

Chapter 13

China's Use of Military Propaganda Technology

Shu-Ting Liu*

I. Introduction

Propaganda has always been China's important rule for dominion. To the PLA, propaganda is pertinent to the stability of military morale and the support from the people and to the goal of "the enemy surrendering without even fighting". The PLA has been faced with the challenge of military recruitment and is eager to expand its talent pipeline. Internally, there are generational problems. Military propaganda is an important task in meeting the expectations of society and young soldiers. As communications technology develops rapidly, the PLA emphasizes the importance of "keeping up with the times" by adapting to the internet era and speaking to the heart of youngsters.¹ This chapter seeks to understand how the PLA propaganda uses technology in cyberspace and the effects it creates.

Unlike other chapters that examine state-of-the-art weapons and cutting-edge technological development, this chapter focuses on the use of propaganda technology and highlights the characteristics of technological tools for propaganda. Further, this chapter is founded on the belief that the PLA's internal propaganda emphasizes the use of technology, while its external propaganda is the accumulation and extension of internal propaganda. Hence, the logic of its internal propaganda sheds light on the PLA's direction in external propaganda. The article

* Policy Analyst, Division of Defense Strategy and Resources, Institute for National Defense and Security Research.

¹ For China's military propaganda, see Kristin Huang, "Can Chinese Military's Hip New Propaganda Strike Chord with Generation Z?," *SCMP*, May 30, 2021, <https://reurl.cc/q1Zlqp>.

also articulates the strategy and the characteristics of China's military propaganda by analyzing its animation, "Demonstration of Concerted Firing on Taiwan", in order to highlight the PLA's direction in the development of external propaganda technology.

II. PLA's Strategy in Internal Propaganda Technology

1. Targeting the Entertainment Culture of the Young Generation

In recent years, the military propaganda of the Chinese Communist Party (CCP) has been focusing on the ACG (animation, comics, and mobile game) industry to grab the interest of young soldiers.² By presenting military propaganda in a manner of entertainment through digital imaging technology, military broadcasting attracts public attention and reinforces propaganda effects.

(1) *Fun and eye-catching animation*

The PLA leverages the readability and fun of animation in attracting the target audience and spicing up the storyline for propaganda. In recent years, the PLA also leverages civil technology and resources and works with private production companies or studios for military propaganda animation through licensing, commission, and co-development by tapping into the thriving domestic animation industry. Take "Year Hare Affair" as an example, it started as a hit online as a long-running comic, and the PLA Political Work Department TV Art Center became a co-producer in the fifth season of the said comic. The broadcasting on the 70th Anniversary of the Founding of The People's Republic of China presented the PLA's image in the new era with animation technology and was particularly well-received by the young audience. In particular, it generated more than 60 million views.³

² For PLA all fire on ACG propaganda, see "How National Defense Education Integrates into the Two-Dimension? The Right Flavor with a Military Touch," *Xinhua Net*, June 10, 2020, <https://reurl.cc/WXEdkD>.

³ For PLA animation propaganda, see "Patriotic Education Campaign in China Under the Era of Xi Jinping," *The Wall Street Journal*, January 4, 2021, <https://reurl.cc/xEgZ4b>.

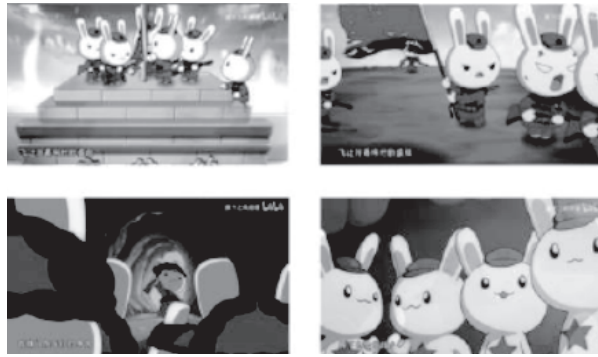


Figure 13-1 PLA's Animation "Year Hare Affair"

Source: "Year Hare Affair" season 5, *Bilibili*, October 1, 2019, <https://reurl.cc/oxgEpg>.

