Cosmopolitanization of journalism research in the era of artificial intelligence

Bridging the global divide in algorithm-driven journalism

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Introduction

As the communication and media research landscape evolves, a pivotal epistemic shift has emerged, highlighting the need to adopt a cosmopolitan approach in scholarly works, including journalism research. The cosmopolitanization of journalism research can be encapsulated in a series of crucial concepts underscoring the global evolution of scholarly inquiry. At its core, this paradigm seeks to transcend the Western-centric influences prevalent in the journalism research canon (Katz et al., 2003), thus nurturing a more inclusive and diverse perspective in the production of academic knowledge to enhance the relevance of research outcomes on a truly international scale (Badr & Ganter, 2021; Carpentier et al., 2020; Waisbord, 2015). Embracing a cosmopolitan mindset implies an acknowledgment of the increasing globalization and interconnectedness of the academic world, advocating for the inclusion of scholarly voices irrespective of their geographic or linguistic origins, fostering theoretical openness and methodological sensibility, and unearthing the structural reasons leading to underrepresented perspectives (Badr & Ganter, 2021; Beck, 2006; Ganter & Ortega, 2019; Hanitzsch, 2019; Waisbord, 2015).

Therefore, discussions surrounding the cosmopolitanization of journalism research have often been intertwined with calls to de-Westernize, decolonize, and decenter the field to address the imbalance of knowledge production across the globe. More than two decades ago, Curran and Park (2000) encouraged Western scholars to reconsider established academic knowledge to ensure its pertinence and applicability to contexts beyond the Global North.[1] The discourse on the de-Westernization of journalism research is closely linked to the following four dimensions of analysis proposed by Waisbord and

1 In this chapter, countries are classified as being in the Global North or Global South based on the categorization provided at https://worldpopulationreview.com/country-rankings/global-north-countries.

Mellado (2014), which can prove instrumental in guiding the cosmopolitanization of academic research: "the subject of study, the body of evidence, analytical frameworks, and academic cultures" (p. 363). The dedication to a cosmopolitan vision beyond North America and Western Europe is geared toward deepening our understanding of media dynamics and providing universal applicability for theoretical frameworks and research evidence across diverse global contexts while recognizing the particularities of individual regions to avoid possible blind spots (Gunaratne, 2010; Kozman, 2021; Waisbord & Mellado, 2014; Wang, 2011).

In this vein, journalism research strives for a cosmopolitan perspective to challenge the concepts and evidence rooted solely within Western hegemony, aiming to bridge gaps in knowledge and strengthen its emphasis on previously marginalized countries (Hanitzsch, 2019; Wahl-Jorgensen & Hanitzsch, 2009; Wasserman & de Beer, 2009). The importance of cosmopolitan journalism research becomes evident, for instance, when considering the diversity of national journalistic cultures, including differences in the professional views of journalists, journalistic practices and ethics across different countries, and the challenges or limitations they encounter in newsrooms worldwide (Hanitzsch et al., 2019). The impetus behind the cosmopolitanization of journalism research is triggered not only by globalization processes but also by the ongoing digitalization trends and the resulting algorithm-driven transformation of journalism (Löffelholz & Sarısakaloğlu, 2024), reflecting the constant evolution of journalism through the integration of new media and communication technologies (Pavlik, 2000; Zelizer, 2019), such as the use of automation and artificial intelligence (AI) technologies in newsrooms (see also Ganter in this book). In this chapter, the term AI refers to "a collection of ideas, technologies, and techniques that relate to a computer system's capacity" (Brennen et al., 2018, pp. 1–2) to display intelligent behavior by "computationally simulating human activities and skills in narrowly defined domains, typically [through] the application of machine learning approaches" (Simon, 2024, p. 11) that allow machines to learn and enhance their performance from data. This article adopts the term algorithm-driven journalism as an umbrella concept to comprehensively address the integration of automation and AI-driven systems into journalistic practice (Sarısakaloğlu, 2025).

As algorithmic systems are implemented in journalism with greater frequency, a broad array of new opportunities for information and communication processes become possible. However, this also results in a global AI-driven divide, not merely due to the lack of or inadequate physical access to new technologies (i.e., first-level AI-driven divide) between countries in the Global North and the Global South but also due to emerging inequalities in the use of algorithm-driven applications (i.e., second-level AI-driven divide). These disparities are mainly due to the insufficient and imbalanced availability of journalistic competencies (Jamil, 2023). Furthermore, this division extends to a third-level AI-driven divide marked by the consequences of disadvantages and inequalities in using algorithmic systems (van Deursen & Helsper, 2015; Verständig et al., 2016). This entails challenges like unequal developmental contribution opportunities, algorithmic biases, and unfair practices in AI algorithms such as algorithmic colonialism, which denotes the tendency of algorithms to inequitably favor certain groups while disadvantaging or exploiting others (Mohamed et al., 2020).

