

Numbers That Matter in Journalism: How to Use Numbers Effectively and Ethically

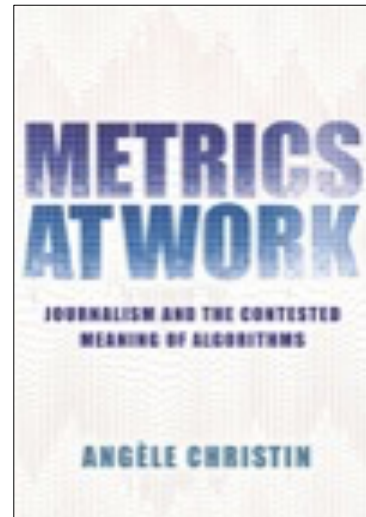
Angèle Christin, **Metrics at Work: Journalism and the Contested Meaning of Algorithms**, Princeton, NJ: Princeton University Press, 2020, 252 pp., \$29.95 (hardcover).

Alessandro Martinisi and Jairo Lugo-Ocando, **Statistics and the Quest for Quality Journalism: A Study in Quantitative Reporting**, London, UK: Anthem, 196 pp., \$30.49 (digital).

Reviewed by
Gyo Hyun Koo
University of Texas at Austin

There is both excitement and concern around the impact of quantitative data on the development and maintenance of journalism. In particular, more and more news organizations rely on big data, such as the number of clicks and visitors, or time spent on the page, in their business models to evaluate labor productivity and performance. At the same time, in the practice of journalism, statistical data is also an important part of news content. Journalists use numerical information to emphasize their scientific reasoning and objectivity with regard to how journalism is done, and they expect such statistical data to enhance public confidence and trust in news. In this article, I review two books that provide an insightful explanation of how numbers and statistics are used in the newsroom.

In ***Metrics at Work: Journalism and the Contested Meaning of Algorithms***, communication and sociology scholar Angèle Christin offers meaningful observations about how online news relies on social media algorithms and traffic-based business models. In particular, she conducts cross-national, in-depth ethnographic fieldwork for four years at newsrooms in two cities—New York (*The Notebook*) and Paris (*La Place*). Observing newsrooms and interacting with journalists in each city, Christin compares the histories, structures, and norms of journalistic fields.





In *Statistics and the Quest for Quality Journalism: A Study in Quantitative Reporting*, communication and journalism scholars Alessandro Martinisi and Jairo Lugo-Ocando offer comprehensive explanations on how journalists use statistics in their news stories and how this practice relates to news quality. Casting doubt on what “quality of news” means and whether the emphasis on numbers improves news quality and revolutionizes journalism, the authors conduct a content analysis, semistructured interviews with journalists, and a focus group with news audiences in the UK.

While people often assume that quantitative data are objective, both books begin with the premise that numbers are not always neutral. First, Christin defines digital metrics used in newsrooms as a resource with “symbolic potential” (p. 4). She argues that the fact that newsrooms worldwide have commonly introduced digital metrics does not simply indicate that journalism fields across the world are standardized. Instead, the metrics are contested symbolic objects with different meanings and consequences, the significance of which can vary depending on different institutional contexts. She argues that digital metrics mean more than aggregated data of users, which is a resource that can be negotiated and contested. Here, Christin calls the people who are mediated through such Web analytics as an “algorithmic public” (p. 6). Furthermore, Martinisi and Lugo-Ocando state that, despite the expectation that statistics used in the news may enhance journalism by an impartial analysis of policy or politics based on scientific knowledge, these numbers are often tailored with people’s “politics and ideologies” and reinforce the narrative of journalists or people with authority.

To show how digital metrics are understood in two newsrooms, Christin traces how American and French media have historically defined journalists’ roles and understood its readers (chapter 1). Also, she explains how online news emerged and developed within two different cultural contexts (chapter 2). She presents how *The Notebook* and *La Place* gradually proceeded to chase digital metrics and describes the distinctive consequences of that shift on news production and journalists’ professional identities (chapters 3 and 4). Then, she explains how different organizational dynamics of the United States and France resulted in distinct understandings of metrics (chapter 5 and 6). She notes that journalists in New York considered audience metrics to be a form of new market pressure. They translated traffic into economic value and perceived digital metrics as a tool for accessing a “commodified, fragmented, and superficial public” (p. 100). They separated their professional identities from digital analytics. However, *La Place* took a different perspective. While journalists at *La Place* tried to achieve their quantitative goals, they intended to use metrics to interact with the public. They viewed this type of data as a sign of their relevance in the public sphere, imposing civic values onto traffic figures and algorithms.

