

The Importance of Journalism in the Digital Age

An Informational Hearing of the Senate Committee on Judiciary

Background Paper

By the Staff of the Senate Committee on Judiciary

I. Introduction

The First Amendment to the United States Constitution states that “congress shall make no law...abridging the freedom...of the press.”¹ As explained by Justice Hugo Black, with this guarantee,

the Founding Fathers gave the free press the protection it must have to fulfill its essential role in our democracy. The press was to serve the governed, not the governors. The Government’s power to censor the press was abolished so that the press would remain forever free to censure the Government.²

To that end, courts have recognized that the First Amendment protects the publication of matters ranging from the federal government’s national security policy³ to vituperative accounts of local politics⁴ to crass political satire.⁵

But a free press requires more than freedom to publish; a free press also requires publishers, and journalists, and an audience for the news. This background paper examines some of the issues facing the news industry today, with a particular emphasis on digital media and how the rise of online news has affected the industry as a whole.

II. The Ascent of Digital News

Digital news is probably older than you think: in the 1970s and 1980s, various companies and governments experimented with videotex systems to deliver news directly to a television or terminal.⁶ In the late 1980s, the internet provider Prodigy

¹ U.S. Const., 1st amend.

² *New York Times Co. v. U.S.* (1971) 403 U.S. 713, 717 (conc. opn. of Black, J.)

³ *Id.*, at p. 714 (maj. opn., per curium).

⁴ *Greenbelt Co-op. Pub. Ass’n v. Bresler* (1970) 398 U.S. 6, 14-15.

⁵ *Hustler Magazine, Inc. v. Falwell* (1988) 485 U.S. 46, 50-51.

⁶ E.g., Wandzilak, *Industry giants launch second videotex wave*, *Network World* (Aug. 25, 1986) pp. 13-14.

delivered news updates to subscribers' computers when they logged on.⁷ But it was the release of the World Wide Web⁸ in the 1990s that brought the internet – and digital news – into many homes for the first time.⁹

Online news facilitated positive outcomes – such as the capacity “to come together as a nation in an instant” for major events – but also downsides, such as increased availability of “the trivial, the one-sided, and the false.”¹⁰ The popularity of online news also coincided with a decline in circulation in print news. Daily news circulation in the United States hovered between 60 million and 64 million for the 1970s and 1980s, but then began falling sharply in the 1990s.¹¹ Despite early concerns that the online medium itself would threaten the quality and availability of news – through competition, rather than convergence, with existing news outlets – many soon argued that the economics of online news (e.g., the difference in profitability from digital subscriptions and ads) posed a bigger threat.¹²

Today, Americans consume their news on digital devices rather than in print by a significant margin: according to the Pew Research Center, as of 2022, 49 percent of U.S. adults often, and 33 percent sometimes, got their news from digital devices, while 8 percent of adults often, and 25 percent sometimes, got their news from print publications.¹³ Conversely, a mere 8 percent of adults reported that they never consumed news on digital devices and 33 percent of adults reported that they never got their news in print.¹⁴ Research suggests that users who get their news online

⁷ Sanburn, *A Brief History of Digital News*, TIME (Feb. 1, 2011), <https://content.time.com/time/business/article/0,8599,2045682,00.html>. All links in this background paper are current as of November 30, 2023.

⁸ The internet is the global network of networks that facilitates the exchange of information between computers, while the World Wide Web is a standardized system of accessing and navigating the internet, specifically through the HTTP protocol. The World Wide Web is not the first or only service for retrieving information over the internet, but it is by far the most popular.

⁹ *Ibid.*

¹⁰ Project for Excellence in Journalism, Report: State of News Media 2004, Pew Research Center, available at <https://www.pewresearch.org/wp-content/uploads/sites/8/2017/05/State-of-the-News-Media-Report-2004-FINAL.pdf>.

¹¹ Pew Research Center, Newspaper Fact Sheet (Jun. 29, 2021), <https://www.pewresearch.org/journalism/fact-sheet/newspapers/>.

¹² Project for Excellence in Journalism, Report: State of News Media 2004, Pew Research Center, *supra*.

