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# Visual propaganda in chinese central and local news agencies: a douyin case study

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This study examines short videos sourced from the Douyin accounts of Chinese central and local news agencies spanning the period from 2018 to 2023, aiming to shed light on the dynamics of visual propaganda within social media and short-form video content. A comprehensive analysis of 2852 short videos was undertaken, focusing on prevalent themes, visual motifs, and emotional persuasion techniques. The results delineate a divergence in focus between central and local news agencies: while the former prioritizes content related to the military, police, and firefighting, the latter emphasizes “livelihood warmth” topics. Central agencies predominantly feature soldiers, police officers, and firefighters, whereas local agencies portray individuals devoid of explicit political affiliations alongside other influencers. Emotional scrutiny unveils a contrast in strategies, with central agencies predominantly evoking emotions such as anger, disgust, fear, and intolerance, while local agencies employ anticipation, acceptance, and respect. This investigation underscores the profound influence of political authority within China’s propaganda framework, shaping both the substance and emotional resonance of political short videos within a hierarchical paradigm.

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## Introduction

Engagement with social media has increased, leading governments to expand their presence on social media platforms (Lu and Pan 2021; Zhang et al. 2020; Zhang and Xu 2023). The Chinese government has increasingly used visual propaganda to mobilize public emotions (Lu and Pan 2021; Schneider 2021). Given the key role of visuals in the daily lives of most people, analyzing and understanding the effects of visual propaganda on society is crucial. (Schneider 2021). Throughout history, visual propaganda has served as a powerful tool for persuasion, manipulation, and control (Belicove 2011; Goldstein 2009; Rose 2012; Seo and Kinsey 2012). Visual communication not only conveys information but also evokes emotion and elicits responses (Bo et al. 2002; Borth et al. 2013; Campos et al. 2017; Zhang et al. 2009).

Several government departments have accounts on Douyin, which is the most popular short video platform in China (Zhang et al. 2020). According to the 52nd Statistical Report on Internet Development in China published by the China Internet Network Information Center (CNNIC 2023), as of December 2022, the number of Internet users in China was 10.79 billion, and 96.8% of these users (10.26 billion users) had accounts on short video platforms. Consequently, the Chinese government has been tightening its control over short video social media platforms. According to the forementioned report, the governments of 31 provinces (autonomous regions and municipalities) in China have established accounts on Douyin. A total of 26,098 Douyin accounts have been established by government officials at all levels of government; 19.5% of these accounts have more than 1 million fans, and 2.8% of these accounts have more than 10 million fans (CNNIC 2023). A total of 38 radio and television organizations at or above the provincial level have established 82 accounts on short video platforms, with each account having more than 10 million fans (CNNIC 2023). According to China Television Corporation (CTR 2023), among these accounts, the Douyin accounts of People's Daily and CCTV News boast 155 million and 144 million fans, respectively. This indicates that these two accounts hold the highest number of fans among all Douyin accounts. The Chinese government uses short videos for information disclosure, image construction, distribution of legal information propaganda, and social governance.

Visual propaganda has been the subject of extensive research (Lu and Pan 2021; Hamilton 2013; Schneider 2021); however, most studies have concentrated on aspects such as production, distribution, audience reception, and consumption of news content (Hamilton 2013; Chernova 2013). While several investigations have delved into the content and visual characteristics of Chinese visual propaganda (Lu and Pan 2021; Schneider 2021), there remains a dearth of studies examining the disparities between central and local governmental utilization of visual propaganda. Kuang (2018) highlights both similarities and distinctions between local and central governance in China. In this sense, our study refrains from treating Chinese media as a monolithic entity (Brazys et al. 2023; Stockmann 2011). Furthermore, the realm of short videos has historically received scant attention from journalism and communication scholars due to the challenges associated with their multimodal nature (Parry 2002; Yang and Zhang 2020; Wu and Ma 2019). Our research fills this gap by investigating the utilization of short videos on Douyin as a propaganda tool and exploring divergences and convergences between central and local news agencies.

The aims of this investigation were twofold: firstly, to juxtapose the utilization of short videos at two distinct levels of political subjectivity--the central level (directly governed by China's Propaganda Ministry) and the local level (under provincial and ministerial jurisdiction); and secondly, to formulate and evaluate

an analytical framework for the scrutiny of visual propaganda, one that earnestly considers both visual elements and linguistic context ("takes seriously" (Ross 2001)). Our study reveals disparities in thematic emphasis and emotional tone between Douyin accounts of Chinese central and local news agencies. This inquiry underscores the significant impact of political authority on China's propaganda landscape, molding both the substance and emotional tenor of political short videos within a hierarchical structure. We commence with a literature review focusing on Chinese propaganda, particularly its visual aspects, followed by an exposition of our methodology and presentation of results. Subsequently, we deliberate on the implications of our findings.

## Propaganda and news media

In their pursuit of shaping societal and political landscapes, governments, military establishments, and foreign service entities frequently employ propaganda strategies (Simpson 1994). This instrumental use of propaganda is often conceptualized as means to disseminate core social and political values (Kenez 1985, p.4). Jowett and O'Donnell (2014) elegantly articulate propaganda as a "deliberate, systematic attempt to shape perceptions, manipulate cognitions, and direct behavior to elicit a response that serves the propagandist's intent" (p. 6). The scholarly literature often frames propaganda as a constructive and institutionalized mode of communication beneficial to its creators (Parry 2002; Sproule 1994). It is, in essence, "a form of communication designed to elicit a response aligned with the propagandist's aims" (Jowett and O'Donnell 1999, p.1).

Propaganda's essence lies in its methodical endeavor to sway the beliefs, attitudes, or actions of individuals through various symbolic means--a toolbox that includes the use of language, gestures, visual symbols such as banners and monuments, musical scores, fashion, emblems, hairstyles, and even the design elements found on currency and stamps (Smith 2023). Philip Taylor (2003, p. 3) perceives propaganda as a "neutral concept, a process akin to sowing seeds, fostering their growth, and nurturing ideas." This perspective underscores the dynamic and interactive nature of propaganda, which is not merely a one-way transmission of messages. Rather, it is a multifaceted process that involves the cultivation of ideas within the societal soil. The medium through which propaganda predominantly resonates is the domain of mass media (Herman and Chomsky 1988). This medium serves as a robust platform for propaganda to reach a vast audience, thereby amplifying its potential to influence public opinion and shape national discourse. The interplay between mass media and propaganda is a complex one, with the former often serving as a vessel for the dissemination of the latter's content.

