



Article

Applying the Constructive Journalism Approach to Combat Chinese Information Disorder in the Digital Age

Haiyue Zhang ^{1,*} and Ling Jiang ²¹ School of Media and Communication, University of Westminster, London HA1 3TP, UK² Collage of Publishing, University of Shanghai for Science and Technology, Shanghai 200093, China; verypp@163.com

* Correspondence: w1790722@westminster.ac.uk

Abstract: Online media serves as the central platform for information dissemination; however, the rise of information disorders threatens the credibility and authenticity of public information. In China, the transformative impact of the digital age has intensified these disorders, significantly altering the media ecology. This study investigated the underlying mechanisms of information overload, algorithmic intervention, and audience polarization, which contribute to the phenomenon of information disorders. By analyzing the roles of content producers, distribution mediums, and audiences within the Chinese context, the study offers a comprehensive understanding of these dynamics. Furthermore, addressing information disorders within the digital media ecosystem has become a critical global challenge. Through a systematic literature review, this study explored potential strategies for mitigating these disorders in China, emphasizing the application of constructive journalism. The constructive journalism framework is proposed as a set of journalistic norms that can foster a healthier and more sustainable online media environment. By enhancing professional ethics, clarifying the instrumental rationality of technology, and employing positive psychology, this approach aims to reduce audience polarization and realize the public value of information dissemination.

Keywords: constructive journalism; information disorders; digital technology; Chinese media ecology



Citation: Zhang, Haiyue, and Ling Jiang. 2024. Applying the Constructive Journalism Approach to Combat Chinese Information Disorder in the Digital Age. *Journalism and Media* 5: 1526–1538. <https://doi.org/10.3390/journalmedia5040095>

Academic Editors: Yao Song and Andreu Casero-Ripollés

Received: 2 July 2024

Revised: 19 September 2024

Accepted: 27 September 2024

Published: 16 October 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Technological advancements, ranging from algorithms to artificial intelligence, have profoundly reshaped the digital media ecology in China, leading to an unprecedented information overload. The production, modes, and content of communication have undergone dramatic transformations. However, amidst this highly efficient, precise, and convenient media environment, the rise of factual distortions and information disorders has become a troubling trend within the news industry.

While information disorders have intensified with the advent of digital media, they are not solely a product of the digital age. The evolution of media—from interpersonal to group to mass communication—has always been accompanied by challenges in maintaining the integrity of information dissemination. Historically, before the widespread adoption of internet technology, information disorders were predominantly observed within the professionalism-centered journalism industry, driven by commercial interests and partisan competition (Wang and Liu 2020). However, in the digital era, the production and dissemination of news extend beyond traditional journalism, implicating a broader array of actors. Consequently, the root causes of information disorders now encompass more complex factors, directly or indirectly influenced by digital technologies, which reshape the interactions within China's media ecosystem. To address this multifaceted issue, this study examined the phenomenon from the perspectives of producers, mediums, and audiences within the Chinese context.

The rapid internet-driven transformation of the media landscape has amplified the impact of information disorders on a global scale (Monsees 2023; Damasceno 2021), making

the combat against these disorders an urgent international priority (Guo 2020; Wardle and Derakhshan 2017). In China, as elsewhere, rebuilding audience trust in journalism has become critical to addressing these challenges (Egelhofer and Lecheler 2019). Scholars have proposed constructive journalism as a potential solution to restore trust, reduce news avoidance, mitigate the adverse effects of news on mental health, and counteract the bias and negativity prevalent in the online media ecosystem (McIntyre and Gyldensted 2018a). Although constructive journalism originated in the West, it has been increasingly adapted and applied within China, aligning with the country's tradition of positive factual reporting. This approach may offer a viable pathway to addressing the pervasive issue of information disorders.

This study aimed to analyze the theoretical underpinnings of information disorders within the digital media ecology and explore the potential of constructive journalism as a countermeasure, focusing on the Chinese context. A systematic literature review served as the primary research methodology, enabling a meta-level examination of existing studies and identifying gaps that warrant further empirical investigation. While empirical data are limited, this review contributes to the development of a theoretical framework and conceptual model for future research, providing crucial insights into the ongoing battle against information disorders.

2. Typology of Information Disorders and the Transformation of Internal Dynamics

Although the phenomenon of information disorders has existed for a long time, it is only in recent years that the term "information disorders" has received extensive attention and research in the academic world. Before that, "fake news" was a more common and popular term to describe the phenomenon of information disorders. Whether it is a cluster concept or a single concept, in the process of defining and studying fake news, some scholars have also proposed to abandon the term fake news due to its conceptual boundaries and categorization issues. In October 2018, the UK government banned the use of "fake news" as a term in policy documents or official communications, arguing that it is "a poorly-defined and misleading term that conflates a variety of false information, from genuine error through to foreign interference in democratic processes (Murphy 2018, para. 2)". In the opinion of some scholars, the concept of fake news is closely related to the 2016 US election (Allcott and Gentzkow 2017) and its use would have a political context and relevance. It does not fulfil the requirement of conceptual purity in academic research (Wardle 2018). Secondly, the concept of fake news hardly satisfies the visual content; it is only a textual concept. However, in the age of digital technology, the counterfeiting of visuals (e.g., image counterfeiting and video counterfeiting) is far more prevalent than the counterfeiting of text (Wardle and Derakhshan 2017).

