# Design Strategies for Children's Magazine Brands Leveraging Interactive Narratives

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Abstract: "Intellectual Property" (IP) stands as a cornerstone in the convergence of internet media, driving the evolution of China's pan-entertainment and cultural creative industries. The development of IP has marked a prominent trend in the branding of children's magazines. However, cultivating profound interactions between IP and its audience to effectively enhance brand engagement presents a complex challenge. Interactive narratives emerge as a novel approach to IP development for children's magazine brands, offering innovative perspectives. This paper delineates a design strategy for implementing interactive narratives within children's magazine brands. It examines the potential value mechanisms, essential structural components, and the critical role of technology in the evolution of IP. By constructing a co-evolving interactive storyworld, developing a multimodal symbolic system centered around IP, expanding the dimensions of interactive narratives through the integration of time and space, and seamlessly connecting digital and traditional media formats, this study seeks to intensify the emotional bond between readers and children's magazines. The aim is to enrich the reader's experience in a multifaceted media environment, thereby reinforcing brand engagement and loyalty.

**Keywords:** Children's Magazine, Brand IP, Interactive Narratives

#### 1. Introduction

Children's magazines traditionally offer a vital gateway to literature and aesthetics, significantly contributing to the educational and developmental trajectories of young readers. However, the proliferation of the Internet and mobile technologies has expanded access to a diverse range of interactive content. This expansion positions children's magazines in direct competition with contemporary media forms such as e-books, educational applications, online videos, and digital games. As a result, the market for children's magazines has shown signs of stagnation. Narrative storytelling remains a fundamental human practice for establishing emotional connections, and brands have increasingly utilized storytelling to foster deep relationships with their audience. With the ongoing evolution of media technologies, both the methodologies and contexts for storytelling are in flux, leading to shifts in how audiences engage with and possess narratives. This paper explores innovative strategies for branding children's magazines in China, with a particular focus on the development of Intellectual Property (IP) and the integration of interactive storytelling. Through this

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examination, we aim to identify approaches that not only revitalize the appeal of children's magazines but also enhance the interactive engagement between these publications and their readership.

# 2. The Current State of IP Development for Children's Magazine Brands

"Intellectual Property" (IP) has emerged as a fundamental pillar within the pan-entertainment and cultural creative sectors, especially pronounced amidst the burgeoning integration of internet media. In this digital milieu, the development of children's magazine brand IPs signifies a pivotal strategy for the traditional media's adaptation and innovation. Children's magazines, distinguished by their unique graphic styles and narrative depth, possess inherent advantages for IP development. Unlike traditional brand design, magazine brand IP design transcends brand identity and recognition, enhancing cultural and social value and often encapsulating a comprehensive brand narrative through imaginative brand imagery. For instance, the notable British children's magazine "DOT.", recognized for its watermelon-headed boy mascot, and its sister publication "Anorak", exemplify the creation of a robust brand IP ecosystem, encompassing a range of derivatives and co-branding initiatives with entities like Airbnb, thereby illustrating the expansive application and product development potential inherent in magazine brand IPs.

In China, the traditional magazine industry is undergoing transformative shifts, propelled by digital technology advancements, media convergence, and industry-wide integration challenges. Despite this, the development of brand IPs in the domestic children's magazine sector lags, with new media adaptations still exploratory. Initiatives such as "XuXu DuoDuo", a collaborative effort with the U.S. "The New York Times for Kids", and successful brand constructions by Sanlian Publishing House and China National Geographic, highlight the market's receptive attitude towards innovative IP development. However, the broader landscape of Chinese children's magazines remains focused on content, editing, distribution, and marketing, lacking a holistic, interdisciplinary approach to brand building.

The primary challenges confronting children's magazine brands include content homogeneity, restrictive institutional frameworks, inadequate marketization and risk management, and a deficit in personnel skilled in new media utilization. Strategic IP development and commercialization present an avenue to forge deeper reader connections, extend the industry chain, and facilitate digital transformation. The imperative challenge lies in engaging readers with the IP to meaningfully bolster the magazine's brand, warranting detailed exploration.