The Internet has changed how information is disseminated and how individuals interact with one another (Benkler 2006; Castells 2004; Jowett and O'Donnell 2014; Lenhart et al. 2010; Seo et al. 2014). Short social videos can enhance the effectiveness of a message (Ungerleider 2013; Chernova et al. 2018; Kalogeropoulos et al. 2016; Judith 2017; Sheldon 2012). Social media platforms, including Facebook, YouTube, and Twitter, have changed global communication patterns. Digital communication technologies have reduced the cost and widened the reach of political communication and have led to greater citizen participation in political activities (Bennett 2004; Castells 2004; Chadwick 2006; Moezzi 2009). The rapid growth of short videos is mainly due to the combination of communication platforms and visual technologies (Cherubini and Nielsen, 2017). Although information is not monopolized on the Internet, it is often manipulated. The average citizen is susceptible to persuasion (Auerbach and

Castronovo, 2013), and short social videos are frequently used in modern visual campaigns.

New media platforms have made it possible for symbols to be more effectively created and more widely disseminated. The Internet enables authorities to more effectively engage in propaganda effort (Golan and Himelboim 2016; Himelboim et al. 2010; Segev 2010). Governments have increasingly begun to use new media platforms to spread political propaganda (Seo and Ebrahim 2016; Dhanesh 2017; Edwards 2018; Brubaker and Wilson 2018; Fraustino et al. 2018; Valentini et al. 2018). This is also true in China (Schneider 2021; Zhang and Xu 2023).

Propaganda on social media platforms can be classified as hard or soft (Mattingly and Yao 2022; Huang 2015). In China, hard propaganda takes the form of, for example, news reports that are inaccurate, exaggerated, fabricated, in favor of China, or against an adversary and that do not involve emotional mobilization (Huang 2015). Hard propaganda typically portrays the ruling party positively, promotes dominant narratives and ideologies, exaggerates the behavior of leaders, and provides false information about opponents (Xia 2020; Mattingly and Yao 2022). Conversely, soft propaganda is a subtle and sleek form of political persuasion (Huang 2018). Soft propaganda is usually presented as entertainment and involves emotional mobilization (Zou 2021; Mattingly and Yao 2022). Therefore, soft propaganda is an entertainment-oriented form of political propaganda (Mattingly and Yao 2022).

Social media is becoming increasingly important in Chinese politics (Yang and Mueller, 2014). Chinese news media are increasingly shifting their focus to digital channels (Zhang 2021; Zhang et al. 2023). Chinese media companies must assume and balance the dual roles of government mouthpieces and news organizations (Zhang et al. 2023). To strengthen its ideological control, the Chinese government employs numerous individuals to sway public opinion on the Internet (Chen et al. 2013). This has led to a backlash in popular opinion. The Chinese Communist Party (CCP) uses the Internet to censor, set agendas, and frame stories to ensure that expressions and activities of mass nationalism in the public sphere are controlled (Landsberger 2009). Social media has become a new tool the government can use to manage information and control public opinion (Nietzel 2016).

### Propaganda in China

In the Chinese propaganda system, the rank of media organizations is linked to the rank of their affiliated government units (Zhao 2004). For example, People's Daily and CCTV News are headed by the propaganda department of the central committee. In contrast, The Paper and Sichuan Observation are led by local propaganda ministries, so their ranks are at the provincial level (CNNIC 2023). Thus, comparing the visual communication strategies of central and local media reveals the independence and maneuverability that localities have gained as political entities under the leadership of the central government, and how they cooperate with the central government in governance (Chen 2009; Zhong and Bastos 2023; Kuang 2018). This relationship, which covers the distribution and subordination of resources, is, in fact, a matrix structure, with the vertical "Tiao" being a vertical, sector-based management system from the central to the local level, and the "Kuai" being a political relationship under the leadership of the party based on administrative divisions (Burns 1996; Xi et al. 2021; Guan et al. 2016). Such a matrix gives flexibility in the functioning of the central-local relationship and allows for the regulation of priorities in governance. When the emphasis is on the center, the emphasis is on the "Tiao"; when the emphasis is on the local level, the emphasis is on the "Kuai". This

is consistent with the theory of fragmented authority (Lieberthal 2004; Mertha 2009; Xi et al. 2021).

In the matrix of "Tiao" and "Kuai", there is a unique political phenomenon in China: local governments translate the policies of the central government when they implement them (Liu 2022; Li 2023). This kind of policy discourse translation realizes the combination of the unity of the central policy, the differences in the translation of the hierarchical government, and the competition among the horizontal local governments (Hajer 1997; Phillips et al. 2004; Wedlin and Sahlin 2017). This is a product of centralized binding decentralization (Liu 2021). Chinese propaganda strategy is a striking manifestation of this political phenomenon, a product of constrained decentralization by the central government (Liu 2021). Influenced by the study of policy discourse, researchers of organizational institutionalism have noted that institutional proliferation is mediated by discursive texts that are simultaneously produced by mutual construction in action and discourse and that one of the missions of China's propaganda is to interpret these texts (Pratkanis and Aronson 2001; Phillips et al. 2004; Wedlin and Sahlin, 2017; Chen and Zhao, 2018). Local governments are allowed to innovate their propaganda strategies by emphasizing not only consistency with the central government but also localization and positioning (Jiang and Wang 2020; Luo 2022).

The Chinese government is widely known for its adept use of mass media for propaganda (Zhang and Xu 2023; Mattingly and Yao 2022; Huang 2015). Chinese propaganda has been used to consolidate governmental control, stabilize the country, and defend national interests through self-promotion and self-advocacy (Shambaugh 2007; Li et al. 2020; Wang 2012; Howard, 2005); Zhang and Jamali 2022). The CCP conveys and expresses its political ideology through official media channels (Wee 2014; Duan and Takahashi 2017; Qi 2018; Zhang 2021). A notable feature of Chinese propaganda is nationalism (Schneider 2018; Zhang and Xu 2023; Zhang and Jamali 2022; Zhao 2004). Since the early 1990s, anti-American sentiments in China and negative attitudes toward US foreign policy have been increasing (Shi et al. 2011). The anti-Western sentiment is often exploited by the CCP. The Chinese government uses soft propaganda to mobilize emotions, entertain the public, and call for unity (Zhang and Yang, 2021; Zou, 2021).

### Short video's visual propaganda and China

Visual effects are a key component of modern publicity. Images are more effective than words at attracting public attention and eliciting emotions (Edwards and Winkler 2008; Geise and Baden 2015; Gibson and Zillmann 2000; Goldstein 2009; Huang and Fahmy 2013; Rose, 2012). Images trigger perceptual processes and those connected with experiences resonate with a person on fundamental, intuitive, and emotional levels (Barry 1997). Visual propaganda is a political application of the visual narrative system. Murray (1995) in their article proposed a conceptual definition of "visual narrative", which is the presentation of one or more events through images that take place in a continuous series of time, resulting in a change of characters in the event, emphasizing the narrative nature of visual characterization of the visual as narrative. Cascati (2007) found in his research that the ubiquitous image has long been ahead of the "thing in itself" and argued that today's society can be defined by "image first". Visual narratives process information visually and present it according to a certain logic and organizational structure, and the presentation of themes, materials, and environments of images all play a role in guiding and integrating the visual function of visual narratives (Yang and Sun 2019; Meng 2020b).

