



Are partisan, unreliable, digital-born, and mass-oriented media more likely to thrive on social media? Comparing four information ecosystems

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Abstract

Social media platforms form information ecosystems distinct from the Web and reconfigure power relationships, especially the distribution of visibilities, among news media. We developed a theoretical framework based on structuration theory to explain the differences between the Web and social media, and investigated four prominent factors: institutional legacy, information reliability, ideological differences, and news inequalities. This study collected social media data from three platforms (Facebook, Twitter, and YouTube; N=8.4 million posts), web traffic data, and an information reliability index for 766 media outlets in the USA. We investigated how four factors explained differences between the platforms and the Web: media outlets that were digital-born (compared to newspapers), partisan, and mass-oriented gained greater visibilities on platforms relative to their web traffic. Meanwhile, the three platforms displayed differences. For example, only Twitter showed significantly increased visibilities of unreliable sources. Our multiplatform research design demonstrates the impact of platformization on journalism.

Keywords: multiplatform, news, platform, social media, structuration

Social media platforms have significantly reshaped the landscape of news production (Anter, 2023; Lamot, 2022; Mukerjee et al., 2023), distribution (Scharkow et al., 2020; Wojcieszak et al., 2022), and consumption (Fletcher et al., 2021; Freelon et al., 2020; Guess et al., 2020). Compared to the Web, such platforms possess different structures and distinct logics that connect the supply and demand sides of the information market (Nielsen & Ganter, 2022). The platformization of news, or the increasingly central role played by platforms in the news sphere (van Dijck et al., 2018, p. 51), may alter visibilities and audience attention to various media outlets on social media platforms. This process profoundly reconfigures the power relationships between news media, as audience traffic generates revenue and could affect the rise and fall of media outlets in the attention economy (Bell et al., 2017; Nielsen & Ganter, 2022). Moreover, it carries important implications that go beyond journalism and newsrooms and extend to the broader information landscape. On a positive note, social media platforms may diversify news access to demographic segments that have historically been disengaged from politics or been disadvantaged, potentially bridging gaps in news consumption (Hendrickx, 2023; Sehl et al., 2018; Vázquez-Herrero et al., 2022). Conversely, there is a growing concern that social media platforms may amplify voices of unreliable outlets (i.e., those lacking editorial norms and processes that ensure the accuracy of published information) and partisan outlets (i.e., those with partisan slants away from the non-partisan position) (Freelon et al., 2020; Grinberg et al., 2019; Guess et al., 2020), further deteriorating information integrity and contributing to a polarized environment.

Additionally, we responded to recent calls for multiplatform research. Individual platforms exhibit distinct user demographics, content norms, community cultures, and affordances (Bode & Vraga, 2018; Dvir-Gvirsman et al., 2023; Horvát & Hargittai, 2021). A multiplatform research design, therefore, offers comprehensive appraisals and characterizes contingencies of platformization dynamics. In this study, we looked at three major social media platforms (Facebook, Twitter [now known as X], and YouTube) and used audience engagement on these platforms as an indicator of platformized visibilities (how visible media actors and their produced content are on digital platforms), which are different from the visibilities of websites in this study, characterized by audience visits. According to the Reuters Digital News Report, these are the three social media platforms that people in the USA use the most for accessing news information (Newman et al., 2023).

This study seeks to answer the following questions: In what ways do social media platforms reshape the visibilities of various types of media outlets? What implications does this have for various information ecosystems (an analytical unit that refers to a "whole" information system comprising multiple actors, see Zuckerman, 2021; here it means Facebook, Twitter, YouTube, and the Web)? To answer these questions, we developed a theoretical framework to understand which media outlets gained advantages regarding platformized visibility relative to their web traffic. Employing the

structuration theory of audience attention (Webster, 2011), we deemed the platformized visibilities of news media to be reshaped by interactions between individuals, news media, and platforms. Drawing on platform research and journalism studies, we assessed four prominent factors: institutional legacy, information reliability, ideological differences, and news inequalities.

We combined social media data from the platforms (N = 8.4 million posts), web traffic data, an information reliability index provided by a third-party journalistic tool, and manual classifications of more than 700 media outlets in the USA. Our analyses revealed that audience engagement on social media platforms can only partially be explained by web traffic. We investigated how four factors accounted for the platforms' differences from the Web: partisan and massoriented news media gained more audience engagement on social media platforms relative to their web traffic; newspaper media gained less compared to digital-born media. Furthermore, the three platforms displayed notable differences: for example, only on Twitter did we observe the significantly increased visibilities of unreliable sources, whereas the boosted visibilities of outlets with more elderly audiences were only characterized on Facebook. Overall, this study highlights the role of platforms in reshaping our information environment, as well as the importance of considering the differences between various information ecosystems, which can shed light on future platform and journalism scholarship.

Structuration theory and the platformized visibilities of news media

We proposed a theoretical framework based on the structuration theory of audience attention to understand the impact of social media on shaping the platformized visibilities of news media. The initial structuration model of audience attention delineated the reciprocal relationship between agents and structure (Giddens, 1984; Webster, 2011), with "agents" referring to individuals, and "structure" comprising various macro-level constructs, such as media, the government, and technologies. The framework emphasizes the duality between agents and structure (i.e., a mutual constitution process) that could explain the formation of public attention. The theory emphasizes two key elements and highlights recursive processes. It considers how individuals make media choices based on their predispositions, how media, as a key structural component, design specific strategies, and how several key actors, particularly media metrics that gauge public attention, connect the two (Webster, 2011).

To identify the factors shaping platformized visibilities, we applied this theoretical framework and particularly highlighted two structural factors: media and platforms (Figure 1). Together with agents, the framework presents three bilateral relationships. The formation of a platformized media audience can be understood as the correspondence between agents and media, which should be affected by the two other dyads. These two relationships, situated between media and platforms, and between agents and platforms, are often intertwined. Compared with the original framework, our framework especially highlights the role of platforms, which helps in understanding the manifestation of platformized visibilities.

The interaction between agents and platforms refers to individuals' use of, engagement with, and avoidance of platforms, which could be intentional or incidental. Scholars

have long documented that users' profiles on social media platforms can differ greatly from those of the general population (Hargittai, 2020). Even within platform user groups, people exhibit various use patterns, especially regarding their information behaviors (Freelon et al., 2020; Haugsgjerd & Karlsen, 2022). The visibility of news media on platforms comes directly from user engagements with the platforms.

The other dyad, between media and platforms, recognizes the engagement of media with digital platforms. The interplays between them exhibit various relationships (Nielsen & Ganter, 2022). As two critical structural factors, media and platforms shape the platformized information environment, in which individuals enact their preferences and purposes and collectively configure the visibilities of media outlets.

Some studies using the structuration framework emphasize the dynamic and recursive process of mutual constitution. These interactions can lead to observable states over time, influenced by various factors such as the legacy roots of news outlets. Media outlets with distinct characteristics develop diverse relationships with platforms and individuals and the variations in these bilateral relationships (platforms-individuals, platforms-media, and individuals-media) should be interconnected. Specifically, our study focuses on platformized visibilities. Individuals have preferences and dispositions when interacting with platforms. Their engagement with platforms affects how media outlets with varied characteristics possess platformized visibilities. Meanwhile, media outlets with diverse characteristics shape their relationships with platforms differently (Nielsen & Ganter, 2022), which should predict the varying levels of visibility they attain. In short, we illustrate the dynamics of structuration by characterizing how these three bilateral relationships, affected by various factors, are associated with each other.

Here, we examined four key factors—institutional legacy, information reliability, ideological differences, and news inequalities—to explain the visibilities of different media outlets on social media platforms compared to their web traffic. We focused on these four factors because they could provide critical insights into the normative implications of news platformization in shaping the broader information landscape. These factors speak to the health and integrity of our information environment, as well as the equity, inclusivity, and social cohesion essential for democratic citizenship in an increasingly polarized society. The following sections discuss specific constitution dynamics, including how individuals use various types of content on platforms, and how media generate different content based on the characteristics of platforms and platform users. Detailing how these factors shape platformized visibility explains why certain media outlets gain or lose advantages on social media.

Institutional legacy and the survival of media outlets

First, we consider how institutional legacy affects the platformized visibilities of media outlets. Online traffic, often indicated by the number of visits to and clicks on news websites, is an important currency critical for the survival of media outlets in the attention economy (Nielsen & Ganter, 2022). However, an increasing share of traffic now originates from social media platforms. Legacy media have experienced revenue lost from traditional channels and are struggling to diversify their revenue sources to make money online (Olsen et al., 2021).