¹³ Forman-Katz & Matsa, News Platform Fact Sheet, Pew Research Center (Sept. 20, 2022), <https://www.pewresearch.org/journalism/fact-sheet/news-platform-fact-sheet/>.

¹⁴ *Ibid.* Television and radio sources are in the middle, popularity-wise, with 31 percent and 13 percent of adults, respectively, reporting consuming from those sources “often.” (*Ibid.*)

increasingly rely on social media platforms for news – such as TikTok, Instagram, and YouTube – rather than traditional news sources.¹⁵

III. The Pros and Cons of News Online

The digital revolution has been a mixed bag for journalism and the press. Positive developments include:

- Timeliness: instead of waiting for the morning paper or the nightly news, the internet allows up-to-the-minute updates on breaking stories.
- Ease of access: with a smartphone or tablet, online news can be obtained anywhere with a WiFi or cellular connection.
- Democratization of voices: the infrastructure and cost model of print media created a high barrier to entry into the news space, whereas independent journalists and small news outlets can post stories online relatively cheaply, giving rise to a greater diversity of viewpoints in the news.¹⁶
- Shared discussions: with digital news, readers can consume and promulgate stories with their networks and create discussions about important issues and events that span the world, giving readers a greater exposure to viewpoints they would not receive from a local news broadcast or local paper.

On the other hand, the rise of digital journalism and the proliferation of news sources has had some unintended negative effects, including:

- Misinformation and disinformation: as this Committee has heard many times, including at its November 2021 hearing on social media, the rise of online news has coincided with a rise in unreliable news outlets which either deliberately or irresponsibly spread false information. These fake stories are often spread through social media and have caused demonstrable harm to the public health¹⁷ and the state of our democracy.¹⁸
- The decline in actual reporters: According to the Pew Research Center, newsroom employment in the United States has dropped 26 percent since 2008,

¹⁵ Lorenz, *Content creators surge past legacy media as news hits a tipping point*, Washington Post (Oct. 31, 2023), <https://www.washingtonpost.com/technology/2023/10/31/creator-economy-news-outlets-influencers/>.

¹⁶ E.g., *ibid.* The Ninth Circuit Court of Appeals has held that the First Amendment’s press protections apply equally to the “institutional press” as well as individual speakers, ensuring that smaller and individual journalistic operations are able to gather information and report with the same leeway as classic print and television news sources. (See *Obsidian Finance Group, LLC v. Cox* (9th Cir. 2014) 740 F.3d 1284, 1291.)

¹⁷ E.g., Su, *It doesn’t take a village to fall for misinformation: Social media use, discussion heterogeneity preference, worry of the virus, faith in scientists, and COVID-19-related misinformation belief*, *Telematics and Information*, Vol. 58 (May 2021).

¹⁸ E.g., Select Committee on Intelligence, *Russian Active Measures, Campaigns, and Interference in the 2016 U.S. Election*, United States Senate (Nov. 10, 2020), https://www.intelligence.senate.gov/sites/default/files/documents/Report_Volume2.pdf.

and the rise of digital-native news employees has not made up for the loss.¹⁹ Many of the so-called news providers on social media are actually more like news aggregators or commentators – meaning they rely on the reporting of others for their takes rather than engaging in firsthand investigation or reporting.²⁰ The loss of journalists is felt in the very places where reporting is most needed to keep an eye on those in power; for example, the number of reporters who cover U.S. statehouses on a full-time basis is down 34 percent since 2014.²¹

IV. The Issues Facing Journalism and the Integrity of the Press Today

a. *The loss of local news*

Since 2005, the country has lost more than 25 percent of its newspapers, or over 2,500 publications.²² Newspaper closures disproportionately affect smaller communities and, in most cases, no digital or print replacement comes to fill the gap, leaving these communities without a reliable source of local news.²³ Northwestern University's Medill School of Journalism reports that more than one-fifth of the country's population lives in a news desert or in communities at risk of becoming news deserts.²⁴ Many of the surviving papers "have cut staff and circulation significantly as print revenues and profits evaporated."²⁵ The quality of local news also appears to decrease when local newspapers are purchased by private equity firms, consistent with these firms' interest in cutting costs (including labor costs) so as to maximize profits.²⁶ As of 2021, hedge funds or private equity firms were estimated to control half of U.S. daily newspapers.²⁷

¹⁹ Walker, U.S. newsroom employment has fallen 26% since 2008, Pew Research Center (Jul. 13, 2021), <https://www.pewresearch.org/short-reads/2021/07/13/u-s-newsroom-employment-has-fallen-26-since-2008/>.