In light of these considerations, the purpose of this chapter is twofold. First, it expounds on the emerging global AI-driven divide in journalism by drawing on theoretical conceptualizations of the digital divide and thematizing challenges as outlined in existing literature, thereby delineating constraints to the attempted cosmopolitanization. Second, I introduce a conceptual framework proposing potential pillars for advancing a truly cosmopolitan perspective to bridge the North–South divide and enhance our understanding of the inequalities and challenges associated with implementing AI tools in journalism, which is a worthwhile consideration for future empirical investigations. Accordingly, the original value of this contribution lies in providing a cosmopolitan approach to algorithm-driven journalism that cultivates global, collaborative, and interdisciplinary academic synergy, considers the AI-driven divide a global phenomenon, and incorporates cosmopolitan algorithms into AI ethical and governance frameworks. While these pillars are not exhaustive, they offer valuable starting points for journalism scholars and journalists to begin reflecting on the practices they may adopt to contribute to the cosmopolitanization of algorithm-driven journalism research.

After outlining the driving factors behind the cosmopolitanization of algorithm-driven journalism, this chapter provides exemplary insights into how knowledge gaps, structural shortcomings, language barriers, lack of journalistic competencies, and approaches to journalism ethics can contribute to the emergence of global inequalities when integrating AI technologies into newsrooms. Building upon these theoretical concepts and reflections on the cosmopolitanization of research, I present pillars of cosmopolitan algorithm-driven journalism to be considered in future journalism research and provide concluding remarks.

Driving factors behind the cosmopolitanization of algorithm-driven journalism

There is a growing impetus to cosmopolitanize algorithm-driven journalism research in response to the evolving global media landscape precipitated by the increasing adoption of AI technologies in newsrooms, which introduces many conceptual opportunities and potentials for journalistic practices (Newman, 2024). Algorithmic systems are steadily becoming an integral part of the journalism profession, and they are already employed throughout the entire journalistic news value chain. This trend belongs to the field of computational journalism (Anderson, 2013) and is referred to as algorithm-driven journalism, involving the utilization of AI methods such as machine learning and deep learning along with automation technologies to perform tasks that require human-like journalistic intelligence (Sarısakaloğlu, 2025). AI tools assist in automatically gathering and selecting information, identifying relevant topics, performing fact-checking, verifying sources, generating textual and visual news content in various languages, and disseminating news articles (e.g., news recommendation, personalization of news content, chatbots, etc.) with minimal or no human intervention (Sarısakaloğlu, 2024). Furthermore, algorithmic tools can facilitate collaborative editing and streamline editorial workflow, allowing multiple authors to work collaboratively on journalistic content from diverse locations around the globe. These advancements offer the possibility of enhancing the journalism profession by divesting human journalists of the burden of routine editorial

tasks and transforming traditional newsrooms into sociotechnical entities, where human and anthropomorphized artificial journalists interact in a symbiotic relationship at all levels of journalistic content generation and distribution (Sarısakaloğlu, 2022).

The use of algorithmic systems not only provides journalists with novel avenues for communication processes but also heralds a change in the field of journalism. It urges us to redefine journalistic workflows, routine practices, job tasks, and responsibilities, thus ushering in new competence requirements for journalists and introducing fresh approaches to the profession (Sarısakaloğlu, 2022). Accordingly, the drive toward algorithmic adoption in journalism poses challenges to news organizations worldwide, irrespective of their geographical location, size, or available resources (Beckett & Yaseen, 2023). However, these challenges are accentuated when it comes to the newsrooms of the Global South, with the exception of China, one of the world's leading innovators in the development of AI systems, primarily due to knowledge gaps, structural limitations (e.g., resource constraints, infrastructural challenges, etc.), language barriers, and lack of necessary competencies (Beckett & Yaseen, 2023; Candelon et al., 2023; Gondwe, 2023a; Yu et al., 2023).

Despite the growing significance of these challenges, our knowledge remains limited. The results of my systematic literature review on algorithm-driven journalism (Sarsakaloğlu, 2025), analyzing 348 peer-reviewed journal articles retrieved across 10 databases up to December 2022, revealed an imbalance in the countries under investigation, with a predominant focus on the Global North, particularly the United States, the United Kingdom, and Germany. In contrast, studies on the use of algorithmic systems in newsrooms in the Global South have provided evidence of underrepresentation (Guanah et al., 2020; Kothari & Cruikshank, 2022; Munoriyarwa et al., 2023; Okiyi & Nsude, 2019). However, to incorporate the Global South into the envisioned "global village" (McLuhan, 1964), wherein technology enables active participation in the global media landscape, it is vital to nurture a profound sense of interconnectedness beyond geographical and cultural boundaries. It is paramount to transition to a truly cosmopolitan vision of algorithm-driven journalism to achieve a more equitable distribution of the benefits derived from algorithmic systems.

The use of AI tools raises concerns about the growing disparity between news organizations in the Global North, where implementing algorithmic systems is more feasible, and their counterparts in the Global South, where resource constraints are commonplace among many news organizations. Hence, our attention should extend beyond investigating the opportunities associated with AI technologies. To foster a cosmopolitan research perspective on algorithm-driven journalism, the disparities and challenges encountered by newsrooms in Global South countries need to be acknowledged to create a more inclusive approach and ensure the equitable use of AI technologies across the globe.