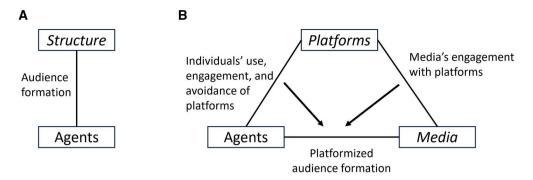


Figure 1. Theoretical framework. Panel A illustrates the original structuration theory, while Panel B highlights platforms and media as two prominent structural factors. This theoretical move prompted us to consider three relationships, paying particular attention to how platformized audience formation (the agent-media dyad) is shaped by the other two dyads.

In response to the increasing reliance on social media to retain audience attention, media organizations may embrace social media logics, or the processes, principles, and practices through which social media platforms channel information and social traffic (Van Dijck & Poell, 2013, p. 5) in their daily practices. For example, empirical studies have shown that news media produce content to cater to user preferences signaled by audience engagement (Anter, 2023; Lamot, 2022; Lischka & Garz, 2021; Mukerjee et al., 2023; Sehl et al., 2021). The adoption of social media platforms also changes the technical formats of news (Hase et al., 2023), the journalistic production process (Dvir-Gvirsman & Tsuriel, 2022; Laaksonen et al., 2024), and relationships and interactions between journalists and external actors (Molyneux & McGregor, 2022).

However, there are reasons why many news organizations resist fully adopting social media logics (Nielsen & Ganter, 2022; Sehl et al., 2021). While directing traffic, social media platforms capture a large share of the advertising revenue that news media rely on for survival (Nielsen & Ganter, 2022). Meanwhile, the non-transparency (Bell et al., 2017) and unpredictability (Meese & Hurcombe, 2021) of algorithmic curation on social media platforms prevent news media from being fully ingrained in these ecosystems (Myllylahti, 2021). These concerns let news media pursue different business models in parallel, some of which are focused on leveraging and embracing social media platforms, and some of which are not. Nielsen and Ganter (2022), for example, classify the strategies of news media interacting with platforms into two categories—off-site strategies (prioritizing audience expansion and embracing digital platforms) and onsite strategies (prioritizing direct engagement with readers and maintaining limited reliance on platforms).

We expected news organizations to manage this tension in various ways, depending on their institutional characteristics (Hågvar, 2019; Pyo, 2024), with media legacy being a prominent factor. Legacy media, including newspapers, broadcast/ TV, and magazines, which used to largely benefit from direct subscriptions and loyal audiences, may especially strive to take control of traffic that does not depend on the vagaries of social media platforms (Meese & Hurcombe, 2021) and adopt more on-site strategies to interact with social media platforms. In comparison, digital-born outlets may pursue different approaches. They already have a history of incorporating social media platforms as a key component of their business models (Poell et al., 2022) and may be more inclined to leverage off-site strategies in adapting to social media

platforms as they evolve. These twin strategies manifest most obviously in many legacy outlets' restriction of access by using paywalls and demanding online subscriptions (Graves & Simon, 2019), while digital-born outlets are heavily reliant on digital platforms to increase their visibilities for boosting advertising revenues. Thus, we expected the pursuit of different strategies to affect the daily practices and visibilities of media outlets on social media platforms. We therefore hypothesized: H1. Legacy media outlets, including newspapers (H1a), broadcast/TV (H1b), and magazines (H1c), attract less audience engagement on social media platforms than digital-born media relative to their web traffic.

Information reliability

Next, we examine the role played by information reliability in dictating the interplay between media outlets and digital audiences. A growing body of scholarship has raised concerns about the threat that exposure to unreliable content poses to democratic citizenship, and digital platforms have been shown to amplify the voices of unreliable information sources (Lazer et al., 2018). Previous studies have revealed that social media platforms help disseminate unreliable information and support the growth of an alternative information industry that operates outside mainstream or reputable media (Grinberg et al., 2019). Social media platforms may function as gateways to unreliable websites as a significant portion of their traffic leads to unreliable sources (Allcott & Gentzkow, 2017; Guess et al., 2020; Nelson & Taneja, 2018). Indeed, unreliable sources often receive more audience engagement on social media platforms compared to web channels. In one study, although unreliable sources comprised only 2.3% of total web traffic, they secured a much larger share of total engagement (14.0%) on Facebook (Altay et al., 2022).

Both media practices and user activities account for this pattern. From a media practice perspective, unreliable messages are often more novel and better at conveying certain emotions—content features that aid in viral diffusion on social media platforms (Vosoughi et al., 2018). From the user perspective, audiences who consume unreliable information also consume more news (Zhou et al., 2025), more frequently engage in politics and use social media (Valenzuela et al., 2019), and are more likely to actively employ the affordances of social media platforms to amplify the voices of unreliable sources (Benkler et al., 2018). Given the advantages that low-reliability sources have on social media—such as the higher viral potential of their content and a more active audience—we proposed H2: Low-reliability media outlets attract greater

audience engagement on social media platforms relative to web traffic than high-reliability media outlets.

Media partisanship: partisan bias and ideological asymmetry

Next, we argue that media partisanship may explain the visibilities of media outlets on social media relative to their web traffic. Previous research has shown that both individuals (Freelon et al., 2020) and news organizations (Benkler et al., 2018) with different political affiliations use social media in distinct ways. As many individuals use social media to consume political information and understand politics, the spread of partisan discourse on these platforms can distort perceptions of politics, potentially intensifying polarization and fostering interparty animosity (Bail, 2022). In this study, we considered media partisanship from two perspectives: first, by comparing outlets with non-partisan viewpoints to those with partisan or even extreme ideological positions (partisan bias), and second, by comparing left-leaning and right-leaning outlets (ideological asymmetry).

We first considered the differences between non-partisan and partisan media. Some researchers have shown that both liberal and conservative partisans are often more active on social media platforms, which provide them with opportunities to circulate partisan discourse that is not commonly disseminated elsewhere (Bail, 2022; Hiaeshutter-Rice & Weeks, 2021; Jackson et al., 2020). Regarding news consumption, frequent social media users are likely to visit partisan outlets (Fletcher et al., 2021; Wojcieszak et al., 2022), suggesting that partisan media should have advantages on social media. Thus, we developed *H3: Partisan media outlets secure more audience engagement on social media relative to their web traffic than non-partisan media outlets*.

Another factor to consider is ideological asymmetry, as left- and right-leaning partisans, along with media outlets, use social media in different ways (Benkler et al., 2018; Freelon et al., 2020; González-Bailón et al., 2022). Previous studies have shown that social media may amplify the voices of right-leaning users and media. From the user perspective, conservative users have more resources to engage in politics (Schradie, 2019) and tend to participate more in political discussions on social media (Pokhriyal et al., 2023). They also react more strongly to political messages with certain features, such as emotionality and morality, which are significant predictors of content virality (Brady et al., 2019). Meanwhile, right-wing media outlets may adopt social media content strategies that differ from those used by non-partisan or left-wing media: They are likely to cater to audience preferences and embrace social media logics to expand their audience networks (Benkler et al., 2018; Mukerjee et al., 2023), which may give them a greater advantage in promoting their social media visibilities (González-Bailón et al., 2022; Hiaeshutter-Rice & Weeks, 2021). Hence, we expected the following hypothesis: H4. Right-wing media outlets attract more audience engagement on social media relative to their web traffic than left-wing media outlets.

News inequalities: socioeconomic status, gender, and age

Finally, we examine news inequalities, by which different demographic groups have varying levels of news consumption (Krupnikov & Ryan, 2022). This imbalance in news consumption can lead to disparities in political power, as groups that consume less news may be less informed and engaged in political processes. Consequently, their ability to contribute meaningfully to the political system may be limited, potentially widening the gaps in political representation and influence between groups (Prior, 2007).

The divide between frequent and less frequent news consumers is often fluid and shaped by information environments and technological affordances (Prior, 2007; Yang & González-Bailón, 2025). From the user perspective, social media may facilitate incidental exposure to news content, making it possible for individuals who rarely consume news on the Web to encounter it (Gil de Zúñiga et al., 2017). However, incidental exposure can still be unequal due to disparities in the chances of encountering news on social media and engaging with the content (Kümpel, 2020). From the media perspective, outlets may adopt social media logic by incorporating platform-specific strategies to reach hard-toengage audiences. For example, outlets may produce short stories and visual content to engage young people who typically have less interest in news (Vázquez-Herrero et al., 2022; see also Hendrickx, 2023; Sehl et al., 2018 for other strategies).

