THE GRAY AREA

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Abstract:

'The Gray Area' is a thesis project that explores Danmaku culture, a form of interactive social engagement on video platforms where users post real-time comments that directly overlay on the video screens, creating a "barrage" of text. In recent years, this culture has reshaped social habits, evolving from a niche subculture—a smaller cultural group or community that exists outside the mainstream with distinct behaviors, beliefs, and localized cultural practices—into an integral part of mainstream culture in China.

However, under the dual pressures of cybercolonialism and commercialization, Danmaku culture has transformed. Its diversity and highly liberated forms of expression have gradually been marginalized or erased, resulting in a shift toward more uniform and standardized product of consumption.

This project is an autoethnographic exploration of Danmaku culture through my personal experiences as both a creator and participant in Danmaku culture. Through data analysis, personal reflections, and practical experimentation, the thesis delves into the rise and fall of Danmaku culture in Bilibili, China's—and arguably the world's—largest Danmaku platform. It focuses on examining its transformation under the pressures of the cultural industry of social media and the economic waves of globalization. Drawing upon the theoretical frameworks of Adorno and Horkheimer's cultural industry, Mbembe's necropolitics, and reception theory, this research reveals the contradictions of Danmaku culture between free expression and cultural control, as well as its adaptation and reconstruction in response to technological, policy, and societal changes. Through practical works and collection, this study reconstructs fragments of the disappeared Danmaku culture and explores its ephemerality and fluidity through interactive media installations.

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Dedication

To my amazing followers on Bilibili: This thesis wouldn't exist without your support. Thank you for your voices, stories, and encouragement kept me going through every challenge.

Thank you for sharing your world with me.

致 Bilibili 上我的关注者:如果没有你们的支持,这篇论文就不会诞生。感谢你们的声音、分享和鼓励,让我克服了每一个挑战。感谢你们与我分享你们的世界。

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Introduction

As a Chinese international student who came to Canada in 2016, my relationship with Danmaku culture began well before my academic journey. Growing up alongside the rise of digital platforms and technology, I was an active participant on Bilibili—not only as a viewer, but also as a content creator and community member. While studying and living in Canada, I began to see this culture from a new perspective and witnessed many shifts in both the platform's structure and the technologies that support it. This new discovery sparked my desire to explore Danmaku not only as a cultural artifact but also as a site between freedom, control, and digital expression in the age of globalization.

The thesis explores the development and transformation of Danmaku culture on the video commentary platform Bilibili. Through autoethnography, data analysis, and practical experimentation through research-creation, this research analyzes how Danmaku culture adapts and reconstructs itself amid technological, policy, and societal changes in the following framework:

Chapter 1: What is Danmaku Exactly?

This chapter introduces the origins and development of Danmaku culture from both first-person and third-person perspectives. Through personal observation of historical events and an analysis of its platform policy over the years, it examines how Danmaku culture transitioned from a niche subculture to mainstream culture.

Chapter 2: Theory/ Literature Review

This chapter utilizes Adorno and Horkheimer's Cultural Industry theory, Mbembe's Necropolitics, Jauss's Reception Theory, among supporting theories and concepts to analyze the tension between free expression and cultural control within Danmaku culture.

Chapter 3: Methodology

This research employs a mixed-methods approach, utilizing autoethnography and data analysis to examine how Danmaku culture is influenced by technological changes, platform policies, and social evolution.

Chapter 4: Making

This chapter delves into the creative process and technical methods of the practical research-creation project entitled The Gray Area.

Chapter 5: Project Record

This chapter provides detailed documentation of the exhibition process, including the setup, presentation, and audience interaction with the installation.

Chapter 6: Reflection and Conclusion

Based on the exhibition and research findings, this chapter presents authors reflections and insights.

Chapter 1: What is Danmuku exactly?

1.1 The History

The past ten years have been a golden age for the development of digital social media. During this time, countless social platforms like TikTok and Instagram have emerged, changing how people share content around the world. From images and short videos to VR and AI, as technology continues to advance faster than policy development can respond to it, the options for entertainment and communication have also grown significantly. As these platforms offer diverse and engaging content, they also follow an unspoken "rule": cultural content that aligns with mainstream values is preserved, while content that does not is restricted or removed. This "unspoken rule" has pushed many niche cultures into a gray area because they are too small or specific to be classified as mainstream or non-mainstream by the platforms' systems, leaving them to exist and grow on the margins. For these niche cultures, there are usually only two endings: either adapt to fit the mainstream to become new cultural forms that align with platform and societal interests, or resist change, and then disappear for not meeting platform standards or interests. This pattern is not random but shaped by a larger regulatory framework that dictates what platforms can and cannot allow. Government policies set the rules for content moderation, influencing how platforms define acceptable discourse. In 2020, China's Cyberspace Administration (CAC) published "Provisions on the Governance of the Online Information Content Ecosystem" which requires platforms to promote "positive energy" content and remove harmful information. ² In response, platforms like Douyin (China's version of TikTok) have implemented strict content filtering systems. Content that promotes patriotism, social harmony, or traditional values is often recommended, while politically sensitive topics, LGBTQ+ content, and certain subcultures face heavy restrictions or outright removal. Similarly, Xiaohongshu (Rednote), a social platform with a predominantly female user base, has quietly removed the "feminism" and "woman-independent" tags, affecting the visibility and searchability of related content. This change not only impacts the accessibility of feminist discussions on the platform but also reflects broader societal challenges in achieving gender equality and equity.³ More details on these regulatory policies will be shown in the Appendix A.

Danmaku culture, the subject of this thesis, is a unique example. As a niche culture, it has escaped from this gray area, with part of it successfully entering the mainstream and becoming a form that aligns with societal interests. However, another part of it has been entirely erased by platforms.

¹ "Positive energy" (正能量) is a state-promoted term in China that refers to content that aligns with official values such as patriotism, social harmony, and optimism. It is often used as a guiding principle in content regulation to encourage narratives that support political stability and discourage dissent or controversial viewpoints.

² Cyberspace Administration of China, *Provisions on the Governance of the Online Information Content Ecosystem*, 2020, https://www.gov.cn/gongbao/content/2020/content 5492511.htm.

³ *China Digital Times*. "Xiaohongshu Removes 'Feminism' and 'Independent Women' Tags." *China Digital Times*, 2023, chinadigitaltimes.net.

The term "Danmaku" (殚幕) may not be familiar in the West, but it is very popular in Asia, especially in Japan and China. This interactive commenting system was first introduced in 2006 by the Japanese video website Niconico. In English, it is also known as "Danmu" or "bullet comments." This system allows viewers to post real-time comments that appear directly overlaid on the video, creating a synchronized and interactive experience. The word "Danmaku" originally comes from a military context, referring to dense barrages of gunfire, bringing to mind the image of bullets covering the screen.⁴ On video platforms, the term is used to describe the effect of a large number of comments sweeping across the screen, creating a "barrage fire" visual. This new form of interaction has created a unique way of expression. In the early days of Danmaku culture even now in China, there was a strong influence from Japanese elements. Many Danmaku have been created based on Japanese anime characters, memes, pop culture. Chinese audiences often participate and reinterpret these elements, blending their perspective and expressions. Danmaku culture is closely tied to Otaku communities, especially in Japan, where it first became popular among anime and gaming fans on Niconico. The term "Otaku" refers to individuals with obsessive interests in areas such as anime, manga, and video games. Originally, "Otaku" was a polite second-person pronoun meaning "your home," but it evolved into a slang term describing people deeply engrossed in specific hobbies, often to the point of social withdrawal. As architectural historian and pop culture scholar Morikawa Kaichirō explains, "In Japan, the use of the pronoun otaku to refer to young, usually school-age males with poor social skills who devote themselves to technology or some aspect of pop culture began in the mid-1980s" (Morikawa 2012, 3).⁵ Otaku culture heavily relies on online interaction and participation, making Danmaku an ideal tool for engagement. As Ito et al. describe, "the otaku subculture thrives in digital networks where fans produce, share, and remix content as a form of cultural participation". 6 The scrolling comments not only create a sense of interaction but also turn passive video-watching into a communal event, where viewers collectively react to specific moments in a show, game, or meme culture. When watching videos with Danmaku, viewers may feel different emotions depending on the content—fun, teasing, sadness, or excitement. The combination of the video content and the emotions expressed through Danmaku creates a strong connection, satisfying the audience's emotional needs and reducing the feeling of isolation that can come with watching alone. This is the core of Danmaku culture.

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⁴ Jianqing Chen, "Bullet-Titling in Twenty-First Century China: Bullet-Like Tactility, Soft Touch and Diachronic Simultaneity," *Journal of Visual Culture* 22, no. 1 (2023): 5.

⁵ Kaichirō Morikawa, \$\$\famounterline{\pi}\cline{\pi}

⁶ Mizuko Ito et al., eds., *Fandom Unbound: Otaku Culture in a Connected World* (New Haven, CT: Yale University Press, 2012).

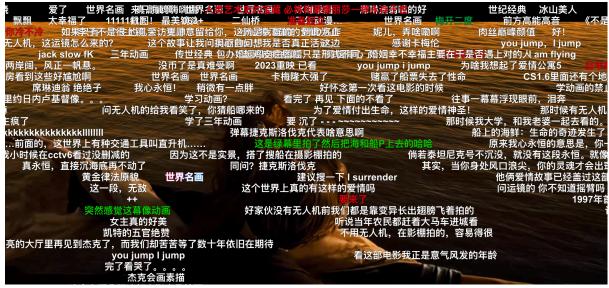


Figure 1, Screenshot of a Video Interface on Bilibili. 2025.

Danmaku art is an important part of Danmaku culture. It layers a large number of symbols, text, and comments over videos, creating an artistic form that combines visuals, emotions, and meaning. It is not limited to simple layering or communication but can rearrange text and symbols to form entirely new images, content, or structures. This form of Danmaku art goes beyond basic interaction and becomes an innovative artistic medium. In this expression, video content and Danmaku content intertwine and influence each other, enriching the original visual material with more depth and meaning. The number, content, rhythm, and presentation of Danmaku can significantly impact the viewer's experience, turning the work into a highly interactive and multidimensional medium.

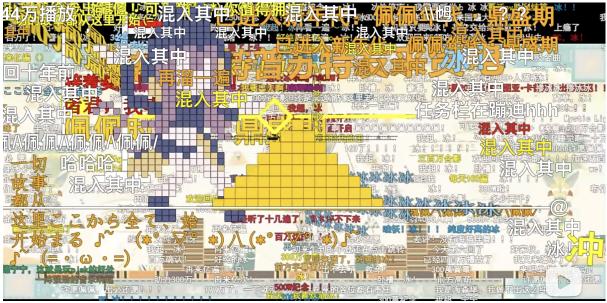


Figure 2. Screenshot of Danmaku Art on Bilibili, from a video by 屏幕另一边的迷云, published in July 2024 on Bilibili. 2025. (Generally, based on content, Danmaku can be defined into three types: 1, Danmaku based on video content. 2, "chat-style" Danmaku that's not too much tied to the video content, more like off-topic or casual chatting among viewers. 3, "effect-type" Danmaku that includes visual elements but lacks textual information.)

In 2007, The first Danmaku website in China, Acfun (A站), was established, marking the beginning of the popularity of Danmaku videos in China. It later influenced the development of Bilibili (This thesis primarily focuses on Bilibili as the main platform for examining the background of Danmaku culture), which became the largest Danmaku video platform in the country and even the world. Initially, the Danmaku culture was considered a "subculture," a non-mainstream cultural form that was popular mainly among specific niche groups. Over time, it broke through these boundaries and moved into mainstream culture, becoming an important part of China's internet culture. A notable example of this shift is the integration of Danmaku into the CCTV(China Central Television) Spring Festival Gala (春 晚), China's most-watched and culturally significant annual television event. In 2025, Bilibili partnered with the China Media Group to livestream the Spring Festival Gala, introducing real-time Danmaku interactions during the broadcast. This collaboration allowed viewers to send live comments over the program, blending traditional festivities with contemporary interactive media. As of 8 a.m. on January 29, 2025, the 2025 Gala's livestream viewership on new media platforms had reached 2.13 billion views. 10 The fact that Danmaku was incorporated into a national event of such magnitude highlights its acceptance as a mainstream cultural phenomenon in China.

However, as Danmaku culture became more popular, conflicts started to emerge, especially regarding its form of expression. As stated in "Bullet Curtain: The Aesthetic and Politics of Danmaku Culture," the word "Danmaku" itself evokes the imagery of "dense gunfire," the feature of numerous comments appearing simultaneously, sometimes entirely covering the video content, became a defining characteristic of Danmaku culture. At the same time, this expressive form came into conflict with Bilibili's Danmaku management policies, leading to ongoing debates among users on the platform.

● 恶意刷屏

禁止单一用户恶意在短时间内发送过多相同弹幕。值得一提的是,在视频气氛烘托下,多用户发送的相同弹幕,属于共同的情感表达,不属于恶意刷屏。

Figure 3, A screenshot of one of Bilibili's management policies. 2024

"Malicious Spamming

Users are not allowed to send too many identical Danmuku in a short time. However, if many users send the same comment to match the video's atmosphere, it is seen as a shared emotional expression and not malicious spamming" (translated by Jinxin Guo).

⁷ AcFun. "About Us." *AcFun Official Website*, https://www.acfun.cn/info/#page=about.

⁸ In/Visible Culture: An Electronic Journal for Visual Studies." *University of Rochester*, https://www.rochester.edu/in visible culture/issue2/introduction.htm

⁹ Xiaochen She, "Bilibili Keeps CCTV Spring Festival Gala Young—But What's in It for the Platform?" *Jiemian*, February 8, 2025, https://m.jiemian.com/article/12323421.html.

¹⁰ China Media Group, "《2025年春节联欢晚会》奏响和美乐章," CCTV News, January 29, 2025, https://content-static.cctvnews.cctv.com/snow-book/index.html?item_id=17132408682544737319.

¹¹ Liu et al., "Bullet Curtain: The Aesthetic and Politics of Danmaku Culture," *International Journal of Cultural Studies* 26, no. 3 (2023): 7.

During this period, the platform adopted a semi-centralized approach, implementing a delegated moderation system by granting qualified users administrative privileges. On Bilibili, this is reflected in the "风纪委员" (Disciplinary Committee) system, where selected users review and vote on content moderation cases, determining whether certain Danmaku comments violate platform guidelines. These users were authorized to ban accounts they deemed to have violated the platform's guidelines with inappropriate Danmaku. As for who is eligible to become a Disciplinary Committee member, Bilibili has not provided a clear selection process. However, there are two fixed requirements: first, users must complete real-name verification, meaning they must provide identity information(upload the ID Card); second, they must have no record of violations within the past 90 days. Essentially, anyone can become part of the Disciplinary Committee if they meet these criteria, making the committee a highly diverse group of users. Although this measure appeared to decentralize power, it reinforced hierarchical structures within the platform, concentrating authority among a select group of users rather than decentralizing it. The Disciplinary Committee's decisions ultimately align with platform policies, and final enforcement—such as placing users in the "小黑屋" (Little Black Room), which restricts posting privileges—remains under Bilibili's control. This approach exacerbated conflicts between different user groups, as moderation decisions were subject to personal interpretation rather than collective governance.