Christin points out that the way newsrooms use digital metrics is evolving, and it has a considerable impact on journalists’ professional identity and performance. Her extensive fieldwork offers an excellent foundation for us to think about how media organizations should understand and approach digital metrics and algorithmic publics to facilitate journalists’ occupational identities and journalistic production. The

media's excessive interest in quantitative data can give readers the impression that newsrooms only care about numbers. This can invite readers' distrust in the media, and the trend of newsrooms relying on quantitative data may result in an enormous loss to journalism in the long run. Thus, we need more discussion on finding a balance between setting editorial goals, which keeps the newsroom serving the public good, and aiming for quantifiable goals that keep media outlets profitable and relevant to at least part of the public.

In *Statistics and the Quest for Quality Journalism*, Martinisi and Lugo-Ocando discuss how journalists use numbers in news stories and what that practice means for quality journalism and the public's news engagement. The authors explain the meaning of numbers as information (chapter 2) and explore the meaning of quality in journalism (chapter 3). The authors propose five dimensions essential to achieve news quality: relevance, accuracy, timeliness, interpretability, and accessibility. Based on these theoretical foundations, they research how quality issues have been addressed in the practice of journalism (chapter 6). Among many intriguing findings, some notable results are that journalists often use statistical data without questioning or verification. Reporters are eager to enhance the quality of news, but they lack an understanding of what quality news is and need more accurate knowledge and skills to use statistics. A focus group study of newspaper readers reveals that readers also have not thoroughly defined the concept of quality. Many readers were often skeptical of statistical data used in the news, believing that people with political agendas can miscommunicate such numerical information.

As such, Martinisi and Lugo-Ocando show that numbers and data do not always improve news quality. In particular, as the authors mention, the use of data and statistics is a part of journalistic convention, and the numbers are used to claim or challenge the authority of a particular narrative or to ascertain the objectivity of the news. In the end, the authors highlight the importance of providing journalists with basic knowledge in the fields of logic and argumentation dealing with statistical and probability thinking, as well as scientific and mathematical language training. Martinisi and Lugo-Ocando's work suggests which direction journalism should follow when incorporating quantitative data. For instance, scholars or journalists could identify frequent mistakes that journalists make when using statistics and provide consistent educational opportunities for journalists to avoid such errors. Additionally, organizational efforts could guide journalists to make the sources of their data more transparent and make the data more relevant, interesting, and interpretable. This will help their readers make sense of the statistics while reading the news.

While the authors emphasize the role of journalists in achieving quality journalism, society's efforts as a whole are also needed. For instance, the authors note that inappropriate use of statistical data in the news could bring "unnecessary over-scepticism among readers" (p. 7). However, it is worth mentioning that readers' "healthy skepticism" can play an essential role in holding journalists more accountable. News consumers should be aware that journalists can misinterpret numerical data. They need to question if the narratives that journalists attach to that numerical information are logically and statistically justifiable, rather than blindly trust the data or distrust the information without close examination or consideration (Cappella & Jamieson, 1997; Strömbäck et al., 2020; Tsfati & Peri, 2006).

Both inside and outside the newsroom, there have been constant efforts and challenges around using numbers. Numbers are indicators of journalists' performance and professional identities and represent

an important tool to reconstruct social reality. One key takeaway shared by the two books is that the use of data and statistics should be a means to improve journalism practice, not an end in itself. Journalists should avoid quickly jumping on data simply to achieve quantitative goals (e.g., multiple clicks, high traffic) or to make news look more “objective” or “scientific.” Instead, journalists should use data to achieve a purpose that serves the public need. For instance, as digital metrics allow journalists to understand their readers’ characteristics better, journalists have an obligation to use these measurement tools to see how their editorial choices affect their ability to inform people and meet civic goals (Hindman, 2017). Journalists should also responsibly incorporate data and statistics in their news stories by verifying or questioning data to make them more meaningful (Nguyen & Lugo-Ocando, 2016). At the same time, the use of data and statistics should facilitate readers’ comprehension.

Both books appeal to a broad audience, including aspiring journalists, current journalists, and scholars in journalism, sociology, and informatics. The authors alert students who want to become journalists to think about the ethical implications of using quantitative information. Journalists who face various problems associated with using numbers will learn different strategies to employ when handling quantitative data.

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