²⁰ Lorenz, *supra*.

²¹ Worden, Matsa, & Shearer, The number of full-time statehouse reporters at U.S. newspapers has declined 34 percent since 2014, Pew Research Center (Apr. 5, 2022), <https://www.pewresearch.org/short-reads/2022/04/05/the-number-of-full-time-statehouse-reporters-at-u-s-newspapers-has-declined-34-since-2014/>.

²² Abernathy, The State of Local News 2022, Northwestern Medill Local News Initiative (Jun. 29, 2022), <https://localnewsinitiative.northwestern.edu/research/state-of-local-news/report/>.

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ Ewens, Gupta, & Howell, *Local Journalism under Private Equity Ownership* (April 2, 2023) pp. 19-23, available at <https://ssrn.com/abstract=3939405>.

²⁷ Helmore, *Fears for future of American journalism as hedge funds flex power*, The Guardian (Jun. 21, 2021), <https://www.theguardian.com/media/2021/jun/21/us-newspapers-journalism-industry-hedge-funds>.

b. *The rise and risks of artificial intelligence*

Artificial intelligence (AI) has been used to perform minor journalism-related tasks for some time – tasks like scraping social media or assisting journalists in reviewing large volumes of content.²⁸ In the past few years, however, the increased sophistication of generative AI – algorithms that are able to generate content, such as large language model chatbots like ChatGPT and Bard – has created the potential for substantive news stories to be generated by AI rather than written by human journalists. While some early attempts to outsource content creation to AI have failed,²⁹ efforts to develop usable article-creation AI tools are ongoing; Google is reportedly pitching its AI article-generating product to major news outlets,³⁰ and many news organizations surveyed report that they expect AI will be increasingly used by journalists.³¹

While AI might help journalists and news organizations streamline certain processes, many have raised significant concerns about widespread use of AI by the press, including:

²⁸ Beckett & Yaseen, *Generating Change: A global survey of what news organisations [sic] are doing with AI*, JournalismAi (2022) p. 9. For example, reporters used data mining technology to organize and make sense of the documents that led to the Panama Papers story. (Guevara, *How Artificial Intelligence Can Help Us Crack More Panama Papers Stories*, International Consortium of Investigative Journalists (Mar. 25, 2019), <https://www.icij.org/inside-icij/2019/03/how-artificial-intelligence-can-help-us-crack-more-panama-papers-stories/>.)

²⁹ Gannett, a newspaper conglomerate, paused its use of AI to create articles about local sporting events after the program generated bizarre phrases and technical errors. (Wu, *Gannett halts AI-written sports recaps after readers mocked the stories*, Washington Post (Aug. 31, 2023),

<https://www.washingtonpost.com/nation/2023/08/31/gannett-ai-written-stories-high-school-sports/>.) Two months later, Gannett was again charged with using AI to write fake product reviews; though Gannett denied it had used AI, the company to which Gannett outsourced the content creation advertises itself as using AI for e-commerce. (Sommer, *Mysterious bylines appeared on a USA Today site. Did these writers exist?*, Washington Post (Oct. 26, 2023),

<https://www.washingtonpost.com/style/media/2023/10/26/usa-today-gannett-reviewed-ai-fake-writers/>.) Earlier in the year, CNET published a number of AI-created stories without disclosing the source, and were found out when a troubling number of those pieces were found to contain factual errors. (Farhi, *A news site used AI to write articles. It was a journalistic disaster*, Washington Post (Jan. 17, 2023), <https://www.washingtonpost.com/media/2023/01/17/cnet-ai-articles-journalism-corrections/>.)