Inequalities in news consumption are a key dimension of digital inequalities. Scholars in this field investigate how inequalities are configured in the digital world, often in relation to class, age, gender, and other demographic factors, which are central to social inequalities (Robinson et al., 2015). Many individual differences may contribute to disparities in news consumption. Based on previous research, we focused on three key attributes—socioeconomic status, age, and gender—since gaps in news engagement related to these attributes may be less pronounced on social media platforms. We first examined audience socioeconomic status, which is often characterized by differences in income, education, or social class. The distinction between mass and elite audiences is a common market segmentation strategy used by many media organizations (Lehman-Wilzig & Seletzky, 2010). Previous research has documented a narrowing news consumption gap regarding socioeconomic status on social media. Kalogeropoulos and Kleis Nielsen (2018) found that the difference in news access between high and low social classes was smaller on social media compared to web news access. A similar pattern was observed among groups with varying education levels (Haugsgjerd & Karlsen, 2022). Since people who are not typical news consumers may use social media to access news, outlets catering to mass audiences—particularly those with lower education and income levels-are expected to see increased engagement on social media. Thus, we hypothesized the following: H5. Media outlets attracting audiences with relatively low education levels (H5a) and lower incomes (H5b) attract more audience engagement on social media relative to their web traffic.

In addition, we examined age and gender—two important predictors of news consumption (Toff & Kalogeropoulos, 2020)—because women, compared to men, and young people, compared to older adults, are generally less likely to consume news. Previous studies have shown that gaps in news consumption between age groups tend to be narrower on social media (Fletcher & Nielsen, 2018). Similarly, Haugsgjerd and Karlsen (2022) found that differences in news

consumption by age and gender were smaller on social media during election campaigns. Therefore, we hypothesized the following: H6. Media outlets attracting younger audiences gain more audience engagement on social media relative to their web traffic. H7. Media outlets attracting more female audience members gain more audience engagement on social media relative to their web traffic.

Platform differences: affordances, users, and production strategies

In addition to characterizing the four factors to explain the visibilities of media outlets on social media relative to their web traffic, we also examined the differences *between* individual platforms. Because platforms often have different relationships with users and media, we expected the differences in platformized visibilities between platforms to demonstrate the contingency of these factors.

The relationships between different user groups and platforms vary across platforms (Bode & Vraga, 2018). Users' profiles on platforms, such as their demographic backgrounds, differ substantially (Horvát & Hargittai, 2021). Additionally, the usage patterns of each platform are shaped by platform affordances. For instance, Dvir-Gvirsman et al. (2023) found that several perceived affordances, including content persistence and content personalization, predicted news reception and dissemination behaviors on social media platforms.

Previous researchers have also documented various interactions between media and platforms. For example, media outlets select and edit news stories according to specific platform characteristics. Hase et al. (2023) found that news media circulated more content on news-centered platforms, such as Twitter.

Overall, previous scholars have highlighted various pathways for different platforms to shape the platformized visibilities of news media. Still, given the unclear pattern we grasped from previous studies, we proposed a research question (RQ) as follows: RQ. How do the factors that shape the platformized visibilities of media outlets on Twitter, YouTube, and Facebook (relative to web traffic) differ?

Methods

Data

Media outlets

The data collection steps for this study are shown in Figure 2. We first compiled a list of media outlets widely used in the USA by combining the outlets used in five previous studies (Bakshy et al., 2015; Budak et al., 2016; Grinberg et al., 2019; Peterson et al., 2021; Yang et al., 2020). Next, we located their primary accounts on Twitter, Facebook, and YouTube. The time window of our study was February 2022 to July 2022. We used a six-month time window to enhance the reliability of our web traffic and social media engagement measures by accounting for irregular fluctuations and spikes over time. There were 766 outlets that appeared in at least one information ecosystem. When we assessed the hypotheses related to the four factors, we included only outlets that had a measure of web traffic data and that could be assigned a media category (see below; N = 650).

Measurement limitations

Although previous studies (Lin et al., 2023; Robertson et al., 2018) have supported the validity of many measures used in this study, our measures have limitations that should be highlighted before they are introduced. Data from media measurement companies may suffer from representativeness issues, as users who are less concerned about privacy are likely to be overrepresented in web-tracking datasets (Lazer et al., 2021). Additionally, social media engagement metrics may be shaped by particular platform algorithms and may not accurately reflect actual exposure (Lazer et al., 2021). Audience-based measures of outlet characteristics may highlight only relative, not absolute, differences between media outlets (Budak et al., 2016). Furthermore, domain-level measures of information reliability (e.g., NewsGuard) are based on expert ratings across a few dimensions, and metrics may be based on different criteria subjectively chosen by researchers (Lin et al., 2023).

Measures of visibilities: web traffic and audience engagement

We used web traffic and audience engagement to measure the visibilities of outlets on the Web and social media platforms, respectively. To ensure a fair comparison between these information ecosystems, we calculated a standardized index to compare visibilities across platforms and the Web. All variables used for constructing this index, as well as the associated descriptive statistics, are displayed in Table A3 in the Supplementary material.

The Web

We extracted our audience traffic data from ComScore—a media measurement company that estimates monthly audience visits and views based on a large panel of internet users $(N \approx 200,000)$ and traffic data gauged from websites. We calculated the monthly averages of visits and views aggregated from both desktop and mobile channels. After log transformation, we used the averaged standardized values of views and visits to indicate audience traffic on the Web (Cronbach's $\alpha = .99$).

Twitter

After gathering the Twitter handles of outlets, we leveraged the Twitter academic application programming interface (API) to collect tweets posted during the time window. After applying log transformation and standardization, we averaged the overall comments, likes, and retweets to measure audience engagement (Cronbach's $\alpha = .95$).

Facebook

We gathered all Facebook posts published during the time window from the public pages of the media accounts from CrowdTangle—a social media analytics tool provided by Meta that has since been discontinued. We calculated the average of the total number of comments, likes, and shares (logged and standardized) to measure audience engagement (Cronbach's $\alpha = .99$).

YouTube

We used the YouTube API to access YouTube videos posted on media outlets' accounts. To measure audience engagement, we calculated the average number of likes and comments (logged and standardized; Cronbach's α = .95). Of the

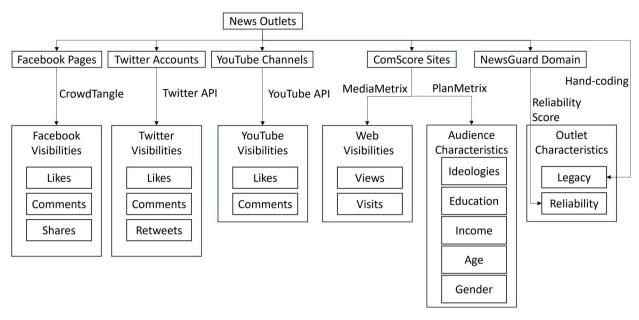


Figure 2. Overview of data collection. The figure shows the data sources used in this study.

social media platforms we studied, only YouTube provided the numbers of views. While it was outside the scope of our study, we conducted an additional analysis based on this single measure (see Figure A9 and Table A12 in the Supplementary material and Discussion sections).

Measures of variables explaining platformized visibilities Institutional legacy

We first manually classified media outlets into two major categories—legacy media and digital-born media (N=164, 25%). The former was further coded into newspaper (N=280, 43%), broadcast (N=171, 26%), and magazine outlets (N=35, 5%). We recruited three research assistants to code these outlets following a codebook (see Table A1 in the Supplementary material) and conducted a validation exercise² (see Table A2 in the Supplementary material). We present the distribution of the four groups across the four information ecosystems in Figure 3.

Paywall

To further explore the institutional legacy factor, we manually checked whether these websites had paywalls (Graves & Simon, 2019; M = .43).

Information reliability

We used a third-party journalistic tool (NewsGuard) to measure the information reliability of media outlets. NewsGuard employed a team of trained journalists to evaluate nine criteria of journalistic practices, assigning scores ranging from zero to one hundred. A high score indicates a reliable news source, which we then scaled down to a range of zero to one for further analysis³ (M = .89, SD = .18). This measure has been used in multiple previous studies to measure unreliable information exposure and engagement (Aslett et al., 2022; Bhadani et al., 2022).

Media partisanship

The ComScore PlanMetrix⁴ database reports the fractions of an outlet's audience (both mobile and desktop traffic) that belong

to five groups of political outlooks (1 = very liberal, somewhat liberal, middle of the road, somewhat conservative, and 5 = very conservative). We treated this as a five-level scale and assigned values one to five to the levels. The average of an audience's political outlook over six months indicated its partisanship (see Figure A2 in the Supplementary material, M = 3.27, SD = 0.17).