There has been a great deal of research on how the Chinese propaganda system mobilizes emotions to promote state-building and increase regime legitimacy (Turner, 2009; Zheng and Zhao 2012; Powell and Wong 1997; Guo and Yang 2016). These studies suggest that the Chinese government and the CCP employs a model of 'emotion work' that utilizes emotions such as fear, sadness, anger, and shame to exert a sustainable influence on contemporary Chinese politics (Perry 2002). This is in line with the study of the emotional semantics of images, in which the use of images is used to establish a relational mapping from image features to the emotions of the characters (Wang and Yu 2003). Video is a continuous image, and when the image is transformed and coated by specific visual rhetorical strategies, the audience produces continuous self-reflexive thinking, which leads to the purpose of meaning assignment (Scott and Bruce 1994; Liu 2018). The Chinese government often uses visual propaganda (Schneider 2021; Lu and Pan 2021). Visual nationalist propaganda is generally effective in mainland China. Generally, nationalist ideologies involve several features that provide citizens with a sense of common identity and establish common feelings and actions among them (Hoselitz 1956; Howard 2005). According to Sun and Yang (2019), the Chinese government often makes short videos about topics related to the lives of citizens to demonstrate that it cares about its citizens.

Consequently, leaders use images to distribute ideology and change perceptions (Cloud 2008; Davis 2005; Edwards and Winkler 2008; Erickson 2008; Harriman and Lucaites 2007; Spillane 2006). Before the rise of social media, visual propaganda primarily involved the use of pictures, movies, and fine art to covertly instill political intent (Goldstein 2009). However, social media has increased the importance of visual communication (Belicove 2011; HubSpot 2011). The immediate sensory stimulation provided by visuals fits with the characteristics of social media and short videos, together enabling fast-paced information consumption (Li 2013).

In China, marketing mediums such as short videos have capitalized on the commercial potential of nationalism, a strategy that entails minimal political risk (Xie and Zhou 2021). These short videos are particularly adept at conveying nationalistic themes, and visual elements, and evoking emotional responses. The Xinhua News Agency and People's Daily, both entities governed by the Chinese government, deliver stories concerning foreign governments with seriousness and a unified voice, ensuring a coherent narrative that fosters a grassroots nationalist sentiment (Stockmann 2011). This strategic use of visual propaganda not only reinforces a consistent political narrative but also cultivates a sense of national identity and unity among the populace. The integration of nationalistic themes within short videos serves as a testament to the evolving nature of visual propaganda, adapting to the digital age while maintaining its political efficacy.

More broadly, video data and image data are often accompanied by metadata and text data (Steinert-Threlkeld 2019; Zhang and Pan 2019). Most studies on short videos have focused on the background and development of the short video industry or audience preferences and emotional fulfillment (Kaye et al. 2021; Li et al. 2020). Studies involving textual interpretation of short videos as a unique publicity mechanism are lacking, and few studies have analyzed how distinct components of the Chinese central and local governments interact with each other to produce propaganda (Chen 2009; Zhong and Bastos 2023; Kuang 2018). Theoretical underpinnings and prior research suggest that video content on social media will be depicted in audience-recognizable patterns, which may vary for different levels of short videos. This research used visual propaganda theory and the sample short videos were coded into five types. On this basis, the above short videos were analyzed in the dimension of character image by

combining with visual rhetoric theory, mining the political symbolism behind the videos, and sorting out the visual motivation of public emotion generation. Therefore, the present study explored the similarities and differences between central news agencies and local news agencies in Douyin through the perspectives of themes, visual characters, and trends of emotional propaganda. Accordingly, the following research questions were formulated for this study:

1. What visual themes have been constructed by the central and local governments in the visual propaganda of Douyin?
2. What kinds of characters are highlighted by the central and local governments in the visual propaganda of Douyin?
3. Under the effect of visual rhetorical strategies, which emotional responses of the public were mainly stimulated by the character images under different visual themes?

### Methodology

Halliday (1985) proposes that language has three major linguistic functions: conceptual metafunction, interpersonal metafunction, and group linguistic function. Based on these three metafunctions, Kress and Van (1996) extend the theory of linguistic domain to the visual level and propose a theory of world grammar centered on online meaning, interactive meaning, and compositional meaning. Painter et al. (2012) expanded on visual grammar to develop a theory of visual narrative centered on interpersonal, conceptual, and primary meaning. Interpersonal meaning focuses on the interpersonal relationships and emotional expressions involved in the images, which are analyzed in terms of the focusing system, emotional system ambient system, and visual polarization. Conceptual meaning focuses on character representation, world relations, and contextual relations, and picture meaning mainly explores the visual space construction of successive groupings of images in context, including layout, framing, and focus. Unlike pictures, the visual narrative of short videos has stronger text accompaniment and changes in visual content, and its analysis process is an unstructured analysis process in which only parts can be described, and the quantity of the whole needs to be combined with text analysis together with sentiment analysis. The fragmented, short-time, and fast-paced visual narrative characteristics of short videos accentuate the interpersonal relationships, emotional expressions, character representations, and event relationships in the videos.

This paper employs an integrative approach that combines visual and textual to capture how political subjects bring together textual, visual, and emotional aspects when communicating political messages. We argue that the potential limitations can be turned into a strength by pairing quantitative and qualitative approaches together and having them supplement each other in this research. We screened the sample short videos in the following steps: First, we ranked the comprehensive influence of media at the central and local levels respectively and selected the two most influential media in each of them. Second, all short videos of these four representative accounts since the beginning of the first short video were collected. Because our goal was to compare the visual publicity strategies of news media at the central-local levels on Douyin, considering the number of Douyin users in China, videos with less than 200w likes to have limited effect on publicity, and we excluded them to ensure that the selected sample videos were the ones that possessed a high degree of audience recognition. Finally, we created a database of the remaining 2852 short videos for further analysis.

