

# Epistemology of Digital Journalism Shift in South Global Nations: A Bibliometric Analysis

Foued Ben Said<sup>1,\*</sup>, Sangeeta Tripathi<sup>2</sup>

<sup>1</sup>MOCFINE Research Laboratory, Manouba University, Manouba, Tunisia.

<sup>2</sup>Department of Mass Communication, University of Technology and Applied Sciences, Dhofar, Sultanate of Oman.  
foued.bensaid@esct.uma.tn<sup>1</sup>, sangeeta.sal@cas.edu.om<sup>2</sup>

**Abstract:** Emerging digital technology and the ongoing transformation of the media landscape have drawn the attention of journalism scholars to study the epistemology of digital journalism. Several studies focus on theoretical contributions and dimensions of journalism epistemology, news production, narrative structure, practices of social media journalism, temporality layered text, journalistic role, authorial stance, knowledge claims and their distinct norms. As digital journalism and news production has become heterogeneous in content, positioning, and dissemination, professional journalists are losing epistemic authority over the news. The study investigates how digital news production in Global South Nations, such as live blogging, mobile journalism, automated journalism, and data journalism, affects epistemic practices and how scholars have addressed these shifts. The study employs a bibliometric approach and selects 916 documents using a systematic search query from the Web of Science Database. The analysis of the network of keywords co-occurrence indicates that South Global scholars mainly focus on participatory journalism, data journalism, blogging journalism, and automated journalism. They cover various areas, such as exploring the potential of data journalism, analyzing the impact of emerging media on journalism production and distribution, and studying the use of AI (Artificial Intelligence) and machine learning to produce news content. The study aims to identify gaps and guide future research in this field.

**Keywords:** Journalism; Epistemology; News Production; Data Journalism; Participatory Journalism; Mobile Journalism; Live Blogging; Automated Journalism; Social Media Platforms; Epistemic Practices; Misinformation.

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## 1. Introduction

With the advent of the cable television network, news broadcasting has drawn upon specific newsgathering techniques. The whole news production process followed a certain set of epistemic to develop cities' best stories about a current event and happening. The emergence of the Internet and constantly developing ICT (Information and Communication Technologies) have brought significant changes in journalism content production. The news demand is being shifted according to the fragmented audience. A large number of mushrooming news channels, more remarkable aggregations of news for 24x7, digital journalism, data journalism, live blogging, automated journalism, citizen journalism, mobile journalism and news production for extremely hurried audiences have drastically impacted the traditional process of news production and changed the epistemological of journalism [11]. The social media platform and mobile devices have made news more pervasive among common people than ever. Digital journalism made news production more heterogeneous in content, posting and dissemination. Now professional journalism started losing epistemic authority over the news. Because the news is being written, produced, and circulated to the audience, which scrolls the headline while waiting for a train or bus or travelling into the Metro. This article explores how

\*Corresponding author.

diverse digital news production change epistemic practices during live blogging, mobile journalism, data journalism, and public participatory journalism in the South Global nations and how the South Global nation scholars have addressed these epistemologies.

The article begins with actor-network theory and the dislocation of news in current practices due to the proliferation of mobile devices, Internet penetration, social media, web portals and several application-based news programs in the South global nations. It develops with social, political, economic, professional, and technological factors [5]; [10];[28] that plays a huge role in structuring and shifting the epistemology of digital news production. The proliferation of mobile devices, penetration of the Internet, social media, web portals and several application-based news apps play as non-human social actors. In China, mobile phone subscriptions have reached 1.64 billion by December 2021. 74.4 percent of the Chinese population has used the Internet till the first half of 2022.

This penetration indicates the Chinese's access to a digital platform [58]. In India, mobile subscription was around 1.15 billion in 2021. In 2022, 66.16 percent of India's population used to access the Internet through mobile devices, which is expected to increase by 96 percent by 2040. Similarly, in Brazil, 77.8 percent population uses mobile [59]. Rapid dispersal of mobile subscriptions and the Internet in global south countries indicate the structural changes in news production and distribution as news channels started to distribute their news online through different web portals and news-based applications. In India alone, 392 regional and national news channels facilitate news through broadcasting or online medium [37]. Most of them have their news-based application. Similarly, some commercial media houses in China offer news-based applications such as Jinri Toutiao, Ifeng News, Caijing Toutiao, People's Daily, Tencent News and Zhihu etc. These news-based applications play a significant impact on human and non-human actors.

To understand the epistemology shift in global south nations, four prominent journalism forms have been mentioned: data journalism, live blogging, participatory journalism, and automated journalism. Its practices show a great heterogeneous [67].

## **2. Actor-Network Theory and Dislocation of News**

The media landscape is changing significantly due to technological shifts [52];[31]. Another reason is the socially, economically, politically, and professionally fragmented audience. Human and non-human social actors play a huge role in the dislocation of news in current journalism practices. Actor-network theory [34];[40] also supports human and non-human interrelations as journalism involves steps or processes more than a journalist does [55]. It is not merely related to professional journalists [70].

