Algorithmic Discipline and Symbolic Interaction: Youth Subcultural Practices in Douyin's "Renew Sparks"

Xiaoqing Li

Quanzhou Huaguang Vocational College, Film Industry College, Quanzhou, Fujian Province, 362121, China

Abstract: The "Renew Sparks" function of Douyin has evolved into a new type of digital social ritual among youth groups through the algorithm-driven continuous interaction mechanism. From the perspectives of semiotics and youth subculture, this paper analyzes the referential and denotational aspects of the "spark" symbol, and reveals how the spark renewal behavior reconfigures the identity and relationship network of youth groups through symbolic interactions. At the same time, this paper also finds that the ritualized interaction of "Renew Sparks" not only relieves the anxiety of social uncertainty, but also leads to the alienation of emotional labor under the discipline of the law of reckoning. This phenomenon reflects the dual logic of resistance and compromise of youth subculture against technological domination in the digital era, providing a critical perspective on how social media reshape the cultural logic of interpersonal interactions, and shedding light on the ethics of platform algorithms and the mental health of youth.

1. Introduction

In recent years, the "Renew Sparks" feature introduced by Douyin has quickly become the centerpiece of Internet social interaction for Generation Z. The rule of "renew spark" is that users can light up and maintain the "spark" logo between friends through continuous interaction, and when the interaction exceeds six days, users get the opportunity to raise a small fireman with their friends, while disconnection will bring about the consequences of extinguishing the spark.

According to the questionnaire survey, 72.3% of users aged 18-25 have actively participated in the behavior of "Renew Sparks", and more than half of them believe that "fire anxiety" affects their social decision-making. This phenomenon not only reflects the deep involvement of digital technology in interpersonal relationships, but also reflects the urgent need of young people to reconstruct the meaning of social interaction in an algorithmic society. However, most of the existing research focuses on the general impact of social media, and lacks in-depth exploration of the figurative and ritualized interactive behaviors such as "renewing the spark", especially from the perspective of the intersection of semiotics and youth subculture.

In this paper, we will use literature survey method, questionnaire survey method and in-depth interview method to integrate Roland Barthes' semiotics theory and Birmingham School's subculture critique framework, break through the instrumental perspective of traditional social

media research, and reveal the logic of symbolic coding and cultural resistance behind the behavior of "Renew Sparks". The results of the study can provide a basis for social media platforms to optimize interaction design and reduce the burden of users' emotional labor, and at the same time warn of the risk of alienation of interpersonal relationships by algorithmic technology, and provide a path of cultural reflection for young people to rebuild real social connections.

The study employed in-depth interviews with 14 participants (see Table 1), ranging in age from 19 to 30 and representing diverse occupations such as college students, freelancers, and service industry workers. Their spark streak days varied from 50 to 307 days, reflecting heterogeneous engagement levels with the "Renew Sparks" feature. This demographic breadth ensures a multifaceted exploration of the symbolic and subcultural dynamics underpinning the phenomenon.

2. Symbolic Production and Meaning Construction of "Renew Sparks"

2.1 The Signifier Meaning of the "Spark" Symbol

Semiotic theory posits that the meaning of a sign is constituted by the dual components of the signifier (form) and the signified (content)[1] (Saussure, 1916). Douyin's "Renew Sparks" feature constructs a highly ritualized symbolic framework through the superimposition of a tripartite signifier system encompassing visual, behavioral, and regulatory dimensions, thereby motivating users to engage in digital social practices.

In the user interaction interface, the jumping of the "spark" symbols and the color gradient reinforce the sensory cues of emotional "warming up"; while the accumulation of numbers quantifies the "durability" of the relationship, forming a visualization of time capital. When the interaction is interrupted, the spark becomes static gray and the numbers are zeroed out. This visual contrast creates an emotional fallout through color psychology - gray symbolizes the "cooling" or even "death" of a relationship, in contrast to gold [2](Barthes, 1977). It has been pointed out that through the figurative expression of "sparks", the originally implicit relationship can be observed and become a medium for people to construct a relational imagination[3](Bai et al., 2023). In a user interview, a college student described, "The gray sparks were as harsh as tombstones, and every time the fire broke it felt like the friendship was 'sentenced to death'." (Interviewee D, 2024) It is evident that visual symbols directly trigger users' emotional anxiety through sensory stimulation.