This study analyzed the content of short videos shared on the Douyin accounts of two central news agencies (People's Daily and CCTV News) and two local agencies (The Paper and Sichuan

**Table 1 Sampling.**

Accounts	Followers	Likes	Number of works	Works with more than 2 million likes
People's Daily	160 million	11.06 billion	5325	1619
CCTV News	150 million	7.75 billion	7720	979
Sichuan Observation	47.0 million	3.65 billion	22,000	235
The Paper	39.181 million	700 million	27,000	19
Total			62,045	2852

Observation) from March 29, 2018, to July 28, 2023. People's Daily and CCTV News are organs of the CCP and the most authoritative official news sources in China (Zhang 2021). They represent the voice and will of the Chinese government (Zhang et al. 2023; Zhang 2021). Their reports on short video platforms are rich in content and are quickly uploaded, and they are representative of China's media convergence. Sichuan Observation and The Paper are local news agencies affiliated with the CCP. They are the most popular local government accounts on Douyin (CNNIC 2023). Short video consumption has increased considerably because of the arrival of the mobile era (Peng 2019), and the number of Douyin users has also increased substantially in recent years. The government uses Douyin to present content in a manner that is more concrete than that used on WeChat or Sina Microblog. Therefore, Douyin is the most representative platform for political communication in China.

This study selected the top four governmental Douyin accounts based on their follower counts, which serves as an indicator of their influence on the platform. This study filtered the data to include only videos with more than 2 million likes, which were considered to represent content that has successfully captured considerable public attention and is an example of effective visual propaganda. To ensure data quality and relevance, all collected Douyin posts were manually reviewed, and only short videos meeting the specified criteria were included in our study sample. This resulted in 2,598 short videos being collected from central government accounts and 254 videos being collected from local government accounts. Duplicate entries were excluded, and each short video underwent a single analysis, ensuring data integrity and consistency Table 1.

We took studies on visual propaganda, which have already identified several common themes introduced in the literature to establish the coding scheme (Chen 2016; Zhang et al. 2020; Li and Fu 2022). According to Painter et al. (2012) interpretation of the visual framework, three types of quantification can be performed based on picture features: quantity (number), contrast (mass/amount), and degree (extent). Number quantization means that when the number of identical elements in a picture increases, the viewer is likely to have more emotional feedback. Therefore, the unit of analysis for this study was the individual short videos posted on Douyin, with quantitative counts of themes, visual characters, and emotional propaganda for each short video. In addition, several popular videos were selected for analysis of the governance performance of the Chinese government in short videos and the communication effects they produce. Through case analysis, common characteristics and problems in the short videos created by the Chinese government were identified. The cases that were chosen were typical, making the research more in-depth and the results more comprehensive and convincing. Through these cases, a comprehensive and overall understanding of the Chinese government's performance on Douyin was obtained. The coding scheme is presented in Table 2.

**Findings**

After coding all short videos independently, we used a random number generator to randomly select 200 short videos (ten

percent of the total sample) to assess inter-coder reliability. Two coders independently coded the frames with a coding reliability set at *Scott's pi* = 0.881, and the average reliability of several items was 0.878. The Chinese government and news organizations often use short video sites for their information campaigns. The two most popular central news agencies' Douyin accounts were People's Daily and CCTV News. The two most popular local news agencies' Douyin accounts were Sichuan Observation and The Paper. Since 2018, when these agencies first started sharing short videos, 5325, 7720, 22000, and 27000 short videos were posted on Douyin by People's Daily, CCTV News, Sichuan Observation, and The Paper, respectively. In total, 1619, 979, 235, and 19 short videos posted on Douyin by People's Daily, CCTV News, Sichuan Observation, and The Paper, respectively, had more than 2 million likes.

**Themes (RQ1).** We selected five themes based on visual propaganda in the Chinese context. The first one is the Military, police, and firefighting, emphasizing what parties and governments have done to national defense (O'Loughlin 2011; Cohen 2012; Seo et al. 2014). The second theme relates to international diplomacy, which aims to distinguish between domestic and foreign political environments and show the superiority of indigenous systems to influence the audience's identity (Semetko and Valkenburg 2000; Liu 2018; Wang 2020; Will 2023). The third is Pandemic prevention and control during COVID-19, which is intended to demonstrate the Government's capacity for strong and effective governance. The fourth theme is People's livelihood and warmth. As Richard Wiseman (2004) pointed out, positive energy is "all the motivation and emotions that give people upward mobility and hope and motivate them to keep pursuing to make their lives complete and happy", and the theme of People's livelihood and warmth conveys the values of truth, goodness, and beauty through interpreting People's livelihood, so that audiences can be subtly affected by positive energy. The fifth theme is festivals and anniversaries. Festivals and anniversaries have an important sense of ritual, in which various symbolic representations are used to rebuild the "imagined community" of culture, thereby gaining greater acceptance and recognition by the public, which is also an important part of nationalism (Higson 1989; Sherman 1994; Anderson 2011; Tremblay and Jayme 2015).

In general, the Military, police, firefighting, and international diplomacy were the most prominent themes in the short videos posted by the two central news agencies, and People's livelihood and tenderness were the most prominent themes in the short videos posted by the two local news agencies.

It was tested using Cronbach's  $\alpha$  coefficient method of SPSS. The results showed that the Alpha values were higher than the value of 0.7 specified by the experts, indicating that the five variables in the scale were true and reliable with internal consistency and stability. Military, police, and firefighting were the most prominent theme in the short videos posted by the central news agencies, accounting for 27.6% of their 2598 short videos (Table 3), followed by international diplomacy (22.1%),

**Table 2 Coding scheme.**

Category	Content	Details
Theme	Coding methods are used to develop themes from theory (Strauss and Corbin 1998).	A continuous comparison method was used, and all short videos were checked by two coders with extensive experience in content analysis and the coders assessed the presence (1) or absence (0) of the above themes. The coder first identified and refined the themes and subthemes that appeared in the short video and then integrated the categories. After the topic categories were determined, the individual short videos were placed in those categories. By modeling the themes of caption text, this study summarizes the five main themes of Chinese government short videos, as shown in Table 3.
Visual Characters	The visual characters of a short video include things that provide characterization as well as relevant news facts.	Visual character coding was introduced to enable more effective categorization of the visual elements. (McQuail 1961; Bowen 2002; Goldstein 2009). Short video visual characters specifically refer to the characters that dominate the video, at the operational level, the characters are categorized and counted according to their occupations and political identities, as shown in Table 4 (Rangan and Kull 2009; Lemke 2009; Wang 2020; Yan 2020).
Emotional Propaganda	Categorizing and coding emotional advocacy allows for a clearer analysis of visual works and reveals the mobilizing functions embedded in them (Plutchik 1984; Izard 1992).	Emotional propaganda covers short videos designed to raise awareness or attract attention by eliciting emotions such as public outrage or sympathy for one's people. At the level of emotion space construction, Plutchik (1984) created a three-dimensional model of emotion used to describe different dimensions of human emotion and proposed eight types of emotion. Evaluating the actual situation of the Chinese government's short video propaganda, this paper applied four emotional labels, as shown in Table 5.