(2) "Moe" animated figures

Based on computer animation, the PLA integrates AI facial recognition and interactivity technology to design fictional figures for military propaganda. "Moe" is a concept originated from Japanese anime and denotes to something cute and lovable. The animated and customized "moe" personas are created to reach the young generation. China Military Online launched its first AI anchorperson, "Xiao Jun," in March 2021, showing animation mixing with in-person interviews. While Xiao Jun's going back and forth with the PLA pilots was fun and interactive, the programs also blended with hip slangs and special-effect images, an innovation distinct from previously standardized interviews for propaganda.⁴

⁴ For PLA animated anchorperson, see "Debut of Military Media AI Anchorperson Xiao Jun and Interview with Y-20 Pilot Feng Wei," *Ministry of National Defense of the People's Republic of China*, March 8, 2021, <https://reurl.cc/Ok0zDv>.



Figure 13-2 Interview Conducted by PLA’s AI Host Xiao Jun

Source: “Debut of military media AI anchorperson Xiao Jun and interview with Y-20 pilot Feng Wei,” *Ministry of National Defense of the People’s Republic of China*, March 8, 2021, <https://reurl.cc/Ok0zDv>.

(3) *Military mobile games with placement propaganda*

The PLA has established a foundation in developing mobile games for placement propaganda. In the early days, the PLA Air Force launched “Golden Helmet,” and the PLA Ground Force developed the dual-use version of “Honor of Kings” in training soldiers with war simulation and cultivating military interest among the young Chinese generation. However, as the government mouthpiece, *People’s Daily* started to criticize “Honor of Kings” as addictive for teenagers, the *Chinese People’s Liberation Army Daily* echoed the same message. Consequently, the troops are said to have discontinued the mobile games.⁵ In fact, China Military Online has not updated the newest information section about mobile games since early 2019. As this seems contrary to the global trends, the future development of China’s military mobile game technology is yet to be observed.

2. Communication for the Internet Era

The PLA propaganda has moved from the traditional paper-based literature to the cyber platform. Various mobile devices now function as propaganda channels.

⁵ For PLA prohibits military video games, see “PLA Soldiers Addicted to Mobile Game ‘Honor of Kings’ Xinjiang Military Base Issues a Ban,” *RFI*, October 12, 2017, <https://reurl.cc/6DakzO>.

Combined with online social means such as short videos, livestreaming, and barrages, they have become the PLA's new way of communicating with the public.

(1) *Short videos close to home*

As short video platforms, such as Douyin and Kuaishou, have become the center of entertainment and social life of the Chinese people, the PLA has been using short videos to enhance internal propaganda. Unlike the long and tedious reports on the PLA's official webpages in the past and unrestricted by the broadcast timeslots of the TV media, each short video is 15 seconds to 5 minutes, providing intuitive audio and video stimulation to the audience on mobile devices and in time confetti. In the example of China Military Online's Douyin account, most releases feature day-to-day military training, military career, and family life, which speaks of the PLA's "close to home and down to earth" strategy in its short video propaganda.

(2) *Engaging via livestreaming*

Livestreaming as the new online social activity emphasizes real-time and reality. The PLA uses livestreaming technology to create an atmosphere of face-to-face communication. For instance, the Network Public Opinion Bureau under the Political Work Department of the People's Republic of China Central Military Commission launched the livestreaming series, "War Drumming Along," without editing or adding special effects to represent the true color of military life. Online connectivity allows instant interactions between the audience and the soldiers. Furthermore, livestreaming is also aired simultaneously via the PLA's new media, China's official media www.cctv.com CCTV.com, the Communist Youth League of China's new media and platforms, such as Toutiao Jinri Toutiao. A single livestreaming of four hours attracted over 43 million viewers, which speaks of its influence on the internet communities.

(3) *Barrages as the technology for interactivity*

Barrages are a new way for interactivity and commenting in the internet era. These are a large number of moving textual comments on videos, similar to the barrage shooting game. It has become an important means of expressing opinions

by the cyber generation in China. Unlike the comments, thumbs up, or sharing on social media, barrages are synchronous and free from the constraints of space, meeting everybody's needs for simultaneous interaction. For instance, the PLA Air Force's airborne troops have set up a Bilibili account, "Our Sky", to publish videos. There is a large barrage of messages, such as "Proud of you" and "Well done", as the audience engages in real-time interactions.



Figure 13-3 PLA's "Our Sky" Barrage Film

Source: "Paratroopers" Parachutes Hit the Ground Running, a Stimulation of Three Days and Two Nights "Thrills on the Battlefield", *Bilibili*, April 2, 2021, <https://reurl.cc/oxgEpg>.