Scholars like Wardle suggested that it would be better to outline a shared language for describing information disorders rather than fake news. She summarized seven types of information disorders including satire and parody, false connection, misleading content, false context, imposter content, manipulated content, and fabricated content. Satire and parody are less common in the spectrum of information disorganization in his study, while fabricated content, specifically content created to spread false information, is more frequent. Walter then categorized these seven common types of information disorders into three camps. These three camps are frequently proposed and conflated by current research scholars. Walter gives a clearer categorization and definition, including misinformation, disinformation, and malinformation, which are differentiated on the basis of truthfulness and intentional or unintentional harm. Information whose content is false but unintentionally harmful is called misinformation, which can include satire and parody, false context, false connection (clickbait), or misleading content (quotes and images). Information whose content is false and intentionally harmful is considered disinformation, which includes malicious lies, fabricated and manipulated content (manipulation campaigns), and conspiracy theories. Information whose content is true and is shared with the intent to cause harm is considered malinformation, which usually refers to individuals or organizations exposing

private information to the public domain such as paparazzi exposés (Wardle 2018). Additionally, Wardle and Shu et al. suggest that misinformation and disinformation can transform into one another. For instance, a creator of disinformation might deliberately spread false information on social media, and misinformation can evolve into disinformation. A prime example of disinformation is fake news, which serves as a tangible case study to illustrate the challenges of mining disinformation platforms (Shu et al. 2020).

Wardle also proposed three elements of information disorders, namely agent, message, and interpreter. There are three stages in the process of disseminating information disorders—creation, production, and distribution. Agents are involved in all stages of the information chain, and there are generally multiple agents with different motivations in these three different stages. Once information is distributed, it can be infinitely copied and redistributed by many different agents with different motivations. Information can be communicated by agents orally (through rumors, speeches, etc.) in text (newspaper articles or pamphlets), or in audio/visual material (images, videos, motion graphics, edited audio clips, etc.). In the age of social media, where everyone can be a potential publisher, the interpreter can also be the next “agent”, i.e., the interpreter receives the message and becomes the next agent to recreate, reproduce, and redistribute the same message, thus entering into an endless dissemination resulting in information disorders (Wardle 2018).

3. Chinese Digital Media Ecology

By 2020, approximately 81% of Chinese internet users were consuming news online (CNNIC 2020). The rapid growth in online news consumption has contributed to a more dynamic and complex media environment (Guo 2020). On one hand, traditional state-affiliated media outlets have established an online presence through official websites. These websites, along with government-owned portals—collectively referred to as “official news websites” in this context—constitute a significant segment of China’s online media landscape (CAC 2017). Notably, national-level official websites such as those of the People’s Daily and Xinhua News Agency serve as the “throat and tongue” of the CCP, articulating the perspectives of the national leadership (Stockmann 2011). Another important segment of the online media environment is comprised of privately-owned portal news websites (hereafter referred to as “commercial news websites”). Leading commercial platforms such as qq.com, sina.com, and sohu.com rank among the top 20 most visited websites globally (Guo 2020). Both official and commercial news websites are required to obtain government licenses, ensuring their compliance with official information dissemination protocols and accreditation of their staff (CAC 2017). Consequently, these two categories of news websites form the backbone of government-controlled news media within China’s online news ecosystem. In addition, social media also plays an important role in the Chinese news environment, such as Weibo, Wechat, and Douyin. As an important communication platform, almost every official or commercial media has its own account, and some even have multiple accounts. Other online news sources such as self-media and bloggers are also subject to the government’s regulations through social media, but are not as strictly controlled by the government (Creemers 2017).

The development of technology has led to the “audience” of the legacy news industry gradually becoming the “user” of new technologies such as social media. Audiences begin to shift platforms for collecting news and information. The circulation of print editions has plummeted. By March 2020, over 80% of Chinese news consumers accessed news via mobile devices (CNNIC 2020). Since the liberalization began in 1978, the media industry has increasingly relied on subscriptions and advertising for survival. However, between 2012 and 2016, newspaper advertising expenditures in constant Renminbi (RMB) fell by 75% (World Advertising Research Centre 2017).

Faced with multiple dilemmas, such as the transfer of advertising investment to internet platforms, the sharp decline in newspaper circulation, and the political requirements of the Xi’s regime to accelerate media integration, China’s legacy media began to passively carry out media convergence during the digital period. The specific time when Chinese

media engaged in media convergence can be traced back to 2014. The Guiding Opinions on Promoting the Integration and Development of Traditional and Emerging Media issued by the Central Committee of the Communist Party of China (CPC) and the State Council marked the official start of this process. This guidance suggests that by promoting media convergence, the communication power, guidance, influence, and credibility of news and public opinion will be enhanced. Media convergence is described as a melding together of old and new media technologies, corporate media companies, media producers, and media consumers (Jenkins 2008). In the news making process, it refers to a process whereby multiple media technologies and platforms are engaged simultaneously in producing and disseminating information (Deuze et al. 2007; Dwyer 2010; Lawson-Borders 2006). By 2018, about 74% of party newspapers nationwide had opened their own APPs (People.net 2018). On the other hand, convergence represents a risk, since user-participation and the over-acceleration of news cycles impinge on the norms of quality journalism, such as truth-telling (Davies 2009), transparency (Karlsson 2011), and accuracy (Fenton 2009). At the same time, there is a tendency to de-professionalize journalists in China. As Wang and Meng observed, many traditional journalists in China have transformed into self-media editors as a result of downsizing in the traditional media industry and a lack of talent in the internet content industry. As self-media editors, they focus more on information handling than on original newsgathering, which leads to lower-quality information and content production (Wang and Meng 2023).

