## **Spurring or Blurring Professional Standards?**

## The Role of Digital Technology in Implementing Journalistic Role Ideals in

## **Contemporary Newsrooms**

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Today's newsrooms have access to a wealth of digital applications that play an increasingly important role in journalists' daily practice and transform the relationship between journalists and audiences in many ways (Costera Meijer, 2020). Newsrooms incorporate digital tools into their traditional set of journalistic routines by, for example, engaging in social media activities (Humayun & Ferrucci, 2022), relying on audience analytics (Lamot & Paulussen, 2020), or using digital technology for journalistic research and verification (Moreno-Gil et al., 2022). These trends likely have profound implications not only for the way journalists reflect on their professional roles in digital societies (Ferrer-Conill & Tandoc Jr., 2018) but also for how they make news decisions and implement role ideals in times of increasing data abundance and pressing questions about 'audience engagement' (Nelson, 2021).

Traditionally, the roles that journalists strive to fulfill in their profession and the implementation of these role ideals in actual news decisions are not necessarily congruent. Previous research indicates that there are gaps between journalists' role conceptions and their performance of these roles (Mellado et al., 2020). These gaps are of particular importance in light of the more and more critically evaluated public performance of journalism in digital societies. In many cases, it is precisely the perception of such discrepancies between what journalists claim to follow as normative principles and what their reporting reflects that have been mentioned as main causes of media distrust and news avoidance in 'high-choice' and 'post-truth' societies (Fawzi & Mothes, 2020; Skovsgaard & Andersen, 2020). Discrepancies between what journalists describe as their ideals (role perceptions) and how their reporting implements those ideals (role behaviors) are thus closely related to broader questions about how contemporary journalism can remain credible and relevant to its audiences. Against the

backdrop of an increasing proliferation of 'alternative media' as competitors to journalism and—in parts—to factual, evidence-based communication in general (Strömbäck, 2023), these questions have become increasingly pressing in journalism and political communication research (Nelson, 2021), since the credibility and relevance of journalism ascribed by news audiences may significantly determine the quality of public discourse and public opinion formation in the years to come (Schulz et al., 2020).

Digital technology, as it is used in newsrooms today, might play an important role in this context, as it does not only create a multitude of new reference points between journalists and their audiences; it is also likely to touch on key normative orientations and actual practices in professional journalism (Costera Meijer, 2020; Ferrer-Conill & Tandoc Jr., 2018). So far, however, little is known about how digital tools—with their growing pervasiveness in daily journalistic practice—might play into the sensitive relationship between self-reported role ideals and actual role performance to serve news audiences.

To better understand the interplay between digital technology and professional roles in journalism, this study examines the relationship between three basic (although not mutually exclusive) approaches to the use of digital tools in modern newsrooms (i.e, *digital research tools*, *digital audience analytics*, and *digital community tools*) and conception–performance gaps in two main (although again not mutually exclusive) journalistic role orientations (i.e, *news quality-* and *news industry-*oriented roles). The study is based on content analysis and survey data from 37 countries and yields initial insights into the meaning of digital tools for journalists' professional roles in times of fragmented and polarized high-choice media environments.

## Conception-Performance Gaps in News Quality- and News Industry-Oriented Roles

The question of how well journalistic role ideals correspond to actual journalistic practice has been of concern to journalism researchers for many years (see Mellado & Mothes, 2020). While some studies surveyed journalists' perceptions of their roles and compared them to the content these same journalists produced (Tandoc Jr. et al., 2013; Weaver & Wilhoit, 1996), others combined individual-level survey data with aggregate data of news media content analyses (Mellado et al., 2020; Mellado & Mothes, 2020). Although differing in their methodological approaches, both strands of research found similar patterns indicating a rather loose relationship between journalists' role conceptions and their performance, which specifically applied to roles related to key news quality standards. For example, based on a cross-national comparison, Mellado and Mothes (2020) found the most pronounced conception-performance gaps for roles related to journalists' core function of providing a public service, either by holding political and economic elites accountable (watchdog role) or by helping citizens participate competently in political life (civic role). As the study suggests, these discrepancies appear to arise from the fact that journalists across countries and media systems consider these roles to be particularly important for their work as reflected in often highest levels of role conceptions (Mellado, 2020; Weaver et al., 2019) but simultaneously struggle implementing these roles in news reporting to a particularly high degree (Mellado & Mothes, 2020). Hence, when it comes to news quality-oriented roles as 'intrinsic' characteristics of the journalistic profession (Flegel & Chaffee, 1971), journalists' role conceptions are often considerably higher than the actual implementation of these roles in journalistic newsrooms.

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In contrast, news media seem to experience less difficulty in implementing ideals that have less normative relevance to journalists, but more performative relevance for media organizations as news industries. In the study by Mellado and Mothes (2020), for instance, this mainly applied to roles that allowed economic or political factors to affect news reporting—either by enriching political news with entertainment elements to maintain audience attention in high-choice media environments (infotainment role), or by journalistic media including their own opinions into news coverage and thus actively influencing political discourse (interventionist role). In times of increasing market competition and simultaneously growing 'affective polarization' and 'moral indignation' in societal debates (Hwang et al., 2018; Wagner, 2021), both roles additionally appear to become increasingly interwoven, in that such roles address important emotional needs of news audiences and thereby simultaneously fulfill important functions for media organizations to ensure economic viability. While 'infotainment' is often used to emotionally engage less news-interested users (Otto et al., 2016; Mothes et al., 2019), 'interventionism' addresses the increasing number of users who are affectively involved in societal debates and particularly appreciate news that supports their own—or their ingroup's—points of view (Edgerly & Vraga, 2019; Wojcieszak & Garrett, 2018). As economic analyses show (Gentzkow & Shapiro, 2010; Merkley, 2018), media companies are therefore increasingly inclined to accommodate user preferences not only by providing entertainment but also by expressing opinions for commercial reasons.

Findings by Mellado and Mothes (2020) corroborate this perspective by showing that these rather (although not exclusively) *news industry*-oriented roles achieved the highest newsroom performance scores, while the normative desirability of both roles was rated lowest by the journalists working in these newsrooms. As a result, 'infotainment' and

'interventionist' roles showed the overall smallest conception—performance gaps. In contrast to *news quality*-oriented roles, such roles were thus easier to implement by newsrooms to a degree that corresponded to the (overall low) normative value that journalists assign to them. Based on these findings, we propose the following hypothesis:

**H1:** *News quality*-oriented roles (watchdog, civic) show larger conception—performance gaps than *news industry*-oriented roles (infotainment, interventionist).

## Conception-Performance Gaps and Newsroom Approaches to Digital Tool Use

Since conception–performance gaps are determined by the extent to which professional standards are fulfilled in newsroom performance, these gaps likely depend on additional factors that shape the work of today's newsrooms to a particular degree. One of these factors is the way in which digital technology is used in contemporary journalism.

Today's newsrooms have access to an increasing number of digital applications that can be utilized for a variety of purposes in the editorial process (Cohen, 2019; Hayes, 2021; Moran & Shaik, 2022), with tools that redefine the relationship of journalists to their audiences being among the most widespread and most evolved (Costera Meijer, 2020; Ferrer-Conill & Tandoc Jr., 2018).