More recently, Sports Illustrated was accused of publishing consumer reviews generated by AI and attributed to AI-generated authors, complete with fake photos and bios intended to make it appear that the authors were human. (Harrison, *Sports Illustrated Generated Articles Published by Fake, AI-Generated Writers*, Futurism (Nov. 27, 2023), <https://futurism.com/sports-illustrated-ai-generated-writers>.) Sports Illustrated initially responded by deleted all of the reviews without comment; it later conceded that the bios and photos were AI-generated but stated that the reviews were written by a third-party company that assured Sports Illustrated that it did not use AI to generate the reviews. (*Ibid.*)

³⁰ Mullin & Grant, *Google Tests A.I. Tool That Is Able to Write News Articles*, N.Y. Times (Jul. 19, 2023), <https://www.nytimes.com/2023/07/19/business/google-artificial-intelligence-news-articles.html>.

³¹ Beckett & Yaseen, *supra*, p. 49.

- Loss of jobs: newspapers have already cut staff and replaced them with AI or other automated processes.³² The head of Axel Springer, an international media group which owns publications including Insider and Politico, opined that AI could replace journalism entirely.³³ AI could thus lead to the loss of tens of thousands of news-related jobs.³⁴
- Loss of quality: an overreliance on AI to produce news could reduce the quality of editorial and news content, as well as the availability of resources for actual investigative journalism. Some are concerned that the use of AI will pressure newsrooms to produce more quantity, rather than focusing on quality, leading to more clickbait and less substantive content.³⁵ NewsGuard, which tracks AI-enabled misinformation, has identified 528 unreliable AI-generated news sites with little or no human oversight.³⁶ The perceived need to produce more content could also lead to reduced spending on complex investigative journalism – and since AI cannot cultivate a source, or meet a whistleblower in a parking lot, or follow up on a hunch, the public would be left with fewer watchdogs to protect them.
- Biased content: “algorithmic bias” occurs when biases in the data collection and data analysis stages of development are incorporated into a system’s algorithm.³⁷ Biases can be introduced through a developer’s unconscious (or conscious) bias in choosing which data to collect, or through the algorithm’s analysis of a large volume of data that reflects existing societal biases.³⁸ For newsrooms and

³² E.g., Henley, *German tabloid Bild cuts 200 jobs and says some roles will be replaced by AI*, The Guardian (Jun. 20, 2023), <https://www.theguardian.com/world/2023/jun/20/german-tabloid-bild-to-replace-range-of-editorial-jobs-with-ai>.

³³ Cooban, *The owner of Insider and Politico tells journalists: AI is coming for your jobs*, CNN (Mar. 1, 2023), <https://www.cnn.com/2023/03/01/media/axel-springer-ai-job-cuts/index.html>.

³⁴ The Bureau of Labor Statistics estimates that there were 58,500 news analyst, reporter, and journalist jobs in the U.S. in 2022. (Bureau of Labor Statistics, Occupational Outlook Handbook: News Analysts, Reporters, and Journalists (last modified Sept. 6, 2023), <https://www.bls.gov/ooh/media-and-communication/reporters-correspondents-and-broadcast-news-analysts.htm>), while the Pew Research Center estimates that there were 85,000 reporters, editors, photographers, and videographers working in newsrooms as of 2020 (Walker, U.S. newsroom employment has fallen 26% since 2008, Pew Research Center (Jul. 13, 2021), <https://www.pewresearch.org/short-reads/2021/07/13/u-s-newsroom-employment-has-fallen-26-since-2008/>). These professionals are then supported by a significant number of other staff.

³⁵ Beckett & Yaseen, *supra*, p. 43.

³⁶ Sadeghi, et al., *Tracking AI-enabled Misinformation: 528 ‘Unreliable AI-Generated News’ Websites (and Counting), Plus the Top False Narratives Generated by Artificial Intelligence Tools*, NewsGuard (last updated Oct. 24, 2023), <https://www.newsguardtech.com/special-reports/ai-tracking-center/>. These sites have generic names that likely sound reliable to readers and function to drive ad revenue to the publishers while spreading misinformation to the public. (*Ibid.*)

³⁷ See generally, e.g., Crawford, *The Hidden Biases in Big Data*, Harvard Business Review (Apr. 1, 2013), <https://hbr.org/2013/04/the-hidden-biases-in-big-data>; Noble, *Algorithms of Oppression* (2018).

