

ORIGINAL RESEARCH ARTICLE

The three elements of hypertext: Constructing digital artistry and rebooting possible lives—Take the Cheng Guang work “Life Reboot” as the center of inspection

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ABSTRACT

The core characteristic of new media literature that differs from traditional print-era literature can be summarized as “digital artistry”. Based on the Cheng Guang interactive platform, the Cheng Guang literature adopts a typical hypertext model and shows a certain degree of representativeness in the creation of digital artistry. Life Reboot fully utilizes the constructive functions of the three elements of hypertext—node, link, and network—to produce aesthetic effects that are different from those of traditional literary works—digital artistry such as composite symbolic text, interactive narrative, and ontolepsis. The use of the three elements of hypertext enables readers to break through the limitations of reality, travel through multi-dimensional space and “parallel universes”, realize a life reboot, reach multiple possible lives, and obtain aesthetic experiences that traditional literary works cannot provide.

Keywords: the three elements of hypertext; Life Reboot; digital artistry; interactive narrative; ontolepsis

1. Introduction

The core quality of new media literature and art that differs from traditional print-era literature and art can be attributed to “digital artistry”. Digital artistry has a wide range of contents and complex production mechanisms. In hypertextual literary art, the three elements of hypertext, such as nodes, links and networks, supported by digital technology, play a key constructive role in the formation of digital artistry. This has been prominent in hypertextual literary production in the West since the 1980s. In the field of contemporary Chinese new media literature and art, the works produced by the Cheng Guang platform adopt a typical hypertext model and show certain representativeness in the creation of digital artistry. “Life Reboot” is the representative work of Cheng Guang’s contracted author, Dr. Lee, with the keywords “male-oriented”, “modern”, and “workplace”. It was released on the Cheng Guang platform in June 2016, and the main line was completed in September 2017. Life Reboot makes full use of the three elements of hypertext—nodes, links, and networks—to create a digital artistry that differs from the nature of traditional literary art—composite symbolic text, interactive narrative, and ontolepsis.

2. The use of the three elements of hypertext

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Life Reboot appropriately uses the three hypertext elements of nodes, links, and networks to form a sophisticated hypertext structure. In hypertext studies, nodes, links, and networks are normally considered as the three elements of a hypertext. As early as the 1990s, the hypertext theorist Landow proposed that for computer text, a new system of text concepts needs to be constructed with nodes, links, networks, etc. Landow's research has deepened since then, but his views on the use of terms such as nodes, links and networks to describe computer text have not changed^[1]. Nodes are individual chunks of text in a hypertext. Links are the connections between nodes. Links organize nodes into a “network structure”^[2]. Wherever a link can be reached, or a text can be radiated, it forms part of the hypertext system. Literary works in cyberspace, book review sections, and other works in the same genre that are influenced by them all together form a generalized hypertext system. In this sense, the Cheng Guang platform is a typical hypertext system.

The Cheng Guang work “Life Reboot” successfully uses the three elements of hypertext and combines the unique reading elements of Cheng Guang, “options” and “branches” to form a hypertext structure. It uses short stories made of language, images, sounds, and other media symbols as nodes, options close to the public's mind, and “attribute accumulation” accumulated from daily behavior to form a link that determines the direction of life, and extends a multi-linear story from different plot branches to create a hypertext network of the work.

Life Reboot is based on a valuable set of story nodes. The richness of the nodes is mainly reflected in two aspects. The first is the richness of the information stored in individual nodes. Each node is designed by the author to incorporate multiple symbols: verbal symbols, image symbols, sound symbols, etc. Multi-symbol compositional operations form composite symbolic texts, which are then processed by the subject's aesthetic appreciation to generate composite literary imagery deep within the subject's consciousness^[3]. Each node can store ample information, and people can freely understand and create when facing the text, thus extending a broader ideational space beyond the nodes. Second, the large number of nodes allows the author to expand the total capacity of the text. The most obvious manifestation of this is the creation of various characters with distinct personalities: Xiao Shi, who gives up a quality life in pursuit of freedom; Jiang Lei, who comes from an ordinary background but constantly insists on himself; Ye Ziqing, who is treated unfairly because of her lameness but is always full of kindness to the world. Readers can see additional characters and stories by making different choices on the links.

