Transformation Dilemma and Future Prospects of Digital Intelligence Technology Enabling Convergent Development of Publishing Industry under the Perspective of "Implosion"

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Abstract—Under the impetus of digital intelligence technology, the publishing field has made a new leap forward, but this progress has also brought about the alienation of technology from individuals. Adopting the theory of media "implosion" as an analytical framework, this paper explores the challenges faced by the publishing industry in the process of digital transformation and intelligent upgrading. The study shows that although technology has expanded the boundaries of human perception, it has also weakened people's ability to think independently. The ubiquitous and full-time penetration of information triggers a dilution of value significance, while the blurring of boundaries may induce transgressive behavior. The article concludes with a prediction for the future of the publishing industry, noting that the industry will focus on user needs and create a more immersive reading experience for readers through immersive media technologies.

Keywords— Implosion; digital intelligence technology; publishing; convergent development.

I. INTRODUCTION

In December 2021, the National Press and Publication Administration issued the" 14th Five-Year Plan for the Development of the Publishing Industry", proposing to vigorously improve the level of digitization, digitization and intelligence of the industry, systematically promote the deep integration of publishing, strengthen the new engine of publishing development, and promote the application of big data, cloud computing, artificial intelligence, regional chain and other technologies in the publishing field. Publishing is the foundation of national cultural undertakings, and the state attaches great importance to the positive effects of artificial intelligence in the digital and intelligent transformation of the publishing industry. The application of AIGC in publishing English has improved the efficiency of content production, reduced the threshold of content creation, and brought diversified communication channels for content distribution. However, while digital intelligence technology has injected new vitality into the transformation and development of the traditional publishing industry, t has also caused a series of problems. Therefore, this paper intends to analyze the problems arising from the digital and intelligent transformation of the publishing industry under the perspective of the "implosion" theory and look forward to the prospects of the publishing industry.

II. EXTENSION AND AMPUTATION: SENSORY PARALYSIS AFTER SPEED UP

The technology constantly simulates the sensory organs of human beings, but it also brings about "amputation". McLuhan once joked that "media is massage", electronic media does not directly impact on the central nervous system to eliminate the pressure of the media on the human body, but with the help of the amputation of other organs of the body or weaken a certain perception ability to achieve the purpose of paralyzing the human subjective consciousness. In the stage of digital publishing, what is weakened is not human organs but human thinking ability. The mobility and portability of digital publishing are very strong, and the fragmented time can be fully utilized, which helps people save a lot of time, but at the same time, it also "cuts off" people's ability to think. Modern society is a fast-paced era. In such a large environment, people have to work hard to adapt to the changing environment. In order to not let themselves fall behind, they often choose to use fragmented time to read and learn. However, over time, fragmented reading habits will lead people to immerse themselves in fast-food shallow reading, which is far from the days of ' deep reading '. Gradually lose the ability to think and imagine, people 's thinking becomes more and more shallow and no longer think deeply.

As thinking declined, people's memory was weakened. 2500 years ago, Socrates denounced the text in the "Phaedrus". In his opinion, the text will kill the memory and weaken people 's memory. Following the writing of words, the invention of the printing press led to the further weakening of human memory. In the digital age, the storage and search functions provided by technology allow people to obtain and copy the information they want after only a search, which is undoubtedly one step closer to "killing" memory. Moreover, people's intelligence, their ability to understand complex things, and their ability to create new concepts all depend on the integration of long-term memory. McLuhan believes that "once we have overexposed the central nervous system, we should simultaneously produce a kind of paralysis and guard

against the development of 'narcissistic numbness' or we will surely die". In the extended phase of the central nervous system, once humans fall into a numb situation, their autonomous judgment will no longer exist, and the individual's will be submerged by the collective torrent, and eventually lose themselves. Although the digital world allows us to obtain instant pleasure and satisfaction, it is at the expense of individual independence and creativity.