However, this relationship arises from a confluence of traditional and modern practices, mediated by human and non-human factors that affect the journalism content of information in two different degrees [62], such as the algorithm effect while accessing the information, the agency of the actor's involvement and characteristics of the platforms. Technology and innovations have affected news presentation style, production, and distribution as the news information is being produced and distributed by a large group of diversified actors. It encourages the dislocation of news. This term refers to fundamental transformations of an established order and redistribution of power from mainstream media to another digital platform [67]. In traditional news production, journalists were the main actors who produced and published news for a broad audience.

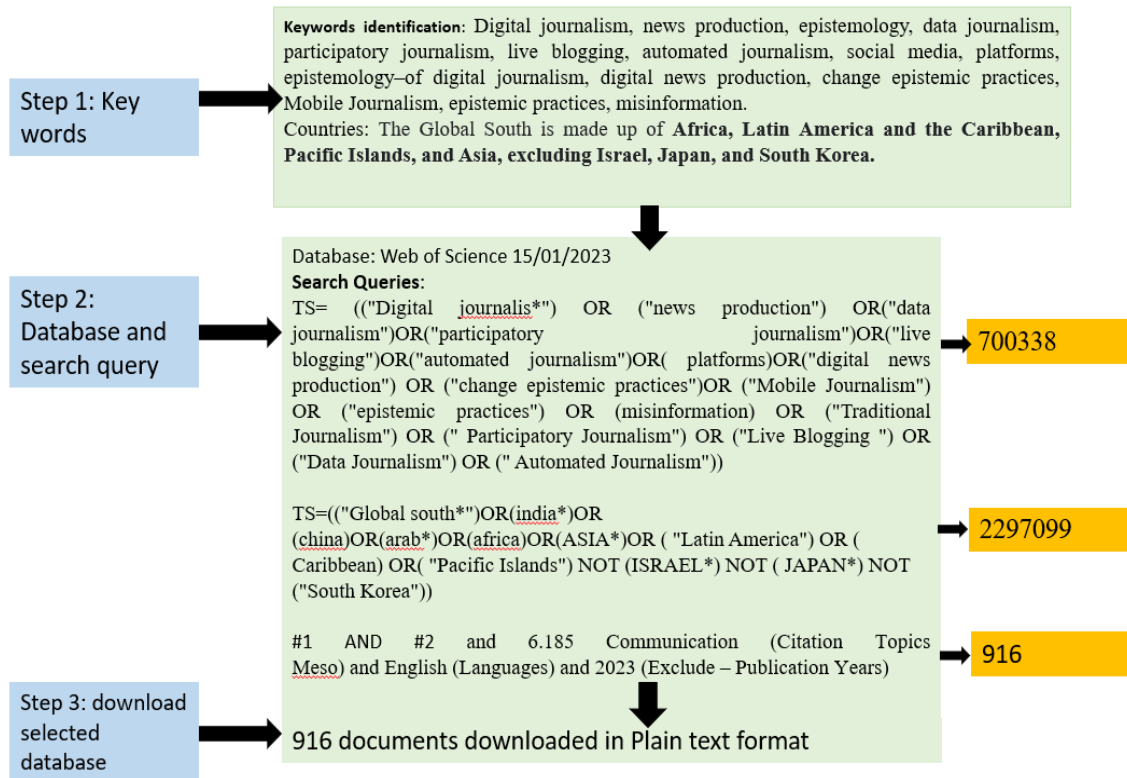
Now the prevalence of the Internet and several digital platforms play an actor role in disrupting the entire set of journalism. Indian media is the best example, as the country's media landscape witnessed the profound impact of mobile and internet expansion on its outlets and audience [25];[39]. India has 100 channels and news apps [14]. India media is hugely commercialized, cross-media ownership, highly concentrated and controlled by politicians and industrialized. One research claims that India has emerged as a mobile-first market as 68 percent of people use smartphones as their primary instrument to get updated about the world [2]. This Research report focused on English language internet users. Omidyar Network report 2017 claimed that Indians spent three hours on their mobile but only 2% of their time on the news. This indicates new audiences and users' behaviour as social actors that impact social media news production and its presentation.

## **3. Methodology**

### **3.1. Database Selection**

In this bibliometric analysis, we started with the definition of the search keywords, which combine the terms Digital journalism, news production, epistemology, data journalism, participatory journalism, live blogging, automated journalism, social media, platforms, epistemology of digital journalism, digital news production, change epistemic practices, Mobile Journalism, epistemic practices, misinformation by using the Boolean operator or [15], and then we use a search process for south global countries. The third step uses a Boolean that picks the intersection between the two sets and picks the papers in English from

the communication. Finally, 916 documents are selected from the WoS (Web of Science) database and downloaded in Plain text format. The search process is presented in Figure 1.