Unveiling the global divide in algorithmizing journalism

The study of media- and technology-related inequalities among different segments of the population has a long tradition in the social sciences. The first research endeavors date back to the early 1970s, when communication scholars Tichenor et al. (1970) introduced

the knowledge gap hypothesis, which addresses phenomena related to the unequal utilization of mass media among diverse social groups. The hypothesis asserts that social groups with a higher socioeconomic status or formal education are more adept at acquiring knowledge and new competencies conveyed through mass media compared with their socioeconomically disadvantaged counterparts (Tichenor et al., 1970). This perspective implies that countries in the Global South are possibly being excluded from the opportunity of using media in general.

Building upon the knowledge gap hypothesis, conceptualizations of the digital divide emerged in the 1990s as Western Europe began to experience increased digitalization and Internet usage became widespread. Analytically, these conceptualizations can be grouped into three categories, providing a framework for the investigation and description of phenomena related to unequal access to technological opportunities among population groups, these being the aforementioned first-level, second-level, and third-level digital divides (DiMaggio et al., 2004; Norris, 2001; Warschauer, 2003). In general, the digital divide refers to global (e.g., between geographic areas), institutional (e.g., among organizations), or individual (e.g., based on personal demographics) disparities in access to information and communication technologies (Norris, 2001; Organization for Economic Co-operation and Development [OECD], 2001; Riggins & Dewan, 2005). With the increasing use of AI technologies, an AI-driven divide (or algorithmic divide) is emerging, which can be considered a subdimension of the digital divide (Carter et al., 2020). In the following section, the levels of the AI-driven divide are described in relation to global disparities.

First-level AI-driven divide

Research on the first-level digital divide addresses structural disparities that prevent certain population groups from having equal access to digital communication infrastructure, such as computers and the Internet (van Dijk, 2006). These inequalities may be driven by physical, technical, and social constraints on access to digital media and the Internet (van Dijk, 2018) and compounded by inadequate economic resources, among other factors. Building upon Norris's (2001) definition of the global digital divide, which focuses on delineating disparities in access to information and communication technologies between geographic areas, for the purposes of algorithm-driven journalism research, it can be inferred that the global first-level AI-driven divide is primarily rooted in the unequal availability of and access to data and algorithmic technologies in newsrooms, which is particularly pronounced between industrialized and peripheral countries (North–South divide). Such disparities can have substantial implications for journalism in the Global South, where journalists may not have access to the same digital toolbox and information resources as their counterparts in the Global North (Mellor, 2024).

Given that algorithmizing journalistic practices can enhance the efficiency of editorial processes, Western media organizations in particular are becoming increasingly reliant on and investing in AI systems, as highlighted in the *Digital News Project 2024* report by the Reuters Institute (Newman, 2024). Notably, media organizations in the United States are pioneers in integrating algorithm-driven tools into their newsrooms. The Los Angeles Times introduced Quakebot to generate earthquake news, and The Asso-

ciated Press adopted the Wordsmith software to create automated news stories. Innovative tools, such as The Washington Post's text generator Heliograf, and more recently generative systems like Open AI's ChatGPT, have proven to be useful tools when employed in the execution of journalistic tasks (Gondwe, 2023b; Kunova, 2023). The DALL·E program, which can create images based on the text descriptions provided, further highlights the forward-thinking approach of US-American media organizations. In Europe, news agencies, including Agence France-Presse and the German Press Agency, and news media such as The Guardian and the Süddeutsche Zeitung, as well as many others, incorporate AI tools into their daily workflows. This trend is mirrored in Chinese newsrooms, where, for instance, Xinhua News (2018) introduced the world's first AI news anchor in collaboration with the technology company Sogou. In contrast, to compare this situation to numerous newsrooms across the Global South, the findings of a global survey on the adoption of AI technologies in newsrooms that garnered responses from 105 news and media organizations across 46 countries revealed that respondents, particularly those from sub-Saharan Africa, Middle East and North Africa (MENA), and the Asia-Pacific, emphasized infrastructure challenges due to low Internet penetration, which complicates efforts to facilitate the use of algorithmic systems (Beckett & Yaseen, 2023). Additionally, barriers to accessing specific AI tools like ChatGPT exist in some countries (e.g., Cuba, Russia, and Venezuela) due to a range of factors, such as sanctions by the United States, political reasons, or lack of support for the native languages of several countries (Beckett & Yaseen, 2023; OpenAI, n.d.). Furthermore, for example, in Nigerian newsrooms, a notable lag in adopting such advanced technologies is evident due to the unavailability of data and limited knowledge of AI technologies (Okiyi & Nsude, 2019).