³⁸ Crawford, *supra*; Noble, *supra*; see also Metz, *Who Is Making Sure the A.I. Machines Aren’t Racist?*, N.Y. Times (Mar. 15, 2021; updated Jun. 23, 2023),

journalists, relying on AI to generate news therefore bears the risk of “ ‘biased content recommendations, skewed perspectives, or unfair representation in news coverage.’ ”³⁹ Many have expressed concern as to whether “de-biasing” techniques will be adequate to account for an AI’s baked-in biases.⁴⁰

c. *Declining revenues for print media*

As noted above in Part II, the rise of digital news coincided with a sharp drop in circulation for print media. And as paper subscriptions declined, digital advertising revenue did not compensate for the loss of print advertising revenue.⁴¹ Many traditional news sources began by relying on ad revenue only: “[u]p [until] 2011, the vast majority of newspapers gave their online content away for free, focusing on advertising revenue with very limited success.”⁴² But over the early 2010s, many newspapers adopted paywalls for their online content, and by 2015, “more than 450 newspapers in North America charged a subscription fee for at least part of their content online, [including] 77 of the 98 U.S. newspapers with total circulation of 500,000 or more.”⁴³ Some research indicates that large media firms benefit from adding a paywall to encourage subscriptions but small-sized firms do not.⁴⁴ The overall result is that U.S. newspapers’ revenues are significantly lower than they were at the end of the 20th century and the beginning of the 21st.⁴⁵ The reduced revenues have, in turn, led to a loss of employment in newsrooms.⁴⁶

d. *Platforms as publishers*

As more news is consumed digitally, publishers are increasingly reliant on online platforms to disseminate their content and for the generation of ad revenues.⁴⁷ There are three key aspects of the platform-publisher relationship:

<https://www.nytimes.com/2021/03/15/technology/artificial-intelligence-google-bias.html>; Tiku, Schaul, & Chen, *These fake images reveal how AI amplifies our worst stereotypes*, Washington Post (Nov. 1, 2023), https://www.washingtonpost.com/technology/interactive/2023/ai-generated-images-bias-racism-sexism-stereotypes/?itid=sr_19.

³⁹ Beckett & Yaseen, *supra*, p. 39.

⁴⁰ *Id.* at pp. 39-40.

⁴¹ E.g., Chung, Kim, & Song, *The Comprehensive Effects of a Digital Paywall Sales Strategy*, Harvard Business School Working Paper 19-118 (2019) p. 2.

⁴² Chyi & Ng, *Still Unwilling to Pay: An Empirical Analysis of 50 U.S. Newspapers’ Digital Subscription Results*, *Digital Journalism* (2020) p. 3.

⁴³ *Ibid.*

⁴⁴ Chung, Kim, & Song, *supra*, p. 4.

⁴⁵ E.g., Pew Research Center, *Newspaper Fact Sheet* (Jun. 29, 2021), <https://www.pewresearch.org/journalism/fact-sheet/newspapers/>.

⁴⁶ *Ibid.*

⁴⁷ Bell & Owen, *The Platform Press: How Silicon Valley reengineered journalism*, *Columbia Journalism Review* (Mar. 29, 2017), https://www.cjr.org/tow_center_reports/platform-press-how-silicon-valley-reengineered-journalism.php.

- Ad sales: publishers’ sale of ad inventory to advertisers is administered by platforms using the platforms’ algorithms and based on the user data collected by the platforms.
- Access: platforms control access and distribution to news content (e.g., which publisher’s article appears first on a search engine, or which news items show up in a social media feed) based on the platforms’ recommendation algorithms; publishers, in turn, are impelled to tweak their content to better satisfy the algorithm, so as to get more clicks and more revenue.
- Direct funding: some platforms operate aggregated news services for users, in which the platforms pay the publishing companies for the content included in the service.⁴⁸