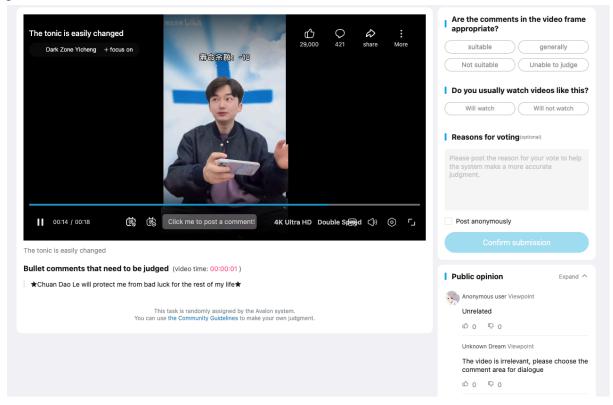


Figure 4. Screenshot of the internal evaluation interface used by Bilibili's Disciplinary Committee ("风 纪委员"), translated into English. 2025.

The key turning point that altered the nature of Danmaku culture occurred in 2018. During this year, Bilibili initiated its international expansion (which will be discussed in detail in the next chapter), leading to significant changes in its management of video content

and Danmaku content. Bilibili introduced a series of new policies that significantly impacted user-generated content to comply with regulatory expectations and align with mainstream values. In early 2017, Bilibili announced new content restrictions through the "Notice on Strengthening the Management of Political Video Content" (《关于加强对时政类视频内容 管理的公告》), suspending individual users from uploading political content and limiting such content to officially licensed news organizations. ¹² Later, on July 12, 2017, Bilibili removed a large number of foreign TV series, including Japanese, Thai, and British dramas, to ensure compliance with national policies and relevant regulations. ¹³ In 2018, after being criticized by national media for hosting "vulgar content," Bilibili intensified content moderation, removing a large number of videos and Danmaku, particularly those discussing sensitive historical topics, political issues, or gender-related debates. ¹⁴ The following year, as an overseas user, I couldn't start a live stream on Bilibili which kept showing a message saying the system was "undergoing an upgrade." However, users in China can stream without any issues. This was a way to block foreign IP addresses to prevent access to restricted websites during streaming. These stricter rules made it harder for users to express themselves freely, turning Danmaku culture from an open and user-driven space into something more controlled. Because of this, Danmaku art, which was once creative and interactive, almost disappeared. What was once a highly free and creative subculture began to shift into a cultural form that fit more closely with mainstream values and commercial goals.

关于全面进行内容整改的公告

近日,国家多部门对哔哩哔哩进行了约谈,并做出处罚和整改的要求。在约谈后,我们立即进行了深刻的检讨和反思。我们将集中开展内容 整改的专项行动,包括:

第一, 认真落实相关处罚决定,严格按照要求对全站内容进行整改。

第二, 重点加强网站审核团队的建设,扩编一倍以上审核人力。目前,我们已在武汉建立了新的审核中心,并于本月内正式投入运营。第 三个审核中心也在计划筹建。

第三,在网站内,我们将通过加强"风纪委员会"机制,发动用户对内容和社区进行自查自清。目前哔哩哔哩的"风纪委员会"已累计招募3.6万人,并将持续扩大规模。

作为平台企业,我们应当认真履行好企业主体责任,对网民负责、对社会负责。我们将组织全公司进行学习,全方位提高员工的思想觉悟,把对主体责任的认识作为企业纪律铁条,贯彻到日常工作中去。

除了开展整改专项行动以外,我们还将主动配合有关部门加强对用户的正面引导和规范管理,制作和传播弘扬主旋律、正能量的内容,与行业内各平台一起推动行业健康发展,共同维护网络信息传播秩序,营造积极健康、风清气正的网络空间。

Figure 5, A screenshot of "Notice on Strengthening the Management of Political Video Content" Official announcement issued by Bilibili following government after being criticized by the Government, 2018.

Translation of the announcement:

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https://web.archive.org/web/20200716171150/http://fashion.people.com.cn/n1/2018/0727/c1014-30173222.html

Bilibili, "关于加强对时政类视频内容管理的公告" [Notice on Strengthening the Management of Political Video Content], February 9, 2017, https://www.bilibili.com/blackboard/activity-shizhengmanager.html.
 "Bilibili Faces Regulatory Scrutiny: Some TV Shows Removed, Stricter Content Review Implemented" (B站遭

遇监管风波:部分影视剧下架, 内容审核趋严). 2017, https://www.sohu.com/a/157147965_498761.

14 People's Daily. "哔哩哔哩回应"扫黄打非"要求:已清查站内内容" (Bilibili Responds to Anti-Pornography and Illegal Publications Requirements: Has Cleared Site Content). July 27, 2018.

"In recent days, multiple government agencies have summoned Bilibili for discussions and issued penalties, requiring the platform to undergo corrective measures. In response, we have conducted a thorough review and reflection. We will initiate a dedicated content rectification campaign, including:

- 1. Strictly implementing the required corrective measures and conducting a full-scale review of all platform content.
- 2. Strengthening the content review team by doubling the number of reviewers. A new review center has been established in Wuhan and will officially commence operations this month, with a third review center currently being planned.
- 3. Enhancing the platform's "Disciplinary Committee" mechanism, encouraging users to actively participate in content regulation and community oversight. The Disciplinary Committee has already recruited 36,000 members and will continue to expand.

As a platform enterprise, we must take full responsibility for our content and uphold our obligations to both netizens and society. The entire company will undergo training to elevate our collective awareness and integrate responsibility into our core disciplinary principles.

In addition to these corrective actions, we will actively collaborate with relevant authorities to guide users toward positive content engagement and regulatory compliance. By producing and promoting mainstream, positive content, we aim to contribute to a healthier industry ecosystem, uphold the integrity of online information dissemination, and foster a clean and positive digital space." (translated by Jinxin Guo)

1.2 Memories of Danmaku Culture

The first time I saw and touched Danmaku was in 2016, the year I came to Canada and stepped into a new culture that marked a big change for me. I naturally, or perhaps unconsciously, started to look for a sense of belonging, something that felt like "being at home." It was in this context that the sense of "belonging" conveyed by Danmaku culture left a strong impression on me. In real life, when certain emotions or cultural expressions don't connect with the surrounding environment, the internet often becomes a place to turn to. I was 18 at the time, in a transitional phase between adolescence and adulthood, navigating unfamiliar spaces and emotions. Just like the research by Best, Manktelow, and Taylor (2014) highlights, online communication and social media can play a significant role in adolescent well-being, providing a space for emotional expression and social connection when real-life interactions feel insufficient. 15 Unlike traditional online interactions that need time for feedback, Danmaku provided a sense of instant emotional resonance and immersion. When I watched a video and had my own thoughts, I sometimes wondered if my ideas made sense. However, seeing similar opinions in the Danmaku helped me realize that my thoughts were not isolated but shared by many others. This instant public discussion space gave me an unexpected feeling of familiarity. When thousands of comments appeared on the screen at once, I felt like I was sharing emotions and experiences with other viewers. Sometimes, I did

¹⁵ Paul Best, Roger Manktelow, and Brian Taylor, "Online Communication, Social Media, and Adolescent Wellbeing: A Systematic Narrative Review," *Children and Youth Services Review* 41 (2014): 27–36.

not post comments myself. Instead, I would just watch the Danmaku flow across the screen, as many times, others had already shared the same thoughts I had. Each of us was 'doing our own thing,' yet still felt connected to the shared experience. This feeling of belonging is different for everyone and is hard to define. For me, it's not easy to put into words. It felt like being alone in a space but surrounded by a familiar energy and activity. Even in a new and unfamiliar environment, the interactions through Danmaku helped me find a sense of connection. This experience made me curious about Danmaku culture and its unique way of bringing people together, and how similar forms of digital interaction such as live-stream chat, virtual communities, and comment sections create a shared sense of presence despite physical distance.

In July 2016, I started recording and collecting content related to Danmaku culture, then reuploaded to the Bilibili platform sharing with other Danmaku fans. Over time, more and more viewers started following me, sharing their experiences and archives with Danmaku culture thought the comments. As a result, I gathered over a hundred videos showcasing a wide range of Danmaku styles, including text-based comments, emoji animations, precisely timed comment movements, and real-time color changes. These videos and their comments were not just a form of communication but also showcased the creativity and individuality of viewers while highlighting how Danmaku became a platform for emotional expression and collective identity. Danmaku culture creates a unique sense of connection by making emotions visible. The interplay between the audience's comments, the video's content, and other viewers' reactions transforms the viewing experience into a dynamic and interactive process. This interactive engagement can be understood through J. J. Gibson's theory of perception, particularly his concept of "affordances," which refers to the action possibilities that an environment offers to an individual. ¹⁶ According to Gibson, perception is not a passive reception of stimuli but an active process of picking up information that guides behavior. In the context of Danmaku, the audiovisual environment and real-time comment system afford viewers the opportunity to respond, express themselves, and engage socially. This mutual responsiveness transforms passive viewing into a participatory and emotionally resonant experience, fostering a shared sense of belonging. By combining audiovisual content with real-time participation, Danmaku becomes more than a way to watch videos, it becomes a medium for emotional connection, creative expression, and social interaction. This collaborative nature is what sparked my fascination with Danmaku and its cultural impact.

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¹⁶ J. J. Gibson, *The Ecological Approach to Visual Perception* (Boston: Houghton Mifflin, 1979), 127.



Figure 6. Screenshot of a Bilibili video interface showing key interactive features such as the comment pool, video overlay comments, and input options. The original video was created by eloim友人 and published in July 2016. Screenshot taken by the author in December 2024.

As shown in Figure 6, the screenshot shows key features of Bilibili's video interface, focusing on its Danmaku function. On the right side, the "弹幕池" (Danmuku pool) lists all Danmuku in time order. By clicking on a single one of them, users can go directly to the moment in the video when the Danmuku was posted. In the video area, colorful texts appear and overlay the video as it plays. At the bottom, the input bar allows users to send their own Danmaku. They can also change the style of the comments they see, such as font size, color, and position (Figure 6).

However, as mentioned earlier, with Bilibili's successful Initial Public Offering (IPO) on the NASDAQ stock exchange in 2018 and its expansion into international markets, the platform began large-scale reviews and removal of Danmaku content. More than half of the Danmaku that I recorded disappeared on the Bilibli platform for "unknown reasons." The culture gradually started to change, shifting from a form of expression full of diversity and creative freedom to a more standardized and uniform mainstream culture. This change felt unfamiliar to me—it became mechanical, like a factory assembly line, lacking creativity and diversity. For example, when a video shows surprising or horror content, earlier Danmaku styles would include creative designs like emoticons as warnings, text forming images, or even covering the screen to stop viewers from seeing frightening elements. However, as the platform pushed for uniformity and it merged different cultural group expressions into a singular form, such moments were reduced to generic comments like "ohhhhhh." Such reactions feel scripted and fake compared with to past precedents.

As Bilibili's user base expanded rapidly, the clear boundaries between different content partitions blurred (Bilibili has 28 partitions, each representing different types of content that viewers can access, such as food, animation, and gaming). The once

self-regulated community etiquette gradually lost its effectiveness, making it inevitable for smaller cultural groups to face disruptions from broader user groups due to the platform's recommendation algorithm. This push-driven mechanism also reflects Bilibili's shift in strategy. Facing fierce competition from domestic video platforms like Douyin and Kuaishou, Bilibili could no longer afford to focus solely on niche cultures or high-quality content. While it remains one of the few major platforms in China that does not require users to watch pre-video advertisements—a key reason for its continued popularity—this strategy limits its ability to generate ad revenue, pushing the platform toward algorithm-driven, influencer-based, traffic-oriented content distribution. In this era of traffic dominance, content is increasingly judged not by its quality or meaning, but by its ability to generate clicks and engagement. The algorithm applies a uniform standard to determine what content gains traction, without considering the distinct characteristics of different partitions. Unlike before, where subcultures had their own space, the algorithm now treats all content under the same framework, leading to the homogenization of creative expression. Starting in 2019, I could hardly find any new video content related to Danmaku culture. Instead, most of what I saw was repetitive and uniform. Eventually, at the beginning of 2020, I decided to stop collecting and documenting it further.

When the research reached this stage, I seemed to have found an answer to why Danmaku culture gradually faded—it had become a tool in the platform's push for internationalization and was sacrificed during its adaptation to the changing digital landscape. Yet this also gave rise to the central research question of this project: Has Danmaku culture truly disappeared, or has it instead evolved into a new form that I no longer recognize? How does a social media platform of culture like Danmaku adapt and reconstruct itself amid technological, policy, and societal changes?

With this question in mind, I started my research and realized that Danmaku is more than just a form of entertainment or interaction—it carries complex social relationships and patterns of online behavior. Danmaku creates a decentralized space where viewers can communicate instantly and anonymously. However, this mechanism also makes it a potential space for cyberbullying. In the second month after I began sharing Danmaku videos, A group of people who dislike Danmaku started leaving negative comments under my video. This led me to reflect on the platform's mechanisms. Despite Bilibili's relatively strict entry requirements, such as requiring users to pass a 100-question test covering multiple topics before they could post Danmaku, ¹⁷(a part of the questionnaire will shown in the Appendix B.) the problem of cyberbullying within Danmaku culture still persisted and even spread. The interesting thing is that the platform did not effectively remove much of the harmful content related to hate comments. Instead, some of the victims ended up being affected or even having their content removed, which, I found quite surprising.

This made me rethink the social meaning of Danmaku culture. Its decentralized and anonymous nature is a double-edged sword: on one side, it gives people a space for creativity

¹⁷ Mary Hui, "To Gain Full Access to These Videos, You Must Pass an Exam of 100 Very Niche Questions," *Goldthread*, February 26, 2018.

and expression; on the other, it increases the chance of online violence and emotional harm. As more people saw my work, negative comments and online harassment became more frequent. After a month, I stopped making Danmaku videos for a while and realized that the social dynamics within Danmaku culture are much more complicated than I first thought. It's not just about interaction and creative freedom—it also brings up the challenge of how to stay rational and respectful in an anonymous space.

Re-examining my own experiences and observations helped me realize that the decline and changes in Danmaku culture were not just the result of platform policies but also a reflection of broader social structures, where cultural control and power dynamics play a role. In the next section, I will draw on theories such as Hans Robert Jauss's Reception Theory, Adorno and Horkheimer's concept of the "cultural industry," Foucault's biopower, Achille Mbembe's "Necropolitics," and frameworks of deliberative democracy and agonism to explore the deeper reasons behind the changes in Danmaku culture and try to find answers to this phenomenon.

Chapter 02 Theory/ Literature Review

2.1 Reception Theory and Danmaku Culture

Danmaku culture reflects a shift in media consumption, where viewers are no longer passive recipients but active participants in shaping meaning. By overlaying real-time comments onto videos, audiences engage in a shared, symbolic dialogue that transforms watching into a collective experience. In this chapter, I will explore how such interactions align with key theories of reader-response and reception aesthetics, illustrating how Danmaku redefines the relationship between text and audience.

