Collective nostalgia and digital reconstruction of film photography among Generation Z on social media

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Abstract. This study explores the phenomenon of collective nostalgia and digital reconstruction centered on film photography among Generation Z in the context of social media. Through quantitative and qualitative analyses, it reveals three pathways: individual production, collective construction, and platform empowerment. The research finds that Generation Z digitally reproduces the "aura" of old media, achieves intergenerational emotional resonance through social media interactions, and completes the large-scale dissemination and cultural re-encoding of nostalgic content with the help of algorithmic mechanisms. This thus demonstrates the cultural logic through which digital natives reconstruct identity, emotion, and cultural identification amid the tide of technology.

Keywords: Generation Z, film photography, digital nostalgia, collective memory, social media

1. Introduction: Generation Z and film photography

Technological iteration in the digital age has spawned a unique media nostalgia phenomenon among Generation Z. As of October 2025, the topic of "film" on Xiaohongshu has accumulated over 17.781 million discussions, and related topics on Douyin have reached 1.15 billion views. Film photography, an "old medium," has experienced a revival on social platforms, forming a large-scale collective nostalgia landscape.

Generation Z is a group characterized by "non-experiential film nostalgia." Yet they continuously purchase old film cameras on second-hand platforms and share film photography works, experiences, and more on social media. They form nostalgic communities through "collective resonance," reconstruct film symbols with digital technology, and ultimately complete a closed loop of "nostalgic emotion - digital expression - identity recognition," achieving the digital reconstruction of film photography in the social media era.

Therefore, this study will further explore this "film nostalgia and reconstruction" phenomenon by utilizing deep learning technology, theories related to digital nostalgia, and combining qualitative research.

2. Theoretical background discussion

The collective nostalgia and digital reconstruction of film photography by Generation Z on social media is a cultural practice intertwined with multiple theoretical perspectives. Its core logic and underlying implications can be clearly explained through the mutual verification of core theories. Walter Benjamin's "Aura" theory provides a central interpretive framework. It refers to the "here and now" nature of works of art in specific temporal and spatial contexts, as well as the emotional connection between the subject and the work arising therefrom [1]. It does not merely point to the non-reproducibility and sense of temporal-spatial distance of film photography, but also contains a profound humanistic background. The real presence of the subject in the "here and now," together with the temporal-spatial connection and interactive aesthetics emphasized by "aura-like perception," collectively highlight that the essence of aura does not lie in film as a single artistic symbol itself, but is born in the entire process of creation, interaction, and perception of film by Generation Z, realizing a unique reproduction of artistic aura in the age of mechanical reproduction. The core implication of "aura" does not lie in the uniqueness and singularity of art. Its true humanistic background is fully confirmed in Benjamin's discussions on artistic authenticity and "aura-like perception": on the one hand, "here and now" emphasizes the real presence of the subject's experience in artistic activities; on the other hand, "aura-like perception" focuses on human beings' temporal-spatial perception and interactive, connected aesthetic experience in artistic

activities. The significance of aura does not lie in the work of art as a single symbol, but is born and formed in the temporal-spatial process of artistic creation, interaction, and perception [1].

Media nostalgia theory further reveals the dual dimensions of this practice: the rise of digital media nostalgia provides individuals with the opportunity to see changes in themselves at different life stages. People attempt to fill the gaps in real experiences and emotions in various ways, thereby achieving self-healing, self-strengthening, and self-identification [2]. Generation Z not only regards film as a carrier of "mediated nostalgia" bearing childhood memories and intergenerational symbols but also values the "technological nostalgia" value of film shooting, such as physical texture and operational processes. This dual integration echoes Sedikides' view that digital media nostalgia provides a path for Generation Z to fill emotional gaps, achieve self-healing and identification. By connecting the "past self" and the "present self" through film images, it avoids psychological dilemmas caused by identity fragmentation.

