The "Plot Routine Dependence" of AI Screenwriting: Homogenization Risk of High-Frequency Reversals in Online Short Dramas and Breakthrough Paths

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Abstract

In recent years, the application of artificial intelligence (AI) technology in the field of online short drama creation has experienced explosive growth. Online short dramas, with their narrative characteristics of "short, concise, and fast" and plot design of high-frequency reversals, cater to the fragmented consumption needs of the public. AI screenwriting, relying on its efficient content generation capability, has become a core tool for the large-scale production of the industry. However, while improving efficiency, AI technology has significantly exhibited the problem of "plot routine dependence"—the content it generates mostly replicates the narrative framework of existing hit short dramas, and high-frequency reversals have fallen into the dilemma of homogenization. This not only restricts the improvement of the artistic value of online short dramas but also poses potential risks to the long-term development of the industry. Combining literature analysis and industrial practice observation, this paper systematically analyzes the manifestations and formation mechanism of the plot routine dependence of AI screenwriting, clarifies the multi-dimensional risks of homogenization in high-frequency reversals, and proposes breakthrough paths from three dimensions: technological optimization, industrial collaboration, and policy guarantee. It aims to provide theoretical reference and practical guidance for the high-quality development of online short dramas in the AI era.

Keywords

AI Screenwriting; Online Short Dramas; Plot Routine; Homogenization Risk; Breakthrough Paths.

1. Manifestations and Formation Mechanism of AI Screenwriting's "Plot Routine Dependence"

The "plot routine dependence" of AI screenwriting is essentially the path lock of AI on past successful narrative models under the combined effect of technical logic and industrial needs. Its manifestations are typical, and the formation mechanism also has clear technical and industrial incentives.

1.1. Typical Manifestations of Plot Routines

The plots of online short dramas generated by AI screenwriting are mostly concentrated in three types of highly solidified routines, and the design of high-frequency reversals shows the characteristic of "predictability":

Identity Counterattack Routine: The core framework is "the underprivileged protagonist is humiliated → accidentally obtains a hidden identity/special ability → counterattacks the villains one by one → finally achieves class leap". For example, AI-generated urban short dramas often set plots such as "a delivery rider is humiliated by a rich second-generation and then

reveals his identity as a group heir" or "an intern doctor is excluded by colleagues and then is proven to be a disciple of a top expert". The reversal nodes and conflict designs are highly similar.

Misunderstanding Reversal Routine: It follows the fixed process of "misunderstanding caused by lack of key information → villains use misunderstandings to create crises → the protagonist falls into a desperate situation → a supporting role suddenly reveals the truth". Typical cases include "the female protagonist mistakenly thinks the male protagonist betrays her, but in fact, the male protagonist is protecting her from gang threats" and "a girlfriend seems to snatch the male protagonist, but actually intends to prevent him from falling into a financial scam". The ways of generating and resolving misunderstandings lack innovation.

Crisis Resolution Routine: It relies on the narrative logic of "the protagonist encounters a life-threatening crisis (such as being framed and imprisoned, or the company is on the verge of bankruptcy) → the plot falls into a dead end → key clues suddenly appear (such as hidden evidence, a mysterious investor) → the crisis is resolved in an instant". Such reversals ignore the rationality of plot foreshadowing. For example, in pursuit of "thrilling experience", an AI short drama allows the protagonist to avoid the death penalty because "the real culprit suddenly surrenders" one minute before the execution, which deviates from realistic logic.

1.2. Formation Mechanism of Plot Routine Dependence

The routine dependence of AI screenwriting is not a defect of the technology itself, but the result of the superposition of three factors: training data, algorithm logic, and industrial needs:

Firstly, the "hit dependence" of training data leads to the solidification of narrative paradigms. Currently, the training samples of AI screenwriting are mostly from popular online short dramas in the past 3-5 years, and these works have already formed a traffic-oriented narrative paradigm of "counterattack + reversal"[1]. By extracting the plot structure, character relationships, and conflict design rules of these works through machine learning, AI naturally tends to replicate such "market-verified" frameworks when generating new content, making it difficult to break through existing routines.

Secondly, the "efficiency first" of algorithm objective functions restrains innovative attempts. The core goal of AI screenwriting is set to "improve user click rate and completion rate", and historical data shows that routine-based content is more likely to achieve this goal because it "conforms to the audience's cognitive habits". To reduce the "risk of innovation failure", the algorithm will actively avoid plot designs that deviate from the norm, and even "correct" the innovative plots modified by human screenwriters, forcing them back to the routine framework.