**Figure 1:** Data selection process

### 3.2. Performance analysis

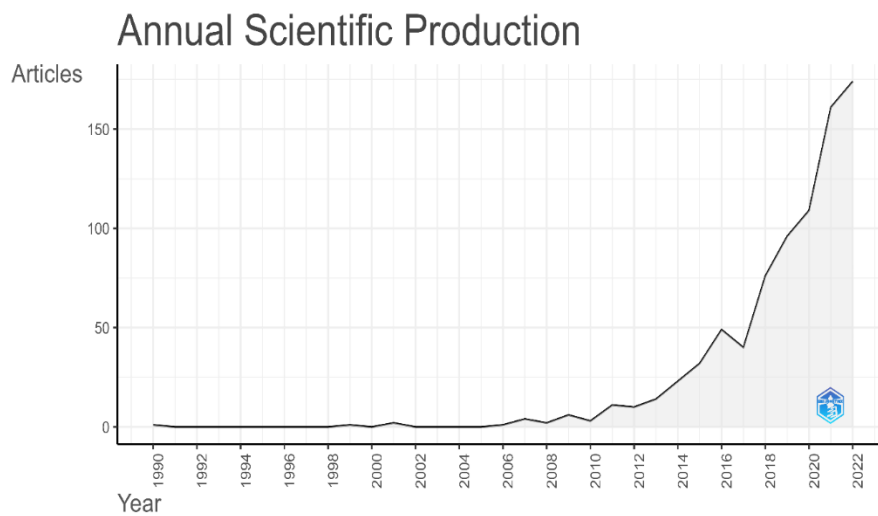
The bibliographic analysis developed in this article includes a performance analysis conducted using the Bibliometrix program of the R software version 4.1.2 and its online application Biblioshiny and mapping of the sciences according to the networks visualized through the Citespace program [16]. The bibliometric analysis for this study consisted of two types of analysis. The first focuses on productivity evolution and uses metrics for each level of analysis. We sought to verify Bradford's law [9] and H index source and authors dynamics and the most relevant sources and authors. The second analysis is the science mapping based on network visualization and cluster characteristics. Table 1 describes the selected documents database.

**Table 1:** Data Description

Description	Results
<b>Main Information About the Data</b>	
Timespan	1990:2022
Sources (Journals, Books, etc.)	145
Documents	916
Annual Growth Rate %	17,49
Document Average Age	4,11
Average citations per doc	9,097
References	33439
<b>Document Contents</b>	
Keywords Plus (ID)	951
Author's Keywords (DE)	2694
<b>AUTHORS</b>	

Authors	1421
Authors of single-authored docs	301
<b>Authors Collaboration</b>	
Single-authored docs	337
Co-Authors per Doc	2,09
International co-authorships %	24,17

The selected documents were published between 1990 and 2022 with a growth rate of 17.49%. The average age of a document is four years. These documents are written by 1421 authors, of which 301 are single-authored. On average, a document is cited nine times. The total number of keywords to be analyzed is 2694. A quarter of the documents were written in international collaboration. Figure 2 illustrates the temporal evolution of document production.



**Figure 2:** Annual Publication Evolution

The annual evolution and productivity analysis could allow an understanding of the growth of the theme from its appearance to date [29]. Figure 2 depicts the annual scientific production in the field of the theme from 1990 to 2022. The annual growth rate in publications focused on Media was calculated with 17,49% publications.

The epistemology of journalism was scant from 1990 till 2010. However, a slight increase can be noted after 2017. From 2017, the publications in the field of Media experienced a considerable increase from below 50 publications annually to almost 200 in 2022.

Table 2 presents a ranking of journals based on their h-index, which assesses a source's output and citations combined. The h-index indicates that a source has published h articles, each of which has received h or more citations [20]; [32].