The first two prongs can be particularly problematic for publishers. With respect to advertisements, there are allegations that platforms take an outsized share of the ad revenues, reducing profits for the publishers who produce the actual content users wish to see. For example, the federal Department of Justice and several states – including California – have filed a civil antitrust suit against Google, alleging that Google has monopolized integral digital advertising technologies (known as the “tech stack”) necessary for the sale and purchase of online ads; as a result, the suit alleges, there is insufficient competition in the digital ad space, which in turn allows Google to charge inflated fees for its own digital ad services.⁴⁹ Google denies the allegations.⁵⁰ As of the release date of this background paper, the court has denied Google’s motion to dismiss and set a pretrial conference for January 2024.⁵¹

With respect to the second prong – platforms’ algorithms determining which content is displayed to users – the connection between page views and revenues can create perverse incentives for publishers. Broadly speaking, algorithms determine what types of content are popular, and then present more of what is popular to users; “[b]y rewarding popularity, algorithmic curation can lead to conformity in the news industry,” whereby outlets “collectively design ‘addictive distractions’ to grab user

⁴⁸ Zornetta & Wang, *Platform Transparency for News Sustainability*, in *Sustaining Journalism, Sustaining Democracy: A Policy Guide on Platforms and the Press* (UCLA Institute for Technology, Law & Policy) (Apr. 2023) p. 8.

⁴⁹ See Complaint, *U.S. v. Google LLC*, Case No. 1:23-cv-00108 (E.D.Va.), available at https://www.justice.gov/d9/press-releases/attachments/2023/01/24/us_v_google_complaint_0.pdf.

⁵⁰ Bartz, *Alphabet seeks dismissal of US antitrust lawsuit over Google’s online ads*, Reuters (Mar. 28, 2023), <https://www.reuters.com/legal/alphabet-seeks-dismissal-us-antitrust-lawsuit-over-googles-online-ads-2023-03-28/>.

⁵¹ Scarcella, *US Justice Dept’s Google advertising case gets fast-paced schedule*, Reuters (Mar. 24, 2023), <https://www.reuters.com/legal/us-justice-depts-google-advertising-case-gets-fast-paced-schedule-2023-03-24/>.

attention, maximize popularity, and ultimately profits.”⁵² Algorithmic curation has indelibly changed the media landscape – for example, Facebook’s News Feed algorithm “has given rise to a large number of new media organizations, many of which exist only thanks to advertising revenue they receive from publishing on Facebook.”⁵³ On the one hand, this has “provided opportunities for smaller media organizations to compete for attention with large well-funded and established media sources,”⁵⁴ which may beneficially increase the range of viewpoints and voices in the popular discussion. On the other hand, because “the economic rewards of producing media that use anger, outrage, ridicule, and tribal bonding are immediate and significant,” publishers find themselves torn between the need for profit and the societal good of producing meaningful, but decidedly less sensational, news content.⁵⁵

Gatekeeper-platforms may also employ other tactics to keep users on their own sites rather than clicking through to publisher pages. These can include posting a large amount of the publisher’s content on the platform page, with the intent of giving the user the information they sought without requiring the user to click a link; establishing technological limits on links that make it less convenient for a user to click through; and comingling ads and legitimate news sources in a single list.

V. Conclusion

This informational hearing will examine the issues facing publishers and the ways in which the digital landscape is helping, or hindering, journalism today. The Committee will hear about the experiences of a range of California publishers, as well as from members of academia and the tech industry. The Committee will also hear about measures taken in other countries to address some of the concerns raised by the news industry.

⁵² Lischka & Garz, *Clickbait and algorithmic curation: A game theory framework of the relation between journalism, users, and platforms*, *New Media & Society* (Vol. 25, Issue 8 (Aug. 2023)).

⁵³ Buckler, Faris, & Roberts, *Mammon’s Algorithm: Marketing, Manipulation, and Clickbait on Facebook*, published in *Network Propaganda* (2018) p. 280.

⁵⁴ *Ibid.*

⁵⁵ *Ibid.* Algorithms can also be tweaked to deprioritize journalism entirely. Earlier this year, many noticed that referrals to top news sites from Facebook had significantly decreased and posited that it was the result of changes in the platform’s content-recommendation algorithms. (See, e.g., Darcy, *Publishers see dramatic drop in Facebook referral traffic as the social platform signals exit from news business*, CNN (Aug. 17, 2023), <https://www.cnn.com/2023/08/17/media/facebook-referral-traffic-reliable-sources/index.html>).