Visible Artificial Intelligence: Exploring the Enhancement of Chatgpt and Film Script Creation

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Abstract: As a joint link of artificial intelligence products, the emergence of ChatGPT triggered a global debate, and attracted the attention of practitioners all over the world. Meanwhile, multiple film and television production fields such as computer graphics processing, digital virtual shooting, CG special effects production, have embedded automatic content generation factors. However, artificial intelligence is also facing legal dilemmas and ethical constraints, researchers need to compare and analyze its advantages and problems, systematically consider the strengths and impacts, limitations and problems of AIGC, and provide reference and practical guidance for AI to better promote itself.

Keywords: Media, Script creation, AIGC, Chatgpt.

1. Introduction

In 2022, the ChatGPT (chat general pre training converter) developed by OpenAI, an American AI laboratory under Google, was officially launched on a multimedia platform. It can generate answers based on the patterns observed during the pre-training phase and statistical patterns. It can also interact based on a chat environment, communicate like a person, and even complete tasks such as writing papers, emails, scripts, copying, translating, coding, etc. Microsoft founder stated that the emergence of ChatGPT is of great significance to human history and is a groundbreaking invention. [1] It can be seen that ChatGPT, as a technology product that has already emerged and been implemented, has a wide range of application scenarios. [2]Fast story outline generation ability of ChatGPT have attracted people's attention from the beginning.[3]In December, the first film "Safe Zone" written and directed entirely by ChatGPT was officially released. Public opinion believes that this indicates that artificial intelligence has penetrated into the field of script creation, from early planning to script creation, to mid-term intelligent painting, text writing and composition, to later scene design, distribution and promotion. Although the improvement of efficiency will have significant social influence, it may also face greater challenges. This article will gradually clarify typical case studies in the fields of human intelligence and film script creation from the above aspects, providing guidance for answering the above questions.

2. Technological upheaval: Script Creation with Artificial Intelligence Throughout the Entire Cycle

The production of film works have redefined the way audiences participate and experience, building closer connections with them.[4] However,a good film still relies on the emotional creation of human authors,the core of film works still needs humanistic care.For example, "Breaking Through the East" tells the long journey of the people of Northeast China crossing mountains and seas and leaving their hometowns, "Life Events" portrays the strong resilience of the lower class people in the face of life and death,praising the hardworking spirit of rural cadres. Realistic films are created on the warmth and coldness of human emotions, possessing the "roots" of film and television, namely the embodiment of life logic, emotional logic, and ideological logic, as well as the examination of the authenticity of real life. Screenwriter Song Fangjin believes that the general pursuit of short, flat, and fast script creation models may be not conducive enough in the long terms. The fundamental principle of adhering to the realism lies in the artist's creative attitude. Only with a "sincere" attitude can one fully enjoy unique artistic resources, capture "unique" creative objects, and generate "colorful" artistic effects.

Professor Liu Tao proposed that in order for artificial intelligence to overcome its limitations in the creative process, it must maximize its participation in text creation, learn and progress. Otherwise, semantic errors, lack of emotional experience, and other defects will have a certain dissolving and deconstructing effect on the humanistic spirit.[5]For example, robots used to be a tool for humans to produce and interpret news, automatically collecting daily news content and quickly generating news reports, surpassing countless professional journalists. However, it should be noted that the writing mode of robot news is stereotyped and dogmatic, lacking innovation due to the use of fixed "templates".As its creation is generally based on data accumulation, it lacks human touch when reporting warm news, which has also led to the loss of users for news organizations. In terms of subject matter, for certain types such as tracking interviews, in-depth interviews, and non fiction writing, due to the particularity of their subject matter, it is difficult to achieve them solely through robots in a short period of time,and there are inherent deficiencies in the integrity, narrative style, and language features of robot news narration in terms of "depersonalization" and "expression restriction". [6]

From 2022 to present, intelligent creative writing is roughly in a transitional stage from "completely under human jurisdiction" to "fully automated independent creation". Machines have gained a certain degree of independence, but there is still a long way to go.[7]Many AI films and television scripts have entered the audience's field of vision. In 2024, as the creator of the AI short drama "Chinese Mythology", he integrated technologies such as text, images, music, and videos to achieve the full process of artificial intelligence reconstruction from creative conception to audio-visual presentation, exploring new models of cooperation between humans and machine intelligence. [8] The creator believes that by adopting "intelligent planning", it can become a "think tank" for creative planning. Story planning is the primary step in creating audio-visual content.Traditional screenwriters' inspiration is often limited by personal experience and knowledge structure, while big language models, which have learned trillions of words, are more familiar with the "human world" of ancient and modern times, both in China and abroad, compared to individual creators. By utilizing tools, it is possible to efficiently complete tasks such as script planning, character design, and the construction of the work's worldview. Taking the creation of "Chinese Mythology" as an example, the creative team used intelligent applications to conduct intelligent retrieval and correlation analysis of ancient Chinese mythological materials, quickly sorting out key information such as character genealogy and plot context. [9]Based on this, dozens of story candidate schemes were generated, and the process of building the segmented story framework only took 20 minutes, reducing the manpower

investment in early planning by about 70%. Since 2023,among the more than 200 AI videos recently created by the Tsinghua University team, the topic selection schemes have covered multiple vertical fields such as literature and history, technology, food, travel, education, etc.[10] Looking ahead to the future, ChatGPT will also enter the field of screenwriting, and empower more possibilities for artistic creation. [11]