4. Defining Constructive Journalism

Egelhofer and Lecheler suggest that constructive journalism, based on the theory of social responsibility, can alleviate the problems associated with information disorders and the “post-truth” era, including rebuilding trust in news and news media (Egelhofer and Lecheler 2019). Constructive journalism is an emerging form of journalism that involves the application of positive psychology techniques to the news process and production in an effort to create productive and engaging stories while upholding the core functions of journalism (McIntyre and Gyldensted 2018a). Although an increasing number of Western scholars have begun to focus on constructive journalism, it has been marginalized and highly controversial in the West because constructive journalism contradicts the traditional Western pursuit of negative news reporting practices. However, constructive journalism has been a hot topic in the Chinese journalism industry in recent years (Zhang and Mat-ingwina 2016; Zhao and Xiang 2019; Le 2021). The information dissemination practices of Chinese mainstream media reflect the values of constructive journalism, especially for improving the media’s communication impact and credibility.

It is necessary for Chinese academics to trace the history of constructive journalism, a concept introduced from Western countries with different political, economic, and cultural backgrounds. Some scholars have depicted the world practice of this concept from the historical roots of constructive journalism (Le 2021). Some scholars also focus on constructive journalism in terms of public services and other aspects to understand the origin of constructive journalism in Western countries. They argue that constructive journalism aims to promote the news production preferences of subjects involved in public associations, to promote civic consultation, to be oriented towards reaching pluralistic consensus, and to enhance civic rationality (Hu 2019). Others mention that constructive journalism is the third new revolution in journalism in Western countries after public and solution journalism (Cai 2019). Starting from various practices in the West and exploring the practices of Chinese media, these articles form micro, meso, and macroperspectives corresponding to the emphasis on solutions, collaborative production, and participation in social governance.

Since journalism is a practical discipline, it is crucial to know how to practice constructive journalism in daily life. According to positive psychology, the definition’s founder, McIntyre, described in 2017 how it stems from citizen journalism and how it shares umbrella concepts with solution journalism, peace journalism, future journalism, and restorative narratives (McIntyre and Lough 2021). In 2018, McIntyre and Gyldensted proposed

six constructive journalistic elements that have been widely used in journalistic practice (McIntyre and Gyldensted 2018b). (1) Solution: when reporting on problems, add a solution-oriented news frame. (2) Future-orientation: traditional journalism only deals with basic information of 5W (who, what, when, where, why), providing future-orientation (“what to do in the future?”) allows for a potentially abundance perspective on the future and society’s ability to achieve its goals. (3) Depolarization: countering the polarization caused by the news media in order to enhance inclusion and diversity. (4) Constructive Interviews: interviews with all parties involved in the issue, especially with experts in the field. (5) The Rosling: use data to make news stories more accurate; data will more directly reflect the facts in a news story. (6) Co-creation and empowerment: engage and empower the public; co-create news content with the public to enhance online and offline interaction (McIntyre and Gyldensted 2018b).

5. Method

In this study, a systematic literature review (SLR) was employed to ensure a comprehensive and structured analysis of the existing research on information disorders in China. This methodology was chosen because it allowed for a critical evaluation of the relevant literature, identifying gaps and trends that inform the study’s focus on mitigating information disorders through constructive journalism. To implement the SLR, we searched academic databases such as Google Scholar and CNKI (Chinese National Knowledge Infrastructure), using keywords like “information disorders”, “algorithmic intervention”, “audience polarization”, “media ecology in China”, and “constructive journalism”. These keywords were selected to capture studies relevant to the digital media landscape and journalistic practices in China. The aim was to synthesize existing knowledge and highlight strategies that could address the spread of fake news, aligning with the study’s goal of proposing constructive journalism as a solution to the growing challenges of the media ecosystem. Therefore, in the following article we first introduced the causes of information disorders in China as summarized by SLR, and then explained in detail how constructive journalism can be used to combat information disorders in the Chinese context.

As this research emphasized understanding these issues within a specific sociocultural context, it required a broad-based theoretical exploration rather than empirical testing. The non-empirical approach was particularly necessary to establish a foundational framework for future empirical studies by synthesizing existing knowledge and critically evaluating the applicability of constructive journalism as a mitigation strategy in China. This allowed the study to advance theoretical discussions on media ethics, technological influence, and journalism norms, providing a well-rounded, in-depth analysis without being constrained by specific datasets or case studies. Thus, the use of a systematic literature review was crucial in advancing theoretical understanding and providing a comprehensive examination of how constructive journalism can address information disorders in the Chinese context.

6. Analysis and Discussion

Walter’s analysis of information flow dynamics identifies three key elements of information disorders but lacks consideration of external factors, such as the impact of digital technologies in China. To thoroughly investigate the causes of information disorders, it is crucial to analyze both the internal dynamics of information flow and the role of digital technologies at each stage of the communication process. This study approached the issue from three perspectives—producers, media, and audiences—examining how technological advancements, algorithmic filtering, and audience polarization contribute to the disorders. It then assessed the feasibility of constructive journalism as a governance strategy in China.

Moreover, the escalation of journalistic objectivity in the digital age was recently revisited by Michael Schudson in a paper: “the journalist’s role is to interpret” (Anderson and Schudson 2019). This opinion of objectivity positively acknowledges that “journalists

are expected to make judgements” (Schudson 2021). This aligns with constructive journalism’s role in addressing information disorders by promoting solution-oriented reporting that counters the adverse effects of diverse information producers, algorithmic biases, and audience polarization. Figure 1 in this study presents the specific causes of information disorders and the detailed process and logic through which constructive journalism can mitigate these issues within the Chinese context. Therefore, the following analysis employed a systematic literature review which not only explained the causes of information disorders within the Chinese context but also outlined how constructive journalism can address these issues.