The work uses links to connect a large number of nodes and combines them with Cheng Guang's characteristic interactive elements—option and branch—to work together in the direction of the plot. The branch is a common text design in Cheng Guang's works. Readers choose different links from the options to go to different nodes, and the nodes are connected into branches. In Life Reboot, the reader takes on the role of a character and makes different choices to enter different branches. There are both “direct branches” (where the user makes a certain choice and the subsequent plot changes as a result of the user's choice) and “accumulation of attributes” (where the author's daily accumulations form attributes and the subsequent plot changes)^[4]. When the reader first enters the work to determine his identity, he chooses “Xiao Shi, a rich nobleman” or “Jiang Lei, a struggling young man”, which is a direct branch to modify his life trajectory to the greatest extent; when the main character applies to university, the reader chooses domestic or foreign, which is a direct branch of changing his life experience at a particular stage. In this work, the options set at the direct branch often have distinct differences, and the subsequent plot changes directly. The accumulation of attributes differs in that the options are not explicitly superior or inferior; it is more applicable to long-term plot development and supports a more novel text design. Multiple accumulations of attributes are required throughout the main character's growth phase. Each time a flat map of the school appears during the growth phase, you can click on the location and trigger the corresponding event: going to the library to study, going

to the gym to exercise, going to the school building to help the teacher, etc. When it comes to holidays, you can choose between activities: doing homework at home, going out to play soccer, dating a classmate, etc. In the above actions, the reader chooses the link and also accumulates IQ, EQ, and HP in the events. The accumulation of attributes determines the branching directions and also affects the main character's life achievements. Throughout this work, the use of links boils down to two categories: direct branching and accumulation of attributes that act on each option to achieve its expressive effect.

Each link organizes two nodes, and all links in this work combine all nodes and branches to construct a hypertextual story network. The two main story lines of *Life Reboot* each have multiple branches, each with a richer narrative, and all of them need to fit closely into the trajectory of the story. The story network is normally organized by using branches, using direct branches to determine the reader's willingness, and using accumulation of attributes to determine whether the reader has met the requirements to enter a particular branch. Meeting different female characters means entering the corresponding branch lines, on each of which numerous minor branches develop. In the growth chapter of Xiao Shi's main line, there are two character branches: one is the route of Ye Ziqing, who is well-matched in social and economic status; the other is the route of Lu Yun, who is a classmate; and there is another route of Liang Zheng in the university chapter, i.e., there are three branches before the social chapter; after entering the social chapter, there is a companion character Han Lufei in the branch of Ye Ziqing and a companion character Jing Rou in the branch of Liang Zheng; each character constitutes their own branch plot. At the same time, by exploiting the accumulation of attributes, the branching lines of each character derive more directions, thus forming a multi-ended story network. There is also a situation where the main character fails to get into any of the reputable characters' side lines, which in turn results in several different endings. *Life Reboot* uses nodes and links to provide a degree of freedom for the reader, and the use of networks organizes this freedom logically, showing different perspectives on events and presenting the overall picture of the story.

All in all, *Life Reboot* uses the three elements of hypertext nodes, links, and networks and combines them with Cheng Guang's options, branches, and other interactive elements to give full play to the characteristics of hypertext technology, building up the artistic world of *Life Reboot* and realizing the collision of various emotions and the interlocking of various events in the story. Like the complex structure of hypertext, life is full of possibilities and unpredictable.

3. Digital artistry: Aesthetic effects generated by the three elements of hypertext

The work's use of the three elements of hypertext is supported by digital technology, presenting aesthetic effects different from those of traditional literature through digital artistry. The digital artistry here is mainly manifested in the following three aspects: multiple symbols such as sound and images in the nodes assist textual expression, and multiple symbols are combined to construct a "composite symbolic text"^[5]. The three elements of hypertext make the narrative no longer limited to a fixed text in a finished state and form an "interactive narrative"^[6], that allows the reader to participate in it. With the use of the three elements, the stories in each node and branch affect each other, creating an aesthetic effect of "ontolepsis".

In "*Life Reboot*", the use of the three elements of hypertext constructs a composite symbolic text that reproduces the reality of life as often as possible. Among the numerous symbolic forms used, language is central and plays a role in "setting the tone". The use of language constitutes a play-like script. As for the overall work, multiple symbols are combined in nodes to convey information, forming a composite symbolic text. Each time the interface is clicked, the textual symbols change, and other symbols, such as images, music, etc., are transformed to match the text. When the character's emotions fluctuate, the face will also display a

corresponding demeanor, such as a blush, tears, etc. When the weather changes, background images flash, shake, or add animation effects such as rain and lightning. Characters, scenes, and actions in this world are simulated in the nodes. There is much to be desired in Life Reboot, such as the uneven quality of the images and the fact that the soundtrack is shared with other works on the platform, which is likely to make some readers feel out of place. Nevertheless, Life Reboot has successfully used the three elements of hypertext to integrate text, music, and images, making Cheng Guang's hypertext literary creations completely different from traditional literary works and a significant improvement over earlier hypertext literary works in terms of audio and visual effects.