Some of these digital applications are particularly well suited to performing *news quality*-oriented roles by enabling journalists to search for and verify information, debunk fake news, and gather contextual information at a whole new level—thereby facilitating journalistic investigation and verification as main elements of the professional journalistic skill set (Himma-Kadakas & Ojamets, 2022). In doing so, such *digital research tools* help newsrooms provide a key public service to society in times of increasing information overload and disinformation spread. For instance, previous studies revealed the potential of social

networking sites in this regard, with such tools helping journalists find additional sources and background information, cross-check information, or collaborate in global professional networks (Bjerknes, 2022; Carson & Farhall, 2018; Zhang & Li, 2020). Other studies show the relevance of more specific computational tools—such as map verification, video and image verification, or reverse search tools—for investigative journalism to extract and link data from diverse sources, to clarify the accuracy of information, and to debunk disinformation (Kunert et al., 2022; Moreno-Gil et al., 2021, 2022). It can therefore be assumed that newsrooms' use of *digital research tools* to facilitate journalistic investigation should increase news quality and thereby shift the relationship between journalists' traditionally high role expectations for *news quality*-oriented roles and the performance of these roles by narrowing the gap between the two:

**H2:** Greater newsroom use of *digital research tools* will be associated with smaller conception–performance gaps in *news quality*-oriented roles (watchdog, civic).

In addition to applying digital technology for research purposes, digital tools can also be used by newsrooms to learn more about user preferences—mainly via *digital audience analytics*—and to utilize this information for editorial decisions on which stories to cover in what way (Blanchett, 2021; Lamot & Paulussen, 2020). Today's elaborate measures of audience metrics offer meticulous analytical insights into user preferences and are becoming increasingly indispensable for newsrooms to remain visible to users in highly competitive information markets (Ferrucci, 2020; Nelson & Tandoc Jr., 2019). This approach to digital tool use can therefore be seen as primarily (although not exclusively) accommodating business interests of newsrooms and thus tending to follow a news industry logic. Relying on audience metrics may thereby substantially interfere with professional quality standards (for

an overview, see Fürst, 2020). An ethnographic analysis by Nelson and Tandoc Jr. (2019), for instance, showed that audience analytics are likely to cause an explicit clash between "doing well and doing good" (p. 1971) as mutually exclusive pursuits in todays' newsrooms.

Research involving countries outside the U.S. supports this claim by indicating that newsrooms often use audience analytics to justify news decisions that substantially interfere with professional standards (Bunce, 2019; Christin, 2018). Tandoc Jr. and Thomas (2015) therefore argued early on for a more nuanced understanding of the differences between the normative concept of 'public interest' and audience metrics' insights into what the 'public may be interested in.' Based on these findings, we can assume that *digital audience analytics* likely widen the gap between *news quality*-oriented role conceptions among journalists and the performance of these roles in journalistic newsrooms by shifting the focus of newsroom performance from quality considerations to business imperatives:

**H3a:** Greater newsroom use of *digital audience analytics* will be associated with larger conception—performance gaps in *news quality*-oriented roles (watchdog, civic).

Moreover, audience metrics may not only determine how newsrooms today address news quality standards, but they may also—and perhaps even more so—increase the relevance of *news industry*-oriented roles in today's newsrooms. Earlier work suggested that the extent to which newsrooms rely on web analytics depends largely on the extent to which editors conceive of audiences as a form of 'economic capital' (Tandoc Jr., 2015). However, more recent studies suggest that audience metrics have become widely established as daily routines in newsrooms and are used more or less independently of normative journalistic conceptions—presumably in part because the economic uncertainty, often assumed to underlie these processes (see, Lowrey & Woo, 2010), has increased substantially in recent

years. An analysis of Dutch newspapers by Welbers et al. (2016), for instance, revealed that information about the most viewed articles significantly influenced subsequent editorial news decisions, even though editors were mostly unaware of—or reluctant to see—their newsrooms' adaption to users' story interests based on audience metrics, especially when it came to entertaining stories. Similarly, qualitative interviews by Chua and Westlund (2019) with journalists from Singapore found that, over the course of three years, newsrooms increasingly opted to use metrics but simultaneously remained critical of such analytics as benchmarks for determining newsworthiness. Hence, the news industry-oriented use of digital tools as most prominently reflected in audience metrics often appears to affect journalistic behavior to a substantial degree, without leading to an increase in journalistic approval of these business standards. Consequently, it can be assumed that newsrooms' use of digital audience analytics affects the relationship between news industry-oriented role conceptions and role performance by widening the gap between the two:

**H3b:** Greater newsroom use of *digital audience analytics* will be associated with larger conception–performance gaps in *news industry*-oriented roles (infotainment, interventionist).

A third prominent approach in using digital tools in contemporary newsrooms pertains to the wide range of digital interaction opportunities. Interactions between journalists and users can be established through various means, the most common of which today is social media (Belair-Gagnon et al., 2019), as social media has become a main way for media users to engage with journalistic content in the first place (Newman et al., 2023). The community tools offered in social media environments help journalists get in touch and stay connected with users on a whole new level (Humayun & Ferrucci, 2022). As research in the area

suggests, such *digital community tools* may be utilized for both *news quality-* and *news industry-*oriented journalistic roles.

On the one hand, newsrooms are using social media to retain audiences and grow new readerships in high-choice media environments by promoting their stories and building their brands across main social media platforms in times of an increasing 'platformization of news' (Hase et al., 2022). As social media have become one of the most important sources of news for audiences around the world (Newman et al., 2023), the presence of journalistic media on these platforms is crucial for ensuring news outlets' economic viability, with potentially detrimental effects on society (Mosco, 2019; Van Aelst et al., 2017). A content analysis of Chilean journalists' posts on Twitter and Instagram, for instance, showed that the mainly brand- and advertising-oriented 'promoter' role was by far the most common role performed by journalists on social media (Mellado & Hermida, 2023). When journalists themselves are asked about the potential effects of social media on their work, it is again mainly economic factors that are mentioned first—such as faster reporting, better self-promotion, or promotion of the news organization as a whole (Ferrer-Conill & Tandoc Jr., 2018; Powers & Vera-Zambrano, 2018; Weaver et al., 2019). Hence, digital community tools have become an indispensable tool for newsrooms when it comes to journalism's economic performance, with the use of social media in this context seeming to follow a similar logic to that underlying news industry-oriented 'infotainment' and 'interventionist' roles.

On the other hand, *digital community tools* are also used in newsrooms to engage with users in a more direct, interactive way. Social media help journalists learn more about their users' stories and perspectives, and facilitate discussions with them about social issues and the perceived quality of journalists' reporting (Belair-Gagnon et al., 2019; Lawrence et al., 2018).

In this way, social media can contribute substantially to strengthening a trust-based relationship between journalists and their communities. Surveys from various countries show that a substantial share of journalists appreciate these opportunities by using social media to find inspiration for news, engage with audiences, and discuss the quality of their outlet's content with users (Neuberger et al., 2019; Powers & Vera-Zambrano, 2018; Weaver et al., 2019). According to Belair-Gagnon et al. (2019), this reciprocity between journalists and users can be seen as a form of community contact that is often used in addition to more traditional modes of communication and largely without any strategic motives being pursued: "journalists engage in these online conversations with the hope that they benefit their readers and perhaps improve the quality of the coverage" (p. 566). Not surprisingly, these emerging trends in the interaction between journalists and users in the sense of an exchange of ideas are becoming increasingly important in current revisions of the concept of 'journalistic quality.' According to recent initiatives such as 'constructive journalism' or 'solutions journalism' (e.g., Mäder & Rinsdorf, 2022) both journalists' interest in their users' views and the exchange of ideas with them about what good journalism looks like have become essential foundations for future journalism to demonstrate its public value.