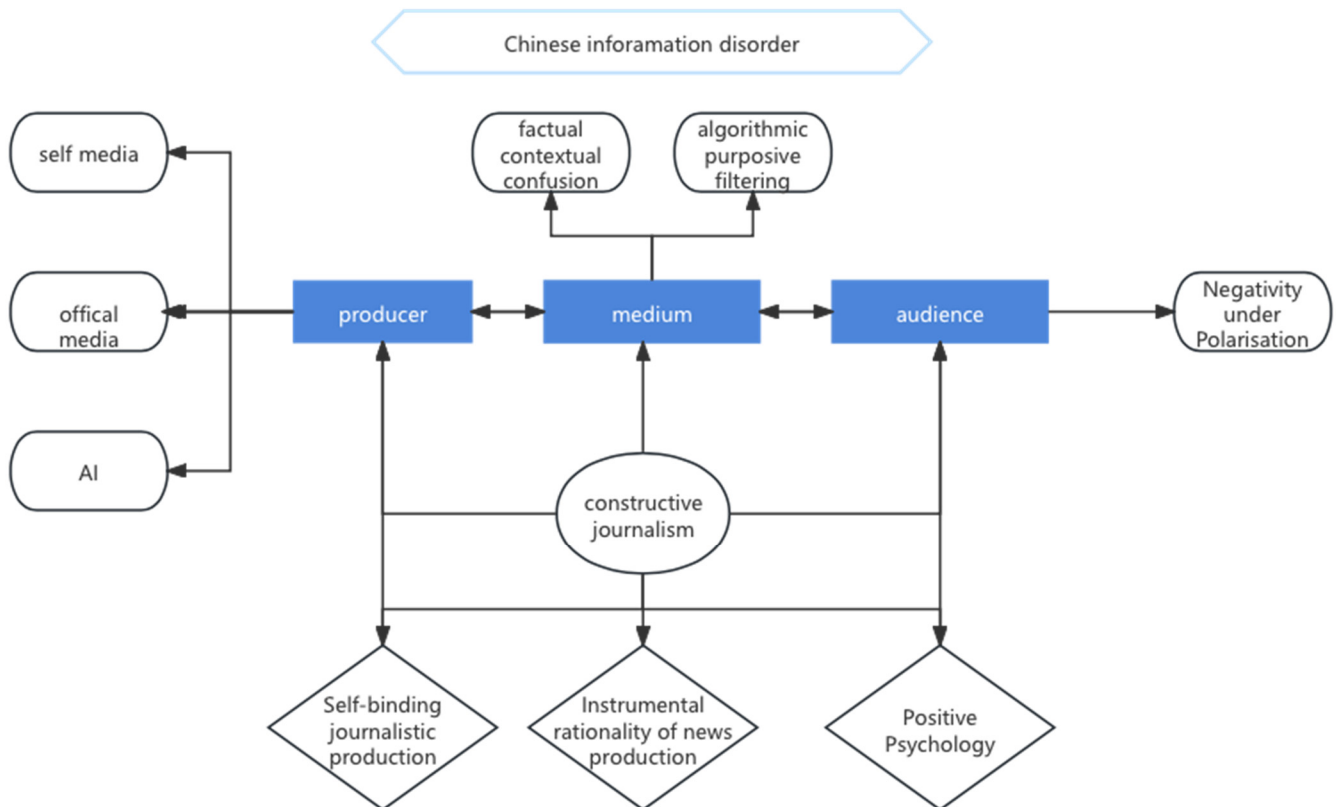


Figure 1. Constructive journalism to combat information disorders.

7. Producers: Diverse Information Producers and Self-Regulation through Constructive Journalism

The rise of information disorders in China’s media ecosystem is deeply tied to the roles of traditional media, self-media, and artificial intelligence in information production. Traditional media, which historically adhered to strict journalistic standards, has been pressured by the fast-paced social media landscape to prioritize speed over accuracy. The pursuit of breaking news (抢新闻) has led to a reduction in fact-checking and source verification, increasing the likelihood of misinformation. This compromises the credibility of traditional outlets, especially given the higher expectations from audiences for professionalism compared to self-media. Self-media, on the other hand, operates without the professional standards expected of traditional journalists. Self-media editors often rely on fragmented or second-hand information and are more likely to prioritize emotional engagement or clickbait over accuracy (Li and Scott 2020). This approach caters to audience curiosity but diminishes the truthfulness of the content, further contributing to the spread of misinformation. Artificial intelligence, increasingly central to the production and distribution of news, exacerbates this issue. AI tools can create “deep fake” content, which is difficult for the public to distinguish from legitimate news (Westerlund 2019). Both traditional and self-media may unknowingly or deliberately use these AI-generated materials, further blurring the lines between truth and fabrication. The convergence of these three

forces—traditional media, self-media, and AI—creates a chaotic media environment where information disorders proliferate.

In the Chinese context, where media de-professionalization and technological manipulation are prevalent (Wang and Meng 2023), constructive journalism emerges as a necessary approach to manage and mitigate these disorders. By emphasizing truthful, solution-oriented reporting and public engagement, constructive journalism offers a way to rebuild trust in media, counteract polarization, and promote a healthier information ecosystem. This approach can serve as a strategic tool for navigating the complexities of China's media landscape and addressing the root causes of information disorders.