Life Reboot uses nodes, links, and networks to form an interactive narrative that enhances the realism of the protagonist's life experience and provides an immersive aesthetic experience. In particular, the emergence of nodes, the connection between fragments, and the direction of the plot have an unpredictable space for development, and the reader can participate in a deeper reproduction of the text (here the accompanying reproduction of the material text is different from the textual "filling in the blank" carried out by the consciousness of the mind under the conditions of the author's completion of the fixed text, as described by phenomenological aesthetics and other theories), thus performing the narrative act together with the absent author. This makes it more difficult to organize the work, and it is also possible to organize incomprehensible stories with repetitive plots or even reversed logic, a problem suffered by many of Cheng Guang works. The interactive narrative of Life Reboot allows readers to have an "immersive"^[7] aesthetic experience, providing them with a wide range of associations. Readers can not only explore the virtual world as one of the main characters, but also intersect with other characters, becoming classmates, colleagues, friends, lovers, and more. Thus, the use of three elements of hypertext forms an interactive narrative in the work, helping the literary work to break through traditional media constraints. Compared with other works, the uniqueness of Life Reboot lies in the large number of nodes and many endings, and the arrangement and reorganization of nodes expand the text space exponentially, making the richness of the interactive experience far beyond other works.

With the use of the three elements of hypertext, the nodes and branches interact with each other and can produce the aesthetic effect of "ontolepsis", which is prominent in Life Reboot. The term "ontolepsis" (also translated as "ontological interpenetration") "refers to the co-existence of different worlds (many parallel alternative worlds) at the ontological level of the novel and the interconnection between the events that occur and the interpenetration of the literary information produced. From the point of view of reception, the reader's reading of a story in one literary world is inevitably influenced by the events of another world, thus creating a peculiar aesthetic effect in which multiple possible worlds and storylines are interlocked and mutually constructed"^[8].

We intercept a representative clip for analysis. During the career period of the main character Jiang Lei, there will be a large number of companies, both large and small, to choose from; Smaller companies are easy to get into, but pay less. The first reading has three situations: the first is that the accumulation of attributes is not sufficient and does not meet the application conditions, directly into the ending "gangster life"; the second is that the accumulation of attributes is sufficient for either of the two companies to be chosen. Moreover, the third is that the aggregate accumulation of attributes can only enter a tiny company. In the first case, the reader can only re-read the story, but the first round of reading, which has already ended, will always be there, influencing the reader's subsequent choices. To avoid entering prematurely into the ending, the reader adjusts the direction of the story and focuses on its properties. In the second case, both options have advantages and disadvantages; applying to a large company or a small company are clearly two directions of development. Based on the information available, the larger company has better terms, and the reader will mostly apply to the larger company on first reading and will also feel grateful and satisfied that he or she has accumulated a

high enough number of attributes. At the small company, however, the main character has the opportunity to fall in love with his boss, Jiang Miao, and gain a valuable relationship. If the reader first enters a large company, they are not even aware of the character Jiang Miao's existence; if they enter the small company first and learn of Jiang's presence, they are prone to psychological fallout when they return to the larger company, as readers know they have missed out on the new character. In the third case, where there is a repetitive, progressive design in the narrative, the dominance of work over reading increases, but the role of the three elements of hypertext is retained. Upon entering the small company, an after-work break to the pantry triggers several chance encounters with Jiang Miao nodes. In general, after this node is repeated five times, the two will gradually form a friendship and become lovers. The Jiang Miao in each node is independent and unrelated, but because of the ontolepsis caused by the three elements of hypertext, the reader then believes that the Jiang Miao in each node is the same person. In this way, the nodes hold each other in check, which in turn has an impact on the reader's behavior and on the text. This continuous ontolepsis creates a unique aesthetic effect: discovering fresh nodes, generating a sense of anticipation, and anticipating the subsequent plot. This pattern makes us appreciate that some events cannot exist independently in the first place. They affect each other in a way that is difficult to achieve in traditional graphic and literary art. It can be argued that ontolepsis is the most characteristic and attractive aesthetic property of hypertextual literature and art.

4. Exploration and reboot of possible lives

Life Reboot uses the node, link, and network of hypertext to create various life experiences in the work and to realize them through various dimensions of digital artistry. Specifically, each round of narrative in Life Reboot is a life journey, and readers can see more possibilities in life in this one life experience.