Reception Aesthetics is a literary theory introduced in the 1960s by German scholar Hans Robert Jauss. The theory redefines the interpretation of literary works as a dynamic interaction between the text and its audience. Unlike traditional theories that prioritize the author or the text, Reception Aesthetics places the audience at the center of meaning-making. Jauss argued that the value and meaning of a work are not static but are completed through the understanding, interpretation, and participation of its audience. This perspective aligns with Roland Barthes' concept in The Death of the Author, As he states: "A text is made of multiple writings, drawn from many cultures and entering into mutual relations of dialogue, parody, contestation, but there is one place where this multiplicity is focused and that place is the reader."18 Building upon this, in semiotics, Charles Sanders Peirce's triadic model of the sign introduces three components: the representamen (the form of the sign), the object (what it refers to), and the interpretant (the understanding shaped by cultural and social contexts). Peirce explains that the interpretant is not a fixed meaning but a continuously evolving understanding, shaped by the interpreter's cultural background and prior interpretations, making meaning a dynamic process rather than a static relationship. 19 These perspectives reinforce the core concept of Reception Aesthetics: the value of a work is only realized through the active participation of its audience, and the communication or represented meaning is contextualized by the evolving dynamics of the participants' graphic and symbolic exchange of signs.

Horizon of Expectations

The central concept in Reception Theory is the "Horizon of Expectations" which refers to the cultural background, experiences, and assumptions that audiences bring to their interpretation of a work. These expectations shape their interpretation, and in turn, the work challenges or fulfills them. Over time, as new audiences reinterpret a work, its meaning expands, adapts, and accumulates layers of "interpretations upon interpretations." Thus, meaning is not fixed but evolves through ongoing engagement with audiences. ²⁰ This idea

¹⁸ Roland Barthes, "The Death of the Author," in *Image-Music-Text*, trans. Stephen Heath (London: Fontana Press, 1977), 148.

¹⁹ Charles Sanders Peirce, *Collected Papers of Charles Sanders Peirce*, vol. 2, ed. Charles Hartshorne and Paul Weiss (Cambridge, MA: Harvard University Press, 1931–1958), para. 2.228.

²⁰ Hans Robert Jauss, *Toward an Aesthetic of Reception*, trans. Timothy Bahti (Minneapolis: University of Minnesota Press, 1982), 25.

resonates with Charles Sanders Peirce's semiotics, in which the "interpretant"—the meaning derived from a sign—is also shaped by the interpreter's cultural context and prior experiences.²¹ In both frameworks, meaning is not fixed but evolves through the ongoing engagement of audiences within their specific cultural horizons.

Danmaku culture is one such example of Reception Aesthetics in the digital age. On Danmaku video platforms like Bilibili, viewers participate in the reinterpretation of video content through real-time comments that overlay the screen. This interaction not only adds dynamic and ever-evolving layers of meaning but also externalizes the audience's emotions, experiences, and imagination. For instance, when watching a suspenseful scene, viewers often share humorous or speculative comments, filling narrative gaps and creating a collective response that enhances the original content's emotional impact. This transforms Danmaku into, what I consider, a 'secondary text' that operates alongside the original, continually reconstructing its meaning and producing a sense of shared experience.

In Danmaku platforms, the UGC (User-Generated Content) and PGC (Professionally generated Content) models converge to reflect the principles of Reception Aesthetics. In the UGC model, viewers are not merely passive consumers but active participants who contribute to the cultural production process by creating Danmaku comments, memes, and secondary interpretations. In contrast, the PGC model highlights professional content creators who tailor their productions to align with audience expectations, as determined by metrics such as likes, shares, and favorites. Both models center on the audience, embodying Jauss's concept of the Horizon of Expectations, where audience interpretations are shaped by their cultural, social, and personal contexts. Through actions of liking, commenting, and "coin" contributions, audiences become the 'judge' to validate and influence the quality and relevance of work.

Secondary Creation Under Appellstruktur

Wolfgang Iser's concept of Appellstruktur ("appeal structure") further enriches my understanding of Danmaku culture. Iser posited that literary works are inherently open systems containing "gaps" or "blanks" that invite readers to actively participate in filling these voids. This concept is particularly evident on platforms like Bilibili, where the "gaps" in video content are addressed through Danmaku comments. For example, when video leaves narrative details ambiguous, viewers may add humor, personal interpretations, or even critique. By doing so, they enhance the work's completeness and infuse it with new layers of meaning. Moreover, Iser's idea of "negativity", the notion that effective works should challenge and subvert familiar expectations rather than merely affirm them resonates deeply

²¹ Charles Sanders Peirce, Collected Papers of Charles Sanders Peirce, Vol. 2: Elements of Logic, ed. Charles Hartshorne and Paul Weiss (Cambridge: Harvard University Press, 1932), 228–229.

²² "Coin" is a virtual currency system on Bilibili, where users can donate coins to videos as a sign of appreciation. Users earn virtual coins by actively engaging with the platform, such as watching videos and completing daily tasks. This engagement metric influences video rankings and creator incentives, aligning with Bilibili's algorithm-driven recommendation system.

²³ Iser, Wolfgang. The Act of Reading: A Theory of Aesthetic Response. Johns Hopkins University Press, 1978.

within Danmaku culture.²⁴ Viewers often use humor, satire, and casual expressions to deconstruct cultural norms, employing popular slang like "666" (used to compliment skill) or "233" (indicating laughter). These responses break the seriousness of the content and playfully challenge traditional authority.

The Horizon of Expectations is expressed directly in Danmaku, which sets it apart from other forms of audience engagement. When reading a book in a library or watching a movie in a cinema, the audience's expectations are usually private and implicit, making them difficult to express or share with others. Danmaku, however, breaks this barrier by allowing a wide range of aesthetic expectations to be openly displayed on the video. This makes it easy to see how a scene impacts viewers and what they anticipate. Viewers of Danmaku videos always bring certain emotions or feelings to their experience, which can vary depending on the content. These feelings might include humor, satire, seriousness, or excitement. The combination of the video's content and the emotions expressed through Danmaku creates a sense of resonance and emotional connection. Viewers then express these feelings through Danmaku, amplifying the emotional experience and greatly satisfying their expectations while reducing the sense of isolation that can come with watching alone.

This demonstrates that, within the framework of Reception Aesthetics, Danmaku culture stimulates audience creativity through the structure of negation. A good work not only fulfills the audience's expectations but also challenges and disrupts them, leading to the creation of new meanings. At the same time, viewers act as the ultimate arbiters of the work by evaluating it through likes, "coin donations," and favorites, while also participating in its recreation through Danmaku. This process places the audience at the center, reshaping the interaction between the work and its viewers. Ironically, this stands in stark contrast to the culture industry prevalent in modern media. While Reception Aesthetics emphasizes audience agency and cultural diversity, the cultural industry prioritizes standardization and commercialization for efficiency. This conflict is reflected in the rise and decline of Danmaku culture: in its early stages, Danmaku culture demonstrated the potential of Reception Aesthetics. However, as the logic of the cultural industry took hold, it became homogenized, eventually leading to its decline.

2.2 The "State of Exception" in the Cultural Industry

Bilibili began as a free-form space for user expression, where Danmaku served as a spontaneous and decentralized form of communication. However, starting from 2018, the platform shifted toward a commercial model aligned with consumer culture and capital-driven media logic. This transformation marked a turning point in the production and control of content, as Danmaku became increasingly shaped by algorithms, moderation, and market forces. In this section, I will explore how such a shift reflects deeper structural dynamics through the lens of cultural theory.

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²⁴ Hans Robert Jauss, *Toward an Aesthetic of Reception*, trans. Timothy Bahti (Minneapolis: University of Minnesota Press, 1982), 25.

In *Dialectic of Enlightenment*, Theodor Adorno and Max Horkheimer introduced the concept of the "culture industry", arguing that modern cultural products lose their critical and unique qualities through industrialization and standardization, becoming tools for capitalism to control thought and behavior. The culture industry continuously shapes consumers' "needs" through standardization and commodification, transforming cultural consumption into a manipulated market activity rather than a form of free creative expression (Adorno & Horkheimer, 1947). As these authors point out: "For the present, the technology of the culture industry confines itself to standardization and mass production and sacrifices what once distinguished the logic of the work from that of society." This logic applies not only to traditional media such as film, radio, and television but also to contemporary online platforms and social media, including the dissemination of Danmaku culture.

Danmaku culture initially emerged as a decentralized form of communication, but as Bilibili developed, it gradually became integrated into the standardized system of the culture industry. The platform began shaping the scope of Danmaku expression through content moderation, recommendation algorithms, and commercialization strategies. Bilibili not only regulates which Danmaku comments can be published through content review policies but also amplifies certain types of Danmaku (such as those promoting "positive energy" narratives) while reducing the visibility of others (such as critical or dissenting comments). As Adorno and Horkheimer stated:

All mass culture under monopoly is identical, and the contours of its skeleton, the conceptual armature fabricated by monopoly, are beginning to stand out. Those in charge no longer take much trouble to conceal the structure, the power of which increases the more bluntly its existence is admitted. Films and radio no longer need to present themselves as art. The truth that they are nothing but business is used as an ideology to legitimize the trash they intentionally produce.²⁷

This phenomenon is particularly evident in the evolution of Danmaku culture. What was once an open space for spontaneous user interaction has increasingly been subject to moderation and algorithmic regulation, transforming Danmaku from a form of free expression into a platform-governed tool shaped by commercial and mainstream ideological interests.

To better understand how Danmaku culture is controlled, we can turn to Michel Foucault's theory of biopower. In The History of Sexuality, Foucault describes biopower as a modern form of governance that maintains social order through managing, regulating, and controlling life processes. Unlike traditional sovereign power, biopower does not rely on violent repression but instead operates through social discipline and self-regulation, leading

²⁵ Theodor W. Adorno and Max Horkheimer, *Dialectic of Enlightenment*, trans. Edmund Jephcott (Stanford, CA: Stanford University Press, 2002).

²⁶ Theodor W. Adorno and Max Horkheimer, *Dialectic of Enlightenment*, trans. Edmund Jephcott (Stanford, CA: Stanford University Press, 2002), 95.

²⁷ Theodor W. Adorno and Max Horkheimer, *Dialectic of Enlightenment*, trans. Edmund Jephcott (Stanford, CA: Stanford University Press, 2002), 95.

individuals to voluntarily conform to the power structure. As he states: "The old power of death that symbolized sovereign power was now carefully supplanted by the administration of bodies and the calculated management of life." On digital platforms, Bilibili and similar Danmaku platforms do not outright ban all controversial speech, but instead guide user expression through algorithms and moderation mechanisms. For example, before posting Danmaku, users must pass a knowledge-based quiz designed to "ensure" they understand Danmaku etiquette and community guidelines. On the surface, this appears to be a measure to maintain community order, but in reality, it functions as an implicit content control mechanism, leading users to unconsciously conform to the platform's norms. As Byung-Chul Han states in Psychopolitics, neoliberalism no longer governs through coercive disciplinary mechanisms, but rather through psychopolitics, making individuals believe their actions stem from free will. He argues:

Today, we do not deem ourselves subjugated subjects, but rather projects, always refashioning and reinventing ourselves. A sense of freedom attends passing from the state of subject to that of project. All the same, this projection amounts to a form of compulsion and constraint—indeed, to a more efficient kind of subjectivation and subjugation.²⁹

In Danmaku culture, the platform does not directly remove all non-compliant Danmaku but instead filters, suppresses, or hides certain content through algorithmic downranking and user reporting mechanisms, subtly encouraging users to self-regulate their behavior. Foucault's Panopticon theory can also be applied to the evolution of Danmaku culture. While the traditional panoptic model emphasized a one-directional gaze of surveillance, digital-era surveillance has shifted into a system where individuals willingly expose themselves and actively participate in the mechanism of control. Han notes:

Jeremy Bentham's panopticon isolated inmates from each other for disciplinary purposes and prevented them from interacting. In contrast, the occupants of today's digital panopticon actively communicate with each other and willingly expose themselves. That is, they collaborate in the digital panopticon's operations.³⁰

On Bilibili, the concept of the digital Panopticon is reflected in how the platform uses algorithmic filters and user reporting systems to maintain control. Instead of directly censoring content, Bilibili encourages users to monitor each other and adapt their behavior to fit platform norms. This creates a form of self-surveillance where users, aware of being watched, voluntarily conform to expected standards. Much like Foucault's Panopticon, where the possibility of surveillance leads to self-discipline, Danmaku culture on Bilibili operates through a system of indirect control, where users participate in regulating their own and others' expressions.

²⁸ Michel Foucault, *The History of Sexuality, Volume 1: An Introduction*, trans. Robert Hurley (New York: Pantheon Books, 1978), 140.

²⁹ Byung-Chul Han, *Psychopolitics: Neoliberalism and New Technologies of Power*, trans. Erik Butler (London: Verso, 2017), 1.

³⁰ Byung-Chul Han, *Psychopolitics: Neoliberalism and New Technologies of Power*, trans. Erik Butler (London: Verso, 2017), 8.

Achille Mbembe expands on Michel Foucault's theory, introducing the concept of "necropolitics". He argues that modern sovereignty is not only concerned with the management of life (biopower) but also with the control over death and disappearance—determining which groups are allowed to survive and which must be excluded or erased.³¹ This perspective applies not only to governance in physical spaces but also to digital governance. In the context of Danmaku culture, Mbembe's necropolitics theory helps explain how platforms determine which cultural expressions can persist and which must be eliminated. On Bilibili, for instance, some aggressive or discriminatory comments may not be immediately deleted and can even be amplified, whereas Danmaku that critique the platform, government policies, or social issues are more likely to be censored or hidden. In the digital space, necropolitics no longer focuses on the physical extermination but operates through the manipulation of visibility, determining which cultural expressions may survive and which must be erased.

This logic of selective governance further reflects how digital platforms create a "state of exception" (State of Exception). Drawing from Giorgio Agamben's concept of the state of exception, Mbembe argues that within sovereign governance, laws are not fixed but can be adjusted or suspended by those in power to maintain absolute authority. In other words, the state of exception is no longer a temporary disruption of legal order but a continuous spatial arrangement that allows sovereign power to function outside legal frameworks."...the zone where the violence of the state of exception is deemed to operate in the service of "civilization." On Bilibili, this "state of exception" manifests in the selective application of platform rules—some Danmaku are strictly regulated at certain times, while at others, they are deliberately ignored. For example, during politically sensitive periods, content moderation is heightened, whereas at other times, certain marginalized expressions may be tolerated.

A typical example is the Bilibili video id: av810872, titled "我永远都会守护在你的身边" ("I Will Always Be by Your Side"). The video is a fan-made anime music video (AMV) remix featuring one of Bilibili's most popular anime characters. As of January 2015, this video had accumulated 25.32 million views and 1.483 million Danmaku comments, introduced by the platform as Bilibili's "100 Must-Watch Videos." The video featured an overwhelming amount of "flooding" comments, where users sent a large volume of Danmaku simultaneously, covering the entire screen. This behavior directly violated the Danmaku management guidelines discussed in Chapter 1. However, unlike the strict enforcement seen with similar behaviors in niche videos or subcultures, Bilibili chose not to penalize or address these violations. Instead, the platform widely promoted this video's unique Danmaku flooding as a highlight of its cultural identity. This selective enforcement of policies exemplifies the "state of exception," where certain behaviors are tolerated or even celebrated when they align with the platform's broader goals, despite contradicting established rules.