**Table 2:** Sources Classification by h-index

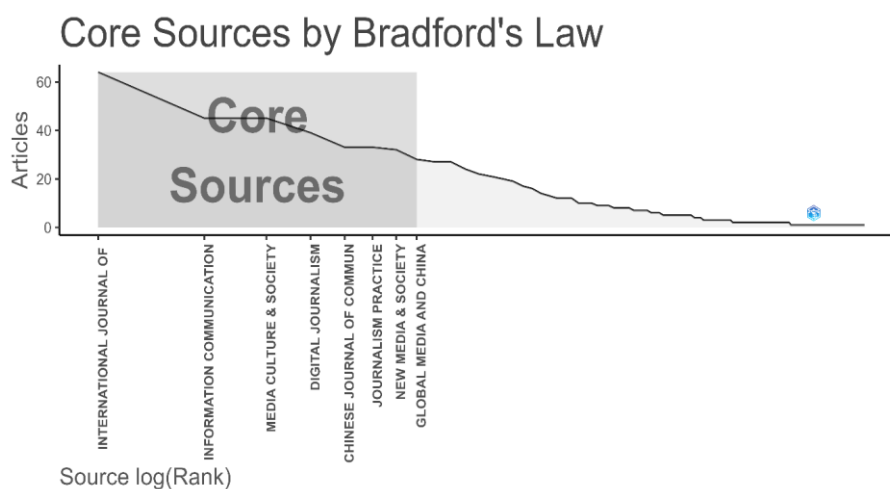
Element	h_index	TC	NP	PY_start
<i>Information Communication and Society</i>	14	872	33	2011
Media Culture & Society	13	420	41	2001
Chinese Journal of Communication	12	518	32	2009
Digital Journalism	12	383	31	2013
<i>International Journal of Communication</i>	12	445	64	2016
Journalism Studies	12	280	24	2010
Social Media + Society	11	347	27	2015
New Media & Society	9	373	21	2006

Telecommunications Policy	8	199	12	2007
Asian Journal of Communication	7	154	17	2009

*h\_index TC= total citations NP: number of papers PY\_start: publication start year*

The journal Information Communication and Society is ranked first in terms of h-index, given the relatively high number of publications and too many citations. Media Culture & Society journal is ranked second in the h-index, reflecting its importance in the field by the number of publications or citations. The most productive journal is the International Journal of Communication, with 64 published papers.

Bradford's law makes it possible to identify the journals that form the central core of a theme and take up 1/3 of the published articles. Figure 3 represents Bradford's Law calculations. Figure 3 indicates that eight journals (0.8% of the total) have 319 published documents, representing 35% of the total.



**Figure 3:** Bradford's Law

Table 3 presents the ranking of the most prolific authors in this topic based on their h-index.

**Table 3:** 10 The most impactful authors

Element	h_index	TC	NP	PY_start
Tanja Bosch	5	165	8	2012
Trisha T. C Lin	5	49	5	2012
Wilfred Yang. Wang	5	78	7	2018
Pablo J. Boczkowski	4	119	4	2018
Lei. Guo	4	66	4	2019
Michael. Keane	4	62	5	2016
Anoop. Kumar	4	31	6	1018
Francis Lap Fung. Lee	4	50	5	2006
Fan. Liang	4	181	6	1018
Weishan. Miao	4	48	4	2017

Bosch is the author with the highest h-index, interested in African digital media platforms. His most cited article is [7], in which he argues that the Rhodes Must Fall campaign can be considered a collaborative project of resisting the norm of memory production. Furthermore, he demonstrates that social media discussions are not meant to be considered separate from more conventional media platforms, especially as, in this case, they may set the agenda for mass media. According to the h index, the second author, Trisha T. C Lin, is working on audiovisual media. His most quoted article [42] proposes a "platform-neutral" regulatory regime for multiscreen television that focuses on ranking audiovisual material in the face of swiftly growing

technological change and competition. The third most influential author is Wilfred Yang; Wang is interested in Chinese digital media, and his most cited paper is [65], which focuses on the iQiyi video streaming service and raises the question: What can we learn about platformization in general if we look at Chinese platforms not just as a departure from Western models, but as a chance to develop a theory? Several aspects of platform theory as it has been developed in English-language studies could benefit from a reconsideration in light of the Chinese online video scenario.

The most cited documents are presented in Table 4.