Social acceleration theory explains the internal motivation of this practice: in the course of human civilization, "slowness," as a profound ontological wisdom, has quietly woven the context of Eastern culture. Standing at the critical point of civilizational transformation, the philosophy of slowness is not a simple rejection of technological civilization, but an attempt to reconstruct the qualitative dimension of experience and the temporal ecology of life amid the vortex of acceleration [3]. The advancement of civilization should not come at the cost of sacrificing the richness of life, and the carnival of efficiency must ultimately return to the questioning of meaning. Faced with the capital logic of efficiency supremacy and technological discipline in digital society, as digital natives, Generation Z resists the acceleration vortex through the ritual sense of film "slow photography." They reconstruct the qualitative dimension of life experience in the ontological wisdom of "slowness," refusing to sacrifice the richness of life for the carnival of efficiency, demonstrating distinct social critical and reflective attributes. Finally, collective memory and media memory theories outline the communication context of this practice: the film nostalgia of Generation Z starts from individual creation, and through interactive sharing and topic aggregation on social media, transforms individual memory into a collective narrative co-created by the group. In emotional release and community resonance, it reconstructs intergenerational cultural identification centered on film visual symbols, making the digitally reconstructed film nostalgia a cultural link for Generation Z to anchor themselves and connect with others.

3. Research methodology design

Today, social media has become the main medium for carrying nostalgic content. Since this study focuses on the film photography of "Generation Z," two platforms with high activity among Generation Z are selected: BILIBILI (hereinafter referred to as Bilibili) and Xiaohongshu. Generation Z users not only publish single dynamic self-expressions on these two platforms but also convey collective identity through comments and discussions with other users.

In view of this, this study carefully selected the most comprehensively discussed videos and posts under the "film photography" theme on Bilibili and Xiaohongshu: two videos on Bilibili ("Popular for 100 Years, How Long Will Film Accompany Us?" with 4,209 comments and "This! Is Film!" with 728 comments), totaling 4,937 comments; and four posts on Xiaohongshu ("Days Are Always Gentle and Shining" with 93 comments, "Here Comes the Film Collection You've Been Asking For" with 43 comments, "Hokkaido Shot with Fujifilm Is Too Beautiful" with 56 comments, and "Film Makes People Happy Twice" with 52 comments), totaling 244 comments. After deduplication and deletion of invalid data, 3,202 valid comments (3,014 from Bilibili and 188 from Xiaohongshu) were finally obtained as analysis samples.

3.1. Quantitative analysis

The quantitative part mainly involves the process of Text Mining, which refers to the application of data mining methods on text datasets, aiming to mine information and discover knowledge from a large number of unstructured text collections [4]. The text mining part of this study includes two parts: word frequency statistics and sentiment analysis.

3.1.1. Word frequency statistics

Word frequency statistics include the following three steps: first, collecting and cleaning comment texts. This study collected full first-level comment data of the videos, including commenters' usernames, comment content, and likes. In terms of sample selection, duplicate data and invalid data such as only emojis, punctuation marks, and texts unrelated to the theme were collected and removed. The data cleaning process includes deduplication, word segmentation, and stopword filtering. This study uses the jieba word segmentation tool (non-model-driven) based on prefix dictionaries and dynamic programming algorithms to preprocess comment texts; uses the Harbin Institute of Technology stopword list (hit_stopwords.txt) to manually filter irrelevant vocabulary; data visualization relies on matplotlib and wordCloud to generate charts, which are static analysis result displays, and word clouds are produced.

3.1.2. Sentiment analysis model construction

This study established a three-level sentiment classification system: positive, negative, and neutral. The sentiment classification model adopts the Chinese version of the BERT (Bidirectional Encoder Representations from Transformers) model, bert-base-chinese. Its key component is BertTokenizer for word segmentation and encoding of Chinese texts. The model architecture features include: pre-training foundation, which is a BERT model pre-trained on Chinese corpora; a classification head added after the Transformer output layer of BERT (default structure); input processing using a maximum sequence length of 128, supporting GPU acceleration auxiliary technology, mixed-precision training enabled through fp16=True, and finally, using accuracy_score as the model evaluation metric.

3.2. Qualitative research design

This part adopts the qualitative text analysis method to explore the internal logical connection of Generation Z's digital nostalgia behavior in film photography. According to Earl Babbie, quantitative analysis is prone to falling into statistical analysis of data and ignoring theory, while the interaction between data collection, analysis, and theory in qualitative research is closer [5]. Based on this, this study will focus on the connection between film photography and social platforms for qualitative research on the basis of the conclusions of the quantitative analysis model. Combining the results of online platform observation, this study selected 5 "Generation Z" users for in-depth online interviews (interview period: July-August 2025, single interview duration: 20-30 minutes) from the dimensions of sample comment presentation effects, shooting practice experience, and the process of getting involved with film photography. The interview outline focuses on shooting motivation, social sharing behavior, and other dimensions, combined with users' personal "film photography" related experiences, to explore the relationship construction logic between film photography and social media platforms. All users have given their consent and will be referred to by their online names below.

