Embodiment, Empathy, Identification: Mechanisms of Red Finance Digital Narrative Empowering the Cultivation of Family-Country Sentiment

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Abstract: Against the dual backdrop of the digital transformation of education and the construction of "Comprehensive Ideological and Political Education," Red Finance resources, as historical witnesses to the economic struggles led by the Communist Party of China (CPC), possess unique educational value. However, the static display of historical materials under traditional educational models has led to a separation of body and mind and the concealment of emotions among students. Grounded in Embodied Cognition Theory and Narrative Ethics, this paper proposes that Red Finance digital narrative is a practice of physical return and spiritual reshaping mediated by technology. The article deeply analyzes the triple mechanisms by which digital narrative empowers the cultivation of Family-Country Sentiment: First is the "Embodiment" mechanism, which reconstructs a historical "sense of presence" through multimodal perception, breaking spatio-temporal barriers and transforming disembodied symbols into embodied experiences. Second is the "Empathy" mechanism, which leverages narrative transportation and mirror neuron mechanisms to drive students from "spectators" to "participants" through role empathy, achieving a resonance between individual emotions and historical destiny. Finally, the "Identification" mechanism sublimates transient emotional experiences into stable Family-Country Sentiment and political beliefs through meaning negotiation and value reflection. Based on this, the paper constructs a complete educational logic ranging from sensory immersion to spiritual internalization, providing profound theoretical support and practical direction for the digital innovation of ideological and political education in universities in the new era.

Keywords: Red Finance, Digital Narrative, Embodied Cognition, Narrative Empathy, Family-Country Sentiment, Political Identification.

1. Introduction

Family-Country Sentiment—the deep love for one's country and people—is the core of the Chinese national spirit and the ultimate value goal of ideological and political education in universities in the new era. The history of Red Finance, as a unique "economic chapter" in the history of the Chinese revolution, records the great practice of the CPC in safeguarding people's livelihoods and supporting the war effort through issuing currency, establishing banks, and regulating materials amidst extreme difficulties such as blockades and encirclement campaigns. This historical process is not only filled with the thrills of "bullets and artillery fire" but also embodies the profound Family-Country Sentiment of "finance for the people," "integrity," and "independence and autonomy." However, since Red Finance historical materials are mostly "cold" artifacts like bills, ledgers, and policy provisions, and are characterized by their age and high specialization, they have long faced the dilemma of being "difficult to display, difficult to understand, and difficult to empathize with." Traditional didactic and indoctrination-based education often abstracts these vivid histories into dry knowledge points, resulting in students "knowing the how but not the why" and making it difficult to generate profound emotional impact.

With the rapid development of digital technology, Digital Narrative (Digital Storytelling), as a new form of communication that deeply integrates narrative art with multimedia technology, offers an opportunity to solve the aforementioned problems. Unlike traditional textual narratives, digital narratives create an embodied, immersive field of meaning through Virtual Reality (VR), Augmented Reality (AR), and interactive games. Academic research on the digitization of red culture mostly focuses on technological implementation or macroscopic paths, with few deep explorations into the micro-psychological mechanisms behind it: How exactly do cold financial data and historical archives transform into the burning Family-Country Sentiment within college students through digital narratives?

This paper attempts to introduce interdisciplinary perspectives such as Embodied Cognition Theory and Narrative Psychology to construct a three-dimensional analytical framework of "Embodiment, Empathy, and Identification." The paper argues that Red Finance digital narrative is not merely the application of technology but a reconstruction movement concerning the body, emotion, and meaning. It makes history touchable through "Embodiment," makes the spirit sensible through "Empathy," and finally completes the contemporary writing of Family-Country Sentiment in "Identification." Deeply analyzing this internal mechanism has important theoretical significance and practical value for improving the effectiveness of ideological and political education in the new era and promoting the intergenerational transmission of red genes.