# 3. Children's Magazine Brand IP within the Interactive Narrative Framework

#### 3.1. The Interactive Narrative

Interactive narrative, a concept at the forefront of digital media innovation, revolutionizes storytelling by granting audiences the agency to shape story outcomes through their decisions and interactions. This paradigm shift transforms readers from passive recipients to active contributors in narrative development. The pioneering work of narratologist Marie-Laure Ryan in "The Transfiguration of Storytelling" underscores the transformative power of digital media in narrative engagement. Ryan posits that digital media not only enables users to navigate through narratives via choices but also facilitates a dynamic interplay between the user's inputs and the narrator's overarching design, thereby crafting an interactive narrative ecosystem [1]. In the context of traditional children's magazine narratives, the reader's role has historically been confined to absorbing pre-defined, linear story arcs without the opportunity for direct contribution or feedback. These narratives conclude within a closed loop, with reader interpretations and reactions remaining internalized and disconnected from the creative process. However, interactive narratives dismantle these barriers, offering readers a profound level of participation and control. This engagement allows readers to

actively shape the story world, influencing character dialogues, actions, and plot trajectories, thereby co-creating the narrative.

The expansion of post-classical narratology into "pan-narrativity" explores narratives beyond literary confines, drawing upon interdisciplinary insights from cognitive science, computer science, and electronic media. According to Ryan, interactive narratives are characterized by several key features: interaction and feedback, where the digital medium responds to user inputs; a multiplicity of symbols, offering limitless textual presentation possibilities; multimodal access, facilitating scene serialization across various times and spaces; and the networking hyperlink, which connects users and affirms their role as narrative agents.

# 3.2. The Value of Interactive Narratives in Children's Magazines

Interactive narratives within children's magazines offer profound benefits for the cognitive and social development of young readers, manifesting in several key areas:

Firstly, enhancing motivation and engagement: Interactive narratives significantly boost children's interest and involvement in magazine content through captivating stories and opportunities for participatory decision-making. This interactive form of storytelling aligns with Vygotsky's sociocultural theory[2], which emphasizes the importance of social interaction in cognitive development. Engaging with interactive narratives allows children to not only acquire knowledge but also develop cognitive and comprehension skills through active and experiential learning processes.

Secondly, fostering emotional awareness and empathy: Participation in the diverse roles offered by interactive narratives enables children to deeply understand and empathize with characters' emotions and motivations. This immersive role-playing enhances their emotional intelligence and empathy, contributing to a richer and more nuanced emotional comprehension.

Thirdly, stimulating imagination and creativity: The element of choice inherent in interactive narratives encourages children's imagination and creativity, resonating with Bruner's narrative construction theory[3]. Stories serve as fundamental tools for children to interpret their world and shape self-identity. This narrative modality not only entertains but also invigorates children's creative and imaginative capabilities, extending to real-life scenarios.

Lastly, supporting the acquisition of social skills: Interactive narratives create a conducive environment for learning communication, collaboration, and sharing, both with characters within the magazine (agentic characters) and among readers. By simulating various social situations, such as cooperation and conflict resolution, interactive narratives furnish a platform for children to practice and refine essential social skills, crucial for their social well-being and development.

# 3.3. Elements of Interactive Narratives in Children's Magazines

Interactive narratives transform traditional narratology's foundational elements—time, space, characters, and events—into dynamic grammatical structures that foster simulation, autopoiesis, and participation. Marie-Laure Ryan [1] elucidates these transformations, highlighting their significance in the interactive narrative landscape. Within the context of children's magazine brand IP, essential elements include the narrative protagonist as the gateway to interaction, symbols as the narrative's functional units, and interactive rules as the structural framework.