**Table 4:** The most cited documents

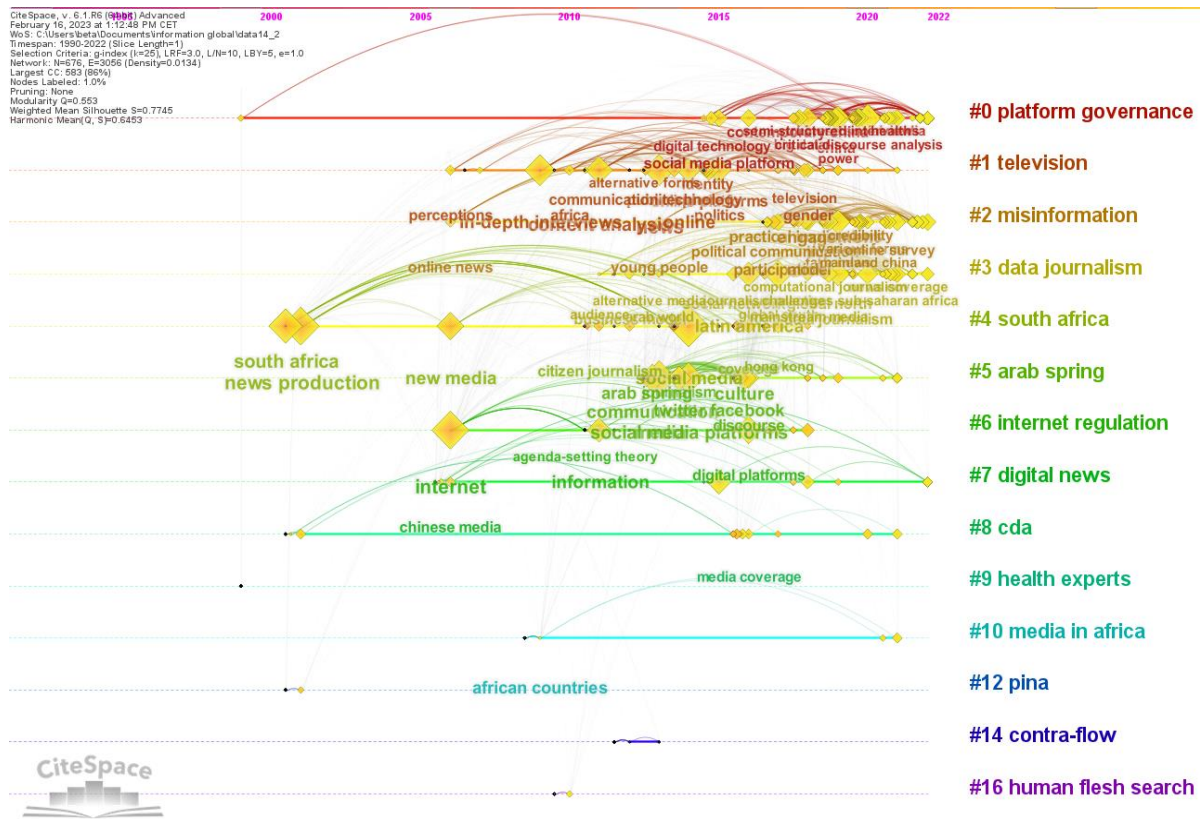
Document	Title	Year	Local Citations	Global Citations
Plantin and de Seta, [53]	The Techno-Nationalist Shaping of China's Digital Platforms, with Emphasis on WeChat as Infrastructure.	2019	27	90
Wang and Lobato, [65] Wang [65]	Studies of Chinese video streaming services within the context of international ones.	2019	21	42
Lin and de Kloet, [43]	Kuashou and Chinese Digital Cultural Production: The Platformization of an Unlikely Creative Class.	2019	21	46
Chen et al., [18]	PositiveEnergy Douyin: constructing "playful patriotism" in a Chinese short-video application.	2021	19	44
Chen and Qiu, [17]	Digital utility: Datafication, regulation, labour, and DiDi's platformization of urban transport in China.	2019	18	42
Zhang, [73]	Infrastructuralization of Tik Tok: transformation, power relationships, and platformization of video entertainment in China.	2021	15	40
Kaye et al., [36]	Parallel platformization of Douyin and TikTok, two popular Chinese mobile short video apps.	2021	13	54
Rauchfleisch and Schäfer, [56]	Weibo's many publics provide a typology of China's emerging and evolving online public spheres.	2015	11	117
Poell et al., [54]	Where is the actual Weibo at? Theory of actor networks and Chinese online conflict.	2014	9	33
Fuchs, [30]	Global political economics and China's social media giants Baidu, Weibo, and Renren.	2016	9	36

The most local (in the selected database) cited paper exposes that WeChat's success as a non-Western digital media service can be attributed to its platformization and Infrastructuralization, which Chinese regulations and policies on media and technology have shaped. Developing a techno-nationalist media environment in China has also significantly shaped the WeChat platform model. The second most cited article centers on iQiyi, a video streaming service. It poses the question: How can we use Chinese platforms to deviate from Western models and expand the platformization theory in media and communication? Through an extensive analysis of iQiyi's Interface and regulatory framework, the authors present two main arguments. The first is the correlation between the regulatory environment, market structure, and platform potentialities.

The second one concentrates on platform interfaces, customization, and segmentation. The oldest, most cited paper [54] aims to provide a comprehensive political-economic analysis of China's major social media platforms in the context of the country's economic transformations. It investigates the commodity and capital form of Chinese social media, comparing it with that of US platforms such as Google (search engine), Twitter (microblog), and Facebook (social networking site). The primary objective is to identify similarities and differences between the political economies of Baidu (search engine), Weibo (microblog), and Renren (social networking site) and their US counterparts. Profits, the function of advertising, boards of directors, shareholder value, stock market prices, and use policies are all crucial to the comparison. The research is based on the subject of whether or not China's economic system is capitalism or socialist and how this affects the country's social media business.

### 3.3. Conceptual Structure

The network of keywords co-occurrence provides the analysis of the thematic conceptual structure by identifying the relevant topics of the literature and related topics and authors contributing to the development of these topics.