III. FULL SPACE-TIME PENETRATION:THE NIHILITY OF MEANING UNDER THE INFLUENCE OF MEDIA

Firstly, the abstraction of symbols conceals the authenticity of the content. Baudrillard argues that when the age of electricity moves towards simulation, implosion tends to eliminate all boundaries, starting with the implosion of meaning, which refers to the process of the medium's abstraction and symbolization of the meaning it wants to convey when coding. In this process, there are deviations in people's interpretation of its meaning. Instead of bringing rich content to the audience, the symbols and information generated by electronic media are eroded and disintegrated, becoming useless noise. At the same time, this also means that the audience will not be able to distinguish the authenticity of the content provided by the media. Compared with traditional digital publishing readers, the content presentation process of intelligent publishing readers is much more complicated, and it needs to go through several links, such as topic selection planning, content production, intelligent proofreading, intelligent typesetting, intelligent printing, intelligent distribution, etc., rather than copying the edited content directly to other media, but the content will lose its original meaning when transmitted. In addition, since the pre-training data of generative AI may contain value bias and false information, its output will be characterized by discriminatory views, extreme remarks, and harmful information. Moreover, the published content generated based on readers' personal reading preferences cannot fully reflect the real world. It deprives readers of the independent selectivity of publications and hinders them from understanding knowledge in different fields. This has caused readers to be limited to a more closed self-space and a single, convergent cognitive range, unable to obtain new knowledge expansion, thus deepening their inherent prejudices. Moreover, the algorithm overemphasizes the subjectivity of the individual, which will also lead to the loss of cohesion of the whole society, weaken people 's sense of identity to the society and the collective, thus distorting the mainstream values and causing confusion in public opinion.

Secondly, the collage of meaning destroys human creativity. In Baudrillard's view, implosion will eventually lead to the nothingness of meaning, because the media in the process of making "reality" is also devouring meaning, and collage meaning and manufacture meaning. Zhang Ning et al. believe that automated content generation means that writing is no longer about knowledge creation and output, but a standardized task flow. Therefore, the automatic generation of published content is undoubtedly a process of screening, splicing, integrating and reconstructing extensive knowledge. For the same or similar topics and instructions, intelligent

language models based on algorithm preference such as ChatGPT will integrate a large number of similar results according to keywords in a short period of time. Moreover, the creation style of AI-generated content is single, and the content for imitation learning is limited, which leads to the problem of serious homogenization and lack of originality of digital publishing content. If the intelligent language model only focuses on the hot topics and trend events of the current society, it may aggravate this tendency, and over time, people's pursuit of spiritual culture will be replaced by "fragmented" reading that caters to their personal reading interests. In addition, artificial intelligence machines replace human editors to complete the creation, review, proofreading, distribution and other work of published content, which will also weaken individual creativity and subjective initiative to a certain extent.

Thirdly, the occupation of time and space represses the subjectivity of the individual. Baudrillard holds a pessimistic view of the mass media, pointing out that after the rise of the media, the reality in which human beings live is no longer real, but rather a "hyper-reality" created by the media, and that the emptiness of meaning will lead to the implosion of the whole society. Some scholars have pointed out that if the "implosion" is out of control, excessive presentation will make people at a loss and cause confusion of values. In this case, human beings will have numb silence on information and be influenced by tools created by themselves, and the society may become a one-dimensional society under the control of the media. Under the "waterfall" algorithm recommendation mode and the omnipresent and ubiquitous mobile communication, readers can obtain information from the platform anytime and anywhere, but at the same time,they are more vulnerable to the suppression of time and space, because readers' personal time and space are infinitely occupied, and all their fragmented time, private space and virtual time and space are extended and infiltrated by the massive publishing information they provide, and may be trapped in it. If readers do not read and think about the vast amount of published information that comes comes from the pavement, then these published content will implode into "meaningless noise" and have no value of existence. Furthermore, the published content is not all valuable things. Real life will always encounter many unsatisfactory places. People will seek comfort and pressure release in the virtual world. Therefore, many publishing entities will choose to cater to the audience 's preferences in order to compete for the audience 's attention. Publish a lot of vulgar and low-interest content on the platform, so that readers can gradually adapt to this pseudo-environment in the bubble of pan-entertainment and can not extricate themselves until they are "drunken and dreaming to death". People may become one-dimensional people under the control of media power.

IV. CROSSING THE LINE: THE OTHER SIDE OF THE BLURRED BORDER

The blurring of boundaries is a prominent feature of implosion. In McLuhan's view, the electronic medium instantly involves people in the same space-time, and the