From a cosmopolitan perspective, collaborative research efforts involving scholars from the Global North and the Global South are needed to tackle the underlying causes of the first-level AI-driven divide and to develop inclusive solutions. To achieve this, communication and technology scholars should shift their focus away from exploring the implementation of AI technologies solely in Western newsrooms. Instead, they should strive to consider diverse contexts beyond the West in scholarly analysis, such as scrutinizing how technology transfer, defined as "the process of conveying results stemming from scientific and technological research to the . . . wider society" (European Commission, 2023), can be carried out by news organizations currently employing AI technologies to generate and distribute journalistic content for those lacking access. Such investigations would provide an opportunity to promote the effective transfer of technology and knowledge. By exchanging academic knowledge, expertise, resources, and best practices, new approaches to addressing the AI-driven divide can be developed to meet the specific needs and challenges of different regions.

Second-level AI-driven divide

The mere availability of and access to digitally networked media, however, does not necessarily imply competent usage (Gunkel, 2003). Individuals with digital skills and a deeper understanding of new technologies are better positioned to leverage the opportunities offered by digital applications. This gives rise to the exploration of the second-level digital divide, which focuses on gaps in technological competencies and the re-

sulting differences in the usage of networked media (DiMaggio et al., 2004; Hargittai et al., 2019; van Dijk, 2006; Warschauer, 2003). Accordingly, research on the second level has shifted focus away from access discrepancies to analyzing inequalities so as to understand the reasons behind disparities in digital knowledge and skills and the subsequent differences in technology usage practices (Gurstein, 2011; Hargittai, 2002; van Dijk, 2005). In the realm of algorithm-driven journalism, such inequality manifests in differences in taking advantage of intelligent technologies and preventing effective and meaningful engagement with new tools in journalism practice. This limitation may be viewed as a constraint in providing innovative journalistic content or meeting the standards of emerging trends in journalism. To ensure the seamless integration of AI tools, overcoming the algorithmic competence gap is of utmost importance.

Notably, the bulk of research in this domain concentrates on Western countries (Graßl et al., 2022; Min & Fink, 2021; van Dalen, 2012), which can be attributed to the fact that Western countries, as previously outlined, are at the forefront of AI technology development and its integration into newsrooms, leading to a heightened interest in investigating journalistic competencies in handling AI. However, Western-centric investigations may be inadequate for elucidating journalistic practices across diverse cultural and regional contexts beyond the Western sphere. Studies have indicated that in newsrooms in the Global South, such as in African newsrooms, where proficiency in handling AI technologies is lacking (Kothari & Cruikshank, 2022; Munoriyarwa et al., 2023; Okiyi & Nsude, 2019), journalists often find themselves playing catch-up or imitating practices from developed countries, irrespective of whether these approaches align with their own journalistic cultures (Mellor, 2024). Hence, journalism research that seeks a cosmopolitan perspective should include, for instance, an examination of the challenges encountered by journalists in non-Western regions when using AI technologies to acknowledge and understand competence gaps in a global context, rather than solely from a Western viewpoint. In this way, non-Western evidence can be incorporated into existing approaches to describing journalistic competencies.

Third-level AI-driven divide

It is essential to explore the consequences of disadvantages and inequalities in users' ability to benefit from these technologies, referred to as the third-level or zero-level digital divide (Iske & Kutscher, 2020; Ragnedda & Muschert, 2018). This concept encompasses challenges that emerge, for instance, from the deployment of algorithmic mechanisms and advancements in technological infrastructure related to net neutrality and hardware design (Iske & Kutscher, 2020; van Deursen & Helsper, 2015; Verständig et al., 2016). In their analysis of the challenges arising from technological-structural changes to media education research, Iske and Kutscher (2020) emphasized that this divide leads to further digital marginalization, evident in phenomena such as the algorithmic personalization of information and the problem of achieving transparent, neutral, and fair technology use. Previous studies have underscored the importance of developing an adequate level of awareness of algorithmic tools (e.g., Gran et al., 2021) and acquiring algorithmic literacy as essential components in effectively navigating the impact of these systems (e.g., Eubanks, 2018; Mohamed et al., 2020). It is reasonable to infer that jour-

nalists with a sufficient understanding of algorithmic technologies, an awareness of ethical challenges, and an adept handling of AI tools will eventually benefit more from these systems and be less susceptible to potential harm.

Against this backdrop, additional research is needed to address disparities in journalists' awareness, perceptions, and attitudes regarding the strengths and risks of algorithmic systems in newsrooms in Global South countries. Such studies could not only enhance effective employment but also be mindful of differences in values and norms worldwide, thus advancing the development of ethical approaches to algorithm-driven journalism that are sensitive to diverse cultural contexts beyond the West.