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³¹ Achille Mbembe, *Necropolitics*, trans. Steven Corcoran (Durham: Duke University Press, 2019)

³² Achille Mbembe, *Necropolitics*, trans. Steven Corcoran (Durham: Duke University Press, 2019), 172.

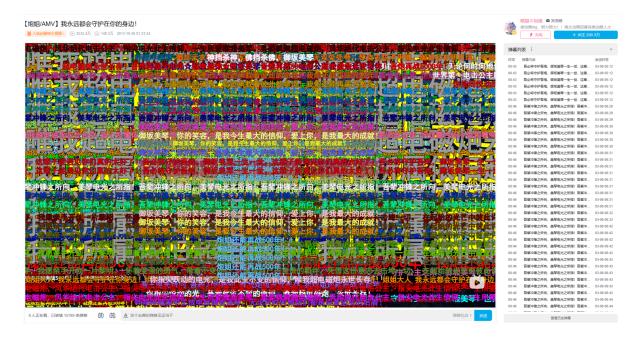
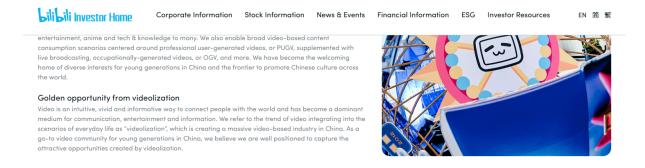


Figure 7. Screenshot of Bilibili video av810872. 2024 (The Danmaku pool in the image, many Danmaku comments were repeated and sent by the same user.)





Unparalleled Leadership among Generation Z+

With our vibrant community and high-quality content, we have established unparalleled leadership among Generation Z+, or Gen Z+, individuals born from 1985 to 2009 in China. According to iResearch, they are viewed as the golden cohort in China's video-based industry as they are the driving force and trend-setter of all kinds of consumption in China.

Highly sticky community with a strong sense of belonging

Cultivating an engaging community where every user feels a sense of belonging has always been our top priority. Our community is comprised of a great number of interest-based sub-communities with passionate users bonding with each other over shared interests. We have thoughtfully designed various interactive features and pioneered a signature commenting function called "bullet chatting" to foster engagement. We also designed a unique official membership examination system to ensure strong interests and affinity to enhance users' belonging and loyalty. We believe that our vibrant community, together with over a decade of experience in building it, forms one of our strongest competitive advantages.

We are focused on fulfilling the diverse and expanding interests of our users.

We attract users with engaging content, retain them with our vibrant community, and curate the right content to satisfy their consumption needs. We have achieved diversified commercialization, primarily generating revenue from mobile games, value-added services, advertising, e-commerce and others. Capitalizing on the videolization trend and our in-depth understanding of highly engaged users, we believe we will capture more of the growing consumption needs of young generations in China.

Figure 8. Official introduction page of Bilibili. 2024

In Bilibili's official introduction, under the section titled "Highly sticky community with a strong sense of belonging," the concepts of "belonging" and "loyalty" now appear somewhat ironic.

2.3 Deliberative Democracy and Agonism

As an interactive form in the digital age, Danmaku was originally intended to offer a new way for people to meet their social needs, creating a space for diverse dialogue and a sense of belonging. Humans are inherently social beings, driven by an innate desire to be accepted, acknowledged, and connected with others. This need persists in virtual spaces, and Danmaku culture in a novel way provides a solution to fulfill it.

From the perspectives of Deliberative Democracy and Agonism theories, Danmaku culture offers a form of interaction that accommodates both consensus and conflict. According to Habermas's theory of Deliberative Democracy, an ideal public sphere should provide equal and rational opportunities for dialogue to facilitate consensus through discussion.³³ Danmaku culture, with its real-time commenting feature, creates a decentralized space for conversation where viewers can express their emotions and opinions on equal terms, forming a dynamic arena for public exchange. However, this form of interaction does not fully align with the rational and orderly model proposed by deliberative democracy. Instead, it is characterized by a high degree of emotionality and immediacy, emphasizing individual and fragmented expressions.

At the same time, political theorist Chantal Mouffe's theory of "agonism" argues that conflict and diversity are essential components of a democratic society and should not be eliminated but rather expressed within a structured framework.³⁴ In Danmaku culture, viewers' opinions and emotions often clash intensely, creating an "agonistic" space for interaction. Differing perspectives coexist in this environment, and conflict becomes a channel for expressing emotions and opinions. For example, when the finale of Game of Thrones³⁵ aired, many viewers expressed disappointment through Danmaku comments, while others defended the storyline. This clash of opinions created a space where viewers could see diverse perspectives, compare them with their own, and find a sense of belonging by connecting with others who shared their views. Through participating in these real-time exchanges, viewers can better understand their own viewpoints by comparing them with others. This process not only helps them express themselves but also allows them to reflect and develop a clearer sense of identity within the online community, reinforcing their sense of identity within the digital community.

Not only on Bilibili or Danmaku culture, online platforms have transformed how we interact with friends and family, but also how we understand groups and communities.

³³ Jürgen Habermas, The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society, trans. Thomas Burger (Cambridge, MA: MIT Press, 1989).

³⁴ Chantal Mouffe, The Democratic Paradox (London: Verso, 2000)

³⁵ Game of Thrones is a fantasy television series produced by HBO, based on George R.R. Martin's A Song of Ice and Fire novels. The show aired from 2011 to 2019 and became widely known for its complex storylines and controversial ending.

Through social networks and interest-based communities, people can easily find like-minded individuals and communicate without geographic limitations, fulfilling the basic human needs for belonging and recognition. As Anthony Giddens discusses in Modernity and Self-Identity, self-identity in contemporary society is increasingly shaped through reflexive processes that take place within abstract systems and mediated experiences.³⁶ Digital platforms significantly aid in meeting these needs by allowing individuals to express themselves through text, images, or videos while finding communities or groups that share similar values, thereby constructing an emotional support system—a "place of belonging". In Bilibili's Danmaku culture, this "place of belonging" is often reflected through the phenomenon of "formation-style" Danmaku.³⁷ This type of Danmaku usually starts with someone leading the way, prompting many similar comments to appear simultaneously. The video's content first attracts viewers with similar interests and backgrounds, creating a shared context where repeated comments build a strong sense of community. Within this space, the repeated Danmaku amplifies the herd mentality, and as more viewers join in, this effect intensifies, eventually resulting in a massive "Danmaku wall." This process not only showcases the power of digital platforms in fostering group identity but also highlights how online communities can transform individual expressions into a collective experience.

However, the convenience of online social interactions has also brought new challenges. The platforms' tendency to weaken diversity impacts users' perspectives and ways of thinking, creating a risk of passively adopting mainstream viewpoints in the search for belonging. In The Filter Bubble (2011), Eli Pariser points out that algorithmic recommendations often construct "filter bubbles," locking users into a single sphere of ideas and limiting exposure to different perspectives³⁸. Danmaku culture once played the role of breaking through such filter bubbles, but now it has become another form of filter bubble. In this context, how individuals can find genuine self-expression and identity within a diverse and complex digital world has become a critical issue for contemporary international societies.

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³⁶ Anthony Giddens, *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Stanford, CA: Stanford University Press, 1991), 5.

³⁷ "Formation-style" Danmaku refers to a coordinated practice where many users post the same or similar comments simultaneously, creating organized patterns or visual effects on the screen.

³⁸ Eli Pariser, *The Filter Bubble: What the Internet Is Hiding from You* (New York: Penguin Press, 2011).

Chapter 03: Methodology

3.1 Searching for Disappearing Danmaku Art

Since 2016, I have been collecting Danmaku art on Bilibili by using screen recording software to capture the moments when Danmaku art appeared. By 2024, when I revisited these collections, many of the Danmaku text and videos had already been deleted. The only remaining information for these videos was their unique URL. Attempting to open these links typically resulted in a "404 Not Found" error page. To ensure the completeness of my research, I conducted some statistical analysis of all the recorded Danmaku that I had recorded to examine the specific circumstances surrounding the disappearance of both the videos and the Danmaku content.

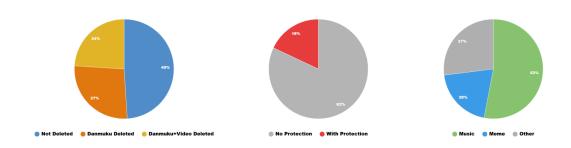


Figure 9, A statistical chart based on 153 Danmaku videos, showing changes in the quantity and types of Danmaku.

Among the 153 Danmaku-related videos I analyzed, 51% of the Danmaku content was deleted or disappeared for various reasons, with 27% of these cases involving both the videos and the Danmaku being completely removed. Of the remaining 49% of Danmaku content that was not deleted, 18% were preserved due to the "Danmaku Protection" mechanism. This feature grants video creators the authority to select and safeguard certain Danmaku, ensuring that they remain permanently visible regardless of external interference.

Among the deleted Danmaku content, 53% were related to collective resonance, characterized by sudden bursts of Danmaku, similar in style to the 'flooding' Danmaku found in the video *av810872* (one of Bilibili's "Top 100 Must-Watch Videos"). Additionally, 28% were associated with memes, often featuring playful comments or artistic forms of Danmaku.

It is important to explain one of the mechanisms of Danmaku, The Danmaku limit. For example, in a five-minute video, to ensure smooth playback on viewing devices, the maximum number of Danmaku displayed within those five minutes is capped at 1,000. When the 1,001st Danmaku is sent, the first Danmaku in other words, the earliest will disappear. Viewers can use the "Danmaku pool" feature to select a specific date and view the 1,000 Danmaku that were active on that day.

While the Danmaku limit governs the visibility of real-time comments, technological changes also significantly determine which Danmaku content remains accessible over time. Flash Player, developed by Adobe, was widely used for embedding interactive content such as animations, online games, and streaming videos. It played a crucial role in the early development of online video platforms, including Bilibili, which initially relied on Flash technology to render and display Danmaku in real time. However, due to security vulnerabilities, performance inefficiencies, and the rise of more advanced web technologies like HTML5, Adobe officially discontinued Flash Player on December 31, 2020.³⁹ This transition forced platforms to shift their infrastructure, leading to compatibility issues for older Danmaku content. Many Danmaku art that were created using Flash-based features, such as precisely timed scrolling effects and interactive animations, became unreadable or dysfunctional in the new system, resulting in a gradual loss of digital history within the Danmaku community. In other words, even the remaining Danmaku content that has not yet been deleted faces the risk of disappearing over time due to technological shifts.

Secondary Data:

In media scholar Xu Junfeng's paper, *The Development of Danmaku Language on Bilibili*, he uses various data to illustrate the changes in Danmaku language over time. One chart from his study highlights a significant decline in the frequency of "flooding" Danmaku comments on Bilibili after 2011, represented by the blue bar in the chart.⁴⁰



Figure 10, The change of the bullet comments which block people slight, clock in the video and fan the flames in the video, by Xu Junfeng

The author also analyzed the quantity and changes in emoticon-based Danmaku and "formation-style" Danmaku. The former shows how some unique Danmaku gained popularity among viewers and managed to survive, while niche ones were eventually forgotten. The latter reflects how the limits of the Danmaku pool and the failure of new users

⁴⁰ 许峻峰, "B站弹幕语言的发展," 现代语言学 12, no. 2 (2024): 904–916. [Xu Junfeng, "The Development of Danmaku Language on Bilibili," *Modern Linguistics* 12, no. 2 (2024): 904–916.]

³⁹ Adobe, *Flash & the Future of Interactive Content*, Adobe Blog, July 25, 2017, https://blog.adobe.com/en/publish/2017/07/25/adobe-flash-update.

to follow established practices have caused this type of Danmaku, especially Danmaku art, to decline quickly in recent years.

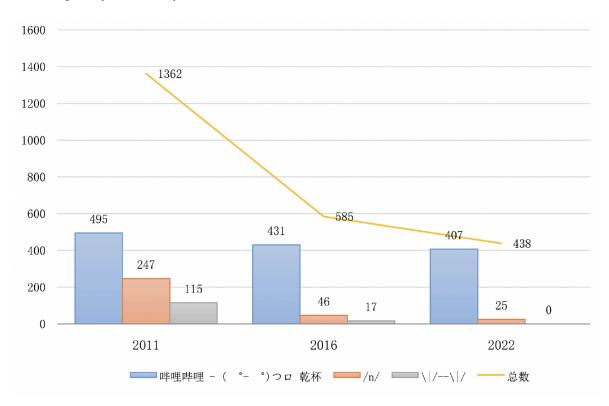


Figure 11, The Change of the emotion bullet comments, by Xu Junfeng

Figure 11, In the figure, the Danmaku "哔哩哔哩- (° - °) つ口干杯" is less prominent due to its slower decline in usage, as it has become a signature feature of Bilibili's platform. This cultural association has helped preserve it over time. In contrast, other emoji-style Danmaku like "/n/" and "|/--|/" lack such platform-specific significance. As their usage decreased among viewers, they eventually fell out of favor and were forgotten.

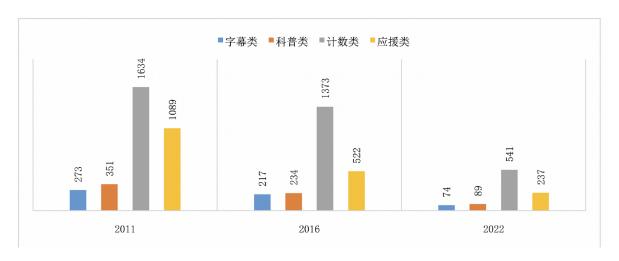


Figure 12, from left to right, The change of the subtitles Danmaku, the science popularizing Danmaku, the counting Danmaku, and the support Danmaku, by Xu Junfeng

Xu Jungeng's research shows that the continuous decrease in Danmaku quantity, the ongoing deletion of historical Danmaku, and the declining number of Danmaku following traditional patterns are the main reasons for the reduction of "formation-style" Danmaku.

By analyzing the combined data, I found that the loss of Danmaku culture is more complex than I initially thought. Its disappearance is not only the result of deliberate deletions by platforms but also due to unavoidable technical issues. The Danmaku that has already disappeared cannot be recovered, and even the remaining content faces the risk of gradually being lost over time.

3.2 Danmaku Practice and Case Analysis

"He who fights too long against dragons becomes a dragon himself; and if you gaze too long into the abyss, the abyss will gaze into you."⁴¹

— Friedrich Nietzsche

In 2020, the second year after Bilibili began large-scale deletions of Danmaku content, I made a practical experiment. I created an AMV (Anime Music Video) related to the animation 'Weathering with You' and invited all the audience who like Danmaku to participate. In my video description, I wrote: "Let's create Danmaku that belongs to all of us." At the time, I had a lack of confidence in this experiment, as I was unsure whether Danmaku culture had truly disappeared, or if anyone would respond to my invitation.