2. Embodiment Mechanism: Perceptual Reconstruction from "Disembodied Symbols" to "Bodily Presence"

Traditional cognitive psychology tends to view the brain as an independent information processor, ignoring the fundamental role of the body in the cognitive process. Embodied Cognition Theory emphasizes that "the mind is embodied," and the cognitive process is deeply rooted in the interaction between the body and the environment [1]. In traditional Red Finance education, students often face exhibits in glass cases or texts in books. This "disembodied" learning mode severs the connection between knowledge and experience, leading to a poverty of historical perception. The primary mechanism by which Red Finance digital narrative empowers the cultivation of Family-Country Sentiment is the realization of the "return of the body" through technological mediation.

2.1. The Awakening of Multimodal Perception and the Generation of Historical "Sense of Presence"

Red Finance historical sites are often filled with sensory details: the roar of machines in the mint, the smell of smoke on the transport route, the rough touch of banknotes from the Soviet Bank, etc. Digital narrative technology possesses powerful multimodal simulation capabilities, capable of mobilizing students' vision, hearing, touch, and even smell to construct a "pseudo-environment" wrapped in full sensory perception.

Through high-fidelity 3D modeling and rendering technologies, digital narratives can restore vanished Red Finance sites (such as the former site of the National Bank of the Chinese Soviet Republic) with millimeter-level precision. When students put on VR headsets, they are no longer readers sitting in a classroom but "time travelers" placed in Ruijin in the 1930s. This visual immersion is the starting point of embodied cognition. Furthermore, the application of Spatial Audio technology gives sound a sense of direction and distance; the clicking of abacuses and the noise of markets constitute an auditory landscape of history. Haptic Devices further extend the boundaries of bodily perception. When students "touch" a silver dollar with body warmth or "shoulder" the heavy money box of the "Shoulder-Pole Bank" in virtual space, the vibration and resistance of the controller make the weight of history tangibly felt.

This comprehensive sensory stimulation breaks the physical barriers of time and space, generating a strong historical "Sense of Presence." Heidegger believed that "Dasein" is "being-in-the-world." Digital narratives allow students to temporarily withdraw from the "being-here" of the real world and project themselves into the "being-there" of the historical world. In this embodied state, Red Finance is no longer an abstract conceptual symbol but a living situation engaging in direct interaction with the body. This "bodily presence" provides the most intuitive and primal perceptual soil for the cultivation of Family-Country Sentiment, ensuring that subsequent emotional stimulation is not without source.

2.2. Embodied Interaction and Dynamic Enactment of Historical Situations

Embodied cognition emphasizes not only bodily perception but also bodily action. In traditional red education, students are passive recipients with bodies in a static state. Digital narrative, however, emphasizes Interactivity, requiring students to drive the narrative development through bodily movement.

In Red Finance digital narrative projects, common designs include Role-Playing Games (RPG) and task-driven activities. For example, in an interactive theater designed around the "Currency Struggle during Counter-Encirclement Campaigns," students play the role of a Red Bank staff member. They need to count currency and identify counterfeit money through gestures, dodge enemy bombing through bodily movement, and converse with virtual characters through eye focus. This interaction based on bodily movement is essentially a reshaping of the "Body Schema."

When students crawl forward in a virtual trench to protect the vault, physiological reactions such as tense breathing, accelerated heartbeat, and muscle tension directly participate in the construction of cognition. According to the James-Lange theory of emotion, physiological reactions often precede emotional experience. The hardship, urgency, and sense of crisis experienced by students in embodied interaction translate directly into a profound realization of the arduous entrepreneurial history of revolutionary ancestors. This "Learning by Doing" model allows the historical logic of Red Finance—why the Party insisted on controlling financial sovereignty and why it strictly cracked down on counterfeit currency—to be self-confirmed in bodily action. Students are no longer observing history but "enacting" history. This deep Bodily Engagement greatly enhances the profundity and durability of cognition.