3. Audio Experience for Voice Propaganda

The "ear economy" in China rose during the pandemic. Audio platforms, such as online music, podcasts, and audiobooks, are gradually becoming the center of Chinese entertainment. Meanwhile, the PLA keeps up with the trend and pursues the possibility of various voice propaganda.

(1) *Music platforms to build cohesion*

Streaming media provides the audience with access to digital music without the limitation to physical equipment, number of downloads, and types of music. Music is available anytime, anywhere, and on demand. In an environment convenient to the audience, online music platforms add features, such as sharing, comments, collection, and customization, for better social interaction. For example, the PLA

News Communication Center launched the military song, “Outset”, on the Chinese online music platform, KuGou Music.⁶ KuGou Music also introduced the “August 1 Army Day Song List” to enhance the PLA’s sense of honor and solidarity by leveraging the reach of music broadcasting.⁷

(2) *Podcasts for subtle and gradual influence*

The podcast market in China has been booming in recent years. Compared to traditional broadcasting, online podcasting is published in lists and available for downloads or streaming on demand. The interface provides features, such as “subscribe” and “push”, for better autonomy of the audience. The PLA inspires a patriotic awareness among troops and people and cultivates a sense of national defense with the power of voices on podcasts. For instance, the PLA leverages the influence of podcasts for recruitment by establishing “2021 Bugle Calls to Military Camps” as another use of its propaganda technology.⁸

(3) *Audio reading to entertain and educate*

Audio reading has lately become a new option for the Chinese audience. Audio-sharing platforms use AI technology to push content to users according to voice preferences and listening habits. On Himalaya, China’s largest audio sharing platform, over 400 audiobooks feature the PLA. Among them, the Pacific War series from “Modern Military Bar” affiliated with the Chinese government attracts over 20 million hits; the Great Final Battle series on the PLA’s warring history generated nearly 2.6 million hits. These numbers show the potential of audio reading to enhance the Chinese people’s awareness of national defense.

⁶ For Online music platform plays military songs, see “Fighting the Pandemic Song ‘Outset’ Live on KuGou Music,” *Xinhua Net*, April 20, 2020, <https://reurl.cc/MkAoVW>.

⁷ For Military propaganda song list, see “Nanfang Daily Joins ‘Kuguo’ for August 1 Army Day Song List as Salute to Soldiers,” *Tencent News*, August 7, 2020, <https://reurl.cc/NZroLn>.

⁸ For PLA’s podcast platform for recruitment, see “Military Recruitment Via Fingertips,” *Ministry of National Defense of the People’s Republic of China*, June 8, 2021, <https://reurl.cc/15RbLE>.

III. Trends of PLA's External Propaganda Technology

As described above, the PLA's use of internal propaganda technology focuses on the social culture of the young generation and values the broadcasting features of digital audio/video. As a further analysis, this paper examines the simulated animation, “Demonstration of Concerted Firing on Taiwan,” published by Warship Knowledge magazine on July 1, 2021.



Figure 13-4 Simulated Animation “Demonstration of Concerted Firing on Taiwan”

Source: “Xi Jinping demonstrates the Chinese people’s determination to resolve the Taiwan issue. The film ‘Demonstration of Concerted Firing on Taiwan’ is now on!” YouTube, July 1, 2021, <https://reurl.cc/35aqWV>.

1. Application Strategies

(1) *Use of civil technology for military propaganda*

The Chinese military propaganda stays on top of the market trends for the audience and mostly relies on civil technologies and resources. Warship Knowledge is the largest popular science magazine by circulation in China. China CSSC Holdings Limited, the military industry heavyweight, is behind the magazine’s publisher, the Society of Naval Architects and Marine Engineers, and is

closely affiliated with the Chinese government. On May 20, 2020, when President Tsai Ing-wen inaugurated, the Warship Knowledge magazine released the film, "Simulation on Firing at Taiwan in 2020,"⁹ and in 2021 added a storyline. The use of civil technology for military purposes creates a more immersive experience for the audience in China's narrative of threats.

(2) *Simulated animation for intimation effects*

Based on 3D computer animation, this film simulates the PLA's military equipment and establishes a 3D model of Taiwan's anti-aircraft missiles and combat areas and terrains by adding simulated fighter aircraft, missiles, armored cars, and soldiers. It seeks to create a highly realistic effect with 3D coloring, textures, and lighting. Through the animated simulation, the PLA attempts to exaggerate China's military power and its understanding of Taiwan's military capabilities. The cross-cutting of images of fighter aircraft taking off and ground troops gathering, together with video and audio effects of missile strikes and tank explosion, create an impression of the breaking out of war and aim to put pressure on Taiwan and the international society.