Education, income, gender, and age

We considered the average education⁵ (M = 5.17, SD = 0.27), income⁶ (M = 4.59, SD = 0.40), gender (fraction of female audience: M = .52, SD = .13), and age⁷ (M = 4.12, SD = 0.45) of audiences of media outlets taken from the PlanMetrix to characterize how various social media platforms affected news inequalities.

Control variables

Other demographic factors

We included a series of demographic factors as controls, including race (fraction of the Black audience, M = .09, SD = .06; fraction of the Asian audience, M = .04, SD = .03), marriage (fraction of married audience, M = .57, SD = .08), and employment (fraction of audience employed full-time, M = .51, SD = .09; fraction of audience employed part-time: M = .11, SD = .04) taken from the PlanMetrix dataset. The levels of these variables and their distributions are shown in Figure A2 in the Supplementary material.

Production

The production of media content is one of the most direct strategies used by news media to boost visibility (van Dijck et al., 2018). Hence, we included the (logged) average number of posts published each month as a control variable, given that media activities are directly related to the accumulated audience engagement (Twitter, M = 6.51, SD = 1.38; Facebook, M = 6.15, SD = 1.32; YouTube, M = 3.08, SD = 1.76).

Analytical strategy

Since we aimed to examine the role of social media platforms in redistributing the visibilities between media outlets compared to the Web, we calculated the *relative visibility* of each outlet on a platform by subtracting the web traffic index from the engagement index for the platform. We then leveraged OLS regressions to regress this metric (*relative visibility*) against the variables discussed previously. Because we hypothesized a curvilinear relationship (H3), we included the quadratic term of media partisanship in the regression model. We also conducted an exhaustive set of robustness tests (see the Supplementary material).

Results

Differences in visibility among media outlets across the four information ecosystems

We first calculated the correlations of the visibility indexes for media outlets across different information ecosystems: the Web, Facebook, Twitter, and YouTube (Table A5 in the Supplementary material). Figure 4 shows scatterplots between web traffic and audience engagement for the three social media platforms, and Figure A3 in the Supplementary material shows scatterplots between the three social media platforms. The moderate associations, ranging from .53 to .67 (all with *p*-values below .001), showed that there were indeed four related but distinct information ecosystems.

To further evaluate how the four information ecosystems varied, we compared the top 20 outlets in each information ecosystem (Table A4 in the Supplementary material). Only nine outlets appeared in three or four of these lists (italicized in Table A4 in the Supplementary material). More than 50% of the top outlets in each information ecosystem did not rank in the top 20 in the other two information ecosystems. For example, *USAToday* was ranked in the top 20 on the Web, but not on the three platforms. The findings further showcased the considerable differences among four information ecosystems.

Factors explaining differences between information ecosystems

We conducted regression analyses to determine how the proposed factors accounted for the differences between these information ecosystems (H1 through H7). These models explained some fractions of the variance, with adjusted R^2 values ranging from .16 to .27. Figure 5 shows the results for

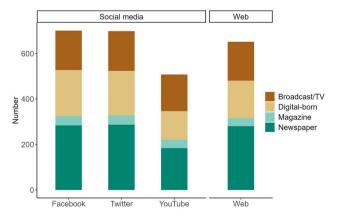


Figure 3. Institutional legacy of media outlets across information ecosystems. The figure summarizes the institutional legacy of media outlets across four information ecosystems—Facebook, Twitter, YouTube, and the Web. The number of newspaper and digital-born outlets varied substantially across the information ecosystems.

three regressions, with each evaluating the difference between one social media platform and the Web (for detailed regression results, see Table A6 in the Supplementary material). Although we report the results for the three social media platforms in a similar manner, readers should bear in mind that these platforms differ greatly. For example, the fractions of the population using the three platforms for news vary (Facebook: 29%, YouTube: 24%, and Twitter: 14%, see Newman et al., 2023). These differences suggest their varying importance for news consumption.

Institutional legacy

H1 stated that digital-born outlets would outperform legacy media, including newspapers (H1a), broadcast/TV (H1b), and magazines (H1c), on social media engagement relative to web traffic. The coefficient of newspapers was significant in all three models (Facebook, b = -0.29, SE = 0.09, p = .002; Twitter, b = -0.39, SE = 0.10, p < .001; b = -0.27, SE = 0.11, p = .017). These coefficients suggested that, compared to digital-born outlets, legacy newspaper media secured 0.34, 0.43, and 0.29 SD less relative visibility (corresponding to 50%, 62%, and 62% decreases in likes⁹). The term broadcast/TV media was significant only for Twitter (b = -0.33, SE = 0.11, p = .002), indicating that broadcast/TV media secured 0.37 SD less relative visibility on Twitter than digital-born outlets (corresponding to a 56% decrease in likes). The effect of magazines was not significant in any of the three models. Therefore, H1a was supported for all platforms, H1b was partially supported (only for Twitter), and H1c was not supported.

Information reliability

H2 pertained to the information reliability of media outlets. This term was significant on Twitter (b=-0.80, SE=0.24, p<.001), suggesting that low-reliability sources secured more relative visibility than high-reliability ones. A one-SD increase in information reliability predicted a 0.16 SD decrease in relative visibility (corresponding to a 30% decrease in likes). However, this effect was nonsignificant for Facebook and YouTube. Overall, H2 was partially supported only regarding Twitter.

Ideological differences

H3 and H4 focused on media partisanship. The linear term was nonsignificant for all three models, which did not support H4. However, the quadratic term for evaluating H3 was significant and positive for all three models (Facebook, b=1.60, SE=0.53, p=.003; Twitter, b=1.94, SE=0.66, p=.004; YouTube, b=1.92, SE=0.82, p=.020), meaning that partisan outlets—those with media partisan scores away from the non-partisan position—gained a greater advantage on social media relative to their web traffic. Figure 6 displays the curvilinear relationships, indicating that non-partisan outlets indeed had the lowest relative visibility. Thus, H3 was supported.

News inequalities

We then examined news inequalities in terms of socioeconomic status, including education (H5a), income (H5b), age (H6), and gender (H7). First, we observed significant negative effects of education for all three models (Facebook, b = -0.35, SE = 0.14, p = .015; Twitter, b = -0.39, SE = 0.16, p = .015; YouTube, b = -0.49, SE = 0.22,

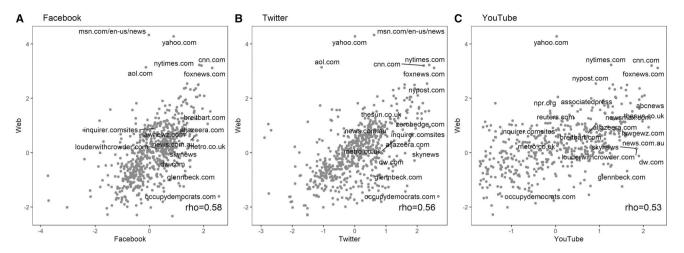


Figure 4. Correlations between the Web and Facebook, Twitter, and YouTube. Panel A shows the Pearson correlations between the audience reach of websites and the standardized engagement of Facebook. Panel B shows its association with Twitter, and Panel C shows its relationship with YouTube. They all revealed moderate correlations.

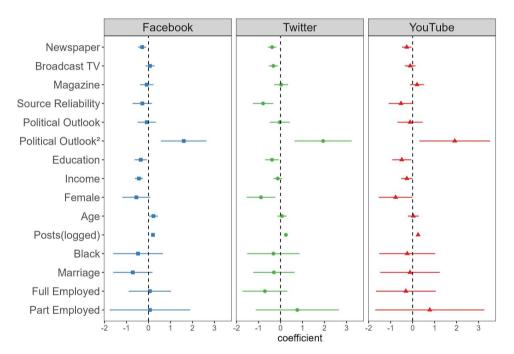


Figure 5. Regression results. The term Asian is not visualized for the sake of presentation due to the large error bars.

p = .026). These values corresponded to 0.11, 0.12, and 0.15 SD decreases in audience engagement for a one-SD increase in average audience education 10 (corresponding to 20%, 23%, and 38% decreases in likes). There were also significant negative effects of income for Facebook (b = -0.44, SE = 0.09, p < .001) and YouTube (b = -0.26, SE = 0.13, p = .048), corresponding to 0.20 and 0.11 SD decreases in audience engagement for a one-SD increase in average audience income (corresponding to 34% and 31% decreases in likes). These findings showed that elite-oriented outlets that attracted audiences with high education levels or incomes generally secured less relative visibility than more mass-oriented outlets. H5a was supported, and H5b was partially supported regarding Facebook YouTube.