4. Data analysis

4.1. Comment word frequency statistics, word clouds, and sentiment analysis

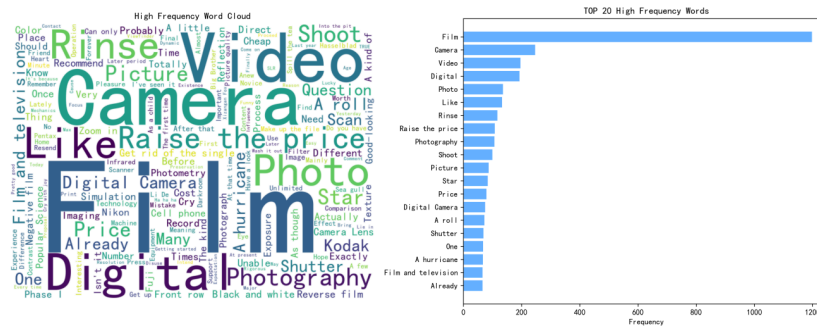4.1.1. Bilibili statistics and analysis

Figure 1. Word cloud and top 20 high-frequency words of film photography comments on Bilibili
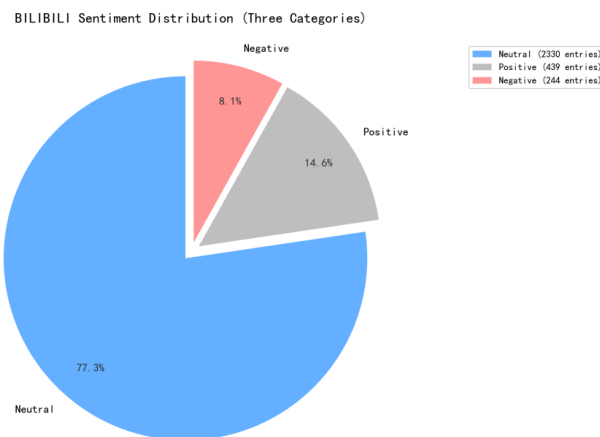
Figure 2. Sentiment distribution of film photography comments on Bilibili (three categories)

In the context of Bilibili, Generation Z's film photography practice revolves around the core word "film" in the word cloud, carrying out technological nostalgia and digital reconstruction, as shown in Figure 1: technical terms such as "camera," "film," and "rinse" reflect traditional photography practices. By restoring material rituals such as loading film and darkroom work, they resist digital instantaneity. The contrast with "digital" and "digital camera" reversely explores the "aura" characteristics of film, realizing the digital value reconstruction of nostalgic symbols. The word "raise the price" reflects the commercial empowerment of nostalgic culture and the hidden worries of consumerism.

In terms of sentiment distribution, as shown in Figure 2, 77.3% of neutral expressions reflect Bilibili's attribute as a knowledge community. Generation Z transforms personal practices into technical popularization and experience sharing, promoting the technical inheritance of collective memory. 14.6% of positive emotions stem from the uncertainty and unique texture of film shooting, becoming the core driving force of collective nostalgia. Although 8.1% of negative emotions expose dilemmas such as scarce consumables and operational thresholds, the sense of participation in "overcoming difficulties" strengthens identity recognition, becoming a dynamic mechanism of nostalgia. At the same time, the high-frequency word "video" reflects platform characteristics, transforming film rituals into video narratives, realizing the digitally visible communication of old media rituals. Then it break through traditional photography circles through community knowledge reproduction. Ultimately, integrating technology, emotion, and digitalization, while safeguarding the materiality and ritual sense of film, it completes knowledge production and emotional resonance through digital platforms, realizing the dual reconstruction of film culture.

