

Every Map Can Be a Game: Playable Cartography

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Abstract:

Maps have traditionally supported spatial understanding, navigation, and communication. While these foundational functions remain relevant, the potential of maps to operate as interactive and rule-based systems that promote engagement, learning, and exploration has received limited academic attention. This research examines the hypothesis that any map, regardless of its origin, medium, or thematic structure, can be interpreted and transformed into a form of gameplay. The investigation draws from both historical and contemporary examples to explore how cartographic artifacts can function not only as representations of geographic space but also as frameworks for interaction, narrative, and decision-making (Ahlqvist, 2011; Chądzyńska and Gotlib, 2015).

The study adopts a review-based and design-informed methodology, focusing on examples where maps have been integrated into game mechanics across different media. This includes historical cartographic games, such as educational board games and early card sets from the nineteenth century, which used symbolic geography to convey knowledge through play. Contemporary cases include digital applications like GeoGuessr, OpenStreetMap based tasks, and commercial video games such as Civilization and The Elder Scrolls V: Skyrim, where maps constitute core navigational and strategic elements (Thorn, 2019). These case studies are examined to identify common design features that enable maps to support interactivity, spatial reasoning, user agency, and thematic coherence.

The research also includes the conceptual design of map-based prototypes that reinterpret existing cartographic formats as simplified game structures. These prototypes explore different types of play, such as transforming subway maps into route-planning puzzles, reimagining historical maps as branching narrative environments, or using thematic maps for abstract strategic challenges. Through this design exploration, the project aims to outline key cartographic characteristics that make a map playable and to clarify how spatial abstraction, symbolism, and narrative logic contribute to user engagement.

As a direction for future development, the study considers several applications of the proposed framework. One possibility is the creation of a digital platform that would serve as a curated repository of playable maps, presented across various historical, cultural, and geographic contexts. Another envisioned outcome is an interactive tool or simulator that allows users to transform their own maps, whether contemporary or historical, into simple game-based experiences. Such a system could provide a modular interface for selecting gameplay elements, visual styles, or spatial logic, enabling users to create, customize, and share their own playable cartographic scenarios. These exploratory directions illustrate the broader potential of playable cartography to support educational, creative, and participatory practices in spatial representation. By reframing cartography as a medium of structured interaction rather than static representation, this research contributes to the growing intersection between spatial design, digital media, and game studies. It emphasizes the interpretive and creative potential of maps and invites reconsideration of their role in fostering spatial literacy, critical thinking, and participatory exploration.

References

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