(1) Character: The Narrative Protagonist as the Interactive Gateway

Children exhibit animistic thinking during the "preoperational stage" of early childhood, typically between the ages of 2 to 7, as identified by Jean Piaget [4]. This stage is characterized by a belief in the animation of inanimate objects, manifesting in behaviors like forming friendships with stuffed animals or conversing with toys. Leveraging this "panpsychic view," children are naturally drawn to anthropomorphic tales, which effortlessly transcend linguistic barriers and facilitate emotional

connections with the brand [5]. Thus, for children's magazine brands, an anthropomorphic character not only acts as the brand's ambassador but also serves as the nucleus of its symbolic system.

# (2) Symbols: The Functional Units of Interactive Narratives

Interactive narratives employ multimodality—text, image, video, and sound—to create a user-centric mode of interaction. Gunther Kress and Theo van Leeuwen's seminal work, "Multimodal Discourse: The Modes and Media of Contemporary Communication" [6], introduces multimodality as a universal semiotic principle that interplays across various modes. These modes, encompassing speech, images, gestures, writing, and more, are semiotic resources shaped by social and cultural conventions for meaning-making. The theory of multimodality thus lays a foundational framework for narrative development across diverse media, aiming for a cohesive narrative experience irrespective of the medium.

#### (3) Rules: Modes and Generative Rules of Interaction

Interactive narratives are structured in various configurations—network, side-branch, radial, track-switching, tree structures, among others—as categorized by Marie-Laure Ryan, each affecting the narrative's progression and user experience. The interaction within these narratives is guided by specific triggers and generative rules, such as choosing different narrative paths, solving puzzles, or completing tasks. For instance, children might unlock new story segments or initiate interactive games by scanning designated images or texts. These interactive elements not only heighten engagement but also stimulate exploration and experimentation, fostering cognitive development and learning.

# 3.4. The Role of Interactive Narrative Techniques in Children's Magazines

The evolution of digital media technologies has significantly diversified storytelling methods. The advancement and integration of blockchain, augmented reality/virtual reality (AR/VR), virtual engines, and 3D projection technologies have facilitated the convergence of sound, imagery, text, animation, and video within stories. These developments offer new avenues for crafting interactive narratives in children's magazines, characterized by enhanced immersion, interactivity, educational diversity, and personalized experiences.

Enhanced Immersion and Experience: AR/VR technologies enable children's magazines to construct deeply immersive narrative environments, transporting readers into the story world. This level of immersion strengthens emotional engagement, making the narrative content more vivid and impactful. For instance, Brainspace, a STEAM-focused children's magazine, leverages Augmented Reality (AR) to animate its content, providing an engaging and immersive learning experience. [7]



Figure 1: Brainspace children's magazine.

Interactive and Participatory Elements: Incorporating interactive features such as touchscreen inputs, voice interactions, and role-play, transforms readers from passive recipients to active participants and co-creators. Such interactivity fosters a spirit of exploration and boosts motivation and learning engagement. An example of this is My Wondrous World of Kindergarten, which encourages children to engage with stories through both screen and voice interaction.



Figure 2: My Wondrous World of Kindergarten magazine.

Diversified Educational Content Delivery: Digital technologies enable the integration of varied educational content within stories, including scientific experiments, historical narratives, and ethical lessons. Technologies like 3D projection and virtual engines enrich the educational content, making it more accessible and engaging, as seen with NUSHU, which employs VR to deliver intuitive classroom experiences.

Personalized and Customized Storytelling Experience: Blockchain technology enhances personalization in storytelling by safeguarding user data and facilitating the creation of content tailored to individual preferences. This allows children to shape the narrative's direction and conclusion according to their interests, offering a unique reading experience. Platforms like Publuu exemplify this by customizing reading suggestions for children's magazines based on individual reader profiles.

# 4. Interactive Narrative Design Strategies for Children's Magazine Brands

# 4.1. Children's Magazine Brand IP Interactive Narrative Design System

The design of children's magazine brands, grounded in an understanding of reader cognition, employs anthropomorphic Intellectual Property (IP) as a mediator to establish an interactive narrative system. This approach encompasses the creation of a brand story world, brand identification system, and brand communication context. Within this framework, anthropomorphic IP serves a dual role: it is both the protagonist within the story world and the symbolic cornerstone of the identification system. This dual functionality ensures narrative consistency across all communication contexts. In the practical application of the interactive narrative system, anthropomorphic IP transcends its narrative role, acting as the linchpin in a cross-media and multimodal symbolic system. It not only invites readers into an immersive narrative space characterized by high levels of participation and interaction but also anchors the brand's identity across various platforms and formats.