**Table 3 Theme comparison.**

Theme	Central news agencies		Local news agencies	
	N	Percent	n	Percent
Military, police, and firefighting	719	27.6%	18	7%
International diplomacy	572	22.1%	10	3.9%
Pandemic prevention and control	452	17.4%	9	3.6%
People's livelihood and warmth	534	20.6%	180	70.9%
Festivals and anniversaries	321	12.3%	37	14.6%
Total	2598	100%	254	100%

**Table 4 Visual characters.**

Visual characters	Central news agencies		Local news agencies	
	N	Percent	n	Percent
Soldiers, police officers, and firefighters	815	31.5%	18	7.3%
Political leaders	672	25.9%	10	3.9%
Medical staff	311	11.9%	8	3.1%
Other influencers (no obvious political affiliation)	414	15.9%	160	62.9%
Null lens without a main character	386	14.8%	58	22.8%
Total	2598	100%	254	100%

People's livelihood and warmth (20.6%), pandemic prevention and control (17.4%), and festivals and anniversaries (12.3%).

People's livelihood and warmth was the most prominent theme in the short videos posted by the local news agencies, accounting for 70.9% of their 254 short videos. The second most prominent

theme was festivals and anniversaries (14.6%), followed by military, police, and firefighting (7%); international diplomacy (3.9%); and pandemic prevention and control (3.6%). A chi-square test revealed a significant difference between the two types of news agencies ( $\chi^2 = 16.66, p < 0.001$ ).

This is presented in the video topics that received the highest number of likes for these accounts. People's Daily's most popular short video received 34,967,000 likes. This video had a military theme and presented a scene in which the Chinese Armed Police Force was training. The most popular short video from CCTV News received 34,599,000 likes. This video had a People's livelihood and warmth theme and depicted the death of Chinese scientist Yuan Longping, a person who assisted in improving China's grain production. The most popular short video from Sichuan Observation received 11,356,000 likes. This video had a People's livelihood and warmth theme and depicted the natural landscape of Chang Bai Mountain and Buddha's light appearing on the mountain's summit. The video blessed the audience with good wishes. The most popular short video from The Paper received 17,403 million likes. This video had a People's livelihood and warmth theme and depicted the ceremony that was held in Changsha City to say goodbye to academician Yuan Longping.

**Visual characters (RQ2).** Visuals are essential in propaganda. Images are often more effective than words in capturing the attention of the public and crystalizing sentiments (Cloud 2008; Edwards and Winkler 2008; Goldstein 2009; Rose 2012). Therefore, this study also analyzed the types of visual characters that were featured in the short videos and determined whether any significant differences existed in the characters presented by the different types of agencies (Table 4). Political leaders which is akin to what Luther and Zhou (2005) named the "leadership" frame, an approachable leader is more likely to gain popular support (Kellner 1988; Nye 1990; Erickson 2008). Soldiers, police officers, and firefighters are often portrayed in media as the

**Table 5 Emotion comparison.**

Emotion classification	Central news agencies		Local news agencies	
	N	Percent	n	Percent
Anger, disgust, fear, and intolerance	1033	39.7%	27	10.6%
Joy, calm, and pleasantness	552	21.2%	70	27.5%
Surprise, shock, and confusion	210	8.2%	10	3.9%
Anticipation, acceptance, and respect	803	30.9%	147	58%
Total	2598	100%	254	100%

“machinery of the state”, and the military is perceived as a demonstration of the power of the state (Fahmy 2005; Peled 2012; Seo et al. 2014). Visual characteristics of medical staff increased during COVID-19 with the theme of pandemic prevention and control. Medical staff are often treated as sacred, wise, hopeful, and authoritative (Lupton and McLean 1998; Gerhardt 2002; Meng 2020a). Other influencers (with no apparent political affiliation) include well-known scientists, athletes, actors, and others who have some influence in society. This kind of visual character enriches the media image system, and behind the symbolic individual, there is an implicit social-cultural significance, which is the mediator of the individual’s deeper development into the social relationship network (Kong et al. 2012); Xiao et al. 2020). Empty shots, as a form of narrative, refer to depictions of natural scenery or scenes, rather than characters, and are therefore also called “scenery shots”. It can be used to change scenes and advance the storyline (Chatman 1978; Yin 2011; Zhang 2021) Table 5.

The results showed that the Alpha values were higher than the value of 0.7 specified by the experts, indicating that the five variables in the scale were true and reliable with internal consistency and stability. The characters most frequently featured in the short videos from the central news agencies were soldiers, police officers, and firefighters, who were featured in 31.5% of their 2,598 short videos. The second most frequently featured characters were political leaders (25.9%), followed by characters with other influencers (no obvious political affiliation) (15.9%) and a null lens without a main character (14.8%). In the 254 short videos from the local news agencies, characters without an obvious political affiliation and other influencers were the most frequently featured (62.9%), followed by a null lens without a main character (22.8%); soldiers, police officers, and firefighters (7.3%); political leaders (3.9%); and medical staff (3.1%). A chi-square test revealed that the difference between the types of news agencies was significant ( $\chi^2 = 40.01, p < 0.001$ ).

**Emotional Propaganda (RQ3).** According to Benkler (2006, p. 180), the Internet has changed “the cultural practice of public communication.” Central and local media are different in terms of emotional bias, which is influenced by both topic and visual characteristics. Because of the similarity between the esthetic and emotional aspects of the videos posted on Douyin and the ideological and emotional aspects emphasized by the Chinese government, visual sentiment analysis can be used to effectively analyze the videos of this study from the perspective of subjective sentiment.

At the level of emotional feature extraction, Eakins and Graham (1999) proposed a three-layer semantic model for images, including feature semantics, object semantics, spatial relationship semantics, behavioral semantics, and scene semantics. Plutchik (1984) proposed four basic emotion dyads: anticipation and surprise, joy and sadness, acceptance and disgust, and anger and fear. Each time one emotion in a dyad

is active, the other is passive. Izard (1992) reported that each person has 8 to 11 basic emotions: pain, disgust, anger, fear, sadness, pleasure, interest, surprise, contempt, shame, interest, surprise, contempt, shyness, and guilt. Both classifications have been widely used by researchers. Short videos have different emotional patterns, and emotions play a key role in stimulating audiences. This research used four emotional labels, namely, anger, disgust, fear, and intolerance; joy, calm, and pleasantness; surprise, shock, and confusion; and anticipation, acceptance, and respect, to classify the emotional propaganda made by the Chinese government in short videos to analyze the presuppositions regarding the ideologies, values, and emotional attitudes shared by Douyin users concerning the central and local news agencies.