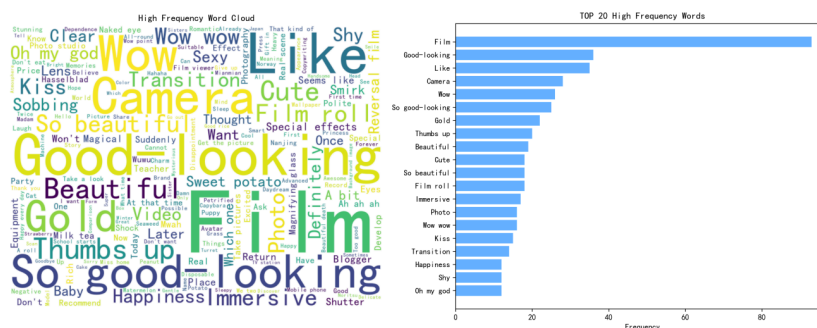### 4.1.2. Xiaohongshu statistics and analysis

Figure 3. Word cloud and top 20 high-frequency words of film photography comments on Xiaohongshu
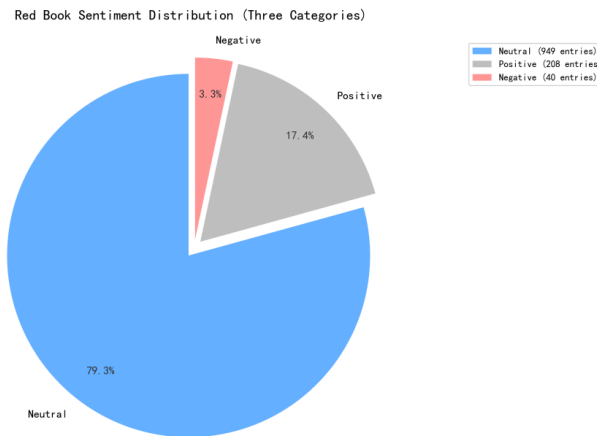
Figure 4. Sentiment distribution of film photography comments on Xiaohongshu (three categories)

In the context of Xiaohongshu, Generation Z's film photography practice presents the characteristics of aesthetic-driven emotional nostalgia and social reconstruction, as shown in Figure 3: the word cloud centers on "film," surrounded by emotional words such as "thumbs up," "like," and "wow." Words such as "cute," "good-looking," and "beautiful" highlight the visual aesthetic experience of film photography. Generation Z transforms the retro texture of film (such as grainy haziness and yellowish colors) into style symbols on social platforms. Through intuitive expressions such as "so beautiful," they shape film photography as "romance beyond film" against digital homogeneous aesthetics, which is the aesthetic reconstruction of nostalgic symbols. Interactive words such as "like" and "recommend" echo Xiaohongshu's attribute of "social seeding." Through interactive rituals (such as liking works of like-minded people and recommending film models), they build a "film enthusiast community," transforming personal nostalgic experiences into collective aesthetic experiences, realizing the social diffusion of "niche hobbies" and strengthening group identity recognition.

In the sentiment distribution, as shown in Figure 4, 79.3% of neutral expressions are not emotionless, but presented as "sharing neutrality": such as recording shooting scenes ("First film experience in Nanjing") and equipment parameters ("This film is amazing"), which actually imply a preference for film. 17.4% of positive emotions focus on the emotional empowerment brought by film— the uncertainty of film shooting (such as "blind box-style film development") and retro texture meet Generation Z's pursuit of "unique aesthetics." The proportion of negative emotions is extremely low at 3.3%, mostly pointing to "failed film development" and "rising film prices." However, due to Xiaohongshu's "beautiful sharing" atmosphere, negative expressions are often transformed into "pitfall reminders," becoming supplements to community knowledge and thus strengthening the collective memory of "joint exploration."

Compared with Bilibili's tendency towards technological rational nostalgia, Xiaohongshu emphasizes the "aestheticization of nostalgia": Generation Z transforms film photography from "technical practice" into a symbol of life aesthetics. Through social behaviors such as liking and seeding, they make film nostalgia culture daily and communicable. At the same time, it also reflects the personalized expression of Generation Z— film photography is not only a carrier of nostalgia but also a style tool to show "literary sense," realizing the digital integration of nostalgic culture and personal style. This practice is essentially a group of Generation Z weaving an emotional network of collective memory through social interaction centered on aesthetic experience on social platforms, completing the "lightweight" reconstruction of film nostalgia, and making old media a social currency in the digital age amid positive emotional resonance.