Finally, the "short cycle and low risk" demand of the industry strengthens path lock. The production cycle of online short dramas is usually only 1-2 weeks. To reduce market risks, investors are more inclined to require AI to generate routine-based content that "has been verified to be popular"[2]. This short-term interest orientation of "low cost and high return" makes the industry lack motivation to promote AI innovation, further solidifying the plot routine dependence.

2. Multi-Dimensional Risks of Homogenization in High-Frequency Reversals of Online Short Dramas

The plot routine dependence of AI screenwriting directly leads to the dilemma of homogenization in high-frequency reversals of online short dramas. This dilemma is not simply "similar content", but multiple damages to the audience experience, industrial ecology, and cultural value.

2.1. Audience Level: Aesthetic Fatigue and Emotional Alienation

High-frequency and homogenized reversals will gradually eliminate the audience's sense of narrative expectation, leading to "aesthetic fatigue". Wang's research points out that when the audience can accurately predict reversal nodes such as "there must be a noble person to help when the villain is about to succeed" or "the protagonist will definitely obtain mysterious power after falling into a desperate situation" through repeated viewing, they will lose the sense of freshness towards the plot and then generate a sense of boredom[3]. Data from a leading short drama platform shows that in 2023, the average daily viewing time of users decreased by 12% compared with 2022, and the abandonment rate increased by 18%. The core reason is that "the content is routine and lacks new ideas".

At the same time, routine-based plots lack in-depth portrayal of characters' emotions. Although AI screenwriting can quickly build a plot framework, it is difficult to capture the complexity of human emotions—such as the inner struggle of the protagonist after counterattack and the human dilemma behind the villains' evil deeds. This design of "valuing reversals over emotions" makes it difficult for the audience to have in-depth resonance with the characters, eventually forming emotional alienation of "forgetting after watching", which weakens the emotional communication value of online short dramas.

2.2. Industrial Level: Suppression of Innovation Ecology and Path Lock

Homogenized content will trigger the "bad money drives out good money" effect in the industry. The production cost of routine-based short dramas generated by AI is only 1/3 to 1/2 of that of original short dramas, and the playback volume is stable, making investors more willing to invest resources in producing such content. On the contrary, high-quality original scripts are difficult to obtain financial support due to the need for a longer creation cycle, higher production cost, and unknown market risks, leading to the gradual shrinkage of original screenwriting forces (Li & Liu, 2024). In the long run, the industry will fall into a path lock of "relying on AI routines → degradation of original capabilities → inability to respond to market changes", losing the core driving force for sustainable development.

In addition, homogenization will reduce the market competitiveness of online short dramas. With the improvement of the audience's aesthetic level, the demand for "innovative and in-depth" content is increasingly strong, but routine-based content cannot meet this demand. If the industry continues to rely on AI routines, it will gradually lose its core user group and eventually be replaced by emerging content forms.

2.3. Cultural Level: Shallow Value and Lack of Spiritual Connotation

Most AI-based routine short dramas focus on shallow themes such as "revenge, thrill-seeking, and curiosity", lacking attention to real life, in-depth discussion of human nature, and transmission of cultural values. For example, most AI short dramas take "wealth accumulation" and "power control" as the core pursuit of the protagonist, ignoring the expression of positive values such as family affection, friendship, and social responsibility; some works even present bad orientations such as "rationalization of illegal crimes" and "money worship" in pursuit of reversal effects.

This content orientation of "valuing entertainment over value" will weaken the cultural function of online short dramas. As an important carrier of mass cultural communication, online short dramas should undertake the responsibility of spreading mainstream values and reflecting social reality. However, homogenized routine-based content not only fails to achieve this goal but may also mislead the audience's values (especially that of young people), which is not conducive to the healthy spread of culture and the construction of spiritual civilization.

3. Breakthrough Paths for Plot Routine Dependence and Homogenization of AI Screenwriting

To solve the problems of plot routine dependence of AI screenwriting and homogenization of high-frequency reversals, it is necessary to break the thinking of "single technical drive" and build a systematic solution from three dimensions: technological optimization, industrial collaboration, and policy guarantee. The core is to achieve a balance between "AI's technical rationality" and "human's artistic sensibility".