The conclusive orientation of the six elements of constructive journalism requires that journalists no longer only provide factual background, but can directly give definite conclusions or give the audience a kind of orientation to seek for conclusions, which is in line with the theory of objectivity put forward by Schudson. When the information producer tries to give the audience a justified and convincing conclusion, the process of news production becomes more cautious and strict. For example, in the process of fact-checking using constructive journalism in the Mingcha of Pengpai (澎湃新闻) (Chinese commercial online news organization in Shanghai), fact-checkers will provide a variety of news sources and supporting materials. In addition to re-investigating and collecting relevant events and evidence, the fact-checker will also provide a richer background introduction to restore the news, and ultimately conclude the authenticity of the news. In the age of digital media, the diversity of information producers has led to information overload and disorders, as there is no unified concept to regulate their ethical standards in China. Constructive journalism can be used as a concept to deepen the professional ethics of news practitioners. Journalists from traditional media have used it as an object that can be put into practice. Editors from self-media can also use it as a concept throughout the entire process of writing and editing. Artificial intelligence in the process of machine learning also needs to take into account the form of constructive journalism with logical conclusions rather than the numerous data only.

8. Medium: Balancing Algorithmic Filtering and Contextual Clarity through Instrumental Rationality in Data-Driven News Production

Entering the internet era, various online platforms and social media have become new mediums. Ordinary people are unsuspecting about information collection and even still trust the organizations that handle metadata. The social platforms spawned by these internet technologies are supported by big data, where the audience's (users') relationships, friendships, interests, tastes, conversations, information searches, emotional responses, and so on are easily quantified into a set of very sophisticated algorithms. It is true that a large number of people naively or unintentionally trust platforms with their personal information. However, people still trust the organizations that process their metadata, and tacitly accept that the platforms or social media companies comply with the rules set out by the public accountability agents (Chen 2021). The rules of algorithmic pushing of social media platforms are based on the emotions and preferences of the audience. In the process of communication, social media platforms target "individuals" and no longer "the general public". In the online media society, communication has gone from the original individual communication, group communication to mass communication under the media of TV and radio, and then back to individual communication under the domination of algorithms. The algorithm is more like an invisible gatekeeper in this process, which helps the audience to screen and filter out what they do not like, rather than false, misleading, harmful, and untrue information. In the information cocoon created by individuals, algorithms have even helped to create information disorders.

Secondly, algorithms are learning from real big data thus generating the underlying logic. However, with weak AI (ANI), they are not always applied in the right context and even create information disorders through misrepresentation. Data is not a fact that can stand on its own. Because independent pieces of data are worthless or meaningless on

their own (Chen 2021), one of the skills of journalists is the ability to accurately correlate massive amounts of data with socially relevant phenomena and issues, and extract facts from them to reveal the actual meaning of the data. The OECD (Organisation for Economic Co-operation and Development) has also emphasized that, similar to raw materials such as water and oil, unapplied data has no intrinsic value in itself, but its value depends on the specific context and use to which it is applied (OECD 2015). Algorithms that know what they know but not what they do not know after learning from huge amounts of data can easily clutter the context. This confusion is indistinguishable to the general audience as they are in the information cocoon and is difficult to verify.

Constructive journalism requires journalists to be able to use data to report more accurately and to visualize the facts. Despite the fact that the collection of big data from users via internet platforms has led to a set of algorithms predicated on catering to audiences for commercial gain, data technology is still an extremely important part of news content production. Data itself is an expression of objectivity. While disaster reporting often focuses on highly emotional personal stories, the incorporation of data in journalism can help mitigate the emotional intensity, offering a more measured and objective representation of events. The citation of data can give the audience rational thinking, but also to avoid the polarization of emotions and exacerbate information disorders. While disaster reporting often focuses on highly emotional personal stories, the incorporation of data in journalism can help mitigate the emotional intensity, offering a more measured and objective representation of events.

In the process of data collection and visualization, there is no way to avoid the use of technology. Individuals cannot avoid mistakes and self-consciousness in the process of collecting and visualizing huge amounts of news data, but the use of tools brings rationality and objectivity. For example, many news outlets use specialized anti-search techniques to trace back to the source. Chinese journalists also use InVid, a video and image authentication tool, to authenticate online content using Error Level Analysis (ELA). The Wayback Machine function in the internet archive is also used to search for older images, websites, or documents. In addition to this, software such as Scrapelhub, Mozenda, and Tableau are often used by journalists to crawl, collect, and analyze data in digital technology. The key is whether journalists can be objective in their use of technology and data, and the concept of constructive journalism can provide a form of self-restraint for those in the media industry. While emphasizing the use of data for more objective and truthful reporting, it is even more important to use the accurate data with an accurate background to combat information disorders.

9. Audience: Addressing Negativity under Polarization through Positive Psychology

Sunstein, in his book *the Republic.com*, gives the widely quoted definition of polarization: “Group members start out with certain biases, and after negotiation, people continue to move in the direction of the bias and end up with extreme views” (Sunstein 2001). There is a close relationship between polarization and information disorders and they usually interact and reinforce each other. Fresh technologies have given users more autonomy in information consumption, but at the same time, the information explosion has led to information overload, so selective exposure has become an important method to improve the efficiency of information reception. Some empirical studies have used data from the National Annenberg Election Survey to confirm the correlation between selective contact and information polarization (Stroud 2010). Luke’s research incorporates a more holistic and authentic human being. Through his analysis of emotional, bigoted, and factionalized humans, he proposes a more practical approach to combat misinformation. Bigotry based on cultural, epidermal, or religious differences is permanent (Munn 2024). The decentralized nature of the internet era allows multiple subjects to exchange opinions in a relatively equal social process, resulting in the formation of different opinion camps, while connected interactive behaviors such as likes, retweets, and comments exacerbate the power of opinion camps thereby creating group polarization, political polarization, opinion polarization,