Renew Sparks requires users to complete standardized actions such as liking, replying or sharing on a daily basis, and these actions are encoded as rituals for fulfilling the digital contract. For example, when user E sets an alarm on his phone to remind himself to "renew the spark at 8pm every night", his behavior has been detached from the essence of content exchange and has been reduced to a mechanized "clocking-in task". This kind of meaningless repetition of actions confirms Foucault's[4] (1975) "regulation theory": platforms design rules to incorporate user behaviors into a predictable and controllable framework, alienating social interactions into an exhibition of "body technologies". More notably, the value of the content of the interaction itself is weakened - a perfunctory "hahaha" comment has the same effect as an in-depth conversation, exposing the symbol system's dissolution of the depth of meaning.

Douyin transforms continuity interactions into quantifiable algorithmic performance through rules such as different level markings and privilege unlocks. For example, level 1 sparkling elves learn to greet each other, level 2 unlocks the action system, level 3 unlocks the dress-up system, and level 11 unlocks rare images. This gamification design draws on Skinner Box's "variable rate reinforcement mechanism" [5](Schüll, 2012), which stimulates continued user engagement through uncertain rewards. The essence of the rule-symbol is the materialization of algorithmic power: the platform redefines interpersonal value in terms of data logic, forcing users to self-regulate in order to acquire symbolic capital. The visual, behavioral, and regulatory codification within the signifier

system not only shapes users' interaction rituals but also, through the symbolic properties of signs, establishes the foundational conditions for the construction of the signified.

2.2 The Signified Meaning of the "Spark" Symbol

The operation of the system of energetic references ultimately serves the production of referential meanings. Through the triple references of emotion, identity and power, the spark symbol reconstructs the perception of social relations in the digital age.

Spark days are commonly interpreted by users as proof of "emotional loyalty". According to the survey, 68% of users believe that "the longer the number of spark days, the closer the relationship is". This perception is actually an illusion created by algorithms: platforms simplify the complexity of emotional maintenance into the accumulation of linear time, so that "persistent renewal" replaces "emotional resonance" as the core indicator of relationship value. For example, user F is estranged from his friends due to conflicting values, but still keeps the flame going because he "can't let go of the 300-day record". This behavior of "renewing the fire for the sake of numbers" exposes the alienating nature of emotional references - symbolic values override real emotions.

In the youth subculture, the number of days of sparks has become an important symbol of digital identity. Users post screenshots of their "365 days of sparks" in their circle of friends, or show the status of their "Sparkling Elf" in short videos, transforming private interactions into social capital for public performances. This practice echoes Goffman's [6](1959) "Theory of Mimetic Theatre": users perform their "idealized selves" in the foreground (public space), and the spark symbols become the core props of the performance. As scholar Zhang Nan points out, the technological environment of social networks has broken the balance of the traditional media ecology and created a new mode of communication in which the public and private spheres, the real and the virtual, and the online and offline are intertwined, a mode that exacerbates users' self-perception bias and social identity anxiety [7] (2023).

The essence of the renewed spark rule is the colonization of social relations by algorithmic power. Through data, standardization and computability, the platform transforms human interactions into a "relationship pipeline" that can be processed by the algorithm. In order to maintain their symbolic value, users have to adapt to the algorithm's rhythm: the frequency of daily interactions are included in the algorithm's evaluation system. This "data supremacy"[8] (van Dijck, 2013) leads to the self-objectification of the social subject - user H says: "It feels like I've become a 'fire-fixing machine' that works for Douyin.'(2024)"

However, youth cohorts are not entirely constrained by the platform's symbolic codification; through creative practices, they actively renegotiate semiotic significations, thereby cultivating distinctive subcultural resistance strategies.

2.3 Meaning reproduction in symbolic interaction

Instead of passively accepting the symbol system, youth groups participate in the reproduction of meaning through secondary creation, forming a unique subcultural symbol system. On the Douyin, users have invented "spark-preserving codes"; for example, sending each other "..." to avoid fire breaks. They also create "fire-renewal pictures", such as the "Broken Spark = break up" emoticon. These practices are both strategies of resistance and cultural complicity. More profoundly, secondary creation itself has been incorporated by the platform as a traffic resource. Douyin's algorithm actively pushes the "Spark Challenge" topic and encourages users to produce related content, forming a closed loop of "symbolic production—traffic acquisition—symbolic reinforcement". This cycle reveals the cultural logic of digital capitalism: users' resistance to creativity is ultimately reduced to a tool for the platform to add value [9](Fuchs, 2014).