**Figure 4:** Time Evolution of Co-occurrence Keyword Clusters

Figure 4 of the keyword co-occurrence network reveals the existence of 14 clusters. Table 5 presents the cluster's characteristics and the epistemology of the journalism treated in each cluster.

**Table 5:** Cluster's Characteristics and Epistemology of Journalism

Cluster	Year	Topics	Epistemology and journalism forms
3	2019	data journalism; journalistic roles; sexual harassment; media democratization; Chinese media; news applications; legacy newspapers; online affordances; Chinese media	Data journalism
2	2019	Social media ; computational social science ; science factionalism; group identity; controversial science   crisis communication; content analysis; collective memory; participatory politics; online public sphere	Social media, news websites, multimedia news. Positive and negative effects.
0	2019	social media; connective actions; feminist activism; stack; agenda setting   platform governance; platforms studies; visibility moderation; digital labor; digital utility	Digital media and participatory journalism, automated journalism.
5	2015	social media; rural women; social networking site; agenda setting; online trolling   arab spring; social networking site; agenda setting; online trolling; digital activism	Arab spring. Digital activism.
1	2015	Social media ; long-distance relationships; communication technologies; transnational family;	Traditional journalism



4	2013	internet television   content analysis; collective memory; crisis communication; internet television; Chinese media South Africa; online political engagement; digital age; covid-19 pandemic; new media technologies   social media; case study; citizen journalist; global news production; arab spring	Blogging journalism, citizen journalism,
6	2013	web use; news consumption; repertoire approach; multiple media platform; young people   social media; platform economy; international alignment; digital sovereignty; tech monopolies	Weibo use, news consumption.

#### 4. Participatory Journalism and social media

Cluster 0 reflects the scholarly study on participatory journalism. Palau-Sampio, [51] discusses the growth of fact-checking and the importance of independent digital platforms in evaluating statements on critical socio-political issues. Radu's study focuses on the rise of online disinformation and the measures many governments take to combat it in the context of the COVID-19 pandemic. Moyo et al., [46] show how analytics tools are reshaping news production and distribution in Africa, while Rodriguez-hidalgo analyzes the quality of Latin American digital native media. Bosch et al., [8] explore how South African social activists use nano media and digital media as communicative platforms, while de Seta, [21] examines the complex dynamics of civility and incivility in Chinese digital media through the lens of the Chinese concept of winning. Finally, Schneider's study explores digital media's role in cementing China's success in managing the COVID-19 crisis. At the same time, Malinverni and Brigagão, [44] analyze the discursive production of Brazilian media about vertical isolation and its relation to President Jair Bolsonaro's pandemic denial and eugenics policies.

Support: social media platforms: people use Weibo on their smartphones and have access to deleted content there, and meta-public spheres are debates about censorship. Rauchfleisch and Schäfer, [56], [72] examine the role of social media in modern conflicts, analyzing the interactions and negotiations between four main actors: social media platforms, mainstream news organizations, online users, and social media content. Using the Sino-Indian border crisis in 2017 as a case study, the authors argue that social media plays an essential role in contemporary wars and conflicts, with professional media outlets and web users leveraging social media to shape and expand the public agenda.

##### 4.1. Digital technology as a tool for digital media

Van Leuven et al., [61] examine the use of social media as a source in foreign news coverage by Belgian news outlets during the Arab Spring protests in 2011. they show how journalists relied more on non-mainstream sources in their coverage of the Syrian uprising, which can be attributed to restricted information access that was circumvented through digital networks and social media platforms. Caple and Knox, [13] explore the shift towards visual storytelling in news production, mainly through online news galleries. They analyze the choices made by news organizations in composing this type of multimodal "text" and consider the implications for media practitioners and education.

Zeng, [71] investigates how digital technologies have changed how feminist activism takes place, specifically in the context of the #MeToo movement in China. He uses mixed methods to study connective actions on social media and identifies counter-censorship strategies. Bunce [11] look at how digital technologies have transformed the relationship between news outlets, journalists, and their audiences, particularly in the context of foreign correspondents in Africa. They identified different approaches to audience metrics and discussed their implications for the media image of Africa distributed around the globe.

Sources and content: Wang and Feng, [64] examine how Xi'an uses TikTok to construct its digital urban identity by emphasizing its modern metropolis and historical city image through linguistic and visual resources in short videos. Their study finds that this city branding discourse reflects China's wanhong economy, urban policies, and social media affordances [66]. Demonstrate that short video applications like Douyin are popular in China for obtaining information, socializing with friends, and entertainment. Short videos showcasing local areas have attracted broad audiences. They have become essential for local community building, reinforcing the sense of belonging and local pride of residents and migrants by concentrating the power of representing local areas in indigenous media. Yu, [69] focuses on using short videos and social media platforms based on short videos by Chinese consumers to safeguard their rights and interests. He claimed that uploading short video evidence on these platforms can draw the media's and government's attention, compels businesses to acknowledge their mistakes and compensate consumers.