Hence, *digital community tools* may not primarily—or not only—serve the needs of the news industry but may also contribute decisively to rethinking the news quality of journalistic products and thereby potentially contribute to new journalistic routines.

Nevertheless, there is considerable concern that the 'audience turn' in journalism will lead to the core journalistic concept of 'quality' being reinterpreted from a more commercial perspective and replaced by a rather business-driven concept of 'innovation' (Costera Meijer,

2020). Given the resulting ambivalence in newsrooms' use of *digital community tools* for economic vs. quality purposes, we therefore pose the following research question:

**RQ1:** How will newsroom use of *digital community tools* be related to conception—performance gaps in *news quality-* and *news industry-*oriented roles?

### Method

### Overview

To address our hypotheses and research question, the present paper reports findings from the second wave of the international project on *Journalistic Role Performance* (JRP), conducted in 2020 and involving 37 countries from a variety of geographic regions, political regimes, and media systems. Our research uses a 'most different systems' design based on a comparative study of advanced, transitional, and non-democratic countries. Journalistic practice is embedded in routines and performed within a social system that serves as the context in which media content is produced (e. g., Shoemaker & Reese, 2014). Therefore, we can most profoundly assess role performance by studying how different societal and cultural contexts explain variations in journalistic role performance across media platforms and topics.

In an effort to obtain a heterogeneous sample, we selected the countries in our sample to collectively represent a variety of political regimes, geographic regions and classifications of media systems (for an overview, see Appendix 1). Our study includes countries from North America, Latin America, Western Europe, Eastern Europe, Asia, Africa, the Middle East, and Oceania. Following Hallin and Mancini's (2004) Western media systems models, we included countries that represent the liberal, democratic corporatist, and polarized pluralist models. We also drew from democracy indices and freedom of the press reports (e. g., Freedom House Global Freedom Score) to sample transitional democracies and non-democratic countries

from different parts of the world. Based on these considerations, the data was gathered by national teams in Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Colombia, Cuba, Ecuador, Egypt, United Kingdom, Estonia, Ethiopia, France, Germany, Hungary, Ireland, Israel, Italy, Japan, Kuwait, Lebanon, Mexico, Paraguay, Poland, Qatar, Russia, Rwanda, Serbia, Spain, Switzerland, Taiwan, United Arab Emirates, the United States, and Venezuela.

For the measurement of conception—performance gaps and potential factors determining the size of these gaps, our study used a mixed-method design. Based on standardized operationalizations of rather *news quality*-oriented (i.e., watchdog, civic) and rather *news industry*-oriented (i.e., infotainment, interventionist) roles in journalism, among others, we first measured role performance based on the presence or absence of indicators of each journalistic role in a sample of news published by the news outlets with the widest reach per country via content analysis. Next, to link this data on newsroom performance with the evaluative level of role conceptions among journalists, we conducted a survey among the journalists who worked at that time in the newsrooms whose reporting was subject to our content analysis.

Our final dataset thus contains merged content analysis and survey data on the average performance of journalistic roles in the news published by each newsroom (role performance) and the perceived relevance of each role by the journalists working in these newsrooms (role conceptions). Based on these two sets of indicators, four conception–performance gap variables—one per journalistic role—were computed at the individual level of journalists by subtracting a newsroom's performance score for a particular role from the conception score assigned to that role by each journalist in the given newsroom. The four resulting gap

variables were examined for their relative magnitude as well as their relationship to newsrooms' digital tool use.

## **Content Analysis on Journalistic Role Performance**

In the content analysis, we analyzed a sample of news stories published by national newspapers, websites, radio stations, and TV news programs with the widest reach in the participating countries. To represent the diversity of each country's media system on a national level, the media sample per country was selected to not only include the most important national media outlets—as indicated by their audience size—but also to reflect the media systems' variety in terms of their media's audience orientation (popular, elite), ownership type (private, publicly traded, public service, civic society, State-run), and political leaning (center, left, right). Based on these criteria, researchers in each of the participating countries selected two to four news media outlets per platform (see Appendix 1). All outlets per country were national in scope; regional and local outlets were included in the sample only in countries where national teams considered them to be important to the national media landscape.

Given that the structure and format of media systems differ in many ways across countries—including size, audience orientation, ownership, and political leaning, but also in terms of the number of national languages spoken in a given territory—researchers were asked to ensure that the selected outlets represented the diversity of each country's media system as best as possible. Team members had to consider the fact that the number of media outlets included may vary from country to country and that greater heterogeneity within a media system would lead researchers to include more outlets.<sup>1</sup>

Using a constructed week method, a two-week stratified-systematic sample was selected for all outlets from January 2 to December 31, 2020. The same days were analyzed in all of the countries included in the study. Because daily and monthly variations are important factors to consider when conducting a news content analysis, we divided the year into two six-month periods: from January to June and from July to December. For each six-month period, we created a constructed week, randomly selecting starting dates on a Monday in January and a Monday in July. Then, using three to four week skip intervals, we selected each of the subsequent six days: a Tuesday, a Wednesday, a Thursday, a Friday, a Saturday, and a Sunday. This procedure allowed us to include seven days in each six-month period for a total sample of 14 days during the year.<sup>2</sup> This involved ensuring that one issue/edition/program from each of the seven days of the week was selected for each half-year, and that every month of the year was represented by at least one day, avoiding over-representation of any one period.

The sampling unit was the newscast with the greatest reach within the selected TV and radio stations, the full issue of the selected print newspapers, and the entire homepage of the selected online websites. Whereas our selected television and radio news programs and newspapers are "static" in the sense that they are unique and appear at fixed times, website news are dynamic and change constantly. We therefore captured the homepages of the websites at two fixed points during the sampled days: once at 11:00 a.m. and once at 11:00 p.m. This 12-hour interval between the two captures was chosen to ensure that the variability of content was adequately recorded throughout the sampling day. The homepages and all their respective links were opened in real time and saved. TV and radio programs were recorded in

real time or accessed via archives and saved, while newspapers were bought and scanned, downloaded in their digital paper version, or tracked back using software like LexisNexis.

The unit of analysis for our content analysis was the news item. All news content in the sampled outlets was coded on the selected days, excluding op-ed articles, reviews, and stories not produced by the journalists of the respective news outlet. Our total sample consisted of 148,474 news stories from 365 news organizations (for an overview, see Appendix 1).

News monitoring, archiving, and coding was performed by native speakers in each participating country. The coding and the collection of additional meta-data on organizational characteristics of newsrooms and system-specific characteristics of each country was conducted between 2020 and 2021. In each country, independent coders were extensively trained in the application of a common codebook. For matters of consistency, the news codebook was not translated into different languages but used in its English master version in all countries. Hence, all coders in the 37 countries were trained using the English version of the codebook. However, each national team added national examples to the English master codebook to ensure high reliability and validity. Each journalistic role was measured by several indicators that have been adapted from and validated in previous studies (see Mellado, 2020; for an overview of operational definitions and descriptive statistics per role, see Appendix 2). The news corpus in each country was randomly divided among coders to avoid bias and prevent one coder from coding an entire source.