2.4 From "spark" to "Sparkling Elf"

The Douyin platform stipulates that users can invite each other to adopt a "Sparkling Elf" when they have interacted with each other continuously for more than six days, which rewrites the logic of symbolic interaction. When virtual social characters (e.g., "Sparkling Elf") become a tool for maintaining relationships, users may fall into passive interactions for fear of losing their social bonds [10](Zhang Yue, 2025).By packaging the algorithmic entity as a "digital life", the platform utilizes the human instinct to protect fragile lives to achieve implicit control. When users are anxious about the status of the genie, they are actually anxious about the survival of the data - this kind of symbolic colonization reveals the ultimate form of techno-capitalism: transforming human emotional instincts into exploitable and quantifiable means of production.

The production and reproduction of the semiotic system are not merely outcomes of platform algorithmic operations but are profoundly interwoven with the praxiological logic of youth subcultures. Synthesizing ritual theory and resistance theory, the following analysis demystifies how the "Renew Sparks" behavior epitomizes the dualistic nature of youth subcultural dynamics in the digital era.

3. The Subcultural Logic of "Renew Sparks" Behavior

3.1 Social ritual in the digital age

Constructing a sense of group belonging through specific ritual behaviors is one of the core features of youth subcultures[11] (Hall & Jefferson, 2006). In the traditional social scene, rituals such as holiday greetings and regular gatherings serve the function of maintaining relationships; while in the algorithmic society, "renewing the spark" has evolved into a digital social ritual, whose logic of operation not only perpetuates the symbolic nature of rituals, but also is deeply embedded in the framework of technological discipline. The act of "Renew Sparks" possesses the three core features of ritual: repetition, normativity and symbolism.

Repetitiveness is reflected in the fact that users are required to perform a fixed set of interactions on a daily basis, with a periodicity similar to that of a religious service or a cycle of traditional festival celebrations. For example, User I refers to the renewal of the fire at 10:00 p.m. every night as "social vespers," emphasizing its temporal regularity(2024).

Normativity is reflected in the ritual standards set by platforms through rule design (e.g., " Disconnect for a day and sparks turn gray"), and users are forced to abide by the "code of fire renewal". This normativity contrasts with the ritual program of socialization in traditional societies, but the essence of both is the reproduction of social order.

Symbolism, on the other hand, is reflected in the fact that the number of days of sparking is given abstract values such as "purity of friendship" and "emotional loyalty," and its symbolic significance far exceeds the actual content of the interaction. As anthropologist Turner (1969) puts it, "Rituals transform chaotic experience into ordered meaning through symbolic manipulation[12]"

In a highly mobile digital existence, youth groups face the dual dilemmas of social atomization and relationship fragility. The "Renew Sparks" ritual addresses these tensions through multifunctional mechanisms. First, it alleviates anxiety over social uncertainty by translating abstract relational states into quantifiable "certainty" through metrics such as streak duration. As User J articulated: "Watching the number grow at least proves this relationship is 'alive'" (2024). Second, it constructs virtual belonging, exemplified by emergent collectives like the "Renew Sparks Team" among university students. Within these group chats, members engage in mutual supervision of daily check-ins and share streak-maintenance tactics, cultivating digital tribes through collective praxis. This organizational hybrid—simultaneously reminiscent of traditional communities yet

algorithmically mediated—embodies youth subcultures' adaptive negotiation of techno-social infrastructures. And while such digital socialization rituals reinforce the control of the platform, they also provide space for youth groups to resist and negotiate. This tension is particularly pronounced in the creative practices of subcultures.

3.2 Resistance and compromise in youth subcultures

Youth subcultures are always in the tension between "resisting the dominant ideology" and "being co-opted by power" [13](Hebdige, 1979). Sparking behavior is also characterized by a distinct duality: a playful resistance to algorithmic rules and an implicit compromise with technological logic.