The results showed that the Alpha values were higher than the value of 0.7 specified by the experts, indicating that the four variables in the scale were true and reliable with internal consistency and stability. The most frequent category of emotion in the short videos from the central news agencies was anger, disgust, fear, and intolerance, with 39.7% of their 2598 short videos featuring this category of emotional propaganda. The second most frequent category of emotional propaganda was Anticipation, acceptance, and respect (30.9%), followed by Joy, calm, and pleasantness (21.2%) and Surprise, shock, and confusion (8.2%). The most common category of emotional propaganda used in the local news videos was Anticipation, acceptance, and respect (58%), followed by Joy, calm, and pleasantness (27.5%); Anger, disgust, fear, and intolerance (10.6%); and Surprise, shock, and confusion (3.9%). The differences were significant according to a chi-square test ( $\chi^2 = 57.39, p < 0.001$ ). The emotional propaganda strategies corresponding to specific themes and visual characters in the videos are presented in Tables 6, 7.

The correlation coefficient between the variables is compared using the KMO test (Kaiser 1974), and if the KMO value is close to 1, then it means that there is a good overall relationship between the variables and a correlation is available. The results show that the KMO values are all close to 1 and greater than 0.7, indicating that the data of this survey are real and reliable, and are more internally consistent and stable. In its emotional propaganda, the Chinese government adopts different emotional promotion strategies for different themes. Anticipation, acceptance, and respect emotional propaganda were more commonly used for the theme of Military, police, and firefighting than for other themes (58.2%; Table 6). For the International diplomacy and Pandemic prevention and control themes, Anger, disgust, fear, and intolerance emotional propaganda was most common (68.2% and 53.1%, respectively). For the People’s livelihood and warmth and festivals and anniversary themes, emotional propaganda focused on joy, calm, and pleasantness was most common (45.7% and 41.6%, respectively).

The KMO test results show that the values are all close to 1 and greater than 0.7 established, indicating that the data of this survey are real and reliable, and are more internally consistent and stable. Concerning the visual characters, and when the emotional propaganda strategies were identifiable, videos with the visual characters of political leaders and a null lens without a main character were mainly assigned the emotion labels of Anger, disgust, fear, and intolerance (76.3% and 64.6%; Table 7). Videos with the characters of Soldiers, police officers, firefighters, and Medical staff were mainly assigned the emotion label of Anticipation, acceptance, and respect (57.2% and 65.5%). Videos with visual characters with no obvious political affiliation and other influencers were most often assigned the label of Joy, calm, and pleasantness. This distribution of labels is consistent with the distribution among the themes.

**Table 6 Use of emotions with different themes.**

Theme	Emotion classification										
	Military, police, and firefighting		International diplomacy		Pandemic prevention and control		People's livelihood and warmth		Festivals and anniversaries		Total
	n	Percent	n	Percent	n	Percent	n	Percent	n	Percent	
Anger, disgust, fear, and intolerance	189	25.6%	397	68.2%	245	53.1%	109	15.2%	120	33.5%	1060
Joy, calm, and pleasantness	102	13.9%	39	6.7%	5	1.2%	327	45.7%	149	41.6%	622
Surprise, shock, and confusion	17	2.3%	38	6.6%	90	19.5%	56	7.8%	19	5.4%	220
Anticipation, acceptance, and respect	429	58.2%	108	18.5%	121	26.2%	222	31.3%	70	19.5%	950
Total	737	100%	582	100%	461	100%	714	100%	358	100%	2852

## Discussion and conclusion

The visual propaganda used by local and central news agencies on Douyin showcases both similarities and differences, with notable thematic, visual, and emotional nuances. Owing to their distinct positions within the hierarchical framework and their varying areas of jurisdiction, local government media at each level exhibit more pronounced hierarchical disparities in their propaganda compared to the central government. In general, the closer the themes and visual characteristics are to “Military, the police, and firefighting”, the less distinguishable they are from central media. Conversely, the more they focus on “People’s livelihood and warmth”, the more likely local governments are to adopt innovative promotional strategies concerning “points” while emphasizing regional characteristics. Although the local news agencies more actively produced content on Douyin than did the central news agencies, the central news agencies received more attention from the public. This indicates that the central news agencies are more trusted than the local news agencies are, which is understandable (Zhang and Xu 2023).

The findings of the present study are consistent with those of Kuang (2018), who discovered that central news agencies focus on news related to national guidelines and policies and that local news agencies focus on local news. The present study found that the central news agencies focused most on the visual characters of soldiers, police officers, and firefighters (27.6%), followed by a focus on international diplomacy (22.1%), People’s livelihood, and warmth (20.6%), pandemic prevention and control (17.4%), and festivals and anniversaries (12.3%). The central news agencies primary focus on Soldiers, police officers, and firefighters indicates that the primary goal is to propagate political news (Zhang and Zhang 2011; Zhang et al. 2023). The central news agencies, often aligned with the state, may have leveraged their authoritative voice to shape narratives that resonate deeply with the national identity and political ideology of the audience. Their content, characterized by a sense of unity and national purpose, could be said to appeal to the collective psyche of the populace. However, the other themes were equally divided in terms of proportion. This indicates that despite their focus on delivering propaganda, the central news agencies still aim to deliver the news. Chinese central news agencies often struggle to balance being government mouthpieces and being news organizations (Zhang et al. 2023).

The local news agencies mostly focused on People’s livelihood and warmth (70.9%), followed by a focus on Festivals and anniversaries (14.6%); the Military, the police, and firefighting (7%); International diplomacy (3.9%); and Pandemic prevention and control (3.6%). Therefore, the role of local news agencies is not to deliver political messages but rather to deliver what their audience wants to see, including soft news and positive posts (Liang 2019; Zeng and Li 2021). In local news agencies, the Chinese government is using a soft propaganda approach, packaging propaganda content in a nonpolitical, entertaining format (Zou 2021;

Mattingly and Yao 2022). It does not diminish the value of their contributions but rather underscores the diversity of propaganda approaches within the Chinese media landscape. In contrast, the local news agencies, while perhaps more active in their content production, may have focused on more localized issues that do not carry the same broad, national implications as the narratives advanced by the central news agencies. As Kuang (2018) reported that, important political news is heavily censored by local propaganda authorities. For instance, COVID-19 was an immense and influential national and global disaster, however, pandemic prevention and control was the least-covered theme by local news agencies. This indicates that local news agencies are limited in their ability to post about ongoing and unpredictable political issues that may influence the stability of government control.

Second, this study found that central news agencies focus on the visuals of the central government and leadership, whereas local news agencies focus more on nonpolitical actors. The central news agencies of this study most frequently focused on the visual characters of Soldiers, police officers, and firefighters (31.5%) and Political leaders (25.9%). This indicates that Chinese central media agencies produce a considerable amount of content on CCP members to increase the members’ visibility among the public (Xu and Wang 2022; Xie and Zhou 2021; Wang 2012), indicating the visual propaganda produced by central news agencies is focused on self-promotion and self-advocacy, to stabilize governmental control (Zhang and Jamali 2022). That is, Chinese central news agencies follow the logic most traditional media do in producing propaganda, especially Chinese nationalism propaganda (Zhang and Xu 2023; Schneider 2018). However, the proportions of different types of visual characters that appeared in the central news agency videos did not differ greatly (max: 31.5% and min: 11.9%). In other words, although the central news agencies had preferences concerning their use of visual characters, they tried to balance the frequency with which different types of characters appeared.