2.3. Spatio-Temporal Folding and Meaning Construction of Embodied Metaphors

Digital narrative also achieves an embodied connection between the past and present through "Spatio-Temporal Folding" technology. With the aid of Augmented Reality (AR) or Mixed Reality (MR), historical financial scenes can be superimposed onto real physical spaces. For example, on the campus lawn, students can see virtual images of the Red Army carrying bank assets on shoulder poles via mobile screens. This interplay of the virtual and real creates a unique "Embodied Metaphor."

The "Shoulder-Pole Bank" itself is a huge metaphor, symbolizing that the Party's financial cause relies not only on material capital but also on the spiritual backbone of people. In digital narrative, this metaphor is no longer a literary figure of speech but a bodily experience. When students experience the sensation of a "shoulder pole" pressing on their shoulders during virtual interaction, abstract Family-Country Sentiment values such as "responsibility," "bearing burdens," and "tenacity" acquire a bodily attachment. Lakoff and Johnson pointed out in Metaphors We Live By that human abstract conceptual systems are mostly built upon concrete bodily experiences [2]. Red Finance digital narrative utilizes technological means to reduce grand narratives like "patriotism" and "dedication" to specific embodied experiences like "moving forward with heavy loads," "holding tight to the steel gun," and "guarding silver dollars," thereby providing a solid corporeal foundation for the

cultivation of Family-Country Sentiment.

3. Empathy Mechanism: The Psychological Bridge from "Spectator Narrative" to "Emotional Resonance"

If embodiment is the cornerstone of cognition, then Empathy is the bridge to belief. Family-Country Sentiment is essentially a deep emotional experience. Although Red Finance involves rational economic activities, it is interwoven with intense human brilliance such as sacrifice, trust, and commitment. One of the core mechanisms by which digital narrative empowers the cultivation of Family-Country Sentiment is through narrative strategies and technological means to stimulate Narrative Empathy in students, achieving an emotional leap from "cold observation" to "teary-eyed resonance."

3.1. Narrative Transportation and Emotional Immersion through Identification

Narrative Transportation Theory suggests that when individuals are fully immersed in a story, their psychological mechanisms undergo "transportation," temporarily detaching from the real world and fully entering the story world, making it easier to accept the attitudes and beliefs conveyed by the story [3]. Red Finance digital narratives greatly enhance this transportation effect through carefully orchestrated scripts and immersive audio-visual effects.

In traditional grand narratives, Red Finance is often described as policy history or institutional history, lacking emotional attachment points. Digital narratives tend to adopt a Micro-perspective, focusing on the twists and turns of specific characters' fates. For example, telling the story of an ordinary peasant woman risking her life to preserve IOUs left by the Red Army, or a bank cadre swallowing a codebook before sacrifice. This narrative strategy of "small characters, big history" triggers students' emotional switches more easily.

More importantly, digital interactive technology reinforces "Identification." In interactive digital narratives, students are no longer listeners of the story but the Protagonists. Through the First-person Perspective, students "become" the soldier escorting gold in the wind and snow. This shift in perspective is crucial. Psychological research indicates that the first-person perspective can significantly improve empathy levels. When the enemy's gun is aimed at "me," or when fellow villagers trustingly hand over grain to "me," what students experience is no longer pure fear or touch, but a sense of responsibility to breathe together and share destiny with historical figures. This Emotional Immersion transforms the Family-Country Sentiment of historical figures from external moral preaching into the subject's intrinsic emotional experience.

3.2. Mirror Neuron Mechanism and Cross-Temporal Emotional Contagion

The Mirror Neuron theory in neuroscience provides a biological explanation for digital narratives stimulating empathy. Research has found that when an individual observes another person's actions or emotional expressions, the neurons in the brain responsible for executing the same action or experiencing the same emotion are activated, as if the individual were executing the action or experiencing the emotion themselves [4].

