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First Author

Zhanji Yang is an independent scholar. His research interests are digital humanities and data analysis. In recent years, he has published more than 6 papers which were searched by SCI and EI, presided 1 prefecture level projects, and applied for/obtained 3 invention patents.

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Title:

Application of text complexity analysis in game background setting: a case study of “Black Myth: Wukong”

Abstract:

Video game texts are important carriers of background settings and worldview construction. Their language characteristics directly affect the players' immersion experience and difficulty of understanding, especially for cross-cultural players. This study focuses on the practical application of text complexity in game text evaluation, aiming to explore how to quantify the language characteristics of game texts and provide objective basis for background setting optimization and cross-cultural communication. Taking “Black Myth: Wukong” as a case study, this study analyzes its text complexity through technical means and evaluates the support effect of language expression on background settings, player experience and cross-cultural communication.

The “Shadow God Map” system (equivalent to an illustrated book) is established in the game. The names, portraits, life anecdotes and other extended information of the characters and enemies encountered by the players along the way are recorded in the form of text, which is an important supplement to the construction of the game worldview and

background setting. The study uses text complexity measurement methods such as vocabulary diversity (TTR), complex vocabulary ratio, average sentence length and FOG readability index to quantitatively analyze the “Shadow God Map” text in the game and explore the relationship between text complexity and cross-cultural communication effect. This study is located at the game narrative and cross-cultural communication research, providing a new interpretation of traditional narratology in the context of digitalization and gamification.

This study reveals how “Black Myth: Wukong” uses complex vocabulary and culturally specific terms to enhance narrative depth, while assessing the potential obstacles of text in cross-cultural communication. At the same time, this study demonstrates the broad potential of text complexity analysis tools in video game creation, provides quantitative support for game designers in language optimization, cultural communication, and user experience improvement, and promotes the exploration of the balance between cultural expression and player readability.

Preliminary analysis shows that “Black Myth: Wukong” successfully constructs a profound worldview through rich language strategies, and its text has both narrative complexity and cultural depth. However, complex vocabulary and long sentence structures may pose a challenge to non-

native players, but the overall text style is relatively friendly, reflecting the balance between cultural expression and readability. This study provides an innovative perspective for game text design, and further shows that properly designed text complexity can not only improve narrative quality, but also enhance player immersion and acceptance.

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Word Games: The Material Possibilities of Thought and Existence

Man Ling Loo

As two essential aspects of games, Immersion and interaction do not hinge on whether the created world is as real as the physical world but whether it is compelling enough for making the desire of believe. A Taiwanese indie game “Word Game” created by Team9, constructs a world made solely of text, where Chinese characters simultaneously serve as narrative, interface, objects, and spatial elements. By reducing the virtual world to its minimal symbolic form, this game presents a unique perspective on the minimal conditions for immersion and interaction.

This study adopts Marie-Laure Ryan’s interactive poetics as the primary analytical approach, dividing the paper into three main chapters: “Materialization and Spatialization of Thought,” “Symbolization and De-symbolization of Identity,” and “The Spatial Logic of Language Systems.” It explores how word, as an ultra-minimalist system of imagery, achieves a seamless integration of form and content, positioning word as both the medium and outcome of thought. This mechanism of replacing physical space with a plane of thought facilitates world-building and player engagement, ultimately extracting language’s horizontal part and those wanderings of symbolic into narrative itself and highlighting the tension between the “I” as identity and the “I” as symbol. This paper emphasizes three interrelated dimensions: the mediating role of symbols, the essential conditions of immersion, and the minimal units of interaction.

The game world constructed solely of word challenges the current trend in the gaming industry of prioritizing sensory richness. It underscores that the minimal requirements for immersion are more closely tied to symbolic efficiency and cognitive engagement than to sensory complexity. These findings potentially expand the possibilities of word, text and language, influence game narrative, game design theory, and broader virtual reality development.