3.1. Technological Optimization: Breaking Data Dependence and Algorithm Limitations

The breakthrough at the technical level lies in optimizing the "learning source" and "decision-making logic" of AI, guiding it to shift from "replicating routines" to "stimulating innovation":

Constructing a Diversified Training Dataset: On the basis of existing short drama samples, introduce classic literary works (such as novels by Lu Xun and Mao Dun), realistic film and television scripts (such as Minning Town and A Lifelong Journey), and narrative materials with diverse cultural backgrounds (such as East Asian family ethics and European realistic narratives) to broaden the narrative perspective of AI (Li & Liu, 2024). At the same time, add "anti-routine" samples (such as short dramas with non-linear narratives and open endings) to enable AI to learn innovative narrative models and reduce dependence on a single routine.

Designing an "Innovation-Incentive" Algorithm: Adjust the objective function of AI, adding indicators such as "plot novelty", "emotional richness", and "cultural value score" in addition to "click rate and completion rate". Use natural language processing (NLP) technology to identify the "routine similarity" of plots, and give higher weight to innovative plots below the threshold to encourage AI to generate differentiated content; at the same time, retain the "correction authority" of human screenwriters over AI plots, allowing humans to break the conventional logic of the algorithm and avoid AI's "forced correction" of innovative plots.

3.2. Industrial Collaboration: Building a Dual-Drive Creation Model of "AI + Human"

At the industrial level, it is necessary to reshape the creation process, clarify the division of labor between AI and human screenwriters, and form a collaborative mechanism of "technology assisting creativity and creativity leading technology":

Clarifying the "AI + Human" Division of Labor System: AI is responsible for basic and repetitive creation tasks, such as building a basic narrative framework, designing regular plot nodes, and generating scene descriptions; human screenwriters focus on the "creative core", including designing differentiated reversals (such as "reversal is not to solve the crisis, but to reveal the human truth behind the crisis"), portraying characters' emotions and inner worlds, and integrating realistic themes and cultural values (Zhang, 2023). For example, in the creation of urban short dramas, AI can generate the basic plot of "the protagonist's business failure", while human screenwriters supplement content at the emotional and value levels, such as "the protagonist's reconciliation with his family after failure" and "the growth insights gained from failure".

Establishing a Differentiated Evaluation and Incentive Mechanism: Platforms need to break the evaluation system of "only focusing on playback volume", incorporate "innovation index", "cultural connotation", and "user emotional resonance" into the content evaluation indicators, and provide traffic support (such as homepage recommendations and topic exposure) and financial subsidies to works with strong originality and positive value orientation; at the same time, set up a special "AI + Original" award to recognize teams that have performed well in collaborative creation and stimulate the industry's innovation momentum.

3.3. Policy and Educational Guarantee: Improving the Innovation Support System

Breaking the homogenization problem also requires external support, and creating a good environment for industrial innovation through policy guidance and talent training:

Introducing Targeted Policy Support: Relevant departments can formulate the Guiding Opinions on the High-Quality Development of Online Short Dramas, clearly oppose content homogenization, and encourage originality and innovation; set up an "original short drama support fund" to provide financial support to original works with practical significance and cultural value; at the same time, strengthen the review of AI-generated content, eliminate routine-based content that is "vulgar and illegal", and guide the healthy development of the industry.

Cultivating Compound Innovative Talents: Film majors in colleges and universities and cultural and creative training institutions offer courses such as "AI Cultural and Creative Creation" and "AI Ethics and Artistic Innovation" to cultivate compound talents who not only master the principles of AI technology (such as algorithm logic and data processing) but also have artistic literacy (such as narrative innovation and emotional expression) and cultural cognition (Li & Liu, 2024). Such talents can play a "bridge role" in the collaborative creation of AI and humans, understanding both how to guide AI innovation and how to make up for AI's shortcomings through human creativity, providing core human support for industrial innovation.

4. Conclusion

The "plot routine dependence" of AI screenwriting and the homogenization of high-frequency reversals in online short dramas are phased problems arising in the process of adapting technological development to industrial needs, and they are not irreversible. The essential contradiction lies in the imbalance between "AI's efficiency logic" and "art's innovation logic"—if AI is allowed to dominate creation, the industry will fall into a "routine trap"; if the value of AI is completely denied, the efficiency dividends brought by technology will be missed.

The key to breaking the dilemma is to build a three-dimensional system of "technological optimization - industrial collaboration - policy guarantee": breaking AI's routine dependence through technological innovation, releasing creative potential through "AI + human" collaboration, and providing support for innovation through policies and education. Only in this way can AI be transformed from a "routine replicator" to an "innovation stimulator", promoting the online short drama industry to achieve both efficient production and the dual improvement of artistic value and cultural value, and ultimately moving towards a path of high-quality development.

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