4.2. Summary

In summary, from the word frequency statistics of the two platforms, it can be seen that Generation Z presents a phenomenon of collective nostalgia and digital reconstruction around film photography on social media. Collective nostalgia is reflected in the attention and discussion on traditional film photography equipment and craftsmanship, while digital reconstruction is manifested through social media interaction and sharing, aesthetic communication, and commercialization discussions. Different platforms show different characteristics and focuses in this process, but essentially, they are the two-way decoding of "nostalgia" by Generation Z in the digital age: they not only explore the "hardcore value" of old media with technical rationality but also endow it with "social vitality" with aesthetic sensibility. This symbiotic reconstruction of "technology + emotion" allows film photography to break through the constraints of physical media and grow into an intergenerational cultural symbol with both "aura core" and "social extension" on digital platforms, providing a highly tense sample for understanding the media practices and cultural resistance of Generation Z.

5. Collective reconstruction of "nostalgia - expression - identification"

5.1. Nostalgic emotion: self-narration and identity visualization in digital nostalgia

In the digital media environment, Generation Z's film photography practice is first reflected as an "individualized production" process. The core logic of this stage lies in individuals transforming personal experiences into visual nostalgic expressions through activities such as shooting film, developing film, and publishing photos, realizing the "digital translation of memory" and "image narrative of identity." In this process, individual nostalgic creation is not only a technical operation but also a symbolic practice of identity construction. The interviewee "Wuwuheiya" said: "When shooting, I am more cautious than using a digital camera. I will think about composition and light and shadow, and consider a lot in the early stage of shooting. Because I can't see the effect immediately after shooting, I feel anxious and expectant." By reenacting the complete film ritual of "loading film - developing - color grading," they resist the "fast-paced" logic of digital society with "slow photography." The interviewee "Chenmian" said: "The process of shooting with a film camera is more complicated and tedious, because you have to load the film, advance the film, etc. It makes you feel more involved and ritualistic." This practice is a reproduction of the real sense of presence in the "here and now": they resist virtual image production through material operations, allowing the creative process to regain temporal depth and emotional warmth. Thus, film photography has become a way for Generation Z to "slow down" and a gentle resistance to social acceleration. The interviewee "Beiyu" said: "Sometimes it takes a month, even a year or half a year to finish shooting a roll of film and then develop it. It seems to reproduce your memory again."... Although their forms of symbolic meaning assignment are different, they all construct a ritualized imagination for this unique pause in film photography, filling it with their own spiritual needs and greatly deepening the memory in the photography process [6]. Overall, the individual production stage reflects the characteristics of "digital translation of nostalgia"— rewriting the aesthetics and ritual sense of old media with digital means, integrating individual emotions, memories, and identities into image narratives, and realizing "self-imaging" and "memory personalization" in the digital age.

5.2. Digital expression: memory sharing and the formation of intergenerational "nostalgic community"

If individual production builds the emotional foundation of nostalgia, then the sharing mechanism of social media promotes the "collectivization of nostalgia." On social media platforms, Generation Z enables personal experiences to be continuously viewed, imitated, and recreated by others through publishing, commenting, reposting, and other behaviors, thus forming a "memory community." This process reflects the social transition from individual memory to intergenerational collective memory. Research data shows that the number of notes under the "film photography" topic on Xiaohongshu has exceeded 2.5 million. This large-scale communication makes film images an intergenerational language— it is both a medium for emotional communication and a link for identity recognition. The interviewee "Wuwuheiya" said: "I hope others can see my photos; I also look at tutorials and shooting guides shared by others." Interactions between users, such as "liking," "collecting," and "recommending film models," complete emotional resonance and knowledge reproduction in seemingly daily communications. The interviewee "Weiyang" said: "When I see film photos taken by others, it suddenly brings back memories of my trip to that place. Sometimes I have forgotten what I took, but seeing the film photos posted by others reminds me of it, which is very surprising." This emotional model indicates that nostalgia is no longer an isolated individual experience, but is transformed into a shared cultural emotion through interactive communication. At the same time, different platforms show different characteristics in the collective construction of nostalgia: Bilibili presents a tendency towards "knowledge-based nostalgia," while Xiaohongshu reflects an "aesthetic-based nostalgia" path. This shows the meaning network co-woven by digital youth and film photography, and thus highlights another possibility beyond continuity and rupture in media technological iteration [6]. This multi-platform resonance transforms nostalgia from a personal interest into a community culture. The value of nostalgia no longer lies solely in reproducing the past, but in forming "emotional consensus among peers" through digital interaction.