Female-oriented outlets secured less audience engagement on Twitter (b = -0.89, SE = 0.33, p = .007) and YouTube

(b=-0.77, SE=0.39, p=.047). A one-SD increase in the female audience fraction predicted a 0.13 SD decrease (for Twitter) and a 0.11 SD decrease (for YouTube) in relative visibility, respectively (corresponding to 25% and 30% decreases in likes), which did not support H6.

Meanwhile, news media catering to the elderly population secured more relative visibility on Facebook (b = 0.23, SE = 0.10, p = .029). A one-SD increase in average age predicted a 0.12 SD increase in relative visibility on Facebook (corresponding to a 28% increase in likes), which did not support H7.

Differences between the three social media platforms

We addressed RQ by comparing the effects of the three models. The effect of broadcast/TV (compared to digital-born outlets) was only significant for Twitter, while this effect

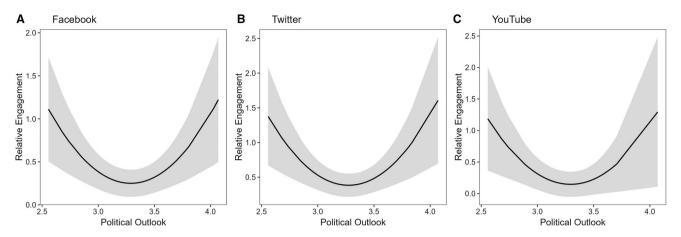


Figure 6. Marginal effects of political outlook. This figure visualizes the marginal effects of media partisanship on relative visibility based on the linear and quadratic terms of media partisanship in the regression models of Facebook (Panel A), Twitter (Panel B), and YouTube (Panel C). The models showed that partisan outlets (with media partisan scores away from the non-partisan position) had larger relative visibility than non-partisan outlets (those near the non-partisan position).

became nonsignificant for YouTube and seemingly moved in the opposite direction (while still nonsignificant) for Facebook. Second, the effect of information reliability was significant only for Twitter; it became nonsignificant for Facebook and YouTube. Third, we observed particular effects related to news inequalities. The effect exacerbating the age gaps only appeared for Facebook, but it was not significant for Twitter or YouTube.

We also investigated the differences between various social media platforms (Figure A12 and Table A13 in the Supplementary material). The results revealed significant differences regarding broadcast/TV and age. The different effect of information reliability for Twitter compared to the other two platforms was in the same direction discussed above, though not significant.

Additional tests and robustness

We conducted an additional analysis to examine how the use of paywalls, a significant indicator of business models, explained the findings regarding institutional legacy. We reran the regression models, including a variable to represent paywall (see Table A14 and Figure A13 in Supplementary material). First, we found a significant effect of paywalls for all three models (Facebook, b = -0.34, SE = 0.10, p < .001; Twitter, b = -0.33, SE = 0.10, p < .001; YouTube, b = -0.23, SE = 0.11, p = .048). The negative coefficients for newspapers became nonsignificant in the additional models for all three platforms. Still, the effect of broadcast/TV remained significant for Twitter (b = -0.37, SE = 0.11,p < .001). Therefore, the use of paywalls by media outlets can partially explain the role of institutional legacy, but not entirely. Moreover, we conducted another test to identify the factors explaining platformized visibility on individual platforms. This analysis highlighted three possible scenarios that account for the effects described in the main text (see the Supplementary material).

We also conducted a series of robustness tests to determine whether our conclusions remained consistent across different measurement and model specifications (see the Supplementary material for more details). All the results aligned with our main findings, as described above.

Discussion

How do social media platforms shape the visibilities of media outlets? To answer this question, we developed a theoretical framework based on the structuration theory of public attention, emphasizing the roles of platforms, agents, and news media. This framework recognizes that the visibilities of media outlets on social media platforms are influenced by the relationships between platforms and individual users, as well as the interactions between news media and platforms. From this perspective, we focused on four factors: institutional legacy, information reliability, ideological differences, and news inequalities. By combining social media data, web traffic logs, an information reliability index, and manual classifications of institutional characteristics, we empirically investigated how the four factors explained the engagement secured by various media outlets on social media relative to their web traffic. While all factors received some support from the results, several findings did not align with our hypotheses, revealing a nuanced picture that required careful interpretation. Furthermore, by adopting a multiplatform research design, we characterized the differences between Twitter, Facebook, and YouTube, demonstrating that various social media platforms exhibit distinct patterns regarding the visibilities of media outlets.

Business models and advantages of digital-born media on social media

First, we found that institutional legacy significantly predicted relative visibility on social media (measured by audience engagement relative to web traffic). In particular, newspaper outlets had significantly less engagement than digital-born outlets (H1). One plausible explanation is news websites' different business models. Our additional analyses showed that the effects of newspapers disappeared after including the paywall variable. Newspaper media may use more on-site strategies to directly engage with the audience rather than embracing social media platforms for audience expansion. While successful in retaining revenue for newspaper media, this strategy may limit the visibilities of these outlets on social media. The number of social media news consumers has risen in recent years, but online

subscription gains have not been universal for newspapers (Newman et al., 2023), which may pose challenges to the sustainability of this business model for many newspaper outlets.

In comparison, for broadcast/TV outlets, this disadvantage regarding relative visibility was only significant for Twitter, which persisted even after considering the availability of paywall. The differences from newspapers demonstrated that pathways to adopting social media platforms may vary between different legacy media. It is time to further unpack the group of legacy media and identify the organizational histories and particular strategies (e.g., Hågvar, 2019) that account for the discrepancies between legacy and digital-born outlets. The mechanisms other than paywalls explaining the effect of institutional legacy are worth further exploration. For example, some researchers have documented variations in journalistic culture regarding the adoption of social media platforms (Lischka, 2021). Many traditional media outlets set boundaries for adopting viral tactics (e.g., leveraging emotionality) due to concerns that such practices may undermine the trust and loyalty of their audiences (Denisova, 2023). How journalistic norms and cultures evolve differently for outlets with diverse legacy histories could be one direction for future research.

Unreliable outlets thrive on Twitter, but not on Facebook and YouTube

Although previous studies have suggested the prominent role of social media in disseminating unreliable information, we found only a significant effect of information reliability for Twitter (H2), but not for the other two platforms. Less reliable sources had a significant advantage on Twitter. This result aligns with previous studies regarding the viral nature of unreliable messages (Vosoughi et al., 2018) and supports the prominence of unreliable information on some social media platforms, which calls for platform moderation to improve information integrity of certain platforms.

We found nonsignificant results for Facebook and YouTube, which, though surprising, echoed the results of a recent study (González-Bailón et al., 2023). As unreliable information became a public concern, platforms initiated various approaches to address it, which may explain our findings. For example, the Algorithmic Feed of Facebook facilitated less exposure to unreliable content than the Chronological Feed (Guess et al., 2023).

Advantages of partisan media

Analyses of ideological differences did not support the notion of ideological asymmetry (H4) but characterized partisan bias: partisan outlets (those with partisan slants away from the non-partisan position) gained more visibilities on platforms than non-partisan outlets, regardless of their slant (H3). Compared to the web, the visibilities of partisan outlets were amplified on three platforms, which may promulgate partisan discourse there.

Although we did not observe a significant effect, our findings do not necessarily reject the notion of ideological asymmetry—the effect presented here was identified after controlling for a series of variables, which could differ between the left and the right. Previous studies have already documented significant differences in media ecosystems between the two sides (Benkler et al., 2018). We believe that future researchers should further unpack the effects

characterized in this study to understand the asymmetric factors that account for the results.

Not a panacea for news inequalities

We found mixed results regarding news inequalities: while digital platforms rewarded mass-oriented outlets, as indicated by the significant effects of education and income (H5), the gaps between various gender and age groups were exacerbated (H6 and H7) on several platforms. Together, these results show that social media are not a panacea for the issue of news inequalities. The effect on the news gap may pertain to the user profiles of these social media platforms but cannot fully explain the pattern. Figure A11 in the Supplementary material presents the demographic information of the platform and Web users. The effect of age for Facebook and the effect of gender for Twitter and Facebook somewhat aligned with the fact that there were more male users on Twitter (Panel A) and fewer young users on Facebook (Panel C). Nevertheless, user profiles cannot explain most of these patterns, as the education and income backgrounds of platform users did not differ substantially from those of general Internet users. This suggests that news users and general users on digital platforms may be very different, which could potentially explain these patterns.