This design strategy leverages the dynamic interplay between real-world systems and potential worlds, integrating narrative symbolic resources with symbolic mappings to weave interaction into the fabric of the narrative. Through this process, the narrative text evolves within a dynamic system of compilation and translation, fostering an interactive IP ecosystem. This ecosystem engages readers actively, maximizes content resources, and cultivates a digital, multi-faceted industry chain, thereby expanding the brand's reach and impact.

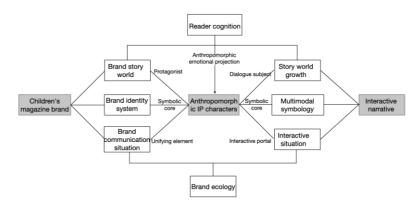


Figure 3: Children's Magazine Brand IP Interactive Narrative Design System.

# 4.2. Constructing Interactive and Symbiotic Story Worlds

In narratology, the concept of a story encompasses a sequence of events, whether real or fictional, that form the substance of discourse, alongside various event relationships like coherence, counterpoint, and repetition. Todorov describes this as "narrative as event" [8]. Genette, a seminal figure in classical narratology, posits that narrative comprises three layers: story, narrative discourse, and narration [9]. Post-classical narratology, however, sees the notion of story evolving with narrative changes. Here, the story is viewed as a meaningful world co-constructed by the narrator and the audience during the narration process, incorporating both the specific events of the story and the audience's cognitive engagement. This shift highlights the narrator's pivotal role, suggesting that, in certain artistic expressions, the original story may become secondary to the audience's cognition and creation.

# (1) Predefined Structure of the Story World

In brand design, initiating the brand's narrative requires a "lead" – a concept drawn from the brand's anthropomorphic knowledge model that carries the brand's foundational concepts and subcultural structures. This initial step is termed the presetting of the brand story world, aligning with post-classical narratology's concept of an "Intended structure" [10], which denotes the initial framework or the foundational narrative schema of the brand story world.

#### (2) Story Growth

Within the realm of distributed brand narratives, stories generated by consumers across different media can be assimilated into the brand's narrative ecosystem, contributing to the story world's expansion or "story growth". This concept underscores the readers' agency, recognizing any entity whose actions contribute to the narrative—whether through creative endeavors or otherwise—as a narrative subject. Interactive narratives, facilitated by media technology, craft a user-accessible, participatory virtual world, thus embodying this dynamic story growth.

# 4.3. Refining IP-Centered Multimodal Symbol Systems

The symbol system, centered on Intellectual Property (IP), integrates the brand story world's discourse in a textual manner with the brand identification system in a cognitive sense. These dual interpretations are interconnected through a "narrative-symbol" structure, where symbols serve to articulate the narrative "text" via their combination and aggregation. This establishes a referential link between the anthropomorphic story world and multimodal discourse, enabling stories to be narrated across diverse contexts and media. Thus, the embodiment of anthropomorphic storytelling is achieved through the careful design of the narrative symbol system.

This narrative symbol system prioritizes visual modal symbols, expanding to encompass other modalities including sensory, linguistic, and interactive modalities.

# (1) Brand Anthropomorphic IP Characters

The narrative connections between visual modal symbols of anthropomorphic agent characters and the story world can be categorized into two types: intrinsic to the character and external. Internal narratives refer to meta-narrative discourses that exist beyond the anthropomorphic story world, rooted in cultural anthropomorphic knowledge models. These narratives aim to evoke cultural identity in consumers, often simplifying cultural and social background elements in the story's design process.

