how their decisions shape localizability and cross-cultural playability, and to document semiotic constraints, narrative arcs, interface structures, affordances, and difficulty progressions in ways that support adaptation and maintain systemic coherence. Crucially, by becoming aware of the shared capital mobilized by both designers and localizers, students learn to transform the documentation they produce into resources that can directly inform localization.

Concretely, this pedagogical model is implemented through a sequence of scaffolded lectures and workshops combining theoretical foundations of game localization with progressive applied exercises. Students are first introduced to key concepts in localization studies, intersemiotic analysis, and production workflows. They are then confronted with incomplete real-world localization kits and asked to reconstruct missing contextual information from textual, ludic, and interface cues: an intentionally demanding task designed to make them experience the informational scarcity faced by professional localizers. This is followed by guided localization exercises with progressively richer contextual material, and by analytical assignments in which students examine existing games to identify design-relevant information for localization teams. After a dedicated module on the structure and functions of professional localization kits, students are finally provided with publicly available game design documents and required to produce full localization kits, composed of a contextual brief and structured reference sheets.

Student performance is then evaluated through a project-based game jam, in which they must design and prototype a culturally situated game while anticipating localization from the earliest stages, producing a complete localization kit, planning text extraction and reintegration processes, and justifying their design choices in relation to cross-cultural playability. Assessment is conducted by professors specialized in game studies, localization, and game design, focusing on contextual completeness, systemic coherence, technical feasibility, and anticipatory handling of cultural and mechanical friction.

Drawing on Fastrez and Philippette's media literacy framework (2017) and the concept of gaming capital (Consalvo, 2009; Krywicki & Dozo, 2022), this pedagogical progression trains students to engage with games as complex, multimodal systems. Students learn to read game mechanics, narrative structures, and interface elements through multidisciplinary analytical grids; organize interconnected semiotic and mechanical information according to specific video game genres; navigate dependencies between rules, progression, and textual content in relation to specific design methods; and write coherent localization-oriented documentation and rationales that leverage their gaming capital to anticipate cross-cultural playability.

To illustrate this, the paper presents localization kits produced by students using this method. The kits demonstrate how designers can identify localization-relevant elements in their documentation and express them through a shared metalinguistic and metadesign vocabulary, enabling anticipation of cultural friction and collaboration with localization teams as design partners rather than service providers.

Ultimately, this paper argues that recognizing the close relationship between localization and game design is essential for creating culturally resonant play experiences. Embedding localization literacy in game design education promotes coherent documentation, inclusive cultural engagement, and collaborative workflows, highlighting localization as a creative, systemic, and central aspect of game design.

Keywords

Video game localization, gaming literacy, semiotics, game design, pedagogy, cultural studies

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