We used a three-step strategy to test intercoder reliability within and across countries. First, we conducted a pretest among the principal investigators from all countries to ensure that they understood the codebook in the same way. Second, each national team conducted

pilot tests based on news reports that were not included in the final sample until coders achieved acceptable intercoder reliability scores. During fieldwork, the progress of each team, their coding quality, and agreement between coders was closely monitored on a monthly basis. Upon completion of the coding procedure, each country conducted a posttest based on 100 additional news reports to ensure sufficiently high intercoder reliability until the end of the coding process.

Based on Krippendorff's alpha, the final global intercoder reliability across all four roles and all countries reached an acceptable value of  $\alpha_K = .77$  (for an overview of reliability scores per role, see Appendix 2). The variation in intercoder reliability across roles ranged from .76 to .79, while the variation across countries ranged from .71 to .91. Each indicator was measured in terms of its presence or absence in a given news story. Based on the results obtained via confirmatory factor analyses, the indicators best representing each role were averaged to form a final mean index score for each role, ranging from 0 to 1. A higher score expressed a higher performance of a news item regarding the specific journalistic role, and vice versa. For the subsequent gap analyses, the mean indices for each role were averaged across all news items published by a given newsroom to obtain an aggregate score per role for each newsroom. The four aggregate scores, one per role, for each newsroom were then compared to the respective role conceptions of each journalist working in that newsroom.

## **Survey on Journalistic Role Conceptions**

To measure role conceptions, we surveyed the journalists who worked in the same newsrooms whose news reports were analyzed in our content analysis. The goal was for the national teams to capture the diversity of each newsroom in their sampling of journalists by representing various editorial responsibilities (e. g., reporters, producers, editors, anchors) and

news beats. Journalists were contacted through their personal or work emails, by phone, through their social media accounts, or through their editorial offices to be invited to participate in the study. The questionnaire was translated and back-translated from English (see Appendix 3) into Spanish, German, Italian, French, Arabic, Korean, Japanese, Polish, Hungarian, Russian, Portuguese, Serbian, Estonian, Hebrew, Chinese, Dutch, and Kinyarwanda. Regions speaking the same language used the same instrument. Back-translation was performed to identify and correct any inconsistencies in the translation. Additionally, given that some concepts are inevitably culturally bound, the questions and item batteries included in our survey were discussed with all local researchers to ensure that they were going to be understood correctly in the respective national context.

The national surveys were conducted via web-based questionnaires, telephone interviews, or face-to-face/Zoom interviews. The first method proved least successful in some countries, as survey reminders were sent repeatedly but were ignored by potential respondents. A total of 2,886 journalists from 326 out of the overall 365 content-analyzed news outlets completed the survey. Before matching journalists' responses with their newsrooms' average role performance, we calculated the minimum number of responses required per newsroom, based on its size. This was necessary, as the examined newsrooms substantially differed in terms of their number of journalists. Some outlets were small (< 50 journalists), some medium-sized (50 to 200 journalists), and some large (> 200 journalists). Using the "WebPower" package in R, we therefore performed a power analysis for multilevel models with three levels (i.e., individual journalists nested within news organizations nested within countries), as these models represent the most complex analytical approaches we would potentially apply. Assuming small effect sizes (f = 0.2) and small intraclass

correlations (icc = 0.2), the analysis suggested including only newsrooms for which data were collected from at least four journalists. We applied this calculated minimum sample size to small newsrooms; for medium-sized and larger newsrooms, however, we decided to even double or triple, respectively, this minimum number across the board in order to better reflect the greater variety in medium and large newsrooms. We thus took a more conservative approach than the power analysis alone would have suggested. Hence, in the case of small newsrooms, all outlets with at least four cases (i.e. journalists) were included in the analyses, while medium-sized and large newsrooms were only included if they were represented by at least eight or twelve journalists respectively. Consequently, we excluded a total of 113 news outlets that did not provide the minimum number of journalist responses required to make valid calculations. There were important differences in the achievement of the minimum required number of responses per outlet across countries. While all quotas were achieved in more than 65% of the participating countries—meaning that all media outlets were included in the final analyses—in the remaining 35% of countries, we had to exclude responses from one to five outlets that did not meet the minimum required number of responses.

Our final sample consisted of 2,615 survey responses from 252 news outlets (for an overview of responses per country and included newsrooms, see Appendix 1). The average number of eligible responses from journalists per country was at 71 responses, with journalists who were approached but declined to participate giving a variety of reasons for their non-participation. In several countries, journalists reported suffering from survey fatigue. Others said they had been instructed by their newsrooms not to answer surveys of any kind. Still others indicated issues with the length of the survey. The percentage of those who refused or ignored contact efforts ranges between 15% and 40% across countries.

To capture the role conceptions of the interviewed journalists, the questionnaire measured the importance that journalists give to each professional role through several individual statements (1 = not important at all to 5 = extremely important). All role indicators were adapted from previous research (Mellado, 2020) and developed in accordance with the indicators measured in the content analysis. The indicators for each role were averaged to obtain a reliable mean index per role for each individual journalist (for an overview of operational definitions, internal consistency, and descriptive statistics per role, see Appendix 4).

## **Dependent Variables: Conception-Performance Gaps**

To analyze the relative magnitude of the discrepancy between journalists' role conceptions and the role performance of their newsrooms with respect to *news quality*-(watchdog, civic) and *news industry*-oriented roles (infotainment, interventionist), we compared individual journalists' role conceptions for each role (see Appendix 4) with the average performance of that role in the news published by their respective newsrooms in the period under consideration (see Appendix 2). Since the scales measuring role conceptions were different from the scales measuring role performance, we first recoded journalists' role conception scores—originally ranging from 1 to 5—into ranges from 0 to 1 (for descriptive statistics on the original and transformed scales, see Appendix 4). Based on these transformed scales for journalists' role conceptions, we calculated the conception—performance gap (CPG) for each journalist individually by subtracting their individual newsroom's aggregate role performance score (RP; min = 0; max = 1) from the transformed role conception score of the given journalist (RC; min = 0; max = 1), resulting in four conception—performance gap

variables—one per examined role—at the individual level of the journalists (min = 0; max = 1). Hence, for each journalist we apply the following formula per role:

RC (role conception per journalist) -RP (aggregate role performance per newsroom) = CPG (conception-performance gap per journalist)

## **Independent Variables: Digital Tool Use in Newsrooms**

To capture journalists' use of digital tools in their newsrooms, journalists were asked to indicate how important several activities are for their daily work in their newsrooms. To address the use of *digital research tools*, journalists' use of digital tools for investigation and verification of information was captured by a single-item measure in the survey (1 = not important at all, 5 = extremely important): "Using digital tools to search for story sources and information" (M = 4.4, SD = 0.8).

The use of *digital audience analytics* was measured by two items (1 = not important at all, 5 = extremely important): "Using metrics and analytics, such as pageviews and time spent, to inform the selection, development, and promotion of stories" and "Using ratings, circulation numbers, or traffic metrics to measure the relevance/value of a story." Both items were averaged to form a reliable index of journalists' use of digital audience analytics (M = 3.2, SD = 1.1, Cronbach's  $\alpha = .81$ ).

To capture the use of *digital community tools*, that is, mainly social media to increase audience engagement and interaction with users, two additional measures were included (1 = *not important at all*, 5 = extremely important): "Using social media to promote stories" and "Using social media to connect with the audience." The two items were again averaged to represent an index of digital community tool use (M = 3.8, SD = 1.1, Cronbach's  $\alpha = .86$ ).