Some young people deconstruct the seriousness of renewed sparks through creative practices, such as the creation of the "Fake Spark Generator" image, in which a user fictionalizes the 999 days of spark records and captions it with the words "Our friendship is all about PS", in order to satirize the illusory nature of the symbol system. This kind of behavior echoes de Certeau's (1984) theory of "poaching", in which users resist meaning by appropriating platform symbols[14]. More users choose to strategically adapt to the platform's rules: User K creates a "fire renewal schedule" that prioritizes the renewal of "high-value relationships" by grading friends according to their closeness, reflecting the quantitative management of social relationships. The popularity of the "fire renewal service" on Taobao (5 RMB/week) and the use of "auto-likes scripts" have exposed the youth group's deep reliance on algorithmic systems. This strategy of "fighting technology with technology" is essentially a disguised recognition of power structures. At the same time, some scholars have also pointed out that over-reliance on virtual interactions may weaken an individual's ability to deal with real-life emotions, and even exacerbate feelings of loneliness and anxiety [15](Jian Wang, 2025). However, whether resisting or compromising, the practices of young users have always struggled to escape the implicit regulation of algorithmic power, ultimately leading to the alienation and self-objectification of emotional labor.

3.3 Emotional labor and self-alienation

According to OMG Macro Alliance data, Generation Z spends an average of 8.33 hours per day using cell phones, with 31% of young people preferring online socialization because the online space provides a sense of security and freedom of personality expression, while its flexibility breaks down time and space constraints and meets the need for instant companionship[16] (Cheng Kexin, 2024). The high intensity of online social time shows that the youth group's reliance on virtual interactions has gone beyond instrumental needs and has evolved into a digital alienation of "emotional labor", where users are forced to manage their emotions and perform intimacy in order to maintain their symbolic value, leading to a split between their real selves and their social masks. By packaging "emotional labor" as a "social game," the platform conceals its exploitation of users' attention. It is an exploitation mechanism of hidden emotional labor.

Renewed sparking behavior has given rise to two types of alienation, one being pseudo-intimacy, such as user N establishing "instrumental friendships" with strangers such as couriers and takeaway riders in order to secure five sparking spots. This social inflation dilutes the meaning of intimacy. The second is self-objectification, for example, users mark the number of days of sparks on the homepage of social media platforms, claiming that "500 days of sparks proves my sense of responsibility". When interpersonal values are reduced to demonstrable data indicators, subjectivity is reduced to an appendage of algorithms [17](Han Byung-chul, 2019).

4. The Survival Paradox and Breakthrough Paths in Algorithmic Society

The phenomenon of "Renew Sparks" reflects the deep-seated dilemma of youth socialization in the digital age. From a positive point of view, this function reduces the threshold of emotional maintenance with minimalist interactive design (such as one-click to renew the flame), so that fragile relationships in mobile societies can obtain a "minimum commitment to stability". Especially for young people who work intensely and study across different regions, "Renew Sparks" has become a "digital band-aid" to combat social desertification.

However, behind this convenience lurks a certain amount of systemic risk. By compressing the value of relationships into calculable indicators such as the number of days of sparks and the rank of Sparkling Elf, platforms have accomplished the "colonization and transformation" of interpersonal emotions by algorithmic power. When users send formatted greetings to strangers in order to maintain a 300-day record, intimacy has been alienated into a "data performance race", and individuals are caught in a never-ending social involution. More critically, self-objectification is rationalized in this process: young people include the number of sparks as proof of social competence in their social profiles, and emotional connections are reduced to decorative labels for personal branding.

To solve this dilemma, it is necessary for many parties to take concerted action. For example, platforms can try to implement "anti-fragile design": adding a "vacation mode" that allows for the suspension of fire renewal without zeroing out the data, and introducing non-quantitative interaction indexes, such as in-depth conversation quality assessment, to weaken the emotional kidnapping of users by algorithms. Meanwhile, colleges and universities can take the example of Northwest University and Shanxi Normal University to set up media literacy courses and integrate relevant courses into the compulsory course system, and guide students to use social media correctly through the case teaching method [18](Wenyu, 2022). The youth community needs to rethink the boundaries between technology and humanity: rebuild the ability to be present offline through "digital disconnection experiments", such as socializing without sparks one day a week. Youth communities could cultivate 'slow relationships' in café conversations and community collaboration, mirroring their digital disconnection experiments. The only way to find a balance between technological convenience and humanistic temperature is to jump out of the data-first value mold.