Applications: Baidu, Toutiao and its international version TopBuzz, Douyin and its international version TikTok, and WeChat [33].



## 5. Traditional Journalism

Cluster 1 represents literature and traditional journalism topics such as newspapers report, reportage, the ideological framework, news production and reception, news, and texts encoded (lexical, symbolic, and intertextual choices). The most related paper to this cluster is, which analyzes how South African newspapers cover the Southern African Development Community's military intervention in Lesotho and the conflicting ideological positions they take. It examines how criticism is expressed in the news, categorizing articles as supportive or critical.

Wang [63] conducted a content analysis of ten Chinese newspapers and their corresponding news applications to examine the impact of digital distribution on journalism. He showed that despite changes in presentation, such as increased use of emotion-driven expressions and illustrations, there were more similarities than differences in the content of online and offline news, including the sources used and the depth of reporting. The use of online features such as hyperlinks was also found to be infrequent. Focusing on the role of ICTs in revitalising the public sphere in African nations and the methodological shifts necessary to analyse these contributions, Akinbobola [1] discussed the effects of these technologies on journalism and the digital public sphere in West Africa. Further research on this technology-led transformation of journalism in African countries is called for as they argue that advances in ICTs can initiate alternative forms of news production and citizen engagement that can either supplement the efforts of mainstream news media or bypass their challenges. The South African Broadcasting Corporation (SABC) is one of the main public broadcasters in Africa.

Deffor [23] analyses the effect of local elements on SABC's online news-making techniques and formats. According to the research, SABC's online news team faces growing difficulties in utilising the full potential of the digital platform due to the need to work with convergence skillsets, novel tools, and shifting mindsets influenced by distinctive digital influences. In English, [26] looked at the difficulties of gatekeeping in traditional, online, and social media from the perspective of sports journalists in India and Australia. Multimedia gatekeeping, he discovered, plays a major role in the daily lives of modern sports journalists in both countries.

## 6. Data Journalism

Cluster 3 includes scholarly studies treating data journalism [35]. The nature of data sources in India was the government, corporate entities, non-government, institutional and academic studies, international agencies, crowd-sourcing, and the data acquisition method, including open data and the right to information. Tools used for creating visualizations were Tableau Public, Google docs/charts/fusion charts, Data Wrapper and the nature of maps used in data visualizations,

Producer: de-Lima-Santos and Mesquita, [24] revealed how alternative media organizations in Brazil, such as Agência Mural, data\_labe, and Favela em Pauta, are using user participation, collaboration, and data journalism to produce data-driven content about low-income informal settlements. The author found that citizen participation, activism, collaboration, and humanizing data contributed to producing data stories despite the challenges faced. The article presents an agenda for future research.

Problems: As a sort of empirical journalistic investigation, data-driven reporting was investigated by Lewis and Nashmi [41]. Inadequate data availability, social and political expectations, ignorance, and resistance are only some of the structural and personal challenges that the author found as limiting the practise of data journalism in the region. He suggested that the lack of data is less of a problem than the ontological limitation of the prevailing loyal-facilitator position in the Arab area, which is stifling the growth of data journalism.

Fahmy and Attia [27] used a field theory method and survey data from the Arab Data Journalists Network to examine the situation of data journalism in the Arab world. Data journalism, its potential, and the cultural, social, and institutional environment of the Arab world were all explored. Given the enthusiasm of Arab journalists and the difficulties presented by the commercial models of most Arab media organisations, they finished their study with a theoretical model and recommendations for advancing data journalism practises and education in the region. The increasing attention paid to data journalism by academics and journalists from all around the world, especially the Global South, is a topic explored by Mutsvairo [48]. Although academic studies of data journalism have been conducted in the United Kingdom and Italy, this collection features publications that examine the field in the Arab world, Latin America, and Africa. Because every region and country seems to embrace a distinct cultural orientation that best represents its position in data journalism, the authors emphasised the significance of looking beyond Western paradigms to examine its evolution.

Data journalism in the business world: Munoriyarwa [47] analysed business news items from two notable business newspapers and conducted qualitative interviews with business news writers to investigate the spread of data-driven approaches in business news reporting. The study reveals that data-driven business news reporting approaches are increasingly being used, giving rise to a new narrative of corporate accountability in the press and instilling a culture of collaboration among journalists.

Participatory journalism: Saldaña et al., [57] found that despite the popularity of Facebook in the region, Twitter is the essential platform for daily newsgathering and journalistic work, and journalists use it to find sources and stories. They also revealed that local journalistic cultures impact the use of social media in different regions in Latin America, particularly in Brazil.

## **7. Blogging Journalism and Citizen Journalism**

For example, mash-ups promote the spread of political parodies questioning state discourse on video-sharing sites, and online forums, blogs, and social networking sites all feature prominently in Cluster 4 as examples of emergent media. Cheong and Gong [19] suggested that new forms of communication have made it easier for people to voice their disagreement with official narratives, while mashups have facilitated the spread of political parodies that critique official narratives.