and action polarization leading to information disorders. Online media present, organize, and practice these biases in novel and more public ways, often with devastating effects and as a tool for spreading misinformation (Munn 2023). Second, the anonymity and absence provided by the internet for users reduces the pressure and constraints of group norms and moral burdens that users may be subjected to, which may give rise to even stronger opinions. In addition to objective platform and technology issues, subjectively, audiences are also more likely to be attracted to extreme viewpoints due to psychological factors such as curiosity and the pursuit of excitement and thrill. This may lead to the deliberate dissemination of false or biased information by some individuals and groups to fulfil specific political or social agendas. The dissemination of such information can exacerbate information disorders, as it may lack objectivity and accuracy.

At the same time, the spread of disinformation, rumors, and biased views can also reverse social and political polarization. When audiences are exposed to inaccurate or biased information, they may be more inclined to stick to their positions than to seek out truthful, accurate, objective, and neutral information, leading to greater levels of disagreement and antagonism. A study of 7915 comments from a particular news network in China found that groups exhibited strong extreme positions of support or opposition, leading to group polarization in most groups, although the extent of this varied between groups. Among the extreme attitudes of these groups, there is a clear tendency towards negative attitudes, which are mainly manifested in the form of strong accusations and criticisms of the subjects involved (Liao et al. 2022). This negative emotional resonance can be detrimental to uninitiated adolescents and to the long-term and stable development of society in China. In group-polarized comments or information, even evidence-based disinformation and fact-checking news can hardly gain the approval of the polarized group, but rather exacerbate the process of information disorders, which greatly endangers the credibility of professional media.

The six elements of constructive journalism clearly put forward the concept of “de-polarization”. This element stresses the importance of enhancing inclusiveness and diversity in journalism and encouraging dialogue and negotiation between different perspectives. By providing a platform for different groups to share their views and seek consensus, journalists can provide more comprehensive, accurate, and objective reporting. Avoiding the dissemination of one-sided or biased information allows audiences to better understand the multifaceted nature of issues, thus reducing polarization and information disorders. For example, Suzhou TV’s program “Suzhou City Council Room” in southern China reported on the investigation of polluting enterprises, bringing together relevant parties who had an influence on the solution of the problem, such as government officials, experts, and scholars. Through the “interview + tracking” method, the program formed a response structure of “government officials + experts and scholars + enterprise personnel”, thus reducing the polarization caused by the audience’s questioning of the problems that the news had not covered.

In addition, it is difficult to avoid the emotional communication generated by the algorithmic pushing approach. Some scholars in China have studied that this emotional communication is mainly dominated by negative emotions (Liao et al. 2022), and excessive negative emotions can lead to information disorders and group polarization. Constructive journalism emphasizes positive psychology as the basis for providing positive emotions, balancing negative emotions, reducing emotional intensification, and making discussions between multiple parties more rational. However, it is important to note that constructive journalism is not a positive campaign that completely avoids and ignores negative social topics. Instead, it emphasizes solutions to problems and positive social progress to balance the negative emotion of the audience. Research in positive psychology has shown that positive emotions help foster optimism and make people more willing to face social issues rather than avoiding them (McIntyre and Gyldensted 2018b). By presenting stories of people overcoming challenges and achieving goals, constructive journalism can inspire positive action and participation in social change. When individuals feel they belong to

a society of positive change, they are more likely to engage in constructive negotiations rather than divisive arguments, thereby reducing group polarization and weakening information disorders (Seligman 2006).

Moreover, by integrating positive psychological cues into algorithmic and rule design, platforms can be encouraged to prioritize content that informs and engages users in constructive ways, rather than amplifying sensational or polarizing material. In the Chinese context, where algorithmic filtering often reinforces biases and emotional reactions, constructive journalism offers an alternative approach that not only addresses misinformation but also fosters audience engagement with responsible and solution-oriented content. This method enhances public trust in media and reduces the overall impact of information disorders by reshaping how content is produced, disseminated, and consumed.

10. Conclusions and Limitation

Information disorders encompass a range of concepts, including misinformation, disinformation, and malinformation. Despite ongoing debates surrounding the definition of “information disorders,” the phenomenon’s existence and intensification in the digital age are indisputable. The diversification of information producers has resulted in an overwhelming information overload, blurring the boundaries between traditional journalism, self-published content, and artificial intelligence-driven outputs. Platform algorithms, governed by user preferences and commercial interests, serve as invisible gatekeepers, prioritizing engagement over the accuracy and objectivity of news content. In the current landscape, where artificial intelligence remains relatively unsophisticated, algorithmic content recommendations are often decontextualized, leading to the misapplication of data and the proliferation of information disorders. Additionally, the anonymity and detachment characteristic of online environments exacerbate audience polarization, which further fuels the cycle of information disorders. These elements are intricately linked, interacting in ways that reinforce and perpetuate the problem.

Exploring the root causes of information disorders is essential for developing effective governance strategies. Constructive journalism, which has emerged as a reflective practice aimed at enhancing journalistic professionalism in the West, aligns with certain principles of Chinese journalism. This form of journalism, with its focus on positive and in-depth reporting, offers a promising approach to mitigating information disorders. By fostering conceptual development among journalists, leveraging digital journalism technologies, and applying positive psychology to address audience polarization, constructive journalism can play a crucial role in combating these issues. In China, where the impact of information disorders is increasingly significant, the media’s role in constructively monitoring and addressing these disorders is vital for improving the online information environment.