5.3. Identity recognition: nostalgic diffusion and cultural re-encoding under algorithmic logic

On the basis of the resonance between individuals and groups, social media platforms further promote the large-scale diffusion of nostalgic content through algorithmic recommendation, traffic distribution, and topic aggregation, forming the third reconstruction path of "platform empowerment." In this process, platform algorithms are not only "cold numbers" but also actors that construct and shape society and culture [7]. First, the algorithmic recommendation mechanism has brought an amplification effect to the communication of nostalgic content. Through user portraits and interest tags, the platform accurately pushes relevant content, enabling the nostalgic theme to receive concentrated exposure in a short time, thus creating a digital landscape of "film fever." The interviewee "+1" said: "(The platform) often pushes me content such as what effects different films produce, and experienced people will share parameters." Second, the algorithmic logic has brought about content homogenization and emotional strengthening, spawning some modal styles of "film style." Although a large number of creators repeatedly use similar

filters, templates, and shooting styles, this homogenization has deepened the recognition and communication power of nostalgic culture, making nostalgia an easily identifiable visual symbol system. The interviewee "Chenmian" said: "Some people around me are very good at shooting film-like photos, that is, adding grainy filters to photos. It seems that everyone likes the texture of film." Third, the commercial logic of the platform mechanism has further promoted the consumption of nostalgia. Nostalgia has a tendency to be embedded in the commodity circulation system. Algorithms not only recommend emotional content but also push related products, making nostalgia a link in the commercial value chain. However, it is also necessary to pay attention to the accompanying risks of "authenticity anxiety" and "disappearance of aura." The strengthening of platform algorithms and templated production may weaken the original individual sincerity of nostalgic images, making nostalgia gradually evolve into a performative and formatted cultural landscape.

5.4. Summary: digital cycle and cultural regeneration of nostalgia

In summary, in the film photography practice of Generation Z on social media, three reconstruction paths are presented. This process reflects the dynamic cycle logic of nostalgia: at the individual level, nostalgia is a visualization process of identity narrative and emotional healing; at the collective level, nostalgia is a social process of forming shared memory and intergenerational resonance through interaction; at the platform level, nostalgia is a process of cultural reproduction and emotional capitalization driven by algorithms. The three are nested and circulate, collectively completing the digital closed loop of "nostalgia - expression - identification." In this closed loop, Generation Z not only expresses individual emotions through film images but also participates in collective cultural construction, and endows nostalgia with new communication logic and social significance with the support of platform technology. Thus, the film photography of Generation Z is not a simple "retro trend," but a cultural reconstruction practice in digital society: they use the aesthetic symbols of old media to rewrite the imagination of "slow life," "authentic existence," and "emotional belonging." It is both a reflection on the accelerated society and a reproduction of self-identity and cultural identification. This "threefold reconstruction" path reveals the contemporary expression of digital nostalgia and provides a new cultural perspective for understanding how digital natives reconstruct meaning and emotion amid the tide of technology.

6. Conclusion

By combining quantitative and qualitative research, this study reveals the three-level reconstruction path through which Generation Z realizes collective nostalgia and digital reconstruction through film photography in the social media environment, focusing on the film nostalgia and digital reconstruction of "Generation Z." The conclusion shows that the film nostalgia of Generation Z is not a simple retro reproduction, but an innovative reconstruction realized through digital platforms: it restores the material rituals and "aura" characteristics of film photography with "technological nostalgia," resisting the efficiency-first logic of the digital age; at the same time, it endows old media with social and symbolic new life with "aesthetic nostalgia," forming a three-dimensional communication network of "technology + aesthetics." This reconstruction not only responds to the dual dimensions of Benjamin's "aura" theory and media nostalgia theory but also expands the construction path of collective memory through platform collaboration. It has become a cultural practice for Generation Z, who grew up in the social media environment, to resist digital alienation and construct identity recognition.

This study aims to theoretically reveal the "platform symbiosis" law of old media nostalgia in the digital age, supplement empirical evidence for cross-platform comparison to the media nostalgia theory, and deepen the understanding of the digital construction mechanism of Generation Z's collective memory. At the same time, it provides reference for the construction of social media content ecology, helping platforms meet the diverse nostalgic needs of Generation Z through differentiated positioning. Of course, future research can be further expanded to intergenerational comparison, long-term tracking, or combined with emerging AI technologies to analyze the generative reconstruction of film nostalgic content, so as to more comprehensively grasp the evolution trend of nostalgic culture in the digital age.

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