Understanding the Impacts of Generative Artificial Intelligence on U.S. Newsrooms

Camryn Uyen Pak

Stanford University

Department of Communication

Advised by Dr. Jay Hamilton

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Abstract

This literature review explores the impacts of generative artificial intelligence (AI) on American news organizations as of March 2024. It analyzes news articles, research studies, legal documents, and newsroom guidelines to examine the evolving content creation practices and ongoing lawsuits that stem from the growth of generative AI technologies. While media organizations implement AI-specific policies and new leadership roles intending to increase newsroom efficiency, the integration of generative AI tools into journalistic workflows raises ethical reporting concerns. Each newsroom has unique policies to address the use of these new technologies, but the majority agree that there is a strong need for human oversight. Furthermore, the creation of generative AI tools and their outputs have sparked copyright infringement allegations by media organizations. These legal disputes also highlight potential economic ramifications for the news industry. Ultimately, this paper emphasizes the need for ethical considerations and ongoing dialogue between stakeholders when deciding how to use AI technologies in newsrooms.

Keywords: news, media industry, artificial intelligence, copyright infringement

Introduction

Over the past few years, generative artificial intelligence (AI) systems amassed millions of users worldwide. The output of these technologies, typically manifesting as text or images, comes from generative AI models being trained on data from books, news articles, webpages, and other media. The growing prominence of generative AI raises questions about government regulation and concerns about how these technologies are used and potentially abused. For example, last year, New York attorney Steven Schwartz was sanctioned for his use of ChatGPT, a generative AI tool that answers prompts given by users.[1] The model provided Schwartz with fabricated judicial opinions and citations which he used in a legal brief.

Not limited to the legal sector, other industries have also felt the impact of generative AI technologies. Last year, Hollywood screenwriters went on a nearly five-month-long strike. Their fear of generative AI taking over their scriptwriting jobs stood at the top of their list of concerns.[2] Among the Writers Guild of America's demands were requirements for studios and production companies to disclose AI-generated material to writers and to prohibit AI from being credited as a writer.[3] However, both the Writers Guild and the studios that negotiated with the collective agreed that generative AI possesses the potential to be useful and can thus be used in tandem with writers' original work. The tricky balancing game that comes alongside the rise of these technologies has also been felt in the education system, where some professors opt to give students the choice of using generative AI for assignments, as long as its use is documented. Other instructors prohibit its use entirely, though there still are no foolproof methods to determining whether text is AI-generated.

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[1] Benjamin Weiser and Nate Schweber, "The ChatGPT Lawyer Explains Himself," *The New York Times*, June 8, 2023, https://www.nytimes.com/2023/06/08/nyregion/lawyer-chatgpt-sanctions.html.
[2] Jake Coyle, "In Hollywood writers' battle against AI, humans win (for now)," *Associated Press*, September 27, 2023, https://apnews.com/article/hollywood-ai-strike-wga-artificial-intelligence-39ab72582c3a15f77510c9c30a45ffc8.
[3] Coyle, "Hollywood writers."

Though discussions regarding the regulation of generative AI technologies continue to grow in number across the United States, Congress has yet to pass any legislation regarding the technologies. In October 2023, the White House issued an executive order stating that among its priorities is "advancing a coordinated, Federal Government-wide approach" to regulating AI. However, creators of these technologies remain unrestricted by AI-specific statutes.[4] Despite this lack of federal legislation, there are existing laws that broadly touch upon issues that are implicated in generative AI use; among these are copyright, privacy, and security.[5] Furthermore, state legislatures have responded to Congressional inaction with bills of their own. As of February 2024, 44 state legislatures have drafted 407 bills pertaining to AI.[6] Among these bills' sponsors is California State Senator Scott Wiener, a San Francisco Democrat. With a Democrat-majority state legislature and a multitude of tech companies in Silicon Valley, California has the potential to set precedents in AI legislation for other lawmaking bodies around the nation.[7] Nevertheless, Capitol Hill has become increasingly invested in the issue and has held many hearings on generative AI technologies, and last year, the U.S. Copyright Office solicited public comments to inform its pending intellectual property-related regulatory measures.[8]

As the impacts of generative AI technology are felt across industries, it is important to understand how — and to what extent — the status quo will be affected. This literature review will focus on generative AI's impacts on U.S. newsrooms. Journalists play a constitutionally

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[4] Joseph R. Biden Jr., "Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence," *The White House*, October 30, 2023, https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/.
[5] Victor Li and Duane Pozza, "What could AI regulation in the US look like?" *American Bar Association Journal*, podcast audio, June 14, 2023, https://www.americanbar.org/groups/journal/podcast/what-could-ai-regulation-in-the-us-look-like/.
[6] Gerrit De Vynck and Cat Zakrzewski, "In Big Tech's backyard, California lawmaker unveils landmark AI bill," *The Washington Post*, February 8, 2024, https://www.washingtonpost.com/technology/2024/02/08/california-legislation-artificial-intelligence-regulation/.
[7] De Vynck and Zakrzewski, "In Big Tech's backyard."
[8] "Artificial Intelligence and Copyright," U.S. Copyright Office, accessed February 22, 2024, https://www.regulations.gov/docket/COLC-2023-0006/comments.

protected role in fulfilling the public's right to know, and their work enables Americans to make informed decisions when exercising their right to vote. In the United States, media outlets provide people with information about current events, share a wide range of political perspectives, and serve as watchdogs by monitoring the actions of government officials. This role is paramount to a functioning democracy. With generative AI changing the way information is synthesized, shared, and digested by readers, it is of great importance to study how newsrooms will be affected.