The increasing use of online games in China has led to the emergence of a virtual world that has influenced Chinese media studies. Arnason [3] pointed out that the researcher is exposed to new methodological challenges that traditional approaches cannot address. He also emphasized the need for solid academic data collection standards and new virtual world research approaches. The studies conducted in this context have attempted to analyze how traditional journalists perceive the credibility of traditional media and commercial news portals in response to the Internet's challenge to traditional journalism. While traditional media websites are seen as more credible, some journalists see commercial portals as an alternative model of journalism. These studies conclude that party journalism remains the dominant lens through which both types of websites are evaluated.

Emerging media have opened the analysis of the Sino-African media interpenetration and concluded that Chinese support takes the form of infrastructural realignment, ideological expurgation, and cultural reproduction. This analysis suggests that a theoretical approach is necessary to understand Sino-African media relations and how they will shape African media production, representation, identity, consumption, and regulation [4]

Content: Mare [45] examines how a community newspaper in Mozambique creatively uses new media technologies to improve its news production and distribution. Despite being under-resourced, @Verdade has successfully adapted to new technologies, leading to new ways of practicing journalism and collaborative storytelling and challenging traditional journalism ethics. Berger [6] explores the distinctions between citizen journalism, citizen media, alternative journalism, and the convergence of citizenship and journalism. It draws on the experience of Grocott's Mail newspaper in South Africa, which launched a project to encourage youth participation in media. Specifically, the article examines the implications of mobile citizen journalism for journalism, citizenship, identity, and local public spheres, particularly in developing countries. Examines the ethical beliefs of citizen journalists in sub-Saharan Africa, where digitally networked technologies enable new reporting forms. Mutsvairo et al., [49] argue that citizen journalists are motivated by social responsibility and a desire to inform the public. While anti-authoritarian and resistant to government regulation, they generally adhere to the same ethical principles as traditional journalists.

Support: Facebook and Twitter in Africa [50] and WeChat in Asia [53].

## **8. Automated Journalism**

Cluster 0 includes academic studies on automated journalism [68] examining the censorship of two AI chatbots on WeChat and proposing a technographic approach considering chatbots as interlocutors and informants. By analyzing the chatbot's intended design, the study seeks to identify deficiencies in the Chinese censorship system and explore the potential for resistance to China's embrace of AI and big data. The use of artificial intelligence in Chinese journalism is something that Sun et al. [60] explore. Researchers found that respondents to an online survey were familiar with AI technology in journalism and had favourable attitudes regarding AI-simulated anchors. Talk about the global struggle between journalists and other institutions over the use of algorithms to create and disseminate news and the ownership of material around the world. In light of China's copyright law and its effect on AI innovation in newsrooms, Kuai et al. [38] investigate the normative aspect of AI in policymaking in journalism.

The results highlight the ways in which authorship and ownership are treated differently in China's copyright law framework, how "originality" and "creativity" in human-machine collaboration are defined, and how tech corporations are given preference over journalistic independence. de Seta, [22] explores China's emergence and development of deep fakes, or Huan Lian. The author provides a historical and cultural context for how synthetic media is being used and domesticated in China, focusing on the launch of the ZAO app, the commercialization of deep fakes, and the communities of practice around audio-visual synthesis on platforms like Bilibili. The conclusion emphasizes the need to situate specific applications of deep learning in their local contexts to better understand the impact and implications of synthetic media.

## 9. Conclusion and Future Direction

In the increasingly digital landscape, myriad technology-driven media have facilitated several open platforms for the public to express their opinion and participate openly. This has brought a significant shift in the traditional epistemology of journalism in global South nations like other parts of the world. Contemporary news production is deeply influenced by different forms of journalism and content created by citizens and non-professional journalists. It brought severe concern as a rising trend of deep fake and disinformation has been noticed during the Pandemic. Digital media have played the main actors as non-human. Another shift of journalism episteme was evident as the news production of social media platforms heavily includes visual storytelling. Media practitioners and research scholars can further investigate such multimodal content as it plays a significant role in setting different narratives of certain news in particular situations. Here, citizen or non-professional journalists actively participate as human actors in news presentation and dissemination through the digital platform. Such news production directly impacts the audience matrix negatively or positively. Such news production is compelling as it reinforces a sense of belonging among the locals and can cause public rage or community pride. Advanced ICT can augment mainstream media's efforts and engage local and national citizens. Data journalism faces structural and individual stick barriers that limit the practices in Arabian countries. The main reason is the ontological limitation of the dominant loyal facilitator rather than the lack of data. This can be considered a gap in future studies as data journalism is a very interesting topic among research scholars worldwide, including Global South Nations.

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