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Author Statement

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A graduate researcher exploring the intersections of narrative theory, digital media, and literary studies. With a background in Chinese Language and Literature from The Chinese University of Hong Kong and currently pursuing advanced studies at National Chengchi University, my research focuses on innovative narrative forms across literature, digital media, and interactive storytelling.

My academic work demonstrates a keen interest in narrative transformation and media studies, with research spanning topics from traditional literary analysis to contemporary digital narratives. Recent scholarly contributions include investigations into network language phenomena, literary adaptations, and narrative strategies in transmedia storytelling.

Forthcoming publications include studies on novel narrative approaches in light novels, animation adaptations, and performative storytelling. This current research on "Word Game" extends my ongoing exploration of narrative complexity and symbolic systems in interactive media, contributing to the understanding of contemporary storytelling methodologies.

Crossing Layers: Redefining Metalepsis in Videogame through Digitality, Ergodicity, and Embodiment

Author's Statement

My name is Zeng ShengLin, I'm a graduate student at the Department of Literature of Central China Normal University. My research focuses on the ludonarrative studies, particularly the intersection of narratology and game design. Under the pen name “吠人”, I have post two critical essays on the game media platform Indienova, exploring the application of narratological concepts in videogame analysis. Additionally, I have contributed to the Sunset-Sway Media Lab by translating three foundational articles on ludonarrative theory, including works by Marie-Laure Ryan, Henry Jenkins, and Astrid Ensslin.

My submission comes from the first chapter of my dissertation “Metaleptic Playing and Narrativity in Videogames”(in progress). In this dissertation, I explore how the narratological concept of “metalepsis” adapts to video game studies, offering a framework to analyze the interplay of symbolic representation, mechanical systems, and hardware to address “ludonarrative dissonance.”

Abstract

This paper explores how the medium specificity of videogame shapes the phenomenon of metalepses, endowing it with the attributes of digitality, ergodicity, and embodiment. It further identifies four specific forms of metalepsis in videogames: embedded, procedural, interactional, and convergent metalepses.

Existing research on the concept of metalepsis is often associated to the definition of narrative levels or layers' boundaries. Following Marie-Laure Ryan's categorization, metalepsis can be understood through two paradigms: one concerning illocutionary boundaries and the other concerning ontological boundaries.(439) The former is exemplified by Alexander R. Galloway's interface theory, which conceptualizes video games as actions that cross diegetic/nondiegetic boundaries.(8) The latter is represented by Astrid Ensslin and Alice Bell's work on “interactional metalepses,” which

transcends the ontological boundaries between the actual world and the story world.(294)

Researchers such as Werner Wolf, and Sonja Klimek who focus on transmedia metalepsis, emphasize its representational nature. In accordance with Gérard Genette's definition, they regard metalepses as the transgression between representational and represented layers. (Wolf, 95)(Klimek, 24) However, since Genette's work, studies on metalepsis have largely been confined to the fictional genre of literary texts. Video games, as inherently multimodal media, challenge traditional hierarchies of representation by adapting and integrating diverse modes of meaning production, including visual, mechanical, and procedural forms that extend beyond verbal narrative. Wolf argues that applying metalepsis to transmedia phenomena requires recognizing the paradoxical blending of hierarchical representational structures.(84) Building on this, I adopt a transmedia adaptation perspective, redefining the transgressed layers in videogames as components that generate meaning and fulfill representational functions. This approach aims to establish a new classification framework for metalepsis that differs from existing methods in game studies and narratology.

As digital artifacts, videogames are composed of software and hardware, which makes their metalepses naturally digital in character. This digitality broadens the range of representation within videogames, extending beyond the conventional symbolic media of text and images. Through physical hardware and interfaces, players engage with non-symbolic elements, including mechanical rules, control hardware, and even program code, all of which contribute to the representation of videogames. Consequently, metalepses in videogames can occur not only within symbolic layers mediated by GUIs but also in the systemic layers that shape game worlds and dictate player actions, as well as at the level of program code. Klimek characterizes this structure as a “tangled heterarchy”, in which no single layer exercises dominance over the hierarchy.(34-35) Embedded metalepses may be observed in the form of authorial Easter eggs, parody devices (e.g. *The Hex*), or nested worlds and systems (e.g. *Pony Island*). Alternatively, procedural metalepses may be identified where players engage directly with code, as exemplified by the "serious ending" in *The Stanley Parable*, which can be triggered by cheating.