3.   Super Script: Recombination of Old and New Scenes in Interrelated Narratives

Data shows that there are currently over millions professional screenwriters in China, but only 3% of their works are widely-spread. [12] This means that there is fierce competition in the screenwriting industry. In 2020, two students majoring in film and television production at Chapman University in the United States continued to write movie scripts using screenwriter Short Read and produced the short film "Lawyer". The director said, "Although we used artificial intelligence, from the perspective of the story, it stepped on the emotional nodes in a somewhat strange way." For example, post production has always been a time-consuming and labor-intensive process in film and television production. Nowadays, with the existence of intelligent shot classification, automatic strip splitting, segment indexing, intelligent subtitles, one click color grading and other methods can be used in video editing, allowing "scissor hands" to take over 80% of the rough cutting work. A 6-minute film can be roughly edited in just 20 minutes, which is five times faster than traditional manual editing. The comprehensive labor and time cost for delivering the entire video is about 1/16 of the traditional production process. After artificial intelligence takes over a large amount of foundational work, they believe that human creators can devote more energy to macro scheduling and artistic control of their works, as well as selecting and optimizing content.

3.1.   Technology Feedback: Application of technical polishing and script creation

The wave of AIGC is sweeping the entertainment industry. Public opinion believes that as technology continues to mature, it will increase the efficiency of audiovisual content creation by hundreds or thousands of times. The entire process may only take a few minutes to complete. This unprecedented dreamlike scene of audiovisual creation can be achieved with the assistance of artificial intelligence. However, although AI has shown great potential in various aspects of the film and television industry, it is still too early to predict that systems will replace human creators. For example, currently, AIGC still faces issues such as inability to handle lengthy works and lack of vitality, which has sparked heated discussions, including copyright ownership and content ethics issues. Masterpieces in film history, such as'Spring'and the 2023 horror masterpiece'Morgan', rely on the combination of social reality to create delicate, touching, authentic, and realistic characters. Director Wang Jing recalled her experience and said, "The creative process requires the pursuit of values such as interpretation, narrative, aesthetics, pleasure, or ethics. It is these dimensions that shine with human wisdom and spirit, and it is the innovation and value at these levels that truly move the audience."

3.2.   Disillusionary Drama: The possibility of creating diverse scripts

Brecht's theory of drama takes "estrangement" or "estrangement effect" as its ideological essence and value core, he proposed the following clear definition of the dialectics and epistemology reflected in estrangement plays: "estrangement is an understanding (understanding - not understanding - understanding), the negation of negation. [13]Brecht inherited Diderot's idea and made dialectical drama a unity of contradiction, drama, and narrative, which is also his brilliance.[14] Afterwards, he continued to propose the idea of social intervention in his aesthetic system of drama, believing that the aesthetic function of drama should not be limited to textual content, structure, language, and other aspects. The ultimate goal is to inspire people to think about life, understand the objective world, take

action, and participate in the transformation of reality. This means that the creation of drama involves the audience's dual expectations of seeking knowledge and beauty, and the thematic changes in the play are not the product of the artist's whims. Such thematic changes must conform to the comprehensive changes in the spiritual life of the times.Clearly, the aforementioned numerous requirements are undoubtedly complex. In contemporary society, it is difficult for a novice screenwriter to possess both proficient literary skills and sharp social insights, which is also the main obstacle that limits their ability to engage in high-quality script creation.

With the breakthrough development of technology, big data has been able to grasp the text. The advancement of natural language processing technology (NLP) and the application of big language models (LLM) have also made open understanding and generation of coherent text possible. At present, AI is proficient in various theories and can meet various requirements such as text extension, refinement, and stylization. Wu Geer pointed out that artificial intelligence has three auxiliary functions in script creation: Library analysis, data mining, and semantic analysis. With the assistance of machines, even ordinary people can produce high-quality works.

4. Probability margin: Think twice about the constraints of AI script creation

Faced with the upcoming era of AI, many people are worried that future screenwriters may no longer need creativity, and human screenwriters will eventually be replaced by machines. But in fact, this is an inaccurate viewpoint. At present, although artificial intelligence scripts are more efficient, they still have limitations in terms of text depth and diversified interpretation content.

4.1. First thought: Limitations of script narrative template

In modern times, compared to the classic narrative studies dominated by structuralism, film rhetoric narrative studies have become more focused on the issue of narrative communication inside of the text. This means that the script must balance narrative skills and aesthetic heights in order to enable the audience to decipher information according to the predetermined viewing trajectory of the movie.[15] However, there is a common problem of in the current process of artificial intelligence intervention in script creation, which involves huge randomness, uncertainty, and gamification. The fast track mode of random crawling also makes script themes more prone to superficiality, and sometimes even conflicts.