The main analyses additionally controlled for various factors potentially influencing the relationship between journalists' digital tool use and conception—performance gaps on different levels (see Appendix 5).

# **Findings**

## Conception-Performance Gaps in News Quality- and News Industry-Oriented Roles

In H1, we expected conception–performance gaps in *news quality*-oriented roles (watchdog, civic) to be larger than in *news industry*-oriented roles (infotainment, interventionist). To address this hypothesis, a within-subjects ANOVA was conducted to compare the four conception–performance gaps, one per journalistic role, at the individual level of journalists (see Figure 1). Supporting H1, the analysis revealed substantially larger gaps for *news quality*-oriented roles ( $M_{\text{watchdog}} = .76$ , SD = .17;  $M_{\text{civic}} = .73$ , SD = .16) than *news industry*-oriented roles ( $M_{\text{infotainment}} = .27$ , SD = .20;  $M_{\text{interventionist}} = .22$ , SD = .25), F(3, 7761) = 7186.15, p < .001,  $\eta^2 = .74$ .

### [FIGURE 1 ABOUT HERE]

To better understand potential factors that may increase or decrease conception—performance gaps in times of progressing digitalization in newsrooms, we additionally examined the relationship between the size of conception—performance gaps and journalists' use of digital tools in their newsrooms. To account for the nested structure of our data, we conducted multilevel analyses for conception—performance gaps as dependent variables. Each 'gap' model contained three levels, with journalists nested in newsrooms, nested in countries. Each 'gap' analysis started with an intercept-only model (null model) and subsequently added the three newsroom approaches to digital tool use as fixed effects, along with all control variables. A similar procedure was repeated twice, for journalists' role conceptions and the

average role performance of their newsrooms as individual dependent variables. These additional models were computed to allow for a deeper understanding of the origins of potential increases or decreases of gaps after the inclusion of predictors.

When looking at the models with conception—performance gaps as dependent variables, our analyses corroborate the descriptive findings obtained based on the ANOVA (see Table 1–2, second and third column). Reconfirming H1, highest intercepts were found for *news quality*-oriented roles, and smallest intercepts occurred for *news industry*-oriented roles, even after including all additional predictors and control variables.

## News Quality Gaps and the Use of Digital Research Tools and Digital Audience Analytics

With respect to gaps in *news quality*-oriented roles (watchdog, civic), the multilevel models with fixed effects included revealed that both gaps were most closely associated with the use of *digital research tools*: 'Watchdog' and 'civic' gaps were more strongly related to journalists' use of digital tools for research and investigation than to their use of audience metrics or community-related tools (see Table 1, third column). However, both relationships were positive. Hence, in contrast to what was expected in H2, conception–performance gaps in 'watchdog' and 'civic' journalism did not decrease but increase with increasing use of *digital research tools* ( $b_{\text{watchdog}} = .022$ , p < .001,  $\beta = .13$ ;  $b_{\text{civic}} = .027$ , p < .001,  $\beta = .19$ ). Both gaps resulted from the fact that the use of digital tools for journalistic research and investigation was more positively related to journalists' perceived importance of the 'watchdog' and 'civic' roles ( $b_{\text{watchdog}} = .023$ , p < .001,  $\beta = .13$ ;  $b_{\text{civic}} = .027$ , p < .001,  $\beta = .20$ ; see Table 1, fifth column) than to actual 'watchdog' and 'civic' role performance ( $b_{\text{watchdog}} = .001$ , p < .05,  $\beta = .04$ ;  $b_{\text{civic}} = .000$ , p > .10; see Table 1, seventh column).

Moreover, while performance of the 'watchdog' and 'civic' roles was—if at all—only slightly positively related to newsrooms' use of digital tools for journalistic research, it was more strongly but negatively related to the use of *digital audience analytics*: The more journalists made use of audience metrics, the lower was the performance of *news quality*-oriented roles of 'watchdog' and 'civic' journalism ( $b_{\text{watchdog}} = -.002$ , p < .01,  $\beta = -.06$ ;  $b_{\text{civic}} = -.003$ , p < .01,  $\beta = -.09$ ; see Table 1, seventh column). At the same time, the perceived relevance of the 'watchdog' and 'civic' roles increased with higher use of audience metrics ( $b_{\text{watchdog}} = .013$ , p < .01,  $\beta = .08$ ;  $b_{\text{civic}} = .011$ , p < .01,  $\beta = .08$ ; see Table 1, fifth column). Consequently, and in line with H3a, the use of *digital audience analytics* was overall positively related to increasing conception—performance gaps in *news quality*-compliant roles ( $b_{\text{watchdog}} = .015$ , p < .001,  $\beta = .10$ ;  $b_{\text{civic}} = .015$ , p < .001,  $\beta = .11$ ; see Table 1, third column).

## News Industry Gaps and the Use of Digital Audience Analytics

Regarding the gaps in *news industry*-oriented roles (infotainment, interventionist), analyses showed that both gaps were most strongly associated with the use of *digital audience analytics*. 'Infotainment' and 'interventionist' gaps were, thus, mainly related to journalists' use of metrics to track audience behavior (see Table 2, third column). In line with H3b, the relationships were positive, so that conception–performance gaps in 'infotainment' and 'interventionist' journalism increased with higher use of audience metrics ( $b_{infotainment} = .024$ , p < .001,  $\beta = .11$ ;  $b_{interventionist} = .020$ , p < .001,  $\beta = .08$ ). In both cases, however, the gaps originated from stronger associations between the use of audience metrics and *news industry*-oriented role conception than role performance. Hence, the use of *digital audience analytics* was positively related to journalists' perceived importance of the 'infotainment' and

'interventionist' roles ( $b_{\text{infotainment}} = .026$ , p < .001,  $\beta = .18$ ;  $b_{\text{interventionist}} = .021$ , p < .001,  $\beta = .10$ ; see Table 2, fifth column), but more intense use of such tools did not correspond with higher performance of these roles (ps > .10; see Table 2, seventh column).

### [TABLE 2 ABOUT HERE]

## Conception-Performance Gaps and the Use of Digital Community Tools

Finally, our research question (RQ1) addressed the somewhat ambiguous nature of digital community tools with respect to journalistic roles. Interestingly, community-related social media use was in no way related to news quality-oriented roles (see Table 1)—neither in terms of 'watchdog' and 'civic' conception—performance gaps (ps > .20) nor when considering the dimensions of 'watchdog' and 'civic' conception (ps > .15) and performance individually (ps > .15). A greater relevance of community-related digital tools occurred with respect to news industry-oriented roles. Although community-related social media use was not consistently related to 'infotainment' and 'interventionist' conception-performance gaps (see Table 2, third column), it showed a consistent positive relationship to the perceived relevance of 'infotainment' and 'interventionist' roles among journalists ( $b_{infotainment} = .009, p < .05, \beta =$ .05;  $b_{\text{interventionist}} = .012, p < .05, \beta = .06$ ; see Table 2, fifth column). Thus, when journalists used social media to engage with the public, they also attested higher relevance to the news industry-oriented roles of 'infotainment' and 'interventionism.' Moreover, digital tool use for community-related reasons additionally showed the only significant relationship to newsroom performance of the two *news industry* roles: The use of digital tools to engage and interact with audiences on social media was reflected in a slightly higher level of 'infotainment' and 'interventionism' in media coverage ( $b_{\text{infotainment}} = .003, p < .05, \beta = .04; b_{\text{interventionist}} = .005, p$ <.01,  $\beta = .06$ ; see Table 2, seventh column). Thus, overall, the use digital community tools

was more strongly (positively) associated with *news industry* roles than *news quality*-oriented roles.