Characters play a pivotal role within the story world's symbolic structure, their functional position influenced by their relational status with consumers. This paper identifies three character types based on their relational dynamics with consumers: upward-looking, level, and top-down. Upward-looking characters, depicted as mentors or mythological figures, hold a higher status and often serve as guides or heroes. Level characters maintain an equal relationship with consumers, acting as companions or friends and fostering a sense of partnership. Top-down characters, perceived as less capable, evoke a sense of intimacy and protective desire in consumers.

#### (2) Magazine Cover and Layout Design

The integration of anthropomorphic IPs into the magazine's cover, table of contents, and column labels transforms these elements into guides and storytellers, leading readers through the content. These characters not only capture children's attention but also provide a visually cohesive and interactive reading experience.

# (3) Extensions to Other Modalities

The practical application of the magazine brand design expands the multimodal symbol system into additional modalities: sensory (beyond visual design), linguistic (language design), spatiotemporal (scene design), symbolic (special symbols design), and material (peripheral product design). Sensory modality enriches the experience with elements like character voices and tactile interactions, offering an immersive alternative to traditional reading. Linguistic modality, through voice and dialogue, enhances story dynamics and interactivity. Spatio-temporal modality, possibly realized through AR technology, immerses readers in the story's setting. Finally, the extension into material modality brings the narrative into children's daily lives through peripheral products, deepening their engagement with the story world.

# 4.4. Expanding Interactive Narrative Contexts Through Spatio-Temporal Integration

The interactive narrative context, defined as a transient scene enriched with multimodal symbols within specific environments and events organized by media, caters to consumers' anthropomorphic cognition for the purposes of brand storytelling and growth. Children's magazine brands achieve this by synergizing digital and traditional print media.

#### (1) Interactive Contexts

In the realm of mixed reality media, the interactive narrative allows users not only to engage with text and images for story comprehension but also to participate actively within the story events, thus becoming integral to the story world. This is facilitated through technological mediums, fostering an embodied narrative perspective.

For children's magazine brands, leveraging virtual reality (VR) and metaverse technologies presents an opportunity to craft immersive experiences that transcend traditional page-bound narratives. By utilizing a VR headset, readers are transported into a three-dimensional enactment of the magazine's content, enabling exploration of story worlds in a manner unattainable by text and images alone. This immersion into virtual realms fosters a more embodied narrative experience, where children can both learn and interact within the story, enhancing their engagement and comprehension.

#### (2) Generative Narrative Context

A pivotal aspect of interactive narrative is the generative narrative network created through user participation in reading and interaction, extending beyond the narratives predefined by the authors. Originating in the gaming industry, the concept of generative narrative refers to stories that evolve not from the creators' pen but are 'generated' and 'emerge' through player interaction with game mechanics. Within interactive narratives, users contribute new narrative content through interactions based on author-provided presets, expanding the story world into a branching network accessible to other users. In the interactive version of Elementary School Times, artificial intelligence (AI) technology allows children to input their drawings, which the system then analyzes using AI algorithms to capture the child's artistic style and elements. This analysis generates an exclusive virtual character, or "Mobao," personalized for each child. This character not only serves as a digital extension of the child's artistic expression but also as an interactive companion in their creative exploration. This approach not only heightens children's interest in art but also fosters their initiative in learning, allowing them to acquire new knowledge and enhance their aesthetic literacy through engagement with their "Mobao" character.

#### 5. Conclusions

In our rapidly digitizing world, interactive narratives in children's magazines transcend traditional entertainment roles, establishing themselves as crucial avenues for education and cultural engagement. By igniting children's curiosity and fostering an exploratory spirit, these narratives not only develop the readers of the future but also cultivate the next generation of thinkers, innovators, and problem solvers. The rich multimodal and multidimensional nature of interactive narratives, combined with their potential for educational application, unveils vast possibilities for the evolution of learning environments.

As digital technology continues to advance, the transformation of children's magazines into a pivotal element of the educational landscape becomes increasingly apparent. Positioned at the intersection of schools, libraries, museums, and cultural institutions, this evolution heralds a unified educational framework. Within this framework, children's magazines emerge as essential channels for knowledge dissemination and creative exploration, opening unprecedented avenues for learning and personal development.

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