By contrast, the visual characters that most frequently appeared in local news agency videos did not have a clear political affiliation or were influencers or a null lens without a main character was used (overall count: 85.7%). The visual composition of local news agencies exhibited a notable disparity when compared to their central counterparts. As Kuang (2018) highlights, local news agencies primarily concentrate on chronicling local events, suggesting a primary mandate that extends beyond the propagation of nationalist narratives or the cultivation of a positive image of the CCP membership. Instead, their focus is squarely on capturing the essence of everyday life and evoking cherished memories, thereby reflecting a distinct thematic bias. This orientation underscores the role of local news agencies as a vehicle for conveying the minutiae of local experiences, contributing to a rich tapestry of narratives that complement the broader national narrative while maintaining an autonomy in their coverage.



**Table 7 Use of emotions for different visual characters.**

Visual Characters emotion classification	Soldiers, police officers, and firefighters		Political leaders		Medical staff		No obvious political affiliation and other influencers		Null lens without a main character		Total	
	n	Percent	n	Percent	n	Percent	n	Percent	n	Percent	n	Percent
Anger, disgust, fear, and intolerance	104	12.4%	519	76.3%	93	29.2%	137	23.8%	207	46.6%	1060	
Joy, calm, and pleasantness	109	13%	16	2.3%	17	5.3%	330	57.7%	150	33.7%	622	
Surprise, shock, and confusion	145	17.4%	66	9.6%	0	0	5	0.8%	4	0.9%	220	
Anticipation, acceptance, and respect	475	57.2%	81	11.8%	209	65.5%	102	17.7%	83	18.8%	950	
Total	833	100%	682	100%	319	100%	574	100%	444	100%	2852	

Third, both central and local news agencies adjust to different themes and visual characters when developing emotional strategies for short videos. The central news agencies mostly used anger, disgust, fear, and intolerance (39.7%), followed by Anticipation, acceptance, and respect (30.9%); Joy, calm, and pleasantness (21.2%); and Surprise, shock, and confusion (8.2%). When the short videos had themes related to domestic crises and international issues, such as pandemic prevention and control and international diplomacy, the emotional strategies were more likely to be negative. Moreover, the short videos with the visual characters of political leaders tended to convey strongly negative sentiments, with these sentiments often being present in news on foreign political leaders and local corrupt officials. The Chinese government has a strong anti-Western sentiment and allows citizens to criticize the Western and local government (Zhang and Xu 2023; Kuang 2018). Although past research has concluded that, Chinese media mostly conveys positive sentiments (Zhang et al. 2023), this study found that fear and anger were the most common emotional categories assigned to the short videos from the central news agencies. When Chinese media disseminate nationalist propaganda, they focus on criticizing the West and how China has been unfairly treated by the West (Zhang and Xu 2023; Zhang and Jamali 2022). Therefore, through fear, anger, and intolerance, they construct the narrative that China is emerging from a “century of humiliation” and has become a world power that is no longer susceptible to Western “bullying” (Jaworsky and Qiaoan 2021).

Previous research underscores have elucidated the critical function of emotional manipulation within the governance framework of the CCP, as conceptualized by Hochschild in 1979 and further explicated by Perry in 2002. Schneider (2021, pp. 4–5) insightful analysis reveals the Chinese state’s long-standing engagement in “emotional governance,” a term that describes the authoritative management of emotional responses to political matters, “Chinese government has long practiced emotional governance, defined as authoritative actions aimed at managing emotional context within political issues.” Repnikova and Fang (2018) have observed that the CCP fosters its nationalist narrative through a sophisticated system of “authoritarian participatory persuasion 2.0.” This system encompasses both direct and indirect strategies to encourage public engagement, with the former entailing calls for netizen to actively repost, share, and generate content, and the latter subtly prompting participation in the nationalist cause. Consequently, Chinese nationalism propaganda does not involve one-way communication in the form of persuading the public but encourages the public to engage in nationalism.

The current study’s findings, however, suggest a nuanced approach to sentimentality in the dissemination of local news. The preponderance of video content from local news agencies (58%) is characterized by positive emotions such as anticipation, acceptance, and respect, while an additional 27.5% is associated with Joy, calm, and pleasantness. Kuang’s (2018) analysis highlights the local government’s propagation efforts as being primarily aimed at solidifying state authority through the cultivation of a favorable administrative image. This research underscores the complexity of emotional messaging in the Chinese political context and its multifaceted engagement with the populace, moving beyond simplistic notions of one-way persuasion to a more interactive and participatory form of nationalism promotion. The deployment of positive sentiment in local news broadcasts serves not only to inform but also to inspire and align the public with the state’s ideological objectives.

Overall, China’s visual propaganda strategy is an extension of China’s propaganda in the short video era. This study supports the findings of other studies demonstrating that visual

propaganda in China follows the logic of social media (Liang 2019; Zeng and Li 2021) and the Chinese government's logic of governance (Baark, 2019; Luo 2022). Soft propaganda created using the logic of social media reduces the likelihood that an audience will resist ideological content developed by an authoritarian regime (Mattingly and Yao 2022; Zhong 2023). In China, hard propaganda created using the logic of governance is developed based on the political tendencies that have long been part of China's propaganda system (Huang 2015; Luo and Zhang 2022). The modern Chinese government uses a combination of soft and hard propaganda, that is, the government combines ideology propaganda content (Wu and Ma 2019) with nonpolitical forms of entertainment (Zou 2021; Mattingly and Yao 2022). Although the present study's findings are consistent with those of other studies showing that the media plays a role in maintaining regime stability in authoritarian contexts through hard and soft propaganda (Creemers 2017; Fang and Repnikova 2018; Han 2015; Rawnsley 2015; Stockmann and Gallagher 2011; Mattingly and Yao 2022; Zhang et al. 2023), this study is distinct from others in that it did not consider the Chinese media to be a single entity. Rather, it differentiated between central and local news agencies.