#### Discussion

Contemporary journalism is going through a fundamental process of reinvention and re-legitimization, mainly driven by hyper-competition in digital information environments and challenges posed by news avoidance and media distrust in digital societies. Against the backdrop of these contextual factors shaping today's journalism, this study aimed to examine the perceived relevance and implementation of competing normative ideals in journalism (news quality vs. news industry-oriented roles) through an analysis of conception—performance gaps, and to advance our understanding of how these ideals might interact with the challenges journalism faces in changing digital news environments. Based on survey and content analysis data from 37 countries, our study yields three key findings.

First, our analyses indicate a further consolidation of a certain disconnect between role ideals and their implementation in news reporting, as shown in previous research (Mellado & Mothes, 2020; Tandoc Jr. et al., 2013; Weaver & Wilhoit, 1996), especially for *news quality*-oriented roles (watchdog, civic) and, thus, for roles most essential to the journalistic profession as a public service. In contrast, conception—performance gaps for *news industry*-oriented roles (infotainment, interventionism) are much smaller. Although these roles continue to have considerably less normative relevance to journalists, they are increasingly gaining practical relevance in today's newsrooms in their battle for user attention. Although the resulting gaps cannot be interpreted in absolute terms, since the individual normative ideals of journalists in a newsroom do not translate one-to-one into the media coverage of the newsroom as a whole, comparing the magnitude of the gaps between diverging role

orientations can provide important insights into the applicability of different role ideals. From this comparative perspective, our analyses suggest that journalists attach much higher importance to *news quality*- than *news industry*-oriented roles—even after controlling for various individual, organizational, and country-level factors—while at the same time the performance of *news quality* roles in newsrooms is much lower than that of *news industry* roles. Hence, in line with H1, 'intrinsic' professional orientations (Flegel & Chaffee, 1971) appear to be consistently less feasible for journalists to implement in their newsrooms than more subordinate journalistic role orientations that prioritize more structural, 'extrinsic' factors, which today are often economically driven.

A second key finding of our study relates to the question of how new digital dynamics in journalism may play into the fragile relationship between journalists' *news quality*-related role ideals and the implementation of these roles in newsrooms. According to our findings, digital tools used for research purposes of journalistic investigation and verification are indeed slightly positively related to the newsroom performance of the 'watchdog' role. Given the correlational nature of our study, this finding could either imply that newsrooms with a stronger focus on digital tools for quality purposes can effectively improve the quality of their reporting, or that newsrooms with an already strong focus on 'watchdog' journalism are more likely to use digital tools for journalistic research in the first place. Interestingly, however, there are two drawbacks associated with this finding: On the one hand, there are even stronger relationships between the use of *digital research tools* and journalists' role conceptions—this time regarding both the 'watchdog' and the 'civic' role. This suggests that either journalists who place higher importance on *news quality*-oriented roles use digital tools that help them implement these roles more intensively, or that the use of these tools alone makes journalists

perceive themselves more as 'watchdogs' or 'civic'-oriented. In both cases, the strength of these relationships lies clearly above the magnitude of the link between *digital research tool* use and the actual performance of *news quality* roles in the newsroom and is expressed in overall increasing conception–performance gaps for *news quality* roles (rejecting H2). On the other hand, the newsroom performance of the 'watchdog' and 'civic' roles was significantly less positively related to the use of *digital research tools* than it was negatively related to the use of *digital audience analytics*. Both 'watchdog' and 'civic' role performance was lower in newsrooms where audience metrics were employed, confirming suggestions from earlier research (Fürst, 2020; Nelson and Tandoc Jr., 2019). Although audience metrics were again positively related to journalists' role conceptions as 'watchdog' and 'civic' journalists, newsrooms were less likely to actually perform both roles when relying on audience metrics. Hence, supporting H3a, the use of *digital audience analytics* appears to correspond to an overall increase in *news quality*-related conception–performance gaps.

The third key finding of our study pertains to the relevance of digital tool use for journalistic role orientations that relate to more 'extrinsic' economic factors by accommodating users' needs for 'infotainment' and opinionated 'interventionism.' Surprisingly, newsroom performance of both *news industry*-oriented roles was not significantly related to the use of *digital audience analytics*, but instead positively related to *digital community tools* for audience engagement on social media (RQ1). Still, in support of H3b, *digital audience analytics* appear to resonate in journalism in that journalists who rely more on audience metrics demonstrated a stronger commitment to 'infotainment' and 'interventionism.' A similar pattern occurred for *digital community tools*, confirming suggestions from earlier research (Ferrer-Conill & Tandoc Jr., 2018; Mellado & Hermida,

2023). Consequently, either journalists who acknowledge these role orientations as professional ideals see a greater need to use audience metrics for monitoring their own performance and/or to be present on social media to promote their news stories, or monitoring tools and interaction with users on social media increase the perceived importance for journalists to provide entertainment and opinion to their audiences.

Several limitations must be considered in our study. Above all, the comparison between role conception and role performance must be interpreted with caution, as both measures refer to different levels of analysis (individual journalist vs. newsroom). Although there are good reasons to collect data on both concepts at the individual level of journalists, doing so in the context of the present research interest would neglect the fact that journalists do not work in isolation; instead, their role performance is a collective outcome of individual decisions and journalistic reporting styles within a newsroom (Mellado, 2020). This approach follows earlier conceptualizations of 'the news' as being manufactured by organizations acting within complex structures and settings, which eventually affects how journalists perform certain roles (Schudson, 2011; Shoemaker & Reese, 2014; van Dalen et al., 2012). However, given the different methodological approaches to capturing role conception and performance, resulting gap sizes are not meaningful on their own, but only when compared across roles.

A second caveat is that we measured the use of digital tools by soliciting only rough estimates of journalists' daily practice. The information provided by the journalists on a limited number of indicators used to capture digital tool use in today's newsrooms can therefore only serve as proxies for much more complex work routines that will need to be further differentiated in future studies, ideally in combination with observational data. Future

research should particularly capture in much greater detail how immersive trends of artificial intelligence affect the work of journalists and characteristics of media products (Lin & Lewis, 2022).

Despite these limitations, our study yields some initial insights into the complex and changing relationship between quality and industry orientations in journalism and their interplay with digital tools used to redefine or refine the relationship between journalists and their audiences. Our study suggests that *news quality* orientation in journalism can partially benefit from the use of digital tools if these are specifically geared towards an improvement of reporting through providing additional research opportunities. However, quality journalism appears to suffer from the use of digital tools if they are used to achieve business goals, which especially applies to audience metrics but also to the use of social media to engage (with) the audience. Based on our findings, social media so far more clearly benefit *news industry* than *news quality* aspirations in journalism, substantiating earlier concerns raised about the downsides of an 'audience turn' in journalism (Costera Mejier, 2020).

With the business logic thus tentatively permeating and reshaping essential role orientations in journalism, newsrooms should not lose sight on the unique characteristics of journalism for citizens in an era of political polarization and post-truth uncertainties (Singer et al., 2023). Not only if journalism is understood as a socially responsible agent, but also from a long-term economic perspective on the public visibility of journalism, it should be important for newsrooms to think about how digital technology can be used to preserve and strengthen journalism's intrinsic values, rather than weakening them—inadvertently or intentionally—by overriding quality orientations with user-centric approaches to digital business innovation.