Challenges faced by inclusive algorithm-driven journalism

To facilitate the cosmopolitanization of algorithm-driven journalism research, scholars need to thoroughly engage with the diversity of practices and challenges related to the global usage of AI tools, since the development of these technologies does not occur in a vacuum but relies on the data provided by individuals that inevitably reflect societal realities, including power imbalances and distortions (Couldry & Mejias, 2019b; Mhlambi, 2020; O'Neil, 2017; Steensen, 2019). Big tech companies in the Global North provide digital infrastructure and resources that enable the performance and operation of digital systems, while countries in the Global South are primarily viewed as valuable resources for creating raw data on account of the digital footprints they leave (Couldry & Mejias, 2019a, 2019b). News agencies can use this data to tailor journalistic content by analyzing user behavior, preferences, and trends, or it can be commodified and sold to entities such as advertising companies. When describing this phenomenon, Couldry and Mejias (2019a) alluded to the concept of data colonialism, defining it as a process that "combines the predatory extractive practices of historical colonialism with the abstract quantification methods of computing" (p. 337), wherein "the exploitation of human beings through data" becomes normalized (p. 336). In the context of AI technologies, Mohamed et al. (2020) argued that colonial power structures can become entrenched, potentially leading to the dominance of specific nations or regions and perpetuating or exacerbating existing power imbalances and inequalities reminiscent of historical colonial structures. They referred to this phenomenon as *algorithmic colonialism*, which posits that algorithms may disproportionately benefit specific groups while marginalizing or exploiting others (Mohamed et al., 2020). In academia, this has sparked a range of ethical questions, including concerns about the exclusion of the Global South in the design of algorithmic systems, algorithmic biases, and unfair practices leading to generating cultural stereotypes and discriminatory outcomes (e.g., Porlezza & Schapals, 2024). These challenges need to be critically reflected upon in future research to facilitate a comprehensive understanding and balanced portrayal of the ethical issues encountered in the field.

The root of the imbalance in the systems design process can be traced back to the exclusion of algorithm developers and journalistic actors from marginalized communities. When teams of developers working on algorithmic tools have a homogenous composition that predominantly comprises programmers and journalists from the Western world, there is a risk that specific ethical values and norms inherent to journalism in the

Global South might not be properly incorporated or may be disregarded in the software code. The lack of diversity in development teams regarding expertise in contexts from the Global South may have a disproportionately negative impact on those on the side of the AI-driven divide (Mhlambi, 2020). This imbalance is also reflected in the findings of a global survey on the implementation of AI technologies in newsrooms, which shows that newsrooms in the Global South face language barriers related to AI tools (Beckett & Yaseen, 2023). This challenge arises from the fact that many tools are predominantly designed for users in industrialized countries and for English speakers, overlooking the need for applications catering to underrepresented languages worldwide (Beckett & Yaseen, 2023). Furthermore, as algorithmic systems are predominantly developed in English-speaking contexts, data scientist Fu (2022) has contended that the absence of representative datasets for non-English languages results in a dearth of technologies capable of processing non-English data. This situation emphasizes the importance of diverse representation in technology development and accentuates the potential pitfalls of excluding certain voices, which contributes to inequitable impacts and perpetuates biases in algorithmic systems. To overcome the overrepresentation of English data in training algorithmic systems and to ensure a more balanced representation in datasets across different languages, efforts should be directed toward actively curating content in multiple languages to improve the accuracy of AI systems in non-English contexts.

Additionally, researchers revealed that a lack of diversity in the datasets used to train algorithms can lead to biases in AI systems, particularly if the training data is built on Western-centric settings, thereby contributing to a biased perspective that favors the Western context (Andersen, 2019; Fu, 2022). As algorithmic technologies are shaped by the cultural values and perspectives of their developers, there is a risk that distortions in data may also emerge due to conscious or unconscious prejudices on the part of algorithm developers, resulting in a systemic bias that adversely affects underrepresented groups (O'Neil, 2017). If a piece of information being classified as newsworthy or non-newsworthy hinges solely on news factors deemed important by Western software developers and journalists, algorithmic biases can emerge, given the diverse journalistic cultures of non-Western newsrooms (Sarısakaloğlu, 2024). An example of such algorithmic bias is when training data for algorithms is inclined toward negative narratives regarding countries in the Global South. Consequently, when reporting on these communities, algorithm-driven tools may inadvertently perpetuate harmful biases by generating news stories that excessively emphasize issues such as conflict, poverty, or disease. This skewed portrayal can lead to an oversight of positive aspects, such as economic growth, cultural richness, or technological advancements, and uphold a narrative of victimhood.

Moreover, scholars stress that using faulty, incomplete, or outdated datasets for input and algorithm training can create biases in the outcomes (Gondwe, 2023a; Mhlambi & Tiribelli, 2023; Noble, 2018; O'Neil, 2017; Zweig et al., 2018), which disproportionately affect individuals who are impoverished or disadvantaged (Eubanks, 2018; O'Neil, 2017). This concern is exacerbated by a lack of transparency in algorithmic processes (Diakopoulos, 2015), contributing to what is often referred to as the black box problem in AI (Fu, 2022; Russell & Norvig, 2021). To prevent unfair distortions in journalism, algorithm-driven journalistic processes should be transparent and disclose the under-

lying data and decision-making criteria of intelligent systems, thereby ensuring the accountability of algorithmic tools (Diakopoulos, 2015).