However, the results of the experiment surprised me. In the video, I saw many forms of Danmaku art that I had never seen before. Viewers programmed musical notes as Danmaku, which appeared at different speeds in sync with the song's rhythm. These Danmaku not only captured the music's tempo accurately but also created dynamic visual effects in a highly creative manner. As more viewers participated, the Danmaku began to exhibit a 3D-like style and even featured complex symbol overlays and interactive effects.

This experiment made me realize that, despite being heavily impacted by platform policies, some parts of Danmaku culture have not disappeared. Instead, it may have fragmented into smaller groups, with each group evolving independently based on their own interests and creativity. However, these groups are now much harder to find. Many are highly niche, with low view counts, and since the platform's algorithm prioritizes high-traffic, popular content, these smaller communities often get buried. In most cases, members of these groups were already connected before the split—otherwise, discovering them later becomes much more difficult.

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⁴¹ Friedrich Nietzsche, Beyond Good and Evil, trans. Walter Kaufmann (New York: Vintage Books, 1966), 89.



Figure 13, Screenshot of AMV (Anime Music Video) related to the animation 'Weathering with You' on Bilibili.

In December 2024, I created and uploaded a video on the Bilibili platform showcasing moments of Danmaku culture and art that had completely disappeared from the platform. After the video was published, many viewers who were once passionate about Danmaku culture left the comments below to express their longing and regret for the vanished culture. Among these, the most frequently repeated comments were "miss" and "it's gone forever," reflecting both the audience's acceptance of and resignation to the changes in Danmaku culture.

One comment that impressed me was:

I started using Bilibili for Danmaku culture, meme videos, and the gaming section. Now, Danmaku isn't sent as often, meme content is far less common, the gaming section is chaotic, and the online environment has gotten worse. I can't even find a good alternative (-.-).

This comment not only summarized the decline of Danmaku culture from its peak but also showed the audience's disappointment and confusion about the platform's cultural shift. Interestingly, some of those who once loved Danmaku culture have gradually become critical of it. Their perspectives on Danmaku culture have changed over time, suggesting that the evolution of this culture is influenced not only by technology and platform policies but also by shifts in user needs and the broader online environment. Through this video and comments, I can clearly see the complexity of Danmaku culture's transformation, as well as its emotional legacy and cultural loss in its new forms.

On the Chinese internet, there is a popular meme: 屠龙者终成龙 "The dragon slayer eventually becomes the dragon." This phrase originates from the German philosopher Friedrich Nietzsche's *Beyond Good and Evil*. Its meaning is: the brave warrior who kills the dragon eventually becomes another dragon himself. Initially, the dragon slayer represents the side of justice, fighting the dragon to rid humanity of its menace. The ultimate goal is to end

the battle through combat. Therefore, there is no absolute distinction between good and evil, and there is no fundamental difference between the hero and the dragon. The distinction lies only in their titles, with people seeing the light of the "hero" but not the darkness behind them. The dragon can also be a metaphor for what people initially despise and resist, such as authoritarianism. The hero represents those who overthrow such authoritarian regimes. However, after one authoritarian regime is toppled, a new one often emerges, along with a new hero to combat it. This cycle repeats endlessly, much like the recurring patterns of history.

Back to the evolution of Danmaku culture, the audience who once loved Danmaku eventually became those who resent and reject it. Perhaps, in 2016, those who left negative comments under my video once loved their own unique and irreplaceable version of Danmaku culture.

3.3 The Symbolic Significance of Physical Objects

During my research on Danmaku culture, my old laptop, which had been processing large volumes of high-frequency Danmaku data, began to lose battery life and lag significantly. This phenomenon not only highlights the limitations of hardware performance but also integrates into the experience of Danmaku culture itself. According to media theory, media are not merely tools for transmitting culture but actively shaping cultural experiences. ⁴² Hardware performance directly influences how Danmaku operates and is displayed—when an outdated device struggles with smooth playback, both the viewing experience and cultural expression are compromised. For instance, while a high-performance computer can seamlessly render the dynamic flow of Danmaku in videos like *av810872*, a lower-performance device often results in freezing, system crashes, or even blue screen errors. This loss extends beyond individual memory, representing an erasure of a unique cultural fragment. The lagging is more than a technical issue; it embodies how technological shifts can reshape entire cultural ecosystems.

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⁴² Marshall McLuhan, *Understanding Media: The Extensions of Man* (New York: McGraw-Hill, 1964).

Chapter 04: Making

At the early stage of the project, I decided to name my work *The Gray Area*. The term itself refers to a transitional space between clarity and ambiguity, order and chaos, certainty and uncertainty. It symbolizes the dissolution and fluidity of boundaries, suggesting that things are never strictly black or white but are constantly shifting, reorganizing, disappearing, and reappearing under the influence of various factors. Under the forces of censorship, algorithmic curation, and commercialization, the lifespan of Danmaku culture has become increasingly unpredictable. The visibility and disappearance of information can happen in an instant, what was once widely circulated may be censored, deleted, or forgotten in the next moment, only to be replaced by new content. Expression is continuously reshaped, folded, and overwritten. The term The Gray Area is a perfect way to describe the current state of Danmaku culture.

4.1: TouchDesigner

When thinking about the project, Jodi's art installation My%Desktop greatly inspired me. I first saw JODI's work in 2019 at MoMA in New York. The installation is displayed in a rectangular space, with visuals created by multiple projectors seamlessly blending together. In their work, the relationship between user freedom and platform control, the expression of glitches and chaos, and the characteristics of information overload all share similarities with Danmaku culture. Additionally, the old flip boards commonly found in airports also inspired me. The rapid changes of these boards reminded me of the way text in Danmaku culture is reorganized and transformed. (It seems that all of these elements are following a cycle of chaos, reorganization, and order.)

For my work, I analyzed the archives generated from my autoethnographic research as well as the Bilibili's weekly Danmaku reports. From these sources, I choose the most representative and popular Danmaku texts, many of which have been deleted for various reasons. Using TouchDesigner, I broke these text down into individual characters and recreated the visual effect of old flip boards combined with the movement of Danmaku. These fragmented characters are placed within a dynamic grid connected to a motion-sensing camera. As viewers interact with the space, their movements disrupt the arrangement of the text, randomly generating new words or chaotic combinations. Each word exists only briefly before being scrambled by the audience or environment's next action, creating a continuous cycle of disappearance and reconstruction.

Along the projection's pathway, I positioned multiple layers of semi-transparent fabric. As the projection passes through each layer, the clarity of the Danmaku starts to fade, becoming more blurred until it is no longer legible. This process reflects the multiple

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⁴³ The Museum of Modern Art. "Gallery Sessions: Exploring Art." *MoMA*, https://www.moma.org/calendar/galleries/5160. Accessed 18 Jan. 2025.

interventions and rapid iterations in today's online environment, showing how Danmaku culture evolves and is reshaped on a massive scale.

Every element of this installation reflects the fragility of contemporary Danmaku culture. The space itself symbolizes a "dumping ground" where deleted comments accumulate, continuously shifting and transforming. This installation is the central work of my research.

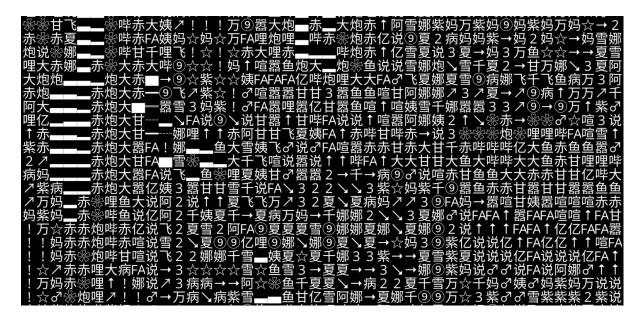


Figure 14. Jinxin Guo. The screenshot of the project 'The Gray Area'. 2024. The text and symbol in the figure are all sourced from Danmaku comments that have been censored and permanently disappeared from the Bilibili platform. They have been deconstructed, fragmented, and reassembled into a new visual form. To view the full video version, visit: https://www.bilibili.com/video/BV1SmoPY1Eqi/

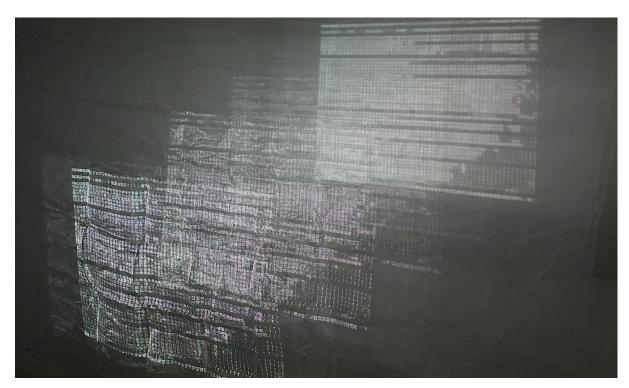


Figure 15. Jinxin Guo. Projection test conducted in the EMS room at OCAD University. 2025. The prototyping took place in the Experimental Space at 205 Richmond St, where a TouchDesigner project was projected onto multiple layers of transparent fabric. As the projection passed through each layer, the fabric both allowed the image to pass through and held part of it visually, creating a sense of a digital world embedded in physical space. The surrounding environment continuously influenced the presentation of the work—touch, air currents, and subtle movement within the room caused the fabric to shift, making the projected imagery gently oscillate with it. To view the full video version, visit: https://voutu.be/tuln80.xz4

4.2: Glossary

The glossary of Danmaku culture is a tool to help the audience better understand it. Since the concept and background of Danmaku may be unfamiliar to viewers, the primary function of the index is to explain the specific meaning of each Danmaku, the story, and the cultural context behind it.

For the presentation method, I made 15 cards using thermochromic ink. Each card shows a different Danmaku character or phrase and explains its cultural meaning. When viewers hold a card, the heat from their hands makes the black surface fade, slowly showing the hidden text. This interaction lets the audience connect with the culture through touch, showing how culture can slowly disappear when ignored and come back when it gets new attention.



Figure 16. Jinxin Guo, Testing with Thermochromic Powder Pigment and Mod Podge, 2025. This material experiment explored the use of thermochromic pigment and Mod Podge to visualize the disappearance and reappearance of text under heat, reflecting the unstable presence of information in online spaces.

4.3: The lagging laptop + Danmaku Archive

This old, lagging laptop has been with me throughout my whole journey of researching, collecting, and recording Danmaku culture from 2016-2022. It's a 'memory' or 'relic' of this entire exploration. On its screen, People will see the recordings of Danmaku in its original environment, and experience the fast-paced and dynamic nature of Danmaku culture up close.

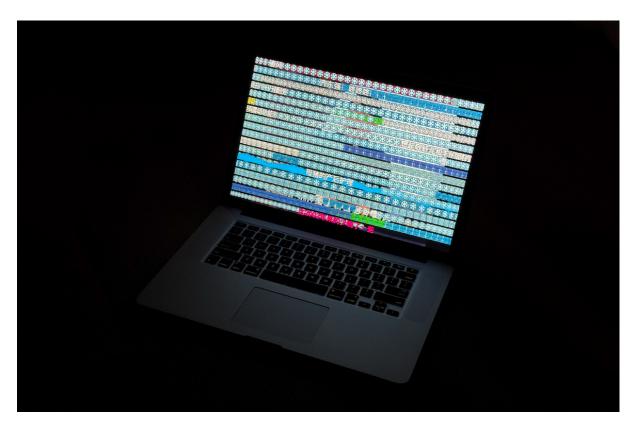


Figure 17. Jinxin Guo, The Lagging Laptop, 2025. This laptop was used in the exhibition to display the Danmaku culture archive from Bilibili. As both a functional device and a symbolic object, it speaks to the early, raw state of Danmaku before its transformation by platform governance and cultural shifts.