(3) *Mimicked tones as an attempt to speak to the heart*

The voice-over of "Demonstration of Concerted Firing on Taiwan" is in a stable and solemn rhythm, in conjuncture with the string music in allegro tempo and the sound effects, such as airplanes flying and wartime broadcasting, to enhance the sense of presence and sharpen the emotional tension of the simulated animation. The idiomatic expressions and the local accent of Taiwanese soldiers are an important addition. There are conversations mimicking the Taiwanese army under the PLA's attack, such as "What the command is saying?," "Their missiles are here! Damn it!," "Oh no. Anti-aircraft missiles are electromagnetically interfered." These Taiwanese colloquial expressions and tones are meant to highlight the PLA's military advantages by imitating the R.O.C. Armed Force's vocal expression in

⁹ Warship Knowledge magazine published "Simulation on Firing at Taiwan in 2020", see "Chinese Media Threatens to Neutralize All the Airports in Taiwan in 4 Minutes 'Taiwanese Army Fights Back' 'You Will Know Our Determination in Less Than 4 Minutes'," *Taiwan News*, May 23, 2020, <https://reurl.cc/V58qAA>.

panic and retreating in defeat and attempting to undermine the confidence of the Taiwan military and its society.

2. Future Trends

(1) *Deepfakes for cognitive warfare*

The above PLA footage shows an increasing sophistication of computer animation technology. In fact, there have been many scandals about the PLA's fakes in propaganda films. For example, the PLA's training images are found to be the patchwork of old propaganda videos. Some of the pictures showing off fighter jets came from Hollywood movies.¹⁰ These indicate that the PLA has strong intention to fake propaganda, but given that its current technical capabilities are inadequate, loopholes are everywhere. Meanwhile, it is expected that the PLA will work on realistic and refined Deepfakes for propaganda purposes. Unlike the traditional post-production of films, Deepfakes use deep learning to create lifelike and natural fake images, which are likely to be used by the PLA for large-scale cognitive warfare.

(2) *Using natural language for simulated emotions*

Deepfakes can be used not only for images but also in voices and texts. The aforesaid propaganda (i.e., imitating accents) reflects the PLA's ambition to manipulate cognition with voices. In fact, the PLA seeks to stir up emotions and control the behavior of targets through various media, of which voice is one of the key applications. The traditional speech synthesis is too rigid and formulaic. Moving forward, the PLA is likely to apply the natural language techniques using machine learning and neural networks after it has built up a sufficient corpus of Taiwanese texts and voices. Once equipped with the capability to finely imitate the speaking style and vocal expression of the Taiwanese people and to synthesize and switch multiple roles, voice-based cognitive warfare will be launched against the

¹⁰ For PLA fakes propaganda films, see "PLA's Intimation not Powerful Enough. Fakes Time and Again and for the Third Time," *Central News Agency*, September 27, 2020, <https://reurl.cc/MkAKmX>.

Taiwanese society.

IV. Conclusion

This chapter examines the PLA's propaganda technology and use. The results indicate that its internal propaganda and technology focus on the entertainment culture (e.g., animations, virtual figures, and mobile games) of the young generation and caters to the communication methods in the internet era, such as short videos, livestreaming, and barrages. It also extends its footprint to voice propaganda via music streaming, podcasts, or audiobooks. In sum, China's development of internal propaganda technology keeps up with the trend of the audience market and taps into resources of civil technologies. The development of mobile games is worth watching, given the policy changes and the suppressed industry in recent years.

Furthermore, this chapter is concerned with the PLA's application and the potential development of propaganda technologies. The simulated animation, "Demonstration of Concerted Firing on Taiwan", published by the Warship Knowledge magazine, is used as a case study. This chapter contends that the development of the PLA's external propaganda technology will focus on the continued and extended use of civil technologies for military propaganda, and simulation techniques such as animation and voice to enhance its propaganda effects. Moreover, it is expected that the PLA will carry on with the improvement of promising propaganda technologies (such as Deepfakes and natural language) first in its immense experiment on internal propaganda and then execute more sophisticated external propaganda projects.