If biases or stereotypes are embedded in the database and are not critically examined or addressed, possibly due to a lack of diversity in development teams, they can even lead to cases of discrimination (Noble, 2018). For instance, discrimination becomes evident in algorithmic recommendation systems if news content is specifically presented to individuals of a particular ethnic background (Sarısakaloğlu, 2024) or when algorithms predominantly suggest news articles that align with a more Western-centric perspective to readers from the Global North, while infrequently recommending news stories primarily consumed by non-Western readers. Algorithmic discrimination not only confines readers' exposure to a narrow spectrum of information but also contributes to reinforcing ethnocentric viewpoints and facilitating a lack of cultural inclusivity in producing and disseminating algorithm-driven news content (see also Horz-Ishak in this book).

To address these challenges effectively, cosmopolitanism-oriented journalism research needs to develop an inclusive theoretical framework that respects and integrates the diversity of ethical and cultural values without favoring Western perspectives. Such a framework would enable scholars to critically reflect on the challenges posed by algorithmic systems and gain a deeper understanding of the implications of AI technologies in journalism on a global scale. Thus, a truly cosmopolitan approach to algorithm-driven journalism research would also facilitate the development of ethical guidelines that are applicable and relevant to different cultural contexts.

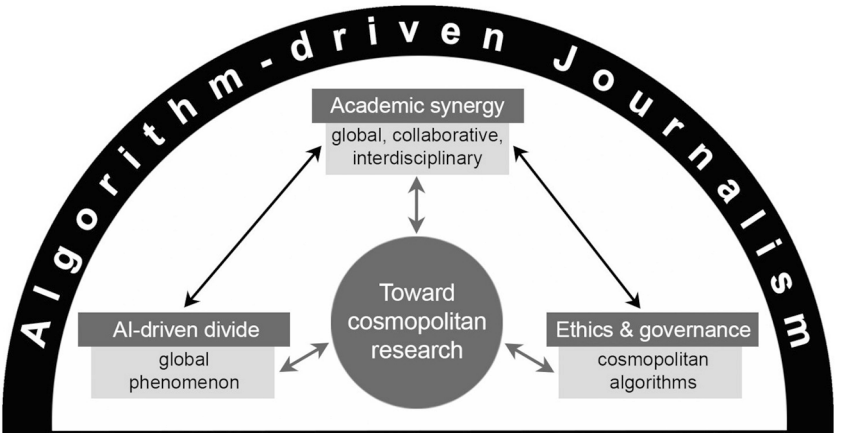
Navigating cosmopolitan algorithm-driven journalism research

The insights provided in the preceding sections strongly suggest that, as an analytical instrument, cosmopolitan algorithm-driven journalism aims to provide a deep understanding of deploying algorithmic systems in newsrooms across different global contexts and cultural values to transcend regional boundaries and acknowledge the multifaceted dynamics inherent in the contemporary media landscape. To achieve this, it is imperative to pay attention to phenomena that might evade the analytical scope of Western scholarship but hold significance in the context of the Global South. This entails considering three key pillars and reflections for cosmopolitan algorithm-driven journalism research, as illustrated in Figure 1.

In advancing cosmopolitan algorithm-driven journalism, cultivating inclusive academic knowledge production emerges as a crucial endeavor emphasizing the importance of scholarly exchange, diverse perspectives, and collaborative efforts across international borders and disciplinary boundaries. In my systematic literature review of algorithm-driven journalism research, I identified a notable geographical imbalance in authors' organizational affiliations, with a prevailing representation of institutions in Global North countries (Sarısakaloğlu, 2025). Within a corpus of 835 authors, 714 authors (85.5%) are from countries in the Global North, with the United States, the United Kingdom, the Netherlands, Spain, and Germany emerging as the five most frequently involved (Sarısakaloğlu, 2025). In contrast, only 121 authors (14.5%) are from the Global

South, with the most commonly represented five nations being China, Singapore, the United Arab Emirates, India and Brazil (Sarısakaloğlu, 2025).

Figure 1: Pillars for advancing cosmopolitan algorithm-driven journalism research (source: author's compilation)



Cultivating global, collaborative, and interdisciplinary academic synergy

Notwithstanding the fact that algorithm-driven journalism studies are a generally nascent research subject across the world, the development of this emerging field in the Global South remains largely unchartered by scholarship compared with the Global North. In this context, particular attention should be paid to exploring how journalism scholars beyond the West can be empowered to actively contribute to the discourse on algorithm-driven journalism and fill the research gap in non-Western scholarship. Among the 348 articles in the aforementioned systematic literature review, over half are written collaboratively (234 articles) (Sarısakaloğlu, 2025). However, as observed in systematic literature reviews on comparative journalism studies (e.g., Hanusch & Vos, 2020), it is worth noting that collaborations in the research of algorithm-driven journalism are most prevalent among scholars affiliated with countries from the Global North (193 articles, 82.5%) (Sarısakaloğlu, 2025). In contrast, collaborations between Global North and Global South scholars account for only 16 articles (6.8%) (Sarısakaloğlu, 2025). These findings indicate power asymmetries in research and publication, which will continue to lead to the domination of Western institutions, resulting in a distortion of research outcomes and the marginalization of voices from beyond the Western world. Hence, ensuring inclusivity through encouraging global and collaborative research initiatives that engage scholars from both Western and non-Western backgrounds is of utmost importance. This could be further exemplified, for instance, by fostering partnerships between research institutions worldwide and bringing together diverse perspectives and expertise, regardless of their geographical location or cultural background, to facilitate equitable participation in academic knowledge production. Through North–South collaboration,

researchers could collectively navigate the intricacies of algorithm-driven journalism, ensuring a global understanding of the use of algorithmic technologies in newsrooms and their impacts on journalism.