From the perspective of content producers, reinforcing journalistic professionalism should become a foundational discipline in the post-truth era. Journalists must adhere strictly to ethical standards, ensuring that their reporting is grounded in reliable sources and factual accuracy. Multiple layers of verification and thorough investigative practices are essential to prevent the spread of misinformation. Constructive journalism also advocates for inter-media cooperation and information sharing, promoting the establishment of cross-media fact-checking mechanisms. By creating a network for mutual monitoring and verification, the overall quality of news can be significantly improved.

From the media platform perspective, the implementation of technological tools for information verification is critical. Big data analytics and artificial intelligence (AI) technologies, such as natural language processing (NLP), machine learning (ML), and image recognition, are invaluable for detecting and flagging false information. For instance, ML algorithms can be trained to identify inconsistencies or anomalies in news content, aiding journalists and editors in rapidly assessing the authenticity of information. Additionally, content review mechanisms and user reporting systems are vital components in the fight against information disorders. Media platforms should establish multi-tiered auditing systems, combining manual and automated reviews, to promptly identify and remove mis-

information. User participation in reporting suspicious content further strengthens the information ecosystem. Transparency and accountability are also foundational in combating information disorders; platforms must openly communicate their content review policies and processes to build user trust and foster greater public engagement. In China, major platforms like WeChat, Weibo, and ByteDance (Today's Headlines) have already initiated various measures aimed at reducing information disorders, leveraging technological innovations alongside user feedback mechanisms to create a healthier information environment.

From the audience perspective, improving information literacy is paramount. Audiences must develop the skills necessary to critically assess the authenticity of information, a goal that can be achieved through targeted education and training initiatives. Schools, community organizations, and media platforms should offer courses on information literacy, teaching individuals how to evaluate the reliability of sources, verify facts, and recognize the hallmarks of misinformation. Education should also encompass an understanding of basic journalistic ethics and the mechanisms of information dissemination, equipping audiences with the critical thinking skills necessary to navigate today's complex media landscape. Moreover, audiences should be encouraged to consult multiple sources to verify information. Relying on a single source can lead to biased or misleading interpretations. Constructive journalism promotes a more comprehensive and objective understanding of events by encouraging audiences to compare and analyze information from diverse sources. For instance, when confronted with significant news, audiences can reference official media, international outlets, and third-party fact-checking websites to confirm the accuracy of the information. Additionally, by applying principles of positive psychology, constructive journalism can help mitigate audience polarization, reducing the spread of clickbait and other forms of information disorders. Critical reading and active engagement are also crucial; audiences should maintain a skeptical approach, thoughtfully evaluating the logic and evidence behind information, and avoiding unverified news. Through feedback and dialogue, audiences can interact with media outlets, requesting additional context and evidence, thereby enhancing the transparency and credibility of news reporting.

While this study proposes potential strategies for combating information disorders in China through a literature review grounded in constructive journalism, future research must include empirical studies to evaluate the effectiveness of these strategies in practice. Furthermore, given that this research is situated within the specific political and cultural context of China, the findings may have broader implications for global media and communication scholarship. Future research should expand the scope of this study to explore more detailed strategies applicable in Western contexts, where the phenomenon of information disorders also demands urgent attention.

Author Contributions: Conceptualization, H.Z. and L.J.; methodology, H.Z.; formal analysis, H.Z.; investigation, H.Z. and L.J.; resources, L.J.; writing—original draft preparation, H.Z.; writing—review and editing, H.Z. and L.J.; visualization, H.Z.; supervision, L.J. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: No new data were created or analyzed in this study. Data sharing is not applicable to this article. This study used a systematic literature review.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Allcott, Hunt, and Matthew Gentzkow. 2017. Social media and fake news in the 2016 election. *Journal of Economic Perspectives* 31: 211–36. [\[CrossRef\]](#)
- Anderson, C., and Micheal Schudson. 2019. Objectivity, professionalism, and truth seeking. In *The Handbook of Journalism Studies*. Oxfordshire: Routledge, pp. 136–51.