In addition to the materiality of the medium, the actions of the player also exert an influence on and shape the presentation of metalepsis. Ensslin and Bell argue “interactional metalepses depend on the reader's non-trivial interaction with the ergodic

text”(297), making ergodicity a key factor in shaping videogame metalepsis. However, it’s worth noting that Aarseth’s “ergodic literature” is formulated with reference to non-ergodic, traditional medium texts, which is why he tends to describe reader participation as a “non-trivial effort”.(1) Since the definitions of “interaction” and “ergodic” are inherently unclear, even though user participation is one of the necessary conditions for text generation in ergodic literature, I contend that not all interactions produce metalepsis, as simple actions like mouse clicks lack the complexity to disrupt representational conventions. I propose redefining interactional metalepsis as instances where player actions break the conventional linkage between primitive actions and their representations(Gregersen and Torben Grodal, 69-71), achieved through techniques like reversing action relationships or increasing primitive action complexity (e.g., *QWOP*).

Furthermore, players are not limited to physically crossing the boundaries between the virtual and the real. While the ergodicity of video game metalepsis emphasizes the physical aspect of interaction as a prerequisite for transgression, such interactions are inanimate “intrusions”, the player’s body just serving as the conduit for agency. Brendan Keogh argues that players do not possess unhindered agency during gameplay, nor are they the sole agents of action.(29-30) Instead, the embodied nature of video games merges the player and the game into a hybrid body, creating a shared context for interaction. I use *Dull Grey* as a case, to illustrate how players can transgress the conventions of "choice" mechanics in interactive fiction by leveraging a lack of agency. This process reveals a form of convergence metalepsis, whereby the player rediscovers the presence of the agentic subject through transgressive gameplay.

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Narrative, Gameplay, and Innovation: Gamification Strategies in History Teaching in the Digital Age

Constructivist learning or teaching methods challenge traditional behaviorist teaching methods by emphasizing learners' active construction and diversified experiences of knowledge. Gamification is a practical approach of constructivism in education, and technological innovations have enriched the presentation of educational gamification to include more than just serious games. This paper aims to explore how to utilize gamified elements and mechanisms, combined with narrative methods, to create a digital learning environment that focuses on experiential learning and is full of creativity for humanities disciplines, with history as a representative.

In this study, we conducted practical explorations on integrating history-based puzzle games into history teaching and conducted interviews with 25 history teachers or researchers in related fields from mainland China and Hong Kong in focus groups. History-based puzzle games use narrative methods to transport players into a history-based game worldview and guide them to progress through the game by solving puzzles. The process involves restoring historical backgrounds and incorporating typical historical figures as NPCs into the game. We used a combination of inductive and deductive methods to identify key information.

The research results emphasize that gamified learning, as an interdisciplinary learning approach, is gradually breaking down disciplinary barriers, especially by focusing on narrative techniques and reforming history teaching methods through film-making ideas. This approach can effectively enhance students' learning interest and engagement, and even guide them to conduct deeper knowledge exploration or possess knowledge transfer abilities, bringing new perspectives and possibilities to the field of education. This study not only emphasizes a diverse and flexible approach to innovative pedagogy, but also proposes the development of digital literacy and creativity for teachers as well as students, crossing over to the goal of lifelong learning.

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My selected research includes a study on promoting lifelong learning in schools and communities, which discusses the importance of lifelong learning in the changing times and its implementation in Asian communities, published in *Shanxi Market Guide*. In addition, I have authored an article titled "Soviet International Education and the Spread of Socialism: Ivanovo International Boarding School," which explores the unique educational model and practices of the Ivanovo International Boarding School during the Soviet period, and its significance in transnational cultural diplomacy and international educational cooperation. This article is available in the Education University of Hong Kong's repository.

Individual publications

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