Chapter 05: Project Record

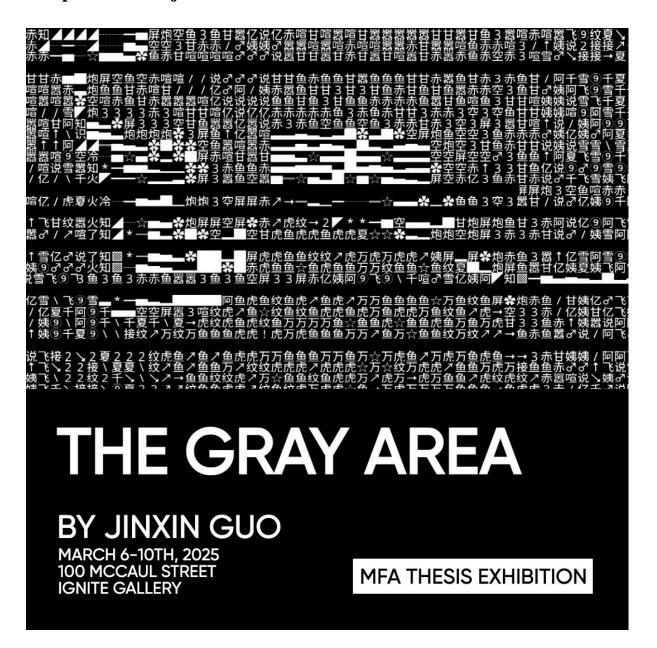


Figure 18. Jinxin Guo, Exhibition Poster, 2025

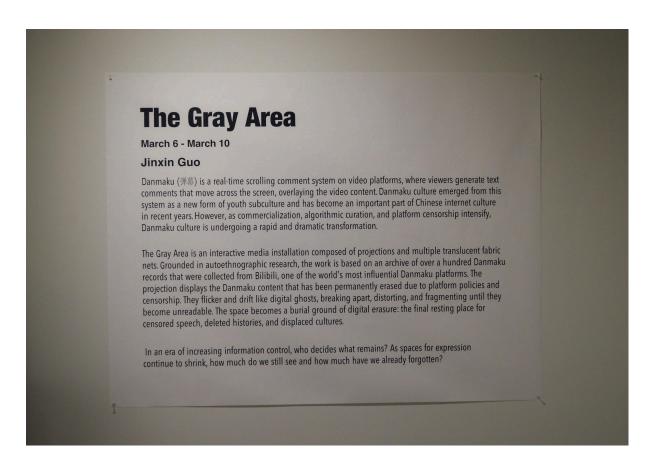


Figure 19. Jinxin Guo, Exhibition Text, 2025

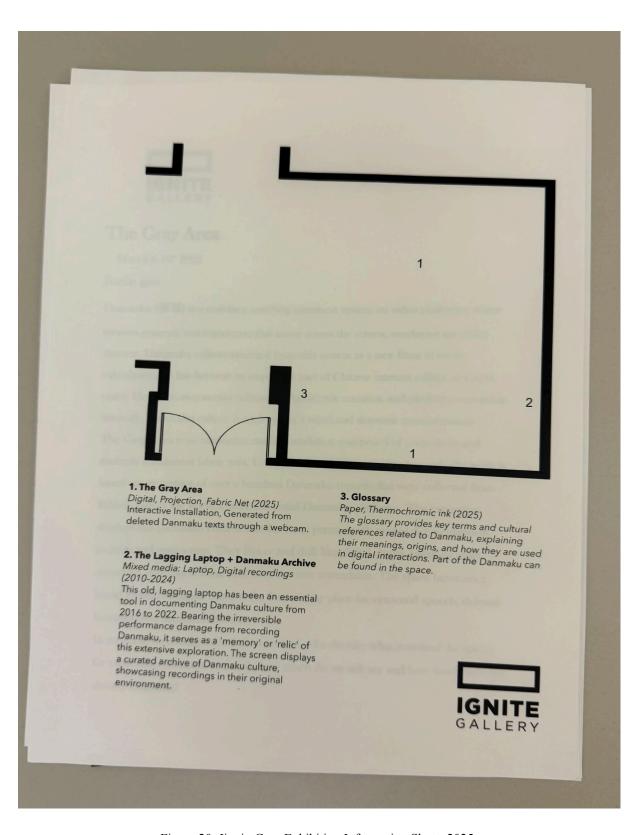


Figure 20. Jinxin Guo, Exhibition Information Sheet. 2025

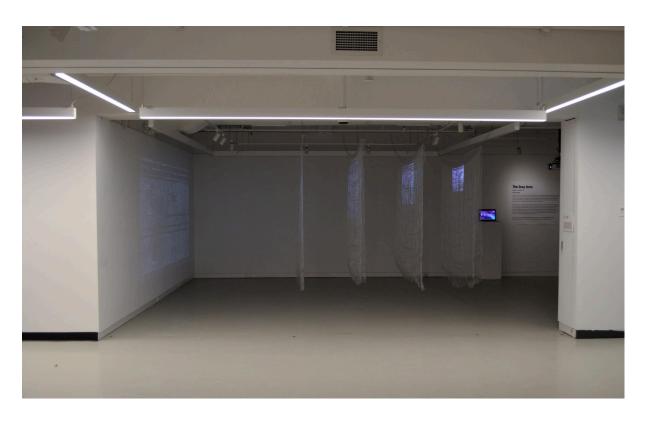


Figure 21. Jinxin Guo, The Gray Area, 2025



Figure 22. Jinxin Guo, The Gray Area, 2025



Figure 23. Jinxin Guo, The Gray Area, 2025



Figure 24. Jinxin Guo, The Gray Area (Work 1), 2025

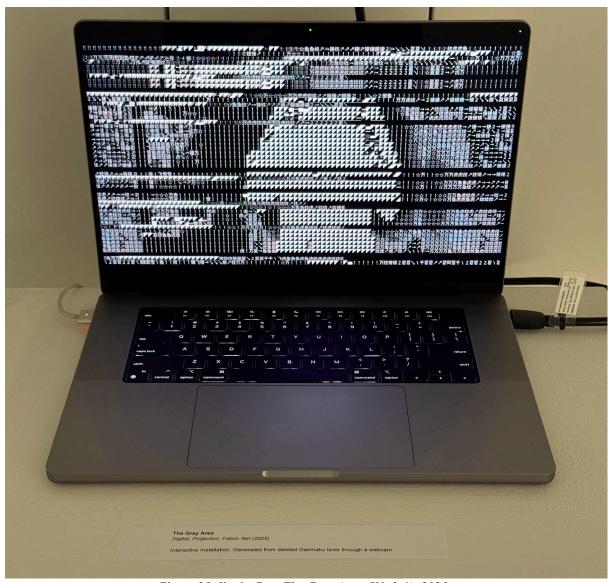


Figure 25. Jinxin Guo, The Gray Area (Work 1), 2025

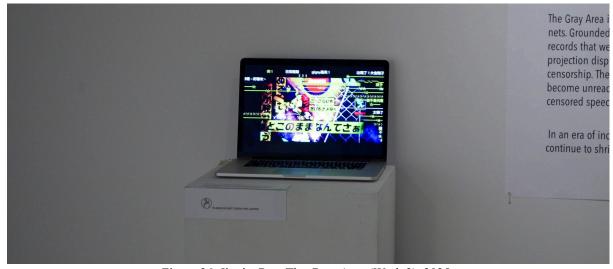


Figure 26. Jinxin Guo, The Gray Area (Work 2), 2025



Figure 27. Jinxin Guo, The Gray Area (Work 3), 2025



Figure 28. Jinxin Guo, The Gray Area (Work 3), 2025



Figure 29. Jinxin Guo, The Gray Area, 2025



Figure 30. Jinxin Guo, The Gray Area, 2025

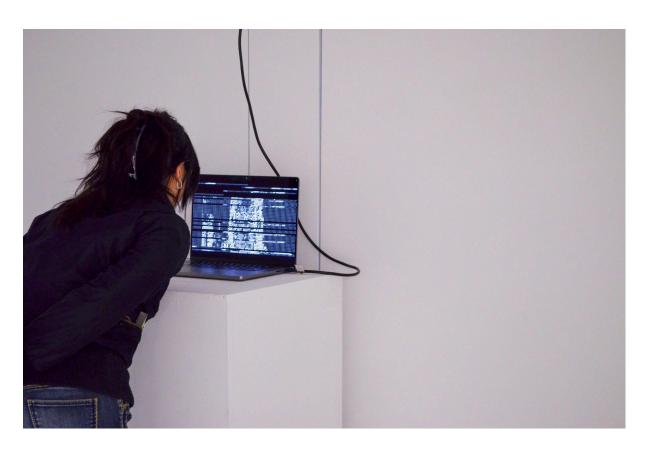


Figure 31. Jinxin Guo, The Gray Area, 2025

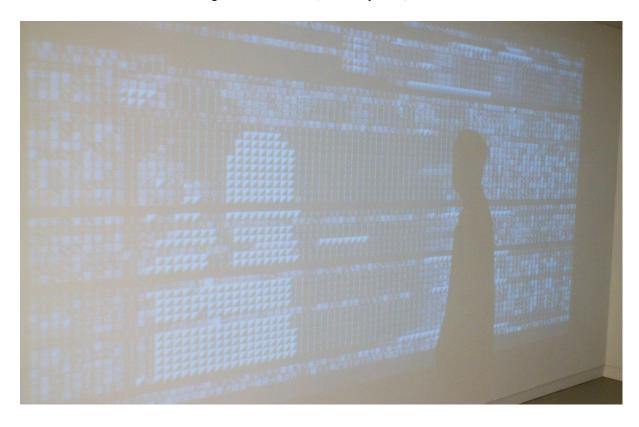


Figure 32. Jinxin Guo, The Gray Area, 2025



Figure 33. Jinxin Guo, The Gray Area, 2025



Figure 34. Jinxin Guo, The Gray Area, 2025

Chapter 06: Reflection/Conclusion

This was my first time exhibiting in a large space like Ignite, and also my first attempt at integrating digital and physical elements in my work. Throughout this exhibition, I experimented with many new materials, such as insect netting and thermochromic ink. The unique properties of these materials revealed unexpected connections to Danmaku culture during the creative process. For example, the disappearance and reappearance of text, along with the gradual dimming of light, in many ways reflected the phenomenon of "information flow and disappearance" represented by today's internet.

The exhibition is a journey through Danmaku culture—what it used to be, what it is going through now, and what it might become in the future. Once a niche form of online interaction, Danmaku is now often presented in official or controlled ways, shaped by mainstream platforms and dominant narratives. The work aims to reveal its original spirit before platform regulations and government policies reshaped it, and to share its richness and complexity with a wider audience.

Within this broader exploration, the Ignite space provided a multi-perspective viewing experience that grounded the conceptual framework in a physical environment. In previous test spaces, maintaining a balance between digital and physical elements was often challenging. The digital visuals could easily overshadow the physical materials, or the physical elements could dominate, weakening the interactive nature of the digital technology. However, Ignite's spatial qualities perfectly bridged this gap, allowing digital and physical elements to coexist harmoniously, enhancing the work's depth and offering an immersive experience for the audience.

This spatial advantage not only improved the visual impact of the work but also offered audiences more opportunities for open interpretation. Whether viewing from a distance to appreciate the overall installation or examining details up close, each viewer could find a unique path to explore the artwork. This multidimensional exhibition experience transformed the work into a dynamic medium, inviting audiences to think and interpret from different perspectives. Such open expression mirrored the diverse viewpoints within Danmaku culture, where every expression is distinct.

During the exhibition, audiences engaged with the work in their own unique ways. Every element in the space influenced their behavior, and this freedom resonated with the idea in Danmaku culture that "every Danmaku is a unique expression." Some viewers chose not to pass through the fabric but instead observed the entire installation from the outside, while others gently shook the fabric to experience the interplay of material and light. This diverse interaction was not only visual but also tactile, where every subtle movement could trigger new changes in the work, blending the audience's thoughts and emotions into the context of the artwork.

Throughout the creation and presentation process, it became increasingly clear that the decline and transformation of Danmaku culture were merely a microcosm of today's

cultural industry. Regardless of any intervention, it could not escape the baptism of capitalist society. The year 2018 was a turning point, and it led to questions: Were there similar turning points before? Will there be new ones in the future? During the exhibition, when I revisited previously deleted videos, I was surprised to find that two of them had been re-uploaded to Bilibili. What does this represent, and what might it foreshadow? In this era filled with traffic and uncertainty, anything is possible.

To me, danmaku wasn't just a layer of commentary; it was a unique form of content in itself. In fact, the full name of the site—"Bilibili Danmaku Video Website"—reflects how central this feature was. However, Bilibili never truly gave danmaku culture that kind of dedicated space. Motivated by this idea, I began creating compilation videos in 2016 that focused solely on danmaku, treating it as a standalone genre.

At first, the danmaku compilations I made gained surprising traction. People shared their favorite Danmaku clips with me and asked to have them included in future edits. It felt like a shared cultural project—exciting, collaborative, and full of energy. But just a week later, things took a turn. A flood of negative comments appeared, turning what had started as a celebration of community into an episode of cyberbullying. It was a very difficult time. I began to question myself, wondering if what I was doing was actually wrong. So I took a break from Danmaku, tried making other videos, and gave myself some space to think things through. I came to realize that Danmaku is a space full of contradictions—some people use it for fun, others for emotional expression, and some as a space for confrontation. But this diversity is also part of its strength. I returned to making Danmaku videos a year later and continued until 2020. To my surprise, the hostility was gone—perhaps the space had changed, or perhaps I had.

Nowadays, I still use Bilibili to watch videos. Its function for me is similar to using YouTube or TikTok, serving more as a tool for entertainment or practical purposes. However, unlike a few years ago, I now rarely turn on the Danmaku feature. This shift in my own viewing habits is not unique. Based on my observations and conversations, many people who once loved Danmaku culture now tend to choose to turn off the Danmaku function while watching videos. They no longer see Danmaku as an essential part of the viewing experience, and only turn it back on when they encounter a scene that evokes a familiar atmosphere or emotional resonance from the past. The reason behind this shift lies in the fact that people hold different understandings and definitions of Danmaku culture. Some regard it as a functional form of interaction, used to gather information or confirm plot developments, while others see it as an important space for finding personal identity and forming emotional connections. These differing perspectives often join together within the shared space, leading to various forms of conflict: some users seek recognition, others express emotion, and some are simply 'passing through'. As a result, what was once an open and inclusive space has gradually become chaotic, tense, and even hostile—prompting many of its original supporters to quit from Danmaku space.

Danmaku, as a neutral space for expression, is in fact composed of various non-neutral comments. Once a particular viewpoint becomes dominant, it gains a sense of

authority and is often labeled as "correct" or even as a form of "positive energy," which then suppresses other possible voices. This phenomenon also reflects a core characteristic of today's Chinese internet environment: public opinion is increasingly shaped by comment sections. Whether on mainstream media platforms or niche social spaces, dominant ideas in comment sections have gradually replaced independent thinking and become a primary force in shaping discourse. Any expression that deviates from mainstream opinion is likely to be quickly criticized or attacked, creating a form of invisible cyberbullying. A large number of users participate in this process not out of rational judgment, but because of conformity—driven by the fear of being isolated or rejected.

In this context, Danmaku culture has undergone a noticeable shift. It is increasingly being used by platforms as a tool to shape public opinion. It is used as propaganda to create a "correct" viewing atmosphere, unify audience responses, and present the platform's alignment with dominant values. A clear example of this is the "positive energy" of Danmaku. Through these comments, platforms aim to reinforce particular values and encourage passive agreement from viewers. This raises important questions: What exactly is "positive energy"? And who has the authority to define it?

In research, "positive energy" often does not refer to genuine kindness or shared positive emotions. Instead, it usually reflects messages that align closely with dominant public beliefs—narratives that are easily accepted, repeated, and widely shared. As a result, "positive energy" should not be seen as a neutral or universal value. Rather, it is a constructed and regulated standard. It works in tandem with mainstream discourse, pushing aside non-mainstream, critical, or dissenting voices. These alternative perspectives are often labeled as "negative," "unharmonious," or even "harmful."

缺乏交流的群体聚集于视频网站上发弹幕,如同古人的壁画,现代的涂鸦一般……只是视频终归是有主题的,就算是杂淡视频,来看视频的人看时间久了也会厌倦自嘲的弹幕,纵使这个网站本就是因为一群人用弹幕聊天,一起自 嶂而兴起,事有主次,弹幕的沉寂不可避免,只不过下一次是在什么事物上涂鸦?纹身,服饰略的应该还会是其一吧

Figure 35. Screenshot of a comment posted by one of my followers on Bilibili. 2025. The comment appeared under the video of the Danmaku archive project I created and uploaded on Bilibili.

"Groups that lack real communication tend to gather on video platforms, posting danmaku comments like ancient people painting on cave walls—or like modern-day graffiti. But videos always have a central theme. Even in casual talk shows, viewers eventually get tired of the self-indulgent danmaku if it goes on too long. After all, this platform rose to popularity because people used danmaku to chat and hype each other up in the first place—but priorities change, and the silence of danmaku is inevitable. The only question is: what will become the next canvas? Tattoos, clothing—those might be among the next ones." (translated by Jinxin Guo).

So, reflecting on my research question: Has Danmaku culture truly disappeared, or does it now exist in a new form, continuing in a way that I no longer recognize? Rather than being completely gone, it has re-emerged in new forms, adapting to technological and societal changes. The core of Danmaku culture has never been about profoundly changing people's lives. Instead, it adds a touch of fun to daily life through brief moments of interaction, entertainment, and emotional sharing. It exists in ordinary moments, creating an additional layer of instant connection and interaction between people.

Danmaku is more than just a string of text floating across the screen; it is a reflection of emotion and a medium for real-time interaction. Participation in Danmaku, whether casual or deliberate, becomes part of a larger conversation. Over time, the text and symbols in Danmaku are constantly reinterpreted and reorganized, gradually becoming embedded in the cultural fabric. This dynamic process mirrors the evolution of language: new words and forms emerge, are adopted and used by users, and eventually integrate into the everyday cultural context

Some people may believe that Danmaku culture is in decline, but the reality is far more complex. It may be retreating from smaller groups, yet simultaneously merging into the wave of mainstream culture. Danmaku culture is like a shell, continually filled by new groups of users, with each generation imbuing it with fresh meaning. Despite these changes, the core features of Danmaku culture remain unchanged: real-time interaction, anonymous expression, and the ability to capture collective emotions. This evolutionary trajectory is similar to many phenomena in the contemporary cultural industry, continuously reshaped and reborn under the baptism of capitalist society.