5. Conclusions

Through the intersection of semiotics and subculture theory, the essence of the phenomenon of "Renew Sparks" is the dialectical unity of technological empowerment and the dissolution of subjectivity in the algorithmic society. The practice of youth groups is both a resistance to digital alienation and a complicity in the logic of technology. On the one hand, the symbolic interaction relieves the anxiety of social atomization and forms a sense of virtual belonging; on the other hand, the implicit regulation of algorithmic power leads to the alienation of emotional labor, and interpersonal relationships are downgraded to calculable data indicators.

In the future, we need to establish a balance between technological convenience and cultural critique: platforms should abandon single-data-oriented interaction design and shift to incentives that respect emotional depth; schools should strengthen media literacy education; and users need to be alert to the cognitive colonization of symbolic systems and reconstruct real social networks with subjective self-awareness. Only in this way can digital technology truly serve humanized interactions, rather than becoming a driver of alienated relationships.

Table 1: Basic Information of 14 Interviewees

ID	Gender	Age	Occupation	Spark Streak Days
A	Female	26	Restaurant Owner	80 days
B	Male	30	Freelancer	120 days
C	Female	24	Media Reporter	66 days
D	Female	22	College Student	153 days
E	Male	24	Graduate Student	210 days
F	Female	20	College Student	307 days
G	Male	21	College Student	98 days
H	Male	25	Elementary School Teacher	180 days
I	Female	19	College Student	110 days
J	Female	19	College Student	253 days
K	Male	23	Car Salesman	120 days
L	Female	22	College Student	73 days
M	Male	20	College Student	50 days
N	Male	24	Waiter	94 days

References

[1] Saussure, F. (1916). Course in general linguistics (W. Baskin, Trans.). Philosophical Library. (Original work published 1916)

[2] Barthes, R. (1977). Image-music-text (S. Heath, Trans.). Fontana Press.

[3] Bai, H., Huang, S., & Liu, Z. (2023). Raising the "flame": Virtual mediators and electronic intimacy. Media Observation, 7, 86–96.

[4] Foucault, M. (1975). Discipline and punish: The birth of the prison. Vintage Books.

[5] Schüll, N. D. (2012). Addiction by design: Machine gambling in Las Vegas. Princeton University Press.

[6] Goffman, E. (1959). The presentation of self in everyday life. Anchor Books.

[7] Zhang, N. (2023). The spatial practice of "Generation Z" social network addiction under the logic of media technology: A case study of "Generation Z" in Jilin Province. Theoretical Research, 122–124.

[8] van Dijck, J. (2013). The culture of connectivity: A critical history of social media. Oxford University Press.

[9] Fuchs, C. (2014). Digital labor and Karl Marx. Routledge.

[10] Zhang, Y. (2025). The impact of virtual mediation on intimacy and ethical myths from Douyin "Sparkling Elf". Audiovisual, 2025(1), 84–89. https://doi.org/10.19395/j.cnki.1674-246x.2025.01.008

[11] Hall, S., & Jefferson, T. (Eds.). (2006). Resistance through rituals: Youth subcultures in post-war Britain (2nd ed.). Routledge.

[12] Turner, V. (1969). The ritual process: Structure and anti-structure. Aldine Publishing.

[13] Hebdige, D. (1979). Subculture: The meaning of style. Routledge.

[14] de Certeau, M. (1984). The practice of everyday life (S. Rendall, Trans.). University of California Press.

[15] Wang, J. (2025). The "sliding" self: A techno-sociological analysis of teenagers' addiction to short videos. Economic Herald, 1, 63–68.

[16] Cheng, K. (2024). Breaking dimensions: Observations on digital social culture—Entering the social circle of Generation Z. Data Market, 2, 09–13.

[17] Han, B.-C. (2019). The expulsion of the other: Society, perception and communication today (W. Hoban, Trans.). Polity Press.

[18] Wen, Y. (2022). Analysis of college students' social media addiction from the perspective of meme theory: A case study of Douyin. Communication Research, 5, 119–120.