Differences across social media platforms

Besides identifying differences between the Web and the three social media platforms, we observed a few noticeable differences between the three social media platforms (RQ): there were significant effects of information reliability, broadcast/ TV, and gender for Twitter, a substantial effect of age for Facebook, and a significant effect of gender for YouTube. Many scholars have examined how various technological affordances (Ronzhyn et al., 2023) lead to different information behaviors of users. For example, Dvir-Gvirsman et al. (2023) showed that social media's capacities to forge connections—both between individuals and between individuals and content—have substantial effects on news reception and dissemination. This affordance is especially prominent on Twitter—a platform that allows users to join existing public social interactions. This may explain the advantage of unreliable sources on the platform: unreliable messages have high viral potential and can make use of the affordance to boost their visibilities. Other affordances, including content personalization and content persistence, also significantly predicted news reception and dissemination among a list of affordances (Dvir-Gvirsman et al., 2023, p. 13). The differences in these affordances may explain the differences between platforms, which should be explored in future studies.

In addition to affordances, several other factors warrant investigation. Different platforms may have diverse policies that shape the findings regarding information reliability. Furthermore, the user characteristics of each platform could play a significant role. For instance, the higher average age of Facebook users compared to those on Twitter and YouTube may explain the findings related to age (see Figure A11 in the Supplementary material).

General implications

We characterized four factors from the three-actor framework inspired by the structuration theory of public attention. Some factors primarily relate to a single dyad: for example, institutional legacy is mostly associated with the platformmedia dyad, emphasizing how media outlets with varied legacy histories exhibit different relationships with platforms. Other factors, such as media partisanship, relate to both dyads, highlighting how the ways partisan groups and partisan media use social media differ from those of other individuals and media outlets. As platform power becomes an increasing concern, this model could be especially helpful in identifying the mechanisms and dynamics that explain the power relationships shaped by the major transformation of platformization. First, the framework can illuminate additional factors explaining the formation of platformized visibilities. Specifically, there are several underexplored factors related to the two dyads, such as journalistic culture and norms in newsrooms using social media (media-platform dyad) and the perceived technological affordances of users (agent-platform dyad). These factors could guide future explorations. Meanwhile, the framework could also help in understanding the dynamics of other dyads. One research direction could be to examine how the interplay between media and platforms, which relates to journalistic practices on platforms, is affected by the two other dyads. For example, individual interactions with digital platforms (agent-platform dyad) could shape platformized journalistic activities. These insights can help us better understand the profound impact of the platformization of news.

Method-wise, in this study, we leveraged an organizational approach to examine institutional performance in journalistic industries (Evans, 2016) and conducted an information ecosystem-level analysis using computational methods to examine an expanded set of media actors (Allen et al., 2020). The combination of the two techniques allowed us to conduct a relatively comprehensive investigation and evaluate prominent factors in tandem, which could answer other questions related to institutions and structural factors.

Overall, we examined how the visibility of news media is reshaped on social media platforms compared to traditional web traffic. The results showed that these platforms do not simply mirror the attention allocation of the Web information ecosystem but amplify the visibilities of some media outlets while diminishing that of others. This reconfiguration of power relationships, which extends to the broader information landscape and general social dynamics, suggests that regulators and platform designers should implement interventions on these platforms to address the information challenges we face today.

Limitations and future research

Our study has several limitations that could guide future explorations. First, the specific dynamic processes underlying structuration are not characterized. One important element extensively examined in structuration scholarship is media metrics that gauge public attention, which should profoundly shape the interactions among users, platforms, and outlets (Webster, 2011). Additionally, we did not examine the specific content strategies employed by news media, which could help explain the mechanisms underpinning the effects of certain institutional features. For example, news organizations might publish more soft news and entertainment content (Lamot, 2022). Exploring the mechanisms and underlying dynamic processes of structuration could be a direction for future research.

Moreover, we studied only three social media platforms, while the scope of platformization could include other

platforms. Future research should investigate other social media platforms, notably TikTok and Instagram. These emerging visually oriented platforms may attract younger and female audiences and those who are typically less politically engaged (Pew Research Center, 2022). Meanwhile, other information platforms, such as search engines and news aggregators, should be considered. Whether and how the framework used here can be applied to such information platforms should be explored to enhance understanding of the general impact of platformization in today's society.

Additionally, we only considered one specific society—the USA—and our findings may be contingent on particular contextual settings. Many societies have different regulatory structures (e.g., the Online News Act in Canada, which let Meta block access to news on Facebook) that may shape different platform-media relationships. Internet penetration and social media use cannot be taken for granted in many Global South societies, which may influence platform-agent relationships. Whether our findings can be generalized to other contexts should be explored.

Supplementary material

Supplementary material is available at *Journal of Communication* online.

Data availability

The data underlying this article cannot be shared publicly due to its proprietary nature.

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Conflicts of interest

No potential conflict of interest was reported by the authors.

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Notes

- We excluded AP, UPI, Reuters, and Bloomberg from the analyses involving this variable, given that they could not be assigned to any group we listed and treating them as a separate group would not have yielded meaningful results because there were only four datapoints in this category (news agency).
- gory (news agency).

 2. We recruited three graduate journalism students to determine the news organization categories, and each coder coded a random sample of one-third of the websites. We did not refer to comScore for this measure because some outlets were not correctly classified. For example, local10.com and desertsun.com were categorized as newspaper and TV, respectively, but should have been classified as TV and newspaper. We conducted a *post boc* validation after our first round of coding—we sampled 60 outlets (15 from each category). We asked a research assistant to classify these outlets following the codebook we developed, which aligned with our coding (Krippendorff's alpha = .89).
- See https://www.newsguardtech.com/ratings/rating-process-criteria/for more details.
- 4. To validate the measures we used, we compared them with Pew ATP survey results (see Figure A1 in the Supplementary material). Although Pew ATP used very different methods (a self-report survey and observational tracking data), their strong associations supported the validity of our measures.

- 5. 1 = less than high school, 2 = some high school, 3 = completed high school, 4 = some college, 5 = associate's degree, 6 = bachelor's degree, and 7 = post graduate degree.
- 6. $1 \le \$25,000$, 2 = \$25,000 \$39,999, 3 = \$40,000 \$59,999, 4 = \$60,000 \$74,999, 5 = \$75,000 \$99,999, $6 \ge \$99,999$.
- 7. 1 = 18 24, 2 = 25 34, 3 = 35 44, 4 = 45 54, 5 = 55 64, $6 \ge 65$.
- 8. The largest variance inflation factor for these items in main analyses was 2.62.
- 9. To enable better interpretation of our findings in real-world terms, we calculated the corresponding changes in likes, a key engagement metric. Since the dependent variable here is the relative difference between platform engagement and web traffic, rather than the absolute value of any visibility measure, the audience should be mindful that this extrapolation of the effect on likes is based on the assumption that the effect applied evenly across various social media engagement metrics but not to web traffic.
- Another way to interpret this effect for education was that onepoint increase in education predicted 0.41, 0.44, and 0.54 SD decreases in relative visibility on Facebook, Twitter, and YouTube, respectively.

References

- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31, 211–236. https://doi.org/10.1257/jep.31.2.211
- Allen, J., Howland, B., Mobius, M., Rothschild, D., & Watts, D. J. (2020). Evaluating the fake news problem at the scale of the information ecosystem. *Science Advances*, 6, eaay3539. https://doi.org/ 10.1126/sciadv.aay3539
- Altay, S., Nielsen, R. K., & Fletcher, R. (2022). Quantifying the "infodemic": People turned to trustworthy news outlets during the 2020 coronavirus pandemic. *Journal of Quantitative Description:* Digital Media, 2, 1–29. https://doi.org/10.51685/jqd.2022.020
- Anter, L. (2023). How news organizations coordinate, select, and edit content for social media platforms: A systematic literature review. *Journalism Studies*, 25, 1–21. https://doi.org/10.1080/1461670X. 2023.2235428
- Aslett, K., Guess, A. M., Bonneau, R., Nagler, J., & Tucker, J. A. (2022). News credibility labels have limited average effects on news diet quality and fail to reduce misperceptions. Science Advances, 8, eabl3844. https://doi.org/10.1126/sciadv.abl3844
- Bail, C. A. (2022). Breaking the social media prism: How to make our platforms less polarizing. Princeton University Press.
- Bakshy, E., Messing, S., & Adamic, L. A. (2015). Exposure to ideologically diverse news and opinion on Facebook. Science (New York, NY), 348, 1130–1132. https://doi.org/10.1126/science.aaa1160
- Bell, E., Owen, T., Brown, P., Hauka, C., & Rashidian, N. (2017). The platform silicon valley journalism. https://academiccommons.colum bia.edu/doi/10.7916/D8R216ZZ
- Benkler, Y., Faris, R., & Roberts, H. (2018). Network propaganda: Manipulation, disinformation, and radicalization in American politics. Oxford University Press.
- Bhadani, S., Yamaya, S., Flammini, A., Menczer, F., Ciampaglia, G. L., & Nyhan, B. (2022). Political audience diversity and news reliability in algorithmic ranking. *Nature human behaviour*, 6, 495–505. https://doi.org/10.1038/s41562-021-01276-5
- Bode, L., & Vraga, E. K. (2018). Studying politics across media. Political Communication, 35, 1–7. https://doi.org/10.1080/10584 609.2017.1334730
- Brady, W. J., Wills, J. A., Burkart, D., Jost, J. T., & Bavel, J. J. V. (2019). Supplemental material for an ideological asymmetry in the diffusion of moralized content on social media among political leaders. *Journal of Experimental Psychology: General*, 148, 1802–1813. https://doi.org/10.1037/xge0000532.supp
- Budak, C., Goel, S., & Rao, J. M. (2016). Fair and balanced? Quantifying media bias through crowdsourced content analysis. Public Opinion Quarterly, 80, 250–271. https://doi.org/10.1093/poq/nfw007
- Denisova, A. (2023). Viral journalism. Strategy, tactics and limitations of the fast spread of content on social media: Case study of the