Furthermore, adopting an interdisciplinary participatory approach to algorithm-driven journalism (Sarısakaloğlu, 2024) is instrumental in integrating country-specific journalistic norms and values into algorithmic tools. This requires collaboration not only with computer scientists and journalism scholars in the Global North but also with their counterparts operating in the Global South. Such an approach would enrich academic discourse by facilitating the exchange of technical expertise in AI and journalism, a crucial step in overcoming the challenges posed by the global AI-driven divide. Additionally, it would have the potential to contribute to the development of ethical and culturally sensitive algorithmic systems, reinforcing cosmopolitan ideals in journalism research and practice.

AI-driven divide as a global phenomenon

Acknowledging the AI-driven divide as a global phenomenon can enhance efforts to describe its widespread impact on newsrooms globally and foster a more interconnected journalistic community. By doing so, researchers can develop approaches to address disparities triggered by algorithmic tools that are not only context-specific but also account for the diverse conditions and needs of newsrooms across different regions. This would ensure that the implications of AI technologies are understood and navigated on a global stage. One step in this direction would be to pay attention to the disparity in journalists' access to AI tools in newsrooms across the globe, their proficiency in using these systems, and the outcomes of their engagement with AI. To adequately investigate the AI-driven divide in newsrooms as a global phenomenon, however, it is essential to critically re-examine the dominant Western theoretical approaches when describing journalistic processes, along with the research designs employed in exploring algorithm-driven journalism, with the aim of assuring the applicability of theoretical frameworks and research evidence across diverse global contexts.

For example, adopting an approach to exploring the competencies of journalists in algorithm-driven newsrooms can benefit from leveraging conceptualizations of journalistic competencies proposed by Western scholars, such as the work of Nölleke-Przybylski et al. (2020). Drawing on previous German-language competence research, they identified components of journalistic competence that delineate skills and tasks essential in digital work environments, including technical competence (Nölleke-Przybylski et al., 2020). In addition to the technical skills and factual knowledge necessary for the operation and programming of software and tools (Nölleke-Przybylski et al., 2020), other scholars have emphasized the application of computational thinking skills to critically reflect on and analyze the abundance of data and generated information to avoid potential biases in journalistic content (Diakopoulos, 2019; Sarısakaloğlu, 2024). The accumulation of all the competencies required for effective interaction with AI tools can be defined as AI literacy (Long & Magerko, 2020) or as *algorithmic capital* in a Bourdieusian sense. The higher the level of algorithmic capital among journalists in the Global South, the more they will be

able to harness the full potential of these technologies, and the lower the global second-level AI-driven divide will become.

Nevertheless, given the diverse journalistic cultures with distinct standards and professional views of journalists, these theoretical concepts may fall short of capturing journalistic competencies beyond the Western context. In response to this, a comparative research approach can be employed to investigate the extent to which the competency requirements of journalists from the Global North and the Global South differ in the context of algorithm-driven news production and distribution, thus expanding existing approaches to journalistic competencies. However, it is challenging to conduct empirical studies due to the limited adoption of AI technologies in many Global South newsrooms, as evidenced in African (Kothari & Cruikshank, 2022) and Pakistani (Jamil, 2023) newsrooms. In contrast, US-American tech companies, media organizations, and research institutions are leveraging AI significantly to enhance journalistic practices.

This further complicates the exploration of technological consequences for journalists and their work, hindering efforts to adapt educational programs for journalists and raise awareness regarding technological and ethical challenges to ensure responsible use and overcome imbalances in knowledge production between newsrooms in the Global North and the Global South (Kothari & Cruikshank, 2022).

Incorporating cosmopolitan algorithms into AI ethical and governance frameworks

As outlined in the previous section, the development of algorithms for AI tools is predominantly anchored in developed countries, raising concerns about their applicability in diverse global settings, particularly as they may not adequately reflect the unique contexts of developing countries (Hamann, 2018). This Western bias has manifested in the form of inadequate representations of non-Western values in algorithmic systems, which underscores the need to broaden the perspective of algorithm-driven journalism research and to adeptly navigate ethical constraints to ensure that AI tools align with and respect journalistic values and norms beyond the Global North to produce culturally sensitive news content. To promote balanced and unbiased representations of global events in news coverage, it is key to design *cosmopolitan algorithms*. These algorithms ought to be collaboratively designed by both Western and non-Western developers trained on diverse data sources and equipped with the capability to prevent or alleviate distortions, stereotypes, or discriminatory patterns in news reporting. By improving fair judgment in AI tools, such algorithms would contribute to the creation of less biased journalistic content. However, putting such a framework into practice would require a collaborative knowledge exchange between scholars from the Global North and the Global South, as well as cross-cultural comparisons, to establish a shared understanding of the concept of fairness, given that ethical values are far from universal and their definitions depend on various factors such as location, historical considerations, and cultural context (Fu, 2022).