In the matrix of the Chinese media landscape, the central media's primary focus is to anchor political stability, disseminate national guidelines and policies, and project the image of the central government and its leadership (Li et al. 2020; Wang 2012; Zhang and Jamali 2022; Zhang and Xu 2023; Zhang et al. 2023). The role of local news agencies becomes intricately linked to the service of local leadership, reflecting the prioritization of local interests and the maintenance of local governmental image (Xiong 2008). This strategic communication is instrumental in underpinning the legitimacy and control of the CCP (Brady 2008; Zhang and Jamali 2022; King et al. 2013; Zhang and Xu 2023). The central news agencies focus on the broader national narrative and the local news agencies align with local agendas demonstrate the multifaceted manners in which media serves the state and its various levels of governance in China. This dynamic progress underscores the importance of media as a strategic instrument in the maintenance of political stability and the projection of state authority across different administrative tiers. As Kuang (2018) challenges the narrative of a unified state structure, asserting that China operates within a framework of decentralization, where the central government's political architecture and power dynamics differ significantly from those of local governments. This decentralization gives rise to a complex interplay of control and influence. Lorentzen (2014) highlights how the central government employs central news agencies to exercise oversight over local leaders, often by allowing negative reports concerning local governments to be aired. Conversely, local governments resort to local media as a tool to cultivate a favorable image, thereby enhancing the career trajectories of local officials (Dowell 2006; Kuang 2018). This dual approach to media utilization underscores the nuanced nature of governance and communication in China. The central authorities have adeptly mitigated tensions within the central-local power dynamic by fostering a network of loyal agents at the local level, thereby enhancing their dominion over regional media entities, as Guan et al. (2016) have observed.

China's media landscape has transcended Ellul's (1973) horizontal model, giving rise to "atoms"—individuals who engage in political discourse via social media platforms with relative autonomy. Douyin's algorithmic mechanisms offer these "atoms" a spectrum of political directions to explore. While this autonomy affords local governments greater latitude in their propaganda endeavors, the influence of local news agencies within the Chinese context remains circumscribed. Kuang (2018) posits that local propaganda efforts are subject to the overarching directives and regulations set forth by the central propaganda machinery. The

former operate within a narrower bandwidth, often precluded from reporting on emergencies and crises that could potentially perturb the political stability of the Chinese regime. Consequently, there is a distinct thematic and visual divergence between the reportage of local and central news agencies. This study contends that although the advent of short video content disseminated by local news agencies suggests a measure of governmental decentralization (Cai and Treisman 2006), insofar as it focuses on reshaping the government's image, guiding public opinion, and stimulating political emotion to accomplish governance objectives, the local news agencies are hobbled by their constrained ability to determine the thematic content of their video offerings. Within the Chinese hierarchical system, although various subjects can participate in propaganda activities, all such activities are subject to stringent institutional constraints (Li 2023). For instance, in the process of propelling the theme of "People's livelihood and warmth", local governments can highlight the lives of the people at the forefront of governance. However, they first emphasize the "Socialist Core Values" proposed by the central government as the foundation. This requirement itself establishes the limits of local governments' propaganda activities.

This study demonstrates that local news agencies' short videos reveal the limitations associated with the Chinese government's decentralization of power and that the central government retains control over video platforms and local governments. This constraint serves as a reminder of the enduring centralization of control over the narrative, despite the medium of communication diversifying and opening new avenues for expression. The entrenchment of political power within China's political architecture, coupled with the hierarchical dispensation of political rights, dictates the control dynamics over the posting of short political videos. This underscores the deeply ingrained nature of power relations within the Chinese political system.

This study has several limitations. The study only obtained samples from a single short video platform, and the findings may not be generalizable to other short video platforms. However, as one of the most famous short video platforms in China, Douyin is the optimal platform from which to obtain samples. Future studies should conduct quantitative analyses of short government videos and the audiences of these videos to determine the effectiveness of the videos. In its totality, this study enriches the discourse on the interplay between social governance and media in China, offering a valuable starting point for future exploration. These variations in content themes, visual characters, and emotional categories offer a rich field for analysis, revealing the subtle ways in which media organizations shape and are shaped by the cultural and political contexts of their audiences. There is potential for expanded inquiry into the various contexts that facilitate the analysis of a wider spectrum of visual texts, thereby enhancing our comprehension of the role played by visual culture in political communication. Moreover, research could delve into the broader implications of visual politics, examining not only their immediate impact but also the long-term consequences on public opinion and societal dynamics.

#### Data availability

We share all the general data and sample data used in the article. The general data comes from CNNIC, CTR and Douyin, and the links to the data sources are attached to this statement. The processed sample data we uploaded on datadryad for other researchers to download. 1. The datasets analysed during the current study are available in the Dryad repository: <https://datadryad.org/stash/share/LztB3Y9js3goyPyNL1p56XItcU-3fdQafwzybYbnVYg>. These datasets were derived from the following

public domain resources: China Internet Network Information Center (CNNIC) is under the Ministry of Industry and Information Technology of China. <https://www.cnnic.net.cn/6/86/88/index.html>. <https://www.cnnic.net.cn/NMediaFile/2023/0908/MAIN1694151810549M3LV0UWOAV.pdf>. 2. China Central Television Market Research Co., Ltd. (CTR) is a joint venture between China International Television Corporation and Kantar Group. <https://www.ctrchina.cn/rich/report/568>. 3. Douyin is part of ByteDance Inc, China. [https://www.douyin.com/user/MS4wLjABAAA8U\\_16rBzmy7bcy6xOJel4v0RzOr\\_wfAubGPeJmN\\_4](https://www.douyin.com/user/MS4wLjABAAA8U_16rBzmy7bcy6xOJel4v0RzOr_wfAubGPeJmN_4). [https://www.douyin.com/user/MS4wLjABAAA8U\\_16rBzmy7bcy6xOJel4v0RzOr\\_wfAubGPeJmN\\_4](https://www.douyin.com/user/MS4wLjABAAA8U_16rBzmy7bcy6xOJel4v0RzOr_wfAubGPeJmN_4). [https://www.douyin.com/search/%E6%BE%8E%E6%B9%83%E6%96%B0%E9%97%BB?aid=83cc9d45-ada9-4c7b-ad96bbb3e441c580&publish\\_time=0&sort\\_type=0&type=general](https://www.douyin.com/search/%E6%BE%8E%E6%B9%83%E6%96%B0%E9%97%BB?aid=83cc9d45-ada9-4c7b-ad96bbb3e441c580&publish_time=0&sort_type=0&type=general). [https://www.douyin.com/search/%E5%9B%9B%E5%B7%9D%E8%A7%82%E5%AF%9F?aid=22075e2b-c146-41eb-822bf40e4ebde5eb&publish\\_time=0&sort\\_type=0&type=general](https://www.douyin.com/search/%E5%9B%9B%E5%B7%9D%E8%A7%82%E5%AF%9F?aid=22075e2b-c146-41eb-822bf40e4ebde5eb&publish_time=0&sort_type=0&type=general).

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## Author contributions

Two authors have contributed equally to this work. JZ serves as the first author, having collected and analyzed the data, as well as writing the manuscript. Meanwhile, DZ serves as corresponding author focused on the theoretical literature review and discussion.

## Competing interests

The authors declare no competing interests.

## Ethical approval

This article does not contain any studies with human participants performed by any of the authors.

## Informed consent

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## Additional information

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