From the point of view of the work as a whole, the use of the three elements of hypertext allows the reader to experience a myriad of life possibilities that they would not experience in the real world. The work revolves around three types of themes: growth, the workplace and marriage. The first is the theme of growth. Xiao Shi and Jiang Lei represent two types of people from different classes, but both map the growth of young people who only have a chance to achieve their ideals through hard work and struggle. The second is a workplace theme. "Life Reboot" sets up a workplace situation with certain difficulties to show the state of specific groups: newcomers to the workplace and professional elites. Xiao Shi is the CEO of the family business, while Jiang Lei is a minor employee. The two go in different directions and the reader can appreciate the different qualities and personalities of the people in the workplace. Thirdly, on the subject of marriage, the work echoes social hotspots by showing different modes of love through many female characters, not only to present romantic love but also to reveal the problems of marriage. In portraying romantic love, the most representative one is Ye Ziqing's extra story "Growing aged unknowingly", which describes the living condition of her lover Ye Ziqing two years after Xiao Shi's death and puts love in front of death for consideration, enriching people's perception of life and love. In addition to portraying romantic love, the work also throws out many thought-provoking issues on the hot topic of marriage, such as: Liang Zheng, a highly attractive woman, is labeled as an "aged woman leftover" because she is unmarried, reflecting the anxiety and confusion of contemporary women; Lin Yichen suffered from a psychological disorder after her sexual assault, but she faced life bravely. The above three types of subject matter, in a comprehensive hypertextual literary form, open a wide space to showcase the multiple possibilities of life.

Under the construction of the three elements of hypertext, multiple possible worlds of life are scattered throughout the work, and readers can constantly move towards these new possibilities in a rebooted way, transcending the real state of existence. According to quantum theory, "the universe is composed of countless parallel worlds"^[9], and in the creation of literary works, "the juxtaposition of multiple possibilities is called

‘parallel universe narrative’, which is seen as an allegory of ‘world construction’^[10]. In *Life Reboot*, the reader plays the role of the protagonist as the center of each world, and each choice has an impact on the trajectory of the world. Specifically, new possibilities for life can emerge after one link, after multiple links, and after one round of narration. First, the most concrete manifestation of this is the bifurcated world that emerges from each link selection. In the parallel worlds, there are countless Xiao Shi and countless Jiang Lei, all of whom are protagonists in the worlds they inhabit. Second, sometimes multiple link selections are needed to split different parallel worlds. These parallel worlds are connected by multiple nodes, and each world changes depending on the choice of the protagonist. Finally, each round of the narrative is completed with the author’s set life ending and its counterpart, and each time the reader makes a new choice for their life, they follow a different branch of development and reach a variety of life endings. In real life, due to objective factors, the life scenarios that people can personally experience are extremely limited, but in the many possible worlds presented in *Life Reboot*, “Reboot” provides readers with a way to constantly move towards new possibilities in life, satisfying readers’ aesthetic ideals.

As we can see above, “Life Reboot” uses the three elements of hypertext to realize the ideal mode of rebooting life, but is the new possibility of life arrived at after the second reboot or even multiple reboots necessarily better? Perhaps not.

The work uses the three elements of hypertext to simulate the possibilities of life and to inspire us to carefully grasp each decision in life. There is also a deeper meaning under this positive theme: one can approach the ideal of life infinitely, but not necessarily arrive at it entirely. With the use of the three elements of hypertext, a complex hypertext structure is formed. Experiencing life once in a work is already difficult, and restarting it means entering it twice or more. The behavior of the reader must change, and the trajectory of life—the nodes read to and the order of reading—all change, so there are generally more unknowns. Readers will be presented with options they have never experienced before. For one thing, life has countless unknown possibilities within the same interface scenario. In the work, each life stage has a corresponding range of activities, and there are about a dozen locations to visit. The main character has limited opportunities to act, the people and things he encounters may not be the same in every place at every time, and even restarting does not guarantee that every choice will have the desired effect. Second, in the longitudinal course of the story, whether it can change the direction of life is even more unknown. The reader has already experienced a large number of choices affecting the direction of the plot before returning to the previous archive point, and changing only one archive point does not necessarily change the ending, while restarting a new life directly may leave the reader bewildered by the arrival of unfamiliar events one after another. “Restarting” is not repeating the same life but constantly bringing new possibilities, which may be good or bad and unpredictable.

People are always expecting and imagining more possibilities in life. “Life Reboot” not only presents the ideal of life for many readers but also is a new expression of the literary ideal through hypertextual literature. While traditional printed works are often fixed to material carriers such as paper, hypertexts such as “Life Reboot” break through the artistic concepts established in the traditional printing era with their dynamism and openness, offering new possibilities for literary works to express literary ideals in the digital era. The role played by the three elements of hypertext is an infinitely dynamic and generative process. Although “Life Reboot” is finished, authors can continue to add new nodes and links to form new hypertext networks if they have the will. There is a limit to what human authors can create, but we have seen that hypertext can provide an ideal state of being for literary works: infinite possibilities that never end. It reminds us that in the face of emerging literary works such as hypertextual literature, we need to interpret and think in terms of dynamic development.

The nodes, links, and networks of hypertext can reach a wide range of places, but “Life Reboot” alone has boundaries after all, and there are always inaccessible places in a work, but the human mind and life experience are infinite. As for the study of new media literature, from the use of the three elements of hypertext to the construction of digital artistry to the opening of multiple life possibilities, we have explored the special value and unique charm of hypertext literature and art in layers.

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Conflict of interest

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