Red Finance digital narratives fully utilize this mechanism. Through Facial Capture and Motion Capture technologies, the micro-expressions and body language of virtual characters are portrayed in minute detail. When a virtual "Old Bank President" frowns, looks anxious, or has trembling lips in the face of suffering caused by fiat currency inflation, these high-fidelity emotional symbols instantly activate the mirror neuron system in students' brains, triggering immediate "Emotional Contagion."

This emotional contagion transcends the boundaries of time and space. Although students live in an affluent peaceful era, under the action of the mirror mechanism, they can intuitively feel the anxiety and longing for materials in the war era. Digital narratives further amplify this emotional resonance by creating high-intensity Emotional Fields, such as tragic background music, oppressive color tones, and compact editing rhythms. In this resonance, a profound Psychological Connection is established between students and historical figures. They begin to understand why, in that era, a small red banknote was regarded as the hope of life, and why people were willing to shed blood and sacrifice their lives for the word "Soviet." This emotional resonance based on physiological mechanisms is a key step for Family-Country Sentiment to move from conceptual cognition to emotional identification.

3.3. Moral Dilemmas and the Stimulation of Deep Empathy

Shallow empathy often stops at emotional infection, while deep empathy requires touching upon conflicts and choices of values. Red Finance digital narratives often stimulate deep empathy by setting up "Moral Dilemmas."

For example, interactive plots might set up such a scenario: As a Red Bank escort, when encountering an enemy raid, does one choose to protect the money box full of gold bars and sacrifice oneself, or abandon the money box to save one's life? Or, in a situation of extreme hunger, does one use public funds to buy grain for emergency relief, or strictly abide by discipline and starve to death? These questions have no standard answers, but every choice is an interrogation of the soul.

When students face these life-and-death choices in virtual situations, they must mobilize all moral cognition and emotional experience to weigh them. This psychological gaming process forces students to deeply understand the spiritual world of revolutionary ancestors. They will discover that the reason ancestors could perform feats of sacrificing life for righteousness was not because they lacked the instinct for survival, but because they held something more sublime than life in their hearts—infinite loyalty to the country and the people. By simulating these extreme moral dilemmas, digital narratives allow students to complete a spiritual alignment with heroic figures amidst struggle, pain, and reflection. This emotional resonance produced through inner struggle is more profound and shocking than one-way praise, rooting the cultivation of Family-Country Sentiment deeply in the soil of human nature.

4. Identification Mechanism: Spiritual Internalization from "Transient Experience" to "Value Destination"

Embodiment brings a sense of presence, and empathy brings emotion, but the ultimate goal of cultivating Family-

Country Sentiment is to achieve Political Identification and Value Internalization. That is, to transform transient experiences in virtual space into stable political beliefs and behavioral norms in real life. Red Finance digital narrative promotes this qualitative leap through mechanisms such as meaning negotiation and reflective reconstruction.

4.1. Meaning Negotiation and Rational Access to Historical Logic

The formation of identification cannot be separated from the participation of reason. If there is only emotional catharsis without rational sublimation, Family-Country Sentiment easily becomes superficial. While stimulating emotion, Red Finance digital narrative always maintains a clear logical line of rationality—namely, the scientific nature and people-centeredness of financial work led by the CPC.

The interactive links of digital narratives contain a large amount of "knowledge decoding" processes. For example, using data visualization technology to display the fluctuation curve of the exchange rate between "Border Currency" and "Fiat Currency," or interactive charts to demonstrate the economic principles behind price stability in base areas. Students discover during the experience that the victory of Red Finance is not only a spiritual victory but also a victory of the Sinicization of Marxist political economy, a result of following economic laws and safeguarding people's interests.

This dual narrative of "Emotion + Reason" prompts students to engage in "Meaning Negotiation" during the experience. They dock and integrate their sensory experiences gained in the virtual world (such as the difficulty of protecting currency) with rational knowledge in the real world (such as the importance of financial sovereignty). Through this negotiation, students deeply understand why the CPC "can," why Marxism "works," and why socialism with Chinese characteristics is "good." This political identification based on rational access is the most solid core of Family-Country Sentiment, making students' love for the country no longer blind but established on a profound foundation of historical materialist cognition.