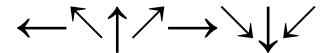
Bibliography:

- AcFun. "About Us." AcFun Official Website. https://www.acfun.cn/info/#page=about.
- Adobe. "Flash & the Future of Interactive Content." *Adobe Blog*, July 25, 2017. https://blog.adobe.com/en/publish/2017/07/25/adobe-flash-update.
- Adorno, Theodor W., and Max Horkheimer. *Dialectic of Enlightenment*. Translated by Edmund Jephcott. Stanford, CA: Stanford University Press, 2002.
- Barthes, Roland. "The Death of the Author." In *Image-Music-Text*, translated by Stephen Heath, 142–148. London: Fontana Press, 1977.
- Best, Paul, Roger Manktelow, and Brian Taylor. "Online Communication, Social Media, and Adolescent Wellbeing: A Systematic Narrative Review." *Children and Youth Services Review* 41 (2014): 27–36.
- "Bilibili Faces Regulatory Scrutiny: Some TV Shows Removed, Stricter Content Review Implemented" (B站遭遇监管风波:部分影视剧下架, 内容审核趋严). 2017. https://www.sohu.com/a/157147965 498761.
- Bilibili. "关于加强对时政类视频内容管理的公告" [Notice on Strengthening the Management of Political Video Content]. February 9, 2017. https://www.bilibili.com/blackboard/activity-shizhengmanager.html.
- Chen, Jianqing. "Bullet-Titling in Twenty-First Century China: Bullet-Like Tactility, Soft Touch and Diachronic Simultaneity." *Journal of Visual Culture* 22, no. 1 (2023): 3–24. https://doi.org/10.1177/14704129231166845.
- China Digital Times. "Xiaohongshu Removes 'Feminism' and 'Independent Women' Tags." *China Digital Times*, 2023. https://chinadigitaltimes.net.
- China Media Group. "《2025年春节联欢晚会》奏响和美乐章." CCTV News. January 29, 2025.https://content-static.cctvnews.cctv.com/snow-book/index.html?item_id=1713 2408682544737319.
- Cyberspace Administration of China. *Provisions on the Governance of the Online Information Content Ecosystem*.2020. https://www.gov.cn/gongbao/content/2020/content_5492511.htm.
- Foucault, Michel. *The History of Sexuality, Volume 1: An Introduction*. Translated by Robert Hurley. New York: Pantheon Books, 1978.
- France, Anatole. *The Garden of Epicurus*. Translated by Alfred Allinson. London: John Lane, 1908.

- Friedrich Nietzsche, Beyond Good and Evil, trans. Walter Kaufmann (New York: Vintage Books, 1966), 89.
- Gibson, James J. *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin, 1979.
- Giddens, Anthony. *Modernity and Self-Identity: Self and Society in the Late Modern Age.* Stanford, CA: Stanford University Press, 1991.
- Habermas, Jürgen. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Translated by Thomas Burger. Cambridge, MA: MIT Press, 1989.
- Han, Byung-Chul. *Psychopolitics: Neoliberalism and New Technologies of Power*. Translated by Erik Butler. London: Verso, 2017.
- Hui, Mary. "To Gain Full Access to These Videos, You Must Pass an Exam of 100 Very Niche Questions." *Goldthread*, February 26, 2018.
- In/Visible Culture: An Electronic Journal for Visual Studies. *University of Rochester*. https://www.rochester.edu/in_visible_culture/issue2/introduction.htm.
- Ito, Mizuko, et al., eds. *Fandom Unbound: Otaku Culture in a Connected World.* New Haven, CT: Yale University Press, 2012.
- Jauss, Hans Robert. *Toward an Aesthetic of Reception*. Translated by Timothy Bahti. Minneapolis: University of Minnesota Press, 1982.
- Liu, et al. "Bullet Curtain: The Aesthetic and Politics of Danmaku Culture." *International Journal of Cultural Studies* 26, no. 3 (2023): 3–24.
- McLuhan, Marshall. *Understanding Media: The Extensions of Man.* New York: McGraw-Hill, 1964.
- Mbembe, Achille. *Necropolitics*. Translated by Steven Corcoran. Durham: Duke University Press, 2019.
- Morikawa, Kaichirō. おたく/ *Otaku/Geek*. Translated by Dennis Washburn. Berkeley, CA: Center for Japanese Studies, University of California, Berkeley, 2012.
- Mouffe, Chantal. The Democratic Paradox. London: Verso, 2000.
- Pariser, Eli. *The Filter Bubble: What the Internet Is Hiding from You*. New York: Penguin Press, 2011.

- Peirce, Charles Sanders. *Collected Papers of Charles Sanders Peirce*. Vol. 2. Edited by Charles Hartshorne and Paul Weiss. Cambridge, MA: Harvard University Press, 1931–1958.
- People's Daily. "哔哩哔哩回应'扫黄打非'要求:已清查站内内容" (Bilibili Responds to Anti-Pornography and Illegal Publications Requirements: Has Cleared Site Content). July 27, 2018. https://web.archive.org/web/20200716171150//http://fashion.people.com.cn/n1/2018/0727/c1014-30173222.html.
- She, Xiaochen. "Bilibili Keeps CCTV Spring Festival Gala Young—But What's in It for the Platform?" *Jiemian*, February 8, 2025. https://m.jiemian.com/article/12323421.html.
- The Museum of Modern Art. "Gallery Sessions: Exploring Art." *MoMA*. https://www.moma.org/calendar/galleries/5160.
- 许峻峰. "B站弹幕语言的发展." 现代语言学 12, no. 2 (2024): 904–916. [Xu Junfeng. "The Development of Danmaku Language on Bilibili." *Modern Linguistics* 12, no. 2 (2024): 904–916.]

Glossary:



Format: Rhythm-based Danmaku formed by sequences of directional arrows **Usage:**

- Typically used in synchronization with music or rhythm games to visually represent the beat or melody.
- Enhances the immersive experience by transforming the rhythm into a dynamic and engaging visual effect, almost like a dance of symbols.

Examples:

- In rhythm games like Osu! or Dance Dance Revolution, Danmaku users often mimic the game's arrow patterns to create a playful interaction that mirrors the gameplay.
- In anime scenes featuring energetic music or dance sequences, such as Love Live! or K-On!, directional arrows appear in Danmaku to visually express the tempo and beat, making the experience more engaging for viewers.

\HEY/

Meaning: A concise and enthusiastic way to cheer, representing a shout of excitement or appreciation for something thrilling or enjoyable.

Features:

- Visual Effect: The \ and / symbolize raised arms, with "HEY" in the center as the cheer, resembling a person raising their hands and shouting.
- Emotional Expression: Instantly conveys excitement, support, or a reaction to something amazing or enjoyable.

Similar English Expressions:

- "Yay!"
- "Woohoo!"
- "Let's go!"

鱼,好大的鱼,虎纹鲨鱼

Source: The misheard lyric (空耳)⁴⁴ from the opening of the Anime 'No Game No Life'. **Meaning:** Humorously misinterpreting song lyrics to create a comedic effect, turning serious or abstract lyrics into something playful and absurd.

⁴⁴ What is a Misheard Lyric (空耳)?:A misheard lyric, or 空耳 in Chinese, refers to phonetically interpreting a word or phrase in a song or dialogue as something completely different, often in a humorous way. This can happen when the listener replaces unfamiliar or unclear sounds with words they find familiar, leading to entertaining reinterpretations.

Similar English Examples:

- "All the single ladies" → "Oh, the ceiling's lazy"
- "Despacito" → "This is a Cheeto"



Format: A sequence of symbols arranged in varying heights to create a wave-like visual effect.

Usage:

- Enhances the atmosphere during musical climaxes or intense, emotional scenes.
- Achieves a powerful visual impact through collective audience participation, amplifying the sense of shared excitement and engagement.

亿千万

Source: Adapted from the fan-made Japanese anime song 思い出は亿千万 (Okusenman). **Meaning:** The song's powerful and emotional lyrics, particularly the phrase "亿千万 亿千万" (Oku Sen Man, meaning "100 million and 1,000 thousand"), have turned it into a popular spam format in Danmaku culture. Whenever this iconic line appears in the background music (BGM), viewers collectively flood the screen with "亿千万".

Example:

- In Your Name (君の名は。), during the iconic climax of the theme song Zenzenzense (前前前世), when the lyric "从你的前前前世开始我就一直寻找你的踪迹" ("I've been searching for you my whole life") plays, Danmaku users often fill the screen with synchronized comments like "前前前世" to amplify the emotional peak.
- In Digimon Adventure (デジモンアドベンチャー), when Koji Wada's theme song Butter-Fly reaches its famous line "無限大な夢のあとの 何もない世の中じゃ" ("After infinite dreams, in a world where nothing remains"), Danmaku is often flooded with "無限大" ("Infinity") to echo the song's grandiose message.



Source: A term from ACGN (Anime, Comics, Games, and Novels) culture, originating from the character Cirno (琪露诺) in the Touhou Project doujin game series.

Meaning:

Due to Cirno's in-game depiction as a "baka" (笨蛋, meaning fool or idiot), the number "⑨" has become a shorthand symbol for "fool" or "idiot" within the ACGN community.

Usage:

- Used humorously to refer to someone behaving foolishly or making a silly mistake.

- Can appear in Danmaku comments to lightly mock a character, a situation, or even a fellow viewer in a playful, non-offensive manner.

Cultural Significance: The use of "⑨" exemplifies the unique symbolic language developed within the ACGN community. Simple symbols like this serve as a form of insider communication, fostering group identity and camaraderie among fans.

夏娜

Source: Adapted from the anime Shakugan no Shana (灼眼の夏娜).

Meaning: "Shana" refers to the protagonist of the 2000s anime Shakugan no Shana. On Bilibili, due to her iconic status, whenever content related to her appears in videos, viewers often flood the screen with repeated "夏娜" comments to express their enthusiasm. This behavior has become a common phenomenon in Danmaku culture.



Source: A commonly used Danmaku format on Bilibili that mimics the visual effect of a shooting star.

- The visual effect of a shooting star Simply used for aesthetic appeal.
- Making a Wish Similar to wishing upon a real shooting star, users post this Danmaku in moments of hope, growth, or emotional significance.
- Farewell or tribute Often appears when a character dies, an anime series ends, or a content creator (such as a VTuber) announces retirement.
- Commemoration Used in tribute to classic works, nostalgic moments, or special anniversaries.

Example:

- When a beloved character sacrifices themselves, users flood the screen with "☆=---" as a symbolic farewell.
- During emotional or climactic scenes in anime like Your Name, and Clannad, this Danmaku appears to emphasize the moment.

23333

Meaning: "23333" is an onomatopoeic representation of laughter in Chinese internet culture, similar to "LOL" or "LMAO" in English.

Example:

- When a video contains a funny moment, Danmaku users will spam "23333" to express laughter.

Similar to "LOL," the more 3s added, the stronger the laughter (e.g., 2333333333 is like "ROFL" or "HAHAHAHAHA").



Source: 2024 Bilibili Annual Danmaku.

Meaning: "接" (meaning "receive" or "catch") is used in Danmaku culture to symbolize welcoming good fortune or positive outcomes. Bilibili users often spam "接" in response to good news, hoping to "catch" some luck for themselves. It is frequently seen in contexts such as:

- Passing exams or getting accepted into a program (e.g., college entrance, civil service exams).
- Getting a job or a promotion.
- Successful confessions in romantic relationships.
- Lucky moments in games, such as drawing rare items.

Example:

- In a video where someone announces they passed an important exam, viewers will flood the screen with "接" to share in the celebration and wish for their own success.
- During each pulls in mobile games, when a streamer gets a rare item, the chat spams "接" to "absorb" the luck.

Bilibili Annual Danmaku (announced by Bilibili official, start from 2020)

- 2024: "接" ("Receive") Used to welcome good fortune, such as passing exams, getting a job, or winning in games. Sent over 5.76 million times.
- 2023: "啊?" ("Huh?") Expresses confusion, disbelief, or questioning. Sent over 13.2 million times.
- 2022: "优雅" ("Elegance") Originally meaning grace and refinement, now commonly used to describe someone staying calm and composed in difficult situations. Sent over 10 million times.
- 2021: "破防了" ("Defense Broken") Originally a gaming term referring to breaking an opponent's defense, now used to describe feeling emotionally overwhelmed or deeply moved. Sent over 6.28 million times.
- 2020:
 - o "武汉加油" ("Stay Strong, Wuhan") A message of encouragement during the COVID-19 outbreak in Wuhan.
 - "有内味了" ("That's the Feeling") Used to describe something that matches expectations or a familiar style.
 - o "双厨狂喜" ("Double Fan Frenzy") Expressing excitement when two fandoms or interests overlap.
 - · "禁止套娃" ("No Recursive Jokes") A reaction against excessive repetition of memes or jokes.
 - "爷青回" ("My Youth is Back") Used when something from a long time ago, such as an old show, game, or meme, suddenly gets a new update or reappears in the public eye, bringing nostalgia to fans.

V AV AV AV AV A

This type of Danmaku is commonly used as a warning or alert to notify viewers that something important, intense, or shocking is about to happen. It is similar to "High Energy Ahead" or "Warning" comments in other online communities.

Meaning & Usage:

- Upcoming intense scenes Used before major fights, plot twists, or key character introductions.
- Horror or disturbing content warning Alerts viewers to prepare for shocking or eerie visuals
- Funny or iconic moments Signals an upcoming hilarious or legendary scene.
- Trolling & humor Sometimes used sarcastically to exaggerate a situation and mislead viewers.

Examples:

- In anime or movies, if a major battle or dramatic reveal is about to happen, users may spam "✓ WARNING ►¬" to hype up the moment.
- This Danmaku warns viewers of an incoming jumpscare or disturbing scene in horror game streams or creepy videos.
- In meme or parody videos, users might use this warning format just for comedic effect, even when nothing serious happens.

今天的风儿甚是喧嚣啊

Source: Anime Daily Lives of High School Boys

Meaning: A satirical comment mocking overly dramatic or pretentiously poetic lines.

Usage:

- To defuse awkward situations
- To mock boring or mundane scenes
- To create humorous contrast

Similar English Expressions:

- "What a poetic day..."
- "Ah, the wind speaks to me..."
- "Well, that was deep..."

火了叫我

Meaning: "火了叫我" (literally "Call me when it goes viral") is a phrase used by viewers when they believe a video has the potential to become popular. By commenting this, users are humorously marking their presence before the video gains widespread recognition, as if predicting its future success. It reflects a sense of participation, anticipation, and sometimes playful self-promotion within the Danmaku community.

Example:

- A high-quality meme or funny clip is posted, and users comment "火了叫我", signaling their belief that it will soon go viral.
- Under well-edited video content, early viewers leave this comment, hoping to return when the video gains more traction.

This phrase is similar to Western internet culture expressions like "Marking my spot before this blows up" or "Remember me when you're famous."