### **Footnotes**

<sup>1</sup> Some examples may be helpful to clarify the variations among the countries that guided national researchers' decisions: (1) While popular-oriented news outlets are not present in some countries, they are highly prevalent in others and needed to be included in the sample. (2) In some countries, all media outlets are private/commercial, while others have both private and public (mostly broadcast) media. (3) In some of the countries included in the study, there are only state-owned media, so there was no opportunity for these countries to consider a wide range of media in terms of ownership. (4) Researchers tried to include media outlets that reflect all dominant languages in multilingual countries in which language is an important feature of the media system.

<sup>2</sup> Some news outlets do not report the news on weekends or present the news on weekends by using formats and/or time slots that differ from those used on weekdays. The most important days off are Sundays, Saturdays and Fridays. Thus, in some countries there were no newspapers published or no news programs broadcasted on television and/or radio on weekends or certain weekend days. Those cases were considered "missing data." However, if only the time of a news program on television and/or radio on weekends differed from the weekdays (e.g., in the case of sports events), the newscast was still included and coded using the actual time slot.

### References

- Belair-Gagnon, V., Nelson, J. L., & Lewis, S. C. (2019). Audience engagement, reciprocity, and the pursuit of community connectedness in public media journalism. *Journalism Practice*, *13*(5), 558-575. https://doi.org/10.1080/17512786.2018.1542975
- Bjerknes, F. (2022). Images of transgressions: Visuals as reconstructed evidence in digital investigative journalism. *Journalism Studies*, *23*(8), 951-973. https://doi.org/10.1080/1461670X.2022.2061574
- Blanchett, N. (2021). Participative gatekeeping: The intersection of news, audience data, newsworkers, and economics. *Digital Journalism*, *9*(6), 773-791. https://doi.org/10.1080/21670811.2020.1869053
- Bunce, M. (2019). Management and resistance in the digital newsroom. *Journalism*, 20(7), 890-905. https://doi.org/10.1177/1464884916688963
- Carson, A., & Farhall, K. (2018). Understanding collaborative investigative journalism in a 'post-truth' age. *Journalism Studies*, 19(13), 1899-1911. https://doi.org/10.1080/1461670X.2018.1494515
- Christin, A. (2018). Counting clicks: Quantification and variation in web journalism in the United States and France. *American Journal of Sociology*, *123*(5), 1382-1415. https://doi.org/10.1086/696137
- Chua, S., & Westlund, O. (2019). Audience-centric engagement, collaboration culture and platform counterbalancing. *Media and Communication*, 7(1), 153-165. https://doi.org/10.17645/mac.v7i1.1760
- Cohen, N. S. (2019). At work in the digital newsroom. *Digital Journalism*, 7(5), 571-591. https://doi.org/10.1080/21670811.2017.1419821

- Costera Meijer, I. (2020). Understanding the audience turn in journalism. *Journalism Studies*, 21(16), 2326-2342. https://doi.org/10.1080/1461670X.2020.1847681
- Edgerly, S., & Vraga, E. (2019). News, entertainment, or both? Exploring audience perceptions of media genre in a hybrid media environment. *Journalism*, 20(6), 807-826. https://doi.org/10.1177/1464884917730
- Ferrer-Conill, R., & Tandoc Jr., E. C. (2018). The audience-oriented editor. *Digital Journalism*, 6(4), 436-453. https://doi.org/10.1080/21670811.2018.1440972
- Ferrucci, P. (2020). It is in the numbers: How market orientation impacts journalists' use of news metrics. *Journalism*, 21(2), 244-261. https://doi.org/10.1177/1464884918807056
- Flegel, R. C., & Chaffee, S. H. (1971). Influences of editors, readers, and personal opinions on reporters. *Journalism Quarterly*, 48(4), 645-651. https://doi.org/10.1177/107769907104800404
- Fürst, S. (2020). In the service of good journalism and audience interests? How audience metrics affect news quality. *Media and Communication*, 8(3), 270-280. https://doi.org/10.17645/mac.v8i3.3228
- Gentzkow, M., & Shapiro, J. M. (2010). What drives media slant? Evidence from U.S. daily newspapers. *Econometrica*, 78(1), 35-71. https://www.jstor.org/stable/25621396
- Hallin, D. C., & Mancini, P. (2004). *Comparing media systems: Three models of media and politics*. Cambridge University Press.
- Hase, V., Boczek, K., & Scharkow, M. (2022). Adapting to affordances and audiences? A cross-platform, multi-modal analysis of the platformization of news on Facebook, Instagram, TikTok, and Twitter. *Digital Journalism*. Advance online publication. https://doi.org/10.1080/21670811.2022.2128389

- Hayes, K. (2021). The networked newsroom: Navigating news boundaries of work.
  Journalism Practice. Advance online publication.
  https://doi.org/10.1080/17512786.2021.1949627
- Himma-Kadakas, M., & Ojamets, I. (2022). Debunking false information: Investigating journalists' fact-checking skills. *Digital Journalism*, 10(5), 866-887. https://doi.org/10.1080/21670811.2022.2043173
- Humayun, M. F., & Ferrucci, P. (2022). Understanding social media in journalism practice: A typology. *Digital Journalism*, 10(9), 1502-1525.
  https://doi.org/10.1080/21670811.2022.2086594
- Hwang, H., Kim, Y., & Kim, Y. (2018). Influence of discussion incivility on deliberation: An examination of the mediating role of moral indignation. *Communication Research*, 45(2), 213-240. https://doi.org/10.1177/0093650215616861
- Kunert, J., Frech, J., Brüggemann, M., Lilienthal, V., & Loosen, W. (2022). How investigative journalists around the world adopt innovative digital practices.
  Journalism Studies, 23(7), 761-780. https://doi.org/10.1080/1461670X.2022.2033636
- Lamot, K., & Paulussen, S. (2020). Six uses of analytics: Digital editors' perceptions of audience analytics in the newsroom. *Journalism Practice*, *14*(3), 358-373. https://doi.org/10.1080/17512786.2019.1617043
- Lawrence, R. G., Radcliffe, D., & Schmidt, T. R. (2018). Practicing engagement: Participators journalism in the Web 2.0 era. *Journalism Practice*, *12*(10), 1220-1240. https://doi.org/10.1080/17512786.2017.1391712

- Lin, B., & Lewis, S. C. (2022). The one thing journalistic AI just might do for democracy. *Digital Journalism*, 10(10), 1627-1649. https://doi.org/10.1080/21670811.2022.2084131
- Lowrey, W., & Woo, C. W. (2010). The news organization in uncertain times: Business or institution? *Journalism & Mass Communication Quarterly*, 87(1), 41-61. https://doi.org/10.1177/107769901008700103
- Mäder, A., & Rinsdorf, L. (2022). Constructive journalism as an adaptation to a changing media environment. *Journalism Studies*. Advance online publication. https://doi.org/10.1080/1461670X.2022.2159859
- Mellado, C. (Ed.). (2020). Beyond journalistic norms: Role performance and news in comparative perspective. Routledge.
- Mellado, C., & Hermida, A. (2023). The journalist on social media: Mapping the promoter, celebrity and joker roles on Twitter and Instagram. *Digital Journalism*. Advance online publication. https://doi.org/10.1080/21670811.2022.2151484
- Mellado, C., & Mothes, C. (2020). Measuring the link between professional role conceptions, perceived role enactment, and journalistic role performance across countries. In C. Mellado (Ed.), *Beyond journalistic norms: Role performance and news in comparative perspective* (pp. 147-166). Routledge.
- Mellado, C., Mothes, C., Hallin, D. C., Humanes, M. L., Lauber, M., Mick, J., Silke, H., Sparks, C., Amado, A., Davydov, S., & Olivera, D. (2020). Investigating the gap between newspaper journalists' role conceptions and role performance in nine European, Asian, and Latin American countries. *The International Journal of Press/Politics*, 25(4), 552-575. https://doi.org/10.1177/1940161220910106