- CAC. 2017. 互联网新闻信息服务管理规定 [Internet News Information Service Regulation]. Available online: https://www.cac.gov.cn/2017-05/02/c_1120902760.htm (accessed on 9 August 2024).
- Cai, Wen. 2019. Professional Conceptual Change from Contemporary Western Journalism Reform Movement—"Constructive Journalism" "programme Journalism" "Public Journalism" Comment and Analysis. *Journalism and Communication Research* 26: 60–70.
- Chen, Changfeng. 2021. Dataism for news communication: Impact, deconstruction and utilisation. *Journalism, Journalism and Communication* 11: 4–13, 31. [CrossRef]
- CNNIC. 2020. *Statistical Report on Internet Development in China*. Beijing: China Internet Network Information Center.
- Creemers, Rogier. 2017. Cyber China: Upgrading Propaganda, Public Opinion Work and Social Management for the Twenty-First Century. *Journal of Contemporary China* 26: 85–100. [CrossRef]
- Damasceno, Cristiane S. 2021. Multiliteracies for combating information disorders and fostering civic dialogue. *Social Media + Society* 7: 2056305120984444. [CrossRef]
- Davies, Nick. 2009. *Flat Earth News*. New York: Random House.
- Deuze, Mark, Axel Bruns, and Christoph Neuberger. 2007. Preparing for an age of participatory news. *Journalism Practice* 1: 322–38. [CrossRef]
- Dwyer, Tim. 2010. *Media Convergence*. Maidenhead: Open University Press.
- Egelhofer, Jana Laura, and Sophie Lecheler. 2019. Fake news as a two-dimensional phenomenon: A framework and research agenda. *Annals of the International Communication Association* 43: 97–116. [CrossRef]
- Fenton, Natalie, ed. 2009. *New Media, Old News: Journalism and Democracy in the Digital Age*. New York: SAGE Publications.
- Guo, Lei. 2020. China's "fake news" problem: Exploring the spread of online rumors in the government-controlled news media. *Digital Journalism* 8: 992–1010. [CrossRef]
- Hu, Baijing. 2019. Concepts and Contexts: Constructive Journalism and the Possibility of Public Consultation. *Journalism and Communication Research* 26: 46–52.
- Jenkins, Henry. 2008. *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.
- Karlsson, Michael. 2011. The immediacy of online news, the visibility of journalistic processes and a restructuring of journalistic authority. *Journalism* 12: 279–95. [CrossRef]
- Lawson-Borders, Gracie L. 2006. *Media Organizations and Convergence: Case Studies of Media Convergence Pioneers*. New York: Routledge.
- Le, Yin. 2021. Constructive journalism in China: Research and practice. *Social Sciences in China* 42: 145–68. [CrossRef]
- Li, Bo, and Olan Scott. 2020. Fake news travels fast: Exploring misinformation circulated around Wu Lei's coronavirus case. *International Journal of Sport Communication* 13: 505–13. [CrossRef]
- Liao, Shengqing, Junchao Chen, and Yu Jianping. 2022. The effect of communication network structure of news reposts on group polarisation. *Journalism* 7: 24–33. [CrossRef]
- McIntyre, Karen, and Cathrine Gyldensted. 2018a. Constructive journalism: An introduction and practical guide for applying positive psychology techniques to news production. *The Journal of Media Innovations* 4: 20–34. [CrossRef]
- McIntyre, Karen, and Cathrine Gyldensted. 2018b. Positive psychology as a theoretical foundation for constructive journalism. *Journalism Practice* 12: 662–78. [CrossRef]
- McIntyre, Karen, and Kyser Lough. 2021. Toward a clearer conceptualization and operationalization of solutions journalism. *Journalism* 22: 1558–73. [CrossRef]
- Monsees, Linda. 2023. Information disorders, fake news and the future of democracy. *Globalizations* 20: 153–68. [CrossRef]
- Munn, Luke. 2023. *Red Pilled-The Allure of Digital Hate*. Bielefeld: Bielefeld University Press.
- Munn, Luke. 2024. Misinformation's missing human. *Media, Culture & Society* 46: 1287–98. [CrossRef]
- Murphy, Margi. 2018. Government bans phrase "fake news". *The Telegraph*, October 23.
- OECD. 2015. *Data-Driven Innovation*. Paris: OECD Publishing.
- People.net. 2018. 'Analysis of Party Newspapers' APPs Development', People's Daily Online. Available online: <http://media.people.com.cn/n1/2018/12/21/c423025-30481151.html> (accessed on 9 August 2024).
- Schudson, Micheal. 2021. The great reinvention of journalistic professionalism: From objectivity 1.0 to objectivity 2.0. *Journalism* 2: 4–12.
- Seligman, Martin E. P. 2006. *Learned Optimism: How to Change Your Mind and Your Life*. New York: Vintage.
- Shu, Kai, Suhang Wang, Dongwon Lee, and Huan Liu. 2020. *Disinformation, Misinformation, and Fake News in Social Media*. Cham: Springer International Publishing.
- Stockmann, Daniela. 2011. Race to the Bottom: Media Marketization and Increasing Negativity toward the United States in China. *Political Communication* 28: 268–90. [CrossRef]
- Stroud, Jomini. 2010. Polarization and partisan selective exposure. *Journal of Communication* 60: 556–76. [CrossRef]
- Sunstein, Cass. 2001. *Republic.com*. Princeton: Princeton University Press.
- Wang, Haiyan, and Jing Meng. 2023. The de-professionalization of Chinese journalism. *Chinese Journal of Communication* 16: 1–18. [CrossRef]
- Wang, Haiyan, and Xiang Liu. 2020. Research on news "de-professionalisation" in the digital environment—A comparative content analysis based on the news of Chinese newspapers in 2018 and 2012. *Journalism University* 7: 79–93, 124.
- Wardle, Claire. 2018. The need for smarter definitions and practical, timely empirical research on information disorder. *Digital Journalism* 6: 951–63. [CrossRef]

- Wardle, Claire, and Hossein Derakhshan. 2017. *Information Disorder: Toward an Interdisciplinary Framework for Research and Policymaking*. Strasbourg: Council of Europe.
- Westerlund, Mika. 2019. The emergence of deepfake technology: A review. *Technology Innovation Management Review* 9: 11. [[CrossRef](#)]
- World Advertising Research Centre. 2017. *Advertising Expenditure Forecasts*. London: WARC.
- Zhang, Yanqiu, and Simon Matingwina. 2016. A new representation of Africa? The use of constructive journalism in the narration of Ebola by China Daily and the BBC. *African Journalism Studies* 37: 19–40. [[CrossRef](#)]
- Zhao, Xin, and Yu Xiang. 2019. Does China's outward focused journalism engage a constructive approach? A qualitative content analysis of Xinhua News Agency's English news. *Asian Journal of Communication* 29: 346–62. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.