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Appendix A:

Provisions on the Governance of the Online Information Content Ecosystem (2020) - Translated by China Law Translate

Internet Information Service Algorithmic Recommendation Management Provisions Chapter I: General Provisions

Article 1:In order to standardize Internet information service algorithmic recommendation activities, carry forward the Socialist core value view, safeguard national security and the social and public interest, protect the lawful rights and interests of citizens, legal persons, and other organizations, and stimulate the healthy development of Internet information services; and on the basis of the "Cybersecurity Law of the People's Republic of China," the "Data Security Law of the People's Republic of China," the "Personal Information Protection Law of the People's Republic of China," the "Internet Information Service Management Rules," and other such laws and administrative regulations; these Provisions are formulated.

Article 2: These Provisions apply to the use of algorithmic recommendation technology to provide Internet information services (hereafter abbreviated as algorithmic recommendation services) within the mainland territory of the People's Republic of China. Where laws and administrative regulations contain other provisions, those provisions are to be followed.

The use of algorithmic recommendation technology as mentioned in the previous Paragraph refers to the use of generative or synthetic-type, personalized recommendation-type, ranking and selection-type, search filter-type, dispatching and decision-making-type, and other such algorithmic technologies to provide information to users.

Article 3: The national cybersecurity and informatization department is responsible for the overall coordination of nationwide algorithmic recommendation service governance and related supervision and management work. The State Council telecommunications, public security, market regulation and other such relevant departments are are, on the basis of their respective duties and responsibilities, responsible for algorithmic recommendation service supervision and management work.

Local cybersecurity and informatization departments are responsible for the overall coordination of nationwide algorithmic recommendation service governance and related supervision and management work within their administrative areas. The State Council telecommunications, public security, market regulation and other such relevant departments are, on the basis of their respective duties and responsibilities, responsible for algorithmic recommendation service supervision and management work within their administrative areas.

Article 4: The provision of algorithmic recommendation services shall abide by laws and regulations, observe social morality and ethics, abide by commercial ethics and professional ethics, and respect the principles of fairness and justice, openness and transparency, science and reason, and sincerity and trustworthiness.

Article 5:Relevant sectoral organizations are encouraged to strengthen sectoral self-discipline, establish and complete sectoral standards, sectoral norms and self-discipline management structures, supervise and guide algorithmic recommendation service providers in formulating and perfecting service standards, providing services according to the law and accepting social supervision.

Chapter II: Information Service Norms

Article 6: Algorithmic recommendation service providers shall uphold mainstream value orientations, optimize algorithmic recommendation service mechanisms, vigorously disseminate positive energy, and advance the use of algorithms upwards and in the direction of good.

Algorithmic recommendation service providers may not use algorithmic recommendation services to engage in activities harming national security and the social public interest, upsetting the economic order and social order, infringing the lawful rights and interests of other persons, and other such acts prohibited by laws and administrative regulations. They may not use algorithmic recommendation services to disseminate information prohibited by laws and administrative regulations, and shall take measures to prevent and curb the dissemination of harmful information.

Article 7:Algorithmic recommendation service providers shall: fulfil their primary responsibility for algorithmic security, establish and complete management systems and technical measures for algorithmic mechanism examination and verification, technology ethics review, user registration, information dissemination examination and verification, security assessment and monitoring, security incident response and handling, data security and personal information protection, countering telecommunications and online fraud, etc.; formulate and disclose algorithmic recommendation service—related norms; and allocate specialized personnel and technical support suited to the scale of algorithmic recommendation services.

Article 8: Algorithmic recommendation service providers shall regularly examine, verify, assess, and check algorithmic mechanisms, models, data, and application outcomes, etc., and may not set up algorithmic models that violate laws and regulations or ethics and morals, such as by leading users to addiction or excessive consumption.

Article 9:Algorithmic recommendation service providers shall strengthen information security management; establish and complete feature databases to be used to identify unlawful and harmful information; and perfect database entry standards, norms, and processes. Where it is discovered that algorithmically generated or synthetic information has not been marked with an indicator, it shall be marked with an indicator, and only then may dissemination continue.

Where unlawful information is discovered, transmission shall be ceased immediately, measures such as deletion adopted to handle it, information spread prevented, and relevant records preserved; and a report shall be made to the cybersecurity and informatization department and relevant departments. Where harmful information is discovered, it shall be dealt with according to online information content ecology management-related regulations.

Article 10:Algorithmic recommendation service providers shall strengthen user model and user tagging management and perfect norms for logging interests in user models and user tagging management norms. They may not enter unlawful or harmful information as keywords into user interests or make them into user tags to use them as a basis for recommending information content.

Article 11:Algorithmic recommendation service providers shall strengthen algorithmic recommendation service display or page ecology management, establish and perfect mechanisms for manual intervention and autonomous user choice, and vigorously present information conform to mainstream value orientations in key segments such as front pages and main screens, hot search terms, selected topics, topic lists, pop-up windows, etc.

Article 12:Algorithmic recommendation service providers are encouraged to comprehensively use tactics such as content de-weighting, scattering interventions, etc., and optimize the transparency and understandability of search, ranking, selection, push notification, display, and other such norms, to avoid creating harmful influence on users, and prevent or reduce controversies or disputes.

Article 13:Where algorithmic recommendation service providers provide Internet news information services, they shall obtain an Internet news information service permit according to the law; and standardize their deployment of Internet news information collection, editing and dissemination services, resharing services, and broadcast platform services. They may not generate or synthesize fake news information, and may not disseminate news information not published by work units in the State-determined scope.

Article 14:Algorithmic recommendation service providers may not use algorithms to falsely register users, illegally trade accounts, or manipulate user accounts; or for false likes, comments, reshares, etc. They may not use algorithms to shield information, over-recommend, manipulate topic lists or search result rankings, or control hot search terms or selections and other such interventions in information presentation; or to carry out acts influencing online public opinion, or evading supervision and management.

Article 15: Algorithmic recommendation service providers may not use algorithms to impose unreasonable restrictions on other Internet information service providers, or obstruct or destroy the regular operation of their lawfully provided Internet information services, or carry out monopolistic or improper competition acts.

Chapter III: User Rights Protection

Article 16:Algorithmic recommendation service providers shall notify users in a clear manner about the situation of the algorithmic recommendation services they provide, and publicize the basic principles, purposes and motives, main operational mechanisms, etc., of the algorithmic recommendation services in a suitable manner.

Article 17: Algorithmic recommendation service providers shall provide users with a choice to not target their individual characteristics, or provide users with a convenient option to switch off algorithmic recommendation services. Where users choose to switch off

algorithmic recommendation services, the algorithmic recommendation service provider shall immediately cease providing related services.

Algorithmic recommendation service providers shall provide users with functions to choose or delete user tags used for algorithmic recommendation services aimed at their personal characteristics.

Where algorithmic recommendation service providers use algorithms in a manner creating a major influence on users' rights and interests, they shall give an explanation and bear related liability according to the law.

Article 18: Where algorithmic recommendation service providers provide services to minors, they shall fulfill duties for the online protection of minors according to the law, and make it convenient for minors to obtain information beneficial to their physical and mental health, through developing models suited for use with minors, providing services suited to the specific characteristics of minors, etc.

Algorithmic recommendation service providers may not push information toward minors that may incite the minor to imitate unsafe conduct, or acts violating social morals, or lead the minor towards harmful tendencies or may influence minors' physical and mental health in other ways; and they may not use algorithmic recommendation services to lead minors to online addiction.

Article 19: Where algorithmic recommendation service providers provide services to the elderly, they shall uphold the rights the elderly enjoy according to the law, fully consider the elderly's requirement in going out, undergoing medical treatment, consumption, handling affairs, etc., provide smart services suited to the elderly according to relevant State provisions, launch monitoring, identification, and handling of information on telecommunications and online fraud, and make it convenient for the elderly to use algorithmic recommendation services securely.

Article 20: Where algorithmic recommendation service providers provide work dispatch services to workers, they shall protect workers' lawful rights and interests such as obtaining labor remuneration, rest and vacation, etc., and establish and perfect algorithms related to platform sign-on and allocation, remuneration composition and payment, work time, rewards, etc.

Article 21: Where algorithmic recommendation service providers sell products or provide services to consumers, they shall protect consumers' fair trading rights, they may not use algorithms to commit acts of extending unreasonably differentiated treatment in trading conditions such as trading prices, etc., and other such unlawful activities, on the basis of consumers' tendencies, trading habits and other such characteristics.

Article 22: Algorithmic recommendation service operators shall install convenient and efficient user complaint and public complaint and reporting access points, clarify handling workflows and feedback time periods, and timely receive, handle and provide feedback on the handling results.

Chapter IV: Supervision and Management

Article 23: The national cybersecurity and informatization department will, together with telecommunications, public security, market regulation, and other such departments, establish a graded and categorized algorithm security management system, implement graded and categorized management of algorithmic recommendation service providers on the basis of the public opinion properties of algorithmic recommendation services or their social mobilization capability, content categories, scale of users, the degree of importance of data handled in algorithmic recommendation, the degree of interference in users' activities, etc.

Article 24:Providers of algorithmic recommendation services with public opinion properties or having social mobilization capabilities shall, within 10 working days of providing services, report the provider's name, form of service, domain of application, algorithm type, algorithm self-assessment report, content intended to be publicized, and other such information through the Internet information service algorithm filing system, and carry out filing formalities.

Where a change occurs in the filed information of algorithmic recommendation service providers, they shall carry out modification procedures within 10 working days of the change occurring.

Where algorithmic recommendation service providers cease services, they shall carry out filing cancellation procedures within 20 working days of ceasing services, and make appropriate arrangements.

Article 25:The national and provincial, autonomous region, and municipal cybersecurity and informatization departments shall, after receiving filing materials submitted by a filing applicant, and where the materials are complete, grant filing within 30 working days, and issue a filing number and publish the matter; where materials are not complete, filing is not to be granted, and the filing applicant shall be notified within 30 working days, and the reason explained.

Article 26: Algorithmic recommendation service providers who have completed filing shall indicate their filing number in a clear position on their website, application program, etc., used for providing external services, and provide a link to the published information.

Article 27: The providers of algorithmic recommendation services with public opinion properties or social mobilization capabilities shall conduct a security assessment according to relevant State regulations.

Article 28:Cybersecurity and informatization department will, together with telecommunications, public security, market regulation, and other such relevant departments conduct algorithm security assessment according to the law, and timely give suggestions to correct discovered problems and provide a time limit for rectification.

Algorithmic recommendation service providers shall preserve network records according to the law, cooperate with cybersecurity and informatization, telecommunications, public security, market regulation, and other such relevant departments carrying out security assessment, supervision, and inspection work according to the law, and provide the necessary technical, data, etc., support and assistance.

Article 29:Related bodies and personnel participating in algorithmic recommendation service security assessment, supervision, and inspection shall maintain confidentiality of the personal private [information], personal information, and commercial secrets they learn when exercising their duties and responsibilities, they may not disclose, sell, or illegally provide it to other persons.

Article 30: Where any organization or individual discovers acts violating these Provisions, they may file a complaint or report with cybersecurity and informatization departments and relevant departments. Departments receiving complaints or reports shall handle them timely and according to the law.

Chapter V: Legal Liability

Article 31:Where algorithmic recommendation service providers violate the provisions of Article 7, Article 8, Article 9 Paragraph I, Article 10, Article 14, Article 16, Article 17, Article 16, Article 22, Article 24, or Article 26 of these Provisions, and laws or administrative regulations contain provisions, those provisions are followed; where laws or administrative regulations do not contain provisions, cybersecurity and informatization departments or telecommunications, public security or market regulation, or other such relevant departments will, on the basis of their duties and responsibilities, issue a warning or a report of criticism, and order rectification within a limited time; where rectification is refused or circumstances are grave, they are to order provisional suspension of information updates, and impose a fine between 10,000 and 100,000 yuan. Where an act violating public order management is constituted, public order management punishment is to be imposed according to the law; where a crime is constituted, criminal liability is to be prosecuted according to the law.

Article 32: Where algorithmic recommendation service providers violate the provisions of Article 6, Article 9 Paragraph II, Article 11, Article 13, Article 15, Article 18, Article 19, Article 20, Article 21, Article 27, or Article 28 Paragraph II of these Provisions, the cybersecurity and informatization, telecommunications, public security or market regulation, or other relevant competent departments will, on the basis of their duties and responsibilities, handle the matter according to the provisions of relevant laws, administrative regulations, and departmental rules.

Article 33: Where providers of algorithmic recommendation services with public opinion properties or social mobilization capabilities obtain filing through hiding relevant circumstances when reporting for filing, providing false materials, or other such improper means, the national and provincial, autonomous region, or municipal cybersecurity and informatization departments cancel filing according to the law, and issue a warning or a report of criticism; where circumstances are grave, they are to order provisional suspension of information updates, and impose a fine between 10,000 and 100,000 yuan.

Where providers of algorithmic recommendation services with public opinion properties or social mobilization capabilities cease services without carrying out filing cancellation

formalities according to the requirements of Article 24 Paragraph III of these Provisions, or they receive administrative punishments such as website closure orders, cancellation of relevant business permits, revocation of the business license, etc., because grave unlawful situations occurred, the national, provincial, autonomous region, and municipal cybersecurity and informatization departments are to impose filing cancellation.

Chapter VI: Supplementary provisions

Article 34: The interpretation of these Provisions is the responsibility of the Cyberspace Administration of China together with the Ministry of Industry and Information Technology, the Ministry of Public Security and the State Administration of Market Regulation.

Article 35: These Provisions take effect on March 1, 2022.

Appendix B:

2014 Version of the Bilibili Membership Application Test Mechanism and Content

The test mechanism and content presented in this appendix are based on the 2014 version, featuring a total of 8,000 questions that covered nearly all the exam topics at that time.

The test randomly selects 100 questions from this pool, and a score of 60 or above is required to pass. Participants have a time limit of one hour to complete the test.

Part of:

Original: "世界已完蛋"来自于哪部作品的OP的空耳?

Translation: "The world is doomed" is a misheard lyric from the opening of which anime? **Options**: Attack on Titan, Lucky Star, Love, Chunibyo & Other Delusions, Nichijou

Original: 在 FATE STAY NIGHT 中阿尔托莉雅的职介是什么? Translation: What is Artoria Pendragon's class in Fate/Stay Night?

Options: Saber, Lancer, Caster, Rider

Original: 以下哪个声优不是游戏《Starry Sky》的声优?

Translation: Which of the following voice actors did not participate in the game *Starry Sky*?

Options: Jun Fukuyama, Daisuke Ono, Miyano Mamoru, Tomokazu Sugita

Original: 负责动画制作中背景部分的画面质量、效果的检验与调控的职务是

Translation: Which role is responsible for checking and adjusting the quality and effects of

the background in animation production?

Options: Art Director, Background Supervisor, Color Setting, Animation Director

Original: USB3.0 的插口通常为何种颜色?

Translation: What color is the USB 3.0 port typically?

Options: Blue, Green, Black, Red

Original: 最终幻想 VIII 中登场的女主角为:

Translation: Who is the female protagonist in *Final Fantasy VIII*?

Options: Aerith, Rinoa Heartilly, Yuna, Garnet

Original: 下列哪种主立体匹配算法不是全局匹配算法?

Translation: Which of the following stereo matching algorithms is not a global matching

algorithm?

Options: BP, SSD, Dynamic Programming, Graph Cut