- Merkley, E. (2018). Partisan bias in economic news content: New evidence. *American Politics Research*, 47(6), 1303-1323. https://doi.org/10.1177/1532673X18821954
- Moran, R. E., & Shaik, S. J. (2022). Robots in the news and newsrooms: Unpacking metajournalistic discourse on the use of artificial intelligence in journalism. *Digital Journalism*, *10*(10), 1756-1774. https://doi.org/10.1080/21670811.2022.2085129
- Moreno-Gil, V., Ramos-Vegas, X., & Mauri-Ríos, M. (2022). Bringing journalism back to its roots: examining fact-checking practices, methods, and challenges in the Mediterranean context. *Profesional de la información*, *31*(2), e310215. https://doi.org/10.3145/epi.2022.mar.15
- Moreno-Gil, V., Ramon, X., & Rodríguez-Martínez, M. (2021). Fact-checking interventions as counteroffensives to disinformation growth: Standards, values, and practices in Latin America and Spain. *Media and Communication*, *9*(1), 251-263. https://doi.org/10.17645/mac.v9i1.3443
- Mosco, V. (2019). Social media versus journalism and democracy. *Journalism*, 20(1), 181-184. https://doi.org/10.1177/1464884918807611
- Mothes, C., Knobloch-Westerwick, S., & Pearson, G. (2019). The PFAD-HEC model:

  Impacts of news attributes and use motivations on selective news

  exposure. *Communication Theory*, 29(3), 251-271. https://doi.org/10.1093/ct/qty033
- Nelson, J. L. (2021). The next media regime: The pursuit of 'audience engagement' in journalism. *Journalism*, 22(9), 2350-2367. https://doi.org/10.1177/1464884919862375
- Nelson, J. L., & Tandoc Jr., E. C. (2019). Doing "well" or doing "good": What audience analytics reveal about journalism's competing goals. *Journalism Studies*, 20(13), 1960-1976. https://doi.org/10.1080/1461670X.2018.1547122

- Neuberger, C., Nuernbergk, C., & Langenohl, S. (2019). Journalism as multichannel communication. *Journalism Studies*, 20(9),1260-1280. https://doi.org/10.1080/1461670X.2018.1507685
- Newman, N., Fletcher, R., Eddy, K., Robertson, C. T., & Nielsen, R. K. (2023). *Digital news report 2023*. Reuters Institute.

  https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2023-06/Digital\_News\_Report\_2023.pdf
- Otto, L., Glogger, I., & Boukes, M. (2016). The softening of journalistic political communication. *Communication Theory*, 27(2), 136-155. https://doi.org/10.1111/comt.12102
- Powers, M., & Vera-Zambrano, S. (2018). How journalists use social media in France and the United States. New Media & Society, 20(8), 2728-2744. https://doi.org/10.1177/1461444817731566
- Schudson, M. (2011). The sociology of news (2nd ed). W.W. Norton & Co.
- Schulz, A., Wirth, W., & Müller, P. (2020). We are the people and you are fake news: A social identity approach to populist citizens' false consensus and hostile media perceptions. *Communication Research*, 47(2), 201–226. https://doi.org/10.1177/0093650218794854
- Shoemaker, P., & Reese, S. (2014). *Mediating the message in the 21st century: A media sociology perspective* (3rd ed). Routledge.
- Singer, J., Lewis, S. C., & Wahl-Jorgensen, K. (2023). Journalism in the Quarterly: A century of change in the industry and the academy. *Journalism & Mass Communication Quarterly*, 100(4), 773-792. https://doi.org/10.1177/10776990231189455

- Strömbäck, J. (2023). Political alternative media as a democratic challenge. *Digital Journalism*, 11(5), 880–887. https://doi.org/10.1080/21670811.2023.2178947
- Tandoc Jr., E. C. (2015). Why web analytics click: Factors affecting the ways journalists use audience metrics. *Journalism Studies*, *16*(6), 782-799. https://doi.org/10.1080/1461670X.2014.946309
- Tandoc Jr., E. C., Hellmueller, L. & Vos, T. (2013). Mind the gap: Between role conception and role enactment. *Journalism Practice*, 7(5), 539-554. https://doi.org/10.1080/17512786.2012.726503
- Tandoc Jr., E. C., & Thomas, R. J. (2015). The ethics of web analytics. *Digital Journalism*, *3*(2), 243-258. https://doi.org/10.1080/21670811.2014.909122
- Thomson, T. J., Angus, D., Dootson, P., Hurcombe, E., & Smith, A. (2020). Visual mis/disinformation in journalism and public communication. *Journalism Practice*, *16*(5), 938-962. https://doi.org/10.1080/17512786.2020.1832139
- Van Aelst, P., Strömbäck, J., Aalberg, T., Esser, F., de Vreese, C., Matthes, J., Hopmann, D., Salgado, S., Hube, N., Stępińska, A., Papathanassopoulos, S., Berganza, R., Legnante, G., Reinemann, C., Sheafer, T., & Stanyer, J. (2017). Political communication in a high-choice media environment: A challenge for democracy? *Annals of the International Communication Association*, 41(1), 3-27.
  http://dx.doi.org/10.1080/23808985.2017.1288551
- van Dalen, A., de Vreese, C., & Albæk, E. (2012). Different roles, different content? A four-country comparison of the role conceptions and reporting styles of political journalists.

  \*Journalism, 13(7), 903-922. https://doi.org/10.1177/1464884911431538

- Wagner, M. (2021). Affective polarization in multiparty systems. *Electoral Studies*, 69(2), 102199. https://doi.org/10.1016/j.electstud.2020.102199
- Weaver, D. H., & Wilhoit, G. C. (1996). *The American journalist in the 1990s: U.S. news* people at the end of an era. Lawrence Erlbaum.
- Weaver, D. H., Willnat, L., & Wilhoit, G. C. (2019). The American journalist in the digital age: Another look at U.S. news people. *Journalism & Mass Communication*Ouarterly, 96(1), 101-130. https://doi.org/10.1177/1077699018778242
- Welbers, K., van Atteveldt, W., Kleinnijenhuis, J., Ruigrok, N., & Schaper, J. (2016). News selection criteria in the digital age: Professional norms versus online audience metrics.

  \*Journalism, 17(8), 1037-1053. https://doi.org/10.1177/1464884915595474
- Wojcieszak, M., & Garrett, R. K. (2018). Social identity, selective exposure, and affective polarization: How priming national identity shapes attitudes toward immigrants via news selection. *Human Communication Research*, *44*(3), 247-273. https://doi.org/10.1093/hcr/hqx010
- Zhang, X., & Li, W. (2020). From social media with news: Journalists' social media use for sourcing and verification. *Journalism Practice*, 14(10), 1193-1210. https://doi.org/10.1080/17512786.2019.1689372