Technology is often a double-edged sword. At the same time as increasing the number of authors, it also means a diversion of readers. In order to attract more reading volume and gain visibility on numerous online article rankings, online article authors will have to put more effort into innovation and ideation, striving to break out of the homogenization trap. At the current rapid development speed of artificial intelligence, regardless of the height that AIGC has reached in generating poetry, even large-scale online novels are expected to surpass the vast majority of human authors. When the entire industry achieves human-machine integration, writing efficiency will be greatly improved. If online writers only stay at simulating, integrating, or even renovating existing writing patterns, routines, and internet memes to a limited extent, it will be difficult to effectively distinguish them from the massive influx of works, let alone surpass those creative and excellent writers among human peers. Technically, good stories always touch people's hearts. Only works with richer emotional experiences, more unique story creativity, and more diverse narrative art can stand out.

4.2. Second thought: Data exhaustion and the crisis of artificial intelligence using

Unlike human screenwriters, AI emerged from the training of large databases and is a text model based on corpora and scripts. Therefore, it does not have much emotional experience or the ability to deeply interpret the text. The intelligent subject represented by applications such as intelligent

screenwriting is different from the literary creation and interpretation mode based on human personal growth and emotional experience. The cornerstone of the former's writing is data analysis, databases, and corpora. At the same time, as an information tool that can gather human past knowledge, although generative artificial intelligence technology has unlimited potential, we still need to maintain critical thinking and be wary of the data-driven bias brought by technologism. In particular, algorithm recommendations in artificial intelligence may amplify or conceal certain aesthetic tastes, emotional tendencies, art types, or thematic content, leading to a convergence of online writers' writing, or only pursuing eye-catching themes and popular topics. As a result, the ideological power and literary value of the works will always hover at the same level, making it difficult to have significant exploration and innovation.

Under current technological conditions, generative artificial intelligence, which is in its growth stage, not only consumes extremely high energy, but also has the risk of being abused. The introduction of AIGC will bring a series of issues such as data security, information ethics, privacy challenges, and copyright governance to literary and artistic creation, including the online literature industry. It is necessary to put forward new requirements for the relevant regulatory system. At the end of 2023, The New York Times took the lead in launching the first wave of AI copyright, accusing companies such as Microsoft of using newspaper content to train artificial intelligence models without authorization, and these AI research and development institutions are also unable to avoid copyright disputes falling into a "model war". All of these remind us not only to pay attention to the structural, patterned, and homogeneous issues in generated text, but also to initiate strict filtering procedures, establish a sound regulatory governance system, and guard against plagiarism, privacy breaches, security vulnerabilities, and inappropriate content.

4.3. Final thought: The ethical shift of artificial intelligence

Under the trend, the arrival of AI is also accompanied by many controversies, and many people are worried that their positions will be replaced, although it does not have human emotions, as a rational tool to intervene in the creation of film and television scripts, its efficiency has far exceeded that of humans, and humans are likely to be defeated by it. This means that in the creative process of such a subject transformation, the deeper the intervention, and the resulting social controversies such as media ethics issues, legal responsibility issues, and whether traditional screenwriters will disappear are foreseeable future realities. From an algorithmic perspective, ChatGPT can currently freely store user interaction information, but it is currently unclear how artificial intelligence will process this data. The results generated should belong to derivative works formed by adaptation, translation, annotation, and organization based on existing works of others. When exercising the copyright of such works, the consent of the original author should be obtained and the copyright of the original work should not be infringed. This means that in the field of script creation, it is remain unknown whether data security, intellectual property, and copyright can be guaranteed.

5. Conclusion: Dialectically view the future of human and artificial intelligence integration and survival based on the present

At present, ChatGPT is just an application interwoven with different algorithmic languages, under the jurisdiction of human government departments. However, it should not be forgotten that ChatGPT is also a constantly evolving form of digital life, possessing the function to build digital content twins for the real world, digital editing capabilities, and almost unlimited digital creation capabilities.

Many experts believes that facing with the upcoming of AIGC generation, humans do not need molecular anxiety. In the future, they can constantly learn and adapt to new technologies. As the famous American writer Howard A. Rodman once said, "The ideas generated by artificial intelligence

may be clever or foolish, but they can help us break through the limitations of our imagination and bring us ideas that we have never had before. This boundary breaking approach is always beneficial. In the long history,any new thing that conforms to the trend of the times will not stop due to personal confusion. In the face of the future, humans should reflect on themselves while confidently, firmly, and wisely dealing with the symbiotic world of humans and machines. They should "settle" in the wave of technological opportunities and challenges."[16]Applying artificial intelligence to media creation can bring more possibilities and optimize the structure of the media industry. Perhaps this is the best way to present the coexistence of humans and machines and the integration of technology and art.

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