Since AI technologies pose ethical challenges not only in journalism but also in all social domains, ensuring trustworthy and inclusive AI has become the focus of various governance approaches (e.g., Porlezza, 2023). Political decision-makers, data protection authorities, and ethics committees are endeavoring to develop guidelines and measures

to ensure a fair and trustworthy deployment of AI technologies (e.g., European Commission, 2019; European Parliament, 2022; Institute of Electrical and Electronics Engineers [IEEE], 2019; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2022). In 2024, EU member states adopted the AI Act, the world's first and most comprehensive law regulating AI that ensures a unified framework for the ethical and responsible design and use of AI systems in Europe, aiming to minimize risks to society (European Parliament, 2024). However, these regulations do not necessarily guarantee the trustworthy use of AI technologies in Global South countries. Nonetheless, the AI Act could establish a global standard for AI regulation.

Moreover, regulations were developed to guide the responsible integration of AI technologies in the field of journalism. In partnership with a commission comprising civil society organizations, AI experts, media representatives, and journalists, Reporters Without Borders (Reporters sans Frontières, 2023) established the first international ethical framework for the use of AI in journalism, known as the Paris Charter on AI and Journalism. The charter delineates a set of fundamental ethical guidelines for journalistic entities worldwide to protect the diversity and integrity of information and news. For instance, it underscores the imperative that "journalists, media outlets and journalism support groups (…) should ensure that AI governance respects democratic values, and that diversity of people and cultures is reflected in the development of AI" (Reporters sans Frontières, 2023, p. 2). These efforts highlight the importance of establishing effective AI governance policies to foster technological innovation while guaranteeing the safe and responsible use of AI systems in alignment with ethical values and legal regulations.

Overall, while the charter sets forth essential ethical guidelines for journalistic entities globally, future research should investigate its practical implementation and identify areas of improvement to enhance the application of ethical frameworks in different national journalistic cultures and to develop theoretical perspectives, without presuming that Western concepts are universally applicable, but rather by considering the ethical values of other regions and the social and cultural context in which AI technologies are embedded.

Conclusion

This chapter advocates for the cosmopolitanization of communication and media research in the study and practice of algorithm-driven journalism by delineating a path toward a more inclusive approach to understanding journalism in the era of AI. To successfully cosmopolitanize algorithm-driven journalism, the inequalities and challenges stemming from the global AI-driven divide must be taken into account, along with recognition of the diversity of global journalistic cultures. As such, scholars investigating the integration of AI tools in journalism not only need to uncover the impediments that restrict journalists from the Global South in generating journalistic content with the assistance of non-human journalists in sociotechnical newsrooms and acting as equals alongside their counterparts in the Western environment, but they must also work toward solutions to overcome inequalities and ensure equitable participation. This goal can be achieved by (1) fostering global, collaborative, and interdisciplinary research efforts,

(2) acknowledging the AI-driven divide as a global phenomenon, and (3) integrating cosmopolitan algorithms into ethical and governance frameworks for AI. These pillars offer avenues to bridge the North–South divide and pave the way for a more equitable future in algorithm-driven journalism.

Overcoming biases inherent in Western-centric perspectives would necessitate co-creating academic knowledge. Instead of emulating Western practices, adopting a cosmopolitan research approach that ensures adequate representation of non-Western voices would help avoid power imbalances in research and broaden frameworks to incorporate the Global South perspective which is essential to attaining a comprehensive understanding of sociotechnical phenomena beyond the mainstream West and discerning blind spots imposed by Western-centric approaches.

Simultaneously, bridging the global research divide in algorithm-driven journalism also requires filling the knowledge gap through the adaptation of curricula and training programs in journalism education that will enable students to become cosmopolitan scholars. They should be equipped with an in-depth theoretical understanding of AI technologies' global implications by recognizing cultural diversity in journalism and the methodological competencies for examining phenomena from a cosmopolitan lens, ensuring that diverse voices and perspectives are represented.

Additionally, acquiring algorithmic capital is vital to avoid adding to the educational disparities created by the use of algorithmic systems and to cultivate future *AI-savvy cosmopolitan journalists*. Otherwise, the disparity in journalists' proficiency in the usage of emerging technologies may lead to a sense of disconnectedness from the *global village journalism* and potentially result in professional inefficiency. Therefore, the aim is not to merely facilitate technical access to AI technologies but to nurture future journalists as sophisticated contributors to the news value chain across the globe, equipping them with the technical, critical, and reflexive skills necessary to use new technologies and build fair and inclusive worldviews.

As cosmopolitan communication and media scholars, our task is to steer algorithm-driven journalism research in a direction that considers the implications of technological advancements on a global scale and contributes to a global mindset of sociotechnical phenomena.

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