- United Kingdom quality publications. *Journalism*, 24, 1919–1937. https://doi.org/10.1177/14648849221077749
- Dvir-Gvirsman, S, Sude, D., & Raisman, G. (2023). Unpacking news engagement through the perceived affordances of social media: A cross-platform, cross-country approach. *New Media and Society*, 26, 6487–6509. https://doi.org/10.1177/1461444823115 4432
- Dvir-Gvirsman, S., & Tsuriel, K. (2022). In an open relationship: Platformization of relations between news practitioners and their audiences. *Journalism Studies*, 23, 1308–1326. https://doi.org/10.1080/1461670X.2022.2084144
- Evans, S. K. (2016). Staying ahead of the digital Tsunami: The contributions of an organizational communication approach to journalism in the information age. *Journal of Communication*, 66, 280–298. https://doi.org/10.1111/jcom.12217
- Fletcher, R., Kalogeropoulos, A., & Nielsen, R. K. (2021). More diverse, more politically varied: How social media, search engines and aggregators shape news repertoires in the United Kingdom. *New Media and Society*, 25, 2118–2139.https://doi.org/10.1177/14614448211027393
- Fletcher, R., & Nielsen, R. K. (2018). Are people incidentally exposed to news on social media? A comparative analysis. *New Media & Society*, 20, 2450–2468. https://doi.org/10.1177/1461444817724170
- Freelon, D., Marwick, A., & Kreiss, D. (2020). False equivalencies: Online activism from left to right. *Science (New York, NY)*, 369, 1197–1201. https://doi.org/10.1126/SCIENCE.ABB2428
- Giddens, A. (1984). The constitution of society: Outline of the theory of structuration. University of California Press.
- Gil de Zúñiga, H., Weeks, B., & Ardèvol-Abreu, A. (2017). Effects of the news-finds-me perception in communication: Social media use implications for news seeking and learning about politics. *Journal of Computer-Mediated Communication*, 22, 105–123. https://doi.org/ 10.1111/jcc4.12185
- González-Bailón, S., d'Andrea, V., Freelon, D., & De Domenico, M. (2022). The advantage of the right in social media news sharing. PNAS Nexus, 1, pgac137. https://doi.org/10.1093/pnasnexus/pgac137
- González-Bailón, S., Lazer, D., Barberá, P., Zhang, M., Allcott, H., Brown, T., Crespo-Tenorio, A., Freelon, D., Gentzkow, M., Guess, A.M., Iyengar, S., Kim, Y.M., Malhotra, N., Moehler, D., Nyhan, B., Pan, J., Velasco Rivera, C., Settle, J., Thorson, E., Tromble, R., Wilkins, A., Wojcieszak, M., Kiewiet de Jonge, C., Franco, A., Mason, W., Stroud, N., Tucker, J.A. (2023). Asymmetric ideological segregation in exposure to political news on Facebook. Science (New York, NY), 381, 392–398. https://doi.org/10.1126/science.ade7138
- Graves, D., & Simon, F. (2019). Pay models for online news in the US and Europe: 2019 update. Reuters Institute for the Study of Journalism. https://ora.ox.ac.uk/objects/uuid:59c4c4a1-7720-4a2d-93fd-2350a0534e69
- Grinberg, N., Joseph, K., Friedland, L., Swire-Thompson, B., & Lazer, D. (2019). Fake news on Twitter during the 2016 US presidential election. *Science (New York, NY)*, 363, 374–378. https://doi.org/ 10.1126/science.aau2706
- Guess, A.M., Malhotra, N., Pan, J., Barberá, P., Allcott, H., Brown, T.,
 Crespo-Tenorio, A., Dimmery, D., Freelon, D., Gentzkow, M.,
 González-Bailón, S., Kennedy, E., Kim, Y.M., Lazer, D., Moehler,
 D., Nyhan, B., Velasco Rivera, C., Settle, J., Thorson, E., Tromble,
 R., Wilkins, A., Wojcieszak, M., Kiewiet de Jonge, C., Franco, A.,
 Mason, W., Stroud, N., Tucker, J.A. (2023). How do social media
 feed algorithms affect attitudes and behavior in an election campaign? Science (New York, NY), 381, 398–404. https://doi.org/10.
 1126/science.abp9364
- Guess, A. M., Nyhan, B., & Reifler, J. (2020). Exposure to untrustworthy websites in the 2016 US election. *Nature human behaviour*, 4, 472–480. https://doi.org/10.1038/s41562-020-0833-x
- Hågvar, Y. B. (2019). News media's rhetoric on Facebook. *Journalism Practice*, 13, 853–872. https://doi.org/10.1080/17512786.2019. 1577163

- Hargittai, E. (2020). Potential biases in big data: Omitted voices on social media. Social Science Computer Review, 38, 10–24. https://doi.org/10.1177/0894439318788322
- Hase, V., Boczek, K., & Scharkow, M. (2023). Adapting to affordances and audiences? A cross-platform, multi-modal analysis of the platformization of news on Facebook, Instagram, TikTok, and Twitter. *Digital Journalism*, 11, 1499–1520. https://doi.org/10.1080/ 21670811.2022.2128389
- Haugsgjerd, A., & Karlsen, R. (2022). Election campaigns, news consumption gaps, and social media: Equalizing political news use when it matters? *International Journal of Press/Politics*, 29, 507–529. https://doi.org/10.1177/19401612221112014
- Hendrickx, J. (2023). The rise of social journalism: An explorative case study of a youth-oriented Instagram news account. *Journalism Practice*, 17, 1810–1825. https://doi.org/10.1080/17512786.2021. 2012500
- Hiaeshutter-Rice, D., & Weeks, B. (2021). Understanding audience engagement with mainstream and alternative news posts on Facebook. Digital Journalism, 9, 519–548. https://doi.org/10.1080/21670811. 2021.1924068
- Horvát, E. Á., & Hargittai, E. (2021). Birds of a feather flock together online: Digital inequality in social media repertoires. *Social Media* + *Society*, 7, 1–14. https://doi.org/10.1177/20563051211052897
- Jackson, S. J., Bailey, M., & Welles, B. F. (2020). HashtagActivism: Networks of race and gender justice. MIT Press.
- Kalogeropoulos, A., & Kleis Nielsen, R. (2018). Social inequalities in news consumption (pp. 1–7). Reuters Institute for the Study of Journalism. https://www.mrs.org.uk/
- Krupnikov, Y., & Ryan, J. B. (2022). The other divide: Polarization and disengagement in American politics. Cambridge University Press.
- Kümpel, A. S. (2020). The Matthew Effect in social media news use: Assessing inequalities in news exposure and news engagement on social network sites (SNS). *Journalism*, 21, 1083–1098. https://doi.org/10.1177/1464884920915374
- Laaksonen, S. M, Koivula, M., & Villi, M. (2024). Mediated by the giants: Tracing practices, discourses, and mediators of platform isomorphism in a media organization. *New Media and Society*, 26, 4317–4335. https://doi.org/10.1177/14614448221122220
- Lamot, K. (2022). What the metrics say. The softening of news on the Facebook pages of mainstream media outlets. *Digital Journalism*, 10, 517–536. https://doi.org/10.1080/21670811.2021.1974917
- Lazer, D. M. J., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., Metzger, M. J., Nyhan, B., Pennycook, G., Rothschild, D., Schudson, M., Sloman, S. A., Sunstein, C. R., Thorson, E. A., Watts, D. J., & Zittrain, J. L. (2018). The science of fake news. Science (New York, NY), 359, 1094–1096. https://doi.org/10.1126/science.aao2998
- Lazer, D., Hargittai, E., Freelon, D., Gonzalez-Bailon, S., Munger, K., Ognyanova, K., & Radford, J. (2021). Meaningful measures of human society in the twenty-first century. *Nature*, 595, 189–196. https://doi.org/10.1038/s41586-021-03660-7
- Lehman-Wilzig, S. N., & Seletzky, M. (2010). Hard news, soft news, "general" news: The necessity and utility of an intermediate classification. *Journalism*, 11, 37–56. https://doi.org/10.1177/146488490 9350642
- Lin, H., Lasser, J., Lewandowsky, S., Cole, R., Gully, A., Rand, D. G., & Pennycook, G. (2023). High level of correspondence across different news domain quality rating sets. *PNAS Nexus*, 2, pgad286. https://doi.org/10.1093/pnasnexus/pgad286
- Lischka, J. A. (2021). Logics in social media news making: How social media editors marry the Facebook logic with journalistic standards. *Journalism*, 22, 430–447. https://doi.org/10.1177/1464884918788472
- Lischka, J. A., & Garz, M. (2021). Clickbait news and algorithmic curation: A game theory framework of the relation between journalism, users, and platforms. *New Media and Society*, 25, 2073–2094. https://doi.org/10.1177/14614448211027174
- Meese, J., & Hurcombe, E. (2021). Facebook, news media and platform dependency: The institutional impacts of news distribution on