4.2. Reflective Observation and Reconstruction of Self-Identity

According to Kolb's Experiential Learning Theory, Reflective Observation is a key link in transforming experience into knowledge [5]. Red Finance digital narrative not only provides experience but also guides reflection through mechanism design.

At the end of many digital narrative projects, "Space-Time Dialogue" or "Digital Message" segments are set up. Students are invited to write a letter to revolutionary ancestors from a hundred years ago as modern college students, or answer the question "What would you do if it were you?" This cross-temporal dialogue forces students to withdraw from the immersive experience and examine and evaluate the experience they just had.

In this process, students complete "Identity Reconstruction." They are no longer merely experiencers of the story but inheritors of the red gene. By mapping the national righteousness of historical figures onto themselves, students begin to think: What role should I play in the construction of a financial power in the new era? How should I inherit the spirit of integrity and people-centeredness of the ancestors? This reflection reconnects the historical "being-there" with the realistic "being-here," but this connection is no longer at the sensory level but at the value level. Students actively incorporate the spirit of Red Finance into their own value systems during reflection, achieving a personalized construction of Family-Country Sentiment.

4.3. Community Interaction and Reproduction of Collective Memory

Family-Country Sentiment is not only an individual psychological activity but also a collective consciousness of a group. Digital narratives provide a field for the reproduction of Collective Memory through networked and social functions.

Red Finance digital narratives are often not single-player experiences but support multi-person online collaboration. Students form "Red Finance Squads" in virtual space to complete tasks together, and share experience feelings and release user-generated content (such as making short videos and posters with Red Finance themes) in the community. In interaction and sharing, individual emotional experiences are confirmed and amplified by the group.

Halbwachs believed that collective memory is constructed in social interaction [6]. In digital communities, students form a public opinion field of emotional resonance through likes, comments, and reposting. This group interaction reinforces students' sense of belonging to "We-ness"—the community of the Chinese nation. When thousands of youths pay tribute to Red Finance pioneers and express their ambition to serve the country together in digital space, Family-Country Sentiment converges from individual trickles into a surging river of the times. This Family-Country Sentiment based on collective identification possesses stronger cohesion and appeal.

5. Conclusion and Prospect

In summary, Red Finance digital narrative empowering the cultivation of Family-Country Sentiment is not a simple physical superposition of "Technology + Education," but a complex psycho-chemical reaction process involving embodied perception, emotional resonance, and value identification.

Its mechanisms lie in: The Embodiment Mechanism solves the problem of "distant history," returning the body to the historical scene through multimodal technology, laying a perceptual foundation for education; The Empathy Mechanism solves the problem of "emotional indifference," opening up spatio-temporal emotional channels through narrative transportation and mirror mechanisms, allowing education to touch the depths of the soul; The Identification Mechanism solves the problem of "lack of belief," achieving value internalization through meaning negotiation and reflective reconstruction, returning education to the essence of nurturing people.

These three mechanisms are interlocked and progressive, jointly constituting a complete digital education closed loop. This study not only reveals the internal logic of the activation of Red Finance resources but also provides powerful theoretical interpretation and practical guidance for how ideological and political education in universities in the new era can use digital technology to tell China's stories well and inherit red genes.

In the future, with the further development of frontier technologies such as the Metaverse, Brain-Computer Interfaces, and Artificial Intelligence Generated Content (AIGC), the embodiment of Red Finance digital narratives

will be more thorough, and interactivity will be more intelligent. We should continue to deepen exploration in this field, be wary of the trap of technologism, always adhere to the principles of people-orientation and content as king, let technology truly serve the comprehensive development of people, and let the red Family-Country Sentiment shine more brilliantly in the digital age.

Acknowledgment

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