boundaries of space-time disappear. While in Baudrillard's view, implosion eliminates the boundaries between the real and the virtual, so that people can't distinguish between the real and the dream, the true and the false. The blurring of boundaries is often a transgression. Infringement is a typical boundary-crossing behavior. Whether it is the digital publishing stage or the intelligent publishing stage, both of them share the common problem of copyright protection dilemma. From digitization to intelligence and then to future intelligence, the speed of technology iteration development is fast, but this problem has not been effectively solved so far. In the stage of digital publishing, the way of copyright transaction has changed. Different from the handwritten copy in the paper era, digital publishing can realize the reproduction of a large number of text contents only through simple copying and pasting. Moreover, the openness of the Internet and the concealment of users make it difficult to clarify the subject of responsibility when digital publications are infringed, and the cost of accountability is also high, which leads to the rampant piracy. For example, some merchants on shopping platforms scan the physical books they buy into electronic versions and then sell them at a low price to profit from them, but they do not pay fees to the authors of the books for disseminating their works. In the stage of intelligent publishing, the wave of ChatGPT has given rise to a new round of copyright protection dilemmas. Large language models such as ChatGPT do not mark the source of citations when generating content, and they will mix the content together, so that people cannot distinguish it at all, so that some people with hearts seize this loophole for academic fraud and endanger academic ethics.

V. THE FUTURE PROSPECT OF PUBLISHING INDUSTRY: CYBER REBIRTH

Baudrillard argues that postmodern society is illusory, disordered, and uncontrollable and that media technology has eroded meaning and exacerbated the spiritual alienation of human beings. However, Haraway subverts Baudrillard 's sense of disillusionment and believes that the implosion brings not destruction and degradation, but liberation and rebirth. That is to say, the "implosion" is not the disappearance of simple boundaries, but the rupture, reorganization and regeneration of boundaries. The implosion of technological science has given birth to cyborg and also shaped a new cognition: every living body is a unique individual, actor and participant, and there is no so-called domination, rule, oppression and ridicule, and many living beings need each other, freely connect, act and create meaning in the cosmic web. With the help of Haraway's theoretical perspective, we may be able to see a new and beautiful picture of the future of human-machine coexistence.

Cyborg people, also known as cyborgs and mechanized people, are mixed living beings formed by the coupling of inorganic and organic substances, but human-machine coupling currently exists only in science fiction and movies. The starting point of Cyborg is the enhancement of human abilities by technology, and in the Netflix animation Cyberpunk: Edge Walker, people gain great physical strength

by implanting chips or implants in their bodies. When it comes to cyborg, we have to mention the universe. The meta-universe includes VR, AR, MR, wearable devices, holographic images and other immersive media technologies. Although these devices and technologies are not embedded in the human body, with the development of smart phones, human beings have been initially equipped with the characteristics of "cyborg", and the virtual space dominated by " disembodiment" is also increasingly showing the characteristics of " embodiment". When these technologies are applied and integrated into the publishing industry, they are mainly reflected in the scenario-based communication mode, which means that the publishing body can create a hyper-realistic mimicry scenario through meta-universe technology, so that the virtual situation is closely integrated with the reader's sensory perceptions, and substitutes the reader into an open, multi-dimensional, switchable, interactive, and immersed dialogue situation, thus triggering the reader's emotional resonance with the published content, and bringing a embodied reading experience. This process also involves the depiction of user profiles like an algorithmic recommendation, but unlike in the past, it is no longer a static concept, but captures the dynamic process of reader behavior, including both physiological and psychological aspects. The perception system of the human mental world needs to contact the external world with the help of various perceptual grasps, such as the specific senses of sight, hearing, smell and touch. Furthermore, the perception system also needs to be organically combined with emotion, intention, and thinking to form cognition. In the future, wearable devices, hybrid virtual reality technology, and brain-computer interface technology will further "embed" the human body, collect and capture the perception of people's sense of smell, taste, and touch, extract and measure subtle changes in the human brain, mind, and emotions, greatly improve the "measurability" and "traceability" of human data, and break the "black box" of human brain cognition and emotion, "follow the feeling" may become a reality.

In summary, to find the boundaries between humans and machines, and between humans and technology in the context of blurred boundaries, it is necessary to first clarify the dominant status of human beings. Technology is created by human beings, and its generation is based on the needs of human beings., so human beings are the creators of technology as well as the dominators. There is no distinction between good and evil in technology. If people guide them to good, then it is good. If people guide them to evil, then it is evil. The publishing industry exists as a highland of human wisdom and a beacon of human civilization. Therefore, the healthy development of the publishing industry is of great significance to the progress of human society. In the face of various alienation phenomena formed in the process of transformation of the current publishing industry, it is not wise to directly stop the combination of people and technology or the integration of publishing industry and technology. Instead, we should strive to explore the method of harmonious coexistence between people and technology, and take into account the

achievement of humanistic value on the basis of technological development.

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