- social platforms. *New Media & Society*, 23, 2367–2384. https://doi.org/10.1177/1461444820926472
- Molyneux, L., & McGregor, S. C. (2022). Legitimating a platform: Evidence of journalists' role in transferring authority to Twitter. *Information Communication and Society*, 25, 1577–1595. https://doi.org/10.1080/1369118X.2021.1874037
- Mukerjee, S., Yang, T., & Peng, Y. (2023). Metrics in action: How social media metrics shape news production on Facebook. *Journal of Communication*, 73, 260–272. https://doi.org/10.1093/joc/jqad012
- Myllylahti, M. (2021). It's a dalliance! A glance to the first decade of the digital reader revenue market and how the Google's and Facebook's payments are starting to shape it. *Digital Journalism*, 12, 1–19. https://doi.org/10.1080/21670811.2021.1965487
- Nelson, J. L., & Taneja, H. (2018). The small, disloyal fake news audience: The role of audience availability in fake news consumption. *New Media & Society*, 20, 3720–3737. https://doi.org/10.1177/1461444818758715
- Newman, N., Fletcher, R., Eddy, K., Robertson, C., & Nielsen, R. (2023). Reuters institute digital news report 2023. Reuters Institute for the Study of Journalism.
- Nielsen, R. K., & Ganter, S. A. (2022). The power of platforms: Shaping media and society. Oxford University Press.
- Olsen, R. K., Kalsnes, B., & Barland, J. (2021). Do small streams make a big river? Detailing the diversification of revenue streams in newspapers' transition to digital journalism businesses. *Digital Journalism*, 12, 1–22. https://doi.org/10.1080/21670811.2021.1973905
- Peterson, E., Goel, S., & Iyengar, S. (2021). Partisan selective exposure in online news consumption: Evidence from the 2016 presidential campaign. *Political Science Research and Methods*, 9, 242–258. https://doi.org/10.1017/psrm.2019.55
- Pew Research Center. (2022). *Teens, social media and technology* 2022. Retrieved August 30, 2022, https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/
- Poell, T., Nieborg, D. B., & Duffy, B. E. (2022). Spaces of Negotiation: Analyzing Platform Power in the News Industry. *Digital Journalism*.
- Pokhriyal, N., Valentino, B. A., & Vosoughi, S. (2023). Quantifying participation biases on social media. EPJ Data Science, 12, 26. https://doi.org/10.1140/epjds/s13688-023-00405-6
- Prior, M. (2007). Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections. Cambridge University Press.
- Pyo, J. Y. (2024). Different stakes, different struggles, and different practices to survive: News organizations and the spectrum of platform dependency. *New Media & Society*, 26, 4572–4588. https://doi.org/10.1177/14614448221123279
- Robertson, R. E., Jiang, S., Joseph, K., Friedland, L., Lazer, D., & Wilson, C. (2018). Auditing partisan audience bias within google search. *Proceedings of the ACM on Human-Computer Interaction*, 2, 1–22. https://doi.org/10.1145/3274417
- Robinson, L., Cotten, S. R., Ono, H., Quan-Haase, A., Mesch, G., Chen, W., Schulz, J., Hale, T. M., & Stern, M. J. (2015). Digital inequalities and why they matter. *Information, Communication & Society*, 18, 569–582. https://doi.org/10.1080/1369118X.2015. 1012532
- Ronzhyn, A., Cardenal, A. S., & Batlle Rubio, A. (2023). Defining affordances in social media research: A literature review. *New Media & Society*, 25, 3165–3188. https://doi.org/10.1177/14614448221135187
- Scharkow, M., Mangold, F., Stier, S., & Breuer, J. (2020). How social network sites and other online intermediaries increase exposure to news. Proceedings of the National Academy of Sciences of the United States of America, 117, 2761–2763. https://doi.org/10.1073/ pnas.1918279117
- Schradie, J. (2019). The revolution that wasn't: How digital activism favors conservatives. Harvard University Press.
- Sehl, A., Cornia, A., & Nielsen, R. K. (2018). Public service news and digital media. https://doi.org/10.2139/ssrn.2771076

- Sehl, A., Cornia, A., & Nielsen, R. K. (2021). How do funding models and organizational legacy shape news organizations' social media strategies? A comparison of public service and private sector news media in six countries. *Digital Journalism*, 12, 1–20. https://doi.org/ 10.1080/21670811.2021.1968920
- Toff, B., & Kalogeropoulos, A. (2020). All the news That's fit to ignore: How the information environment does and does not shape news avoidance. *Public Opinion Quarterly*, 84, 366–390. https://doi.org/10.1093/poq/nfaa016
- Valenzuela, S., Halpern, D., Katz, J. E., & Miranda, J. P. (2019).
 The paradox of participation versus misinformation: Social media, political engagement, and the spread of misinformation.
 Digital Journalism, 7, 802–823. https://doi.org/10.1080/21670811.
 2019.1623701
- Van Dijck, J., & Poell, T. (2013). Understanding social media logic. Media and Communication, 1, 2–14. https://doi.org/10.17645/mac. v1i1.70
- van Dijck, V. J., Poell, T., & de Waal, M. (2018). The platform society: Public values in a connective world. Oxford University Press.
- Vázquez-Herrero, J., Negreira-Rey, M. C., & López-García, X. (2022). Let's dance the news! How the news media are adapting to the logic of TikTok. *Journalism*, 23, 1717–1735. https://doi.org/10.1177/ 1464884920969092
- Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science (New York, NY)*, 359, 1146–1151. https://doi.org/10.1126/science.aap9559

- Webster, J. G. (2011). The duality of media: A structurational theory of public attention. *Communication Theory*, 21, 43–66. https://doi.org/10.1111/j.1468-2885.2010.01375.x
- Wojcieszak, M., Menchen-Trevino, E, Goncalves, J. F. F., & Weeks, B. (2022). Avenues to news and diverse news exposure online: Comparing direct navigation, social media, news aggregators, search queries, and article hyperlinks. *International Journal of Press/Politics*, 27, 860–886. https://doi.org/10.1177/1940161 2211009160
- Yang, T., & González-Bailón, S. (2025). More platforms, less attention to news? A multi-platform analysis of news exposure across TV, web, and YouTube in the United States. *New Media & Society*, https://doi.org/10.1177/14614448251341496
- Yang, T., Majó-Vázquez, S., Nielsen, R. K., & González-Bailón, S. (2020). Exposure to news grows less fragmented with an increase in mobile access. Proceedings of the National Academy of Sciences of the United States of America, 117, 28678–28683. https://doi.org/10.1073/pnas.2006089117
- Zuckerman, E. (2021). Why study media ecosystems? *Information, Communication and Society*, 24, 1495–1513. https://doi.org/10.1080/1369118X.2021.1942513
- Zhou, A., Yang, T., & González-Bailón, S. (2025). The puzzle of misinformation: Exposure to unreliable content in the United States is higher among the better informed. New Media & Society, 27, 1526–1543. https://doi.org/10.1177/14614448231196863