To answer the question of how generative AI might impact the long-standing practices of journalists and the ways their reporting is used, this literature review will examine studies, reports, and articles concerning two issues. To examine the first issue — how generative AI technologies impact newsroom workflows — this paper will scrutinize newsroom policies and initiatives that have been created in response to the rise of generative AI. Focusing on the guidelines followed in assembling a journalistic piece will showcase generative AI's applicability to reporters' work. The second issue — copyright implications posed by generative AI and the technology's potential impacts on the market for reporting — will be analyzed in the context of ongoing lawsuits and partnerships between media organizations and generative AI developers.

The Impacts of Generative Artificial Intelligence on Journalistic Practices

American journalists have long been touted as protectors of democracy. By promoting government transparency and empowering citizens to make informed decisions, reporters play an essential role in upholding the democratic norms that the U.S. was founded upon. Indeed, a 2022 research review by the Democracy Fund, a nonpartisan private foundation, shows that strong

local journalism goes hand-in-hand with greater turnout on Election Day, minimizes voter biases, and counters narratives that spark greater polarization.[9] The need for good journalism is made even more relevant in the wake of the declining news industry; researchers at Northwestern University say that more than a fifth of U.S. citizens live in news deserts, and oftentimes those who lack access to these information sources are generally poorer, older, and do not have the means to access digital journalism.[10]

Professional newsroom organizations have long followed common standards that emphasize the importance of seeking the truth, ethical newsgathering, and the necessarily thorough editorial practices that govern the way information is disseminated to readers. The Society of Professional Journalists Code of Ethics, for example, lays out four key principles for reporters to follow: seek and report the truth, minimize harm, act independently, and be transparent.[11] According to these guidelines, ethical reporters ought to strive "to ensure the free exchange of information that is accurate, fair and thorough."[12] This brings forth the debate over how generative AI technologies ought to be used, if at all, in the newsroom. If information is generated via these models and not via the traditional newsgathering methods that have been in practice for decades, can journalists continue to fulfill the role bestowed upon them by the U.S. Constitution?

Contrary to common belief, some newsrooms have been using AI technologies for years. In his *Wall Street Journal* op-ed, "AI and Journalism Need Each Other," computational journalist Francesco Marconi recounts his early experiences with AI in the newsroom. He writes that the

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[9] Josh Stearns and Christine Schmidt, "How We Know Journalism is Good for Democracy," *Democracy Fund*, September 15, 2022, https://democracyfund.org/idea/how-we-know-journalism-is-good-for-democracy/.
[10] Penny Abernathy, "The State of Local News," *Northwestern University*, June 29, 2022, https://localnewsinitiative.northwestern.edu/research/state-of-local-news/report/.
[11] "SPJ Code of Ethics," *Society of Professional Journalists*, accessed February 27, 2024, https://www.spj.org/ethicscode.asp.
[12] "SPJ Code of Ethics."

Associated Press (*AP*) has been using AI tools to expand its quarterly financial reporting since as early as 2014.[13] Subsequent research on this practice showed that using AI tools led to greater trading activity and a stronger market for the *AP*.[14] With relatively easier access to AI tools today, reporters can use the technologies to more efficiently conduct data analysis tasks, "revealing insights that were once obscured," Marconi writes.[15] These technologies can also be used to analyze public records and sift through piles of documents. Tasks that traditionally took journalists days to complete, such as reading and condensing text, can be done with a click of a mouse. This would allow for greater reporting flexibility and would leave mundane information analysis obligations to AI tools, thus enabling reporters to allocate their time to more meaningful, impactful journalism.

There is a difference between the aforementioned AI technologies used by the *AP* and newer generative AI models that create images and text for reporters. While the latter can help increase the efficiency of the non-reporting and non-writing tasks typically taken on by media organizations' business teams, generative AI technologies can tackle tasks typically handled by reporters and editors. It is these generative tools that today's newsroom leaders struggle to integrate into their workflows; there is no clear, industry-wide standard for how these technologies ought to be used. Some media outlets have already stirred controversies with their use of generative AI for reporting. In November 2023, *Futurism*, a news website that focuses on how science and technology are changing society, reported on how it caught *Sports Illustrated* publishing articles generated by AI and passing them off as written by real people.[16] Not only was the text in the articles AI-generated, but *Sports Illustrated* even used the technologies to

[13] Francesco Marconi, "AI and Journalism Need Each Other," *Wall Street Journal*, December 28, 2023, https://www.wsj.com/articles/ai-and-journalism-need-each-other-nyt-lawsuit-fair-price-news-565d744d.
[14] Marconi, "AI and Journalism."
[15] Marconi, "AI and Journalism."
[16] Maggie Harrison Dupré, "Sports Illustrated Published Articles by Fake, AI-Generated Writers," *Futurism*, November 27, 2023, https://futurism.com/sports-illustrated-ai-generated-writers.

generate headshots and short biographies for the supposed reporters who wrote the articles. After reaching out to *Sports Illustrated*'s publisher, *Futurism* received a statement saying that an external third-party contractor was responsible for the content in question.[17] According to the publisher, the contractor maintained that all the articles it provided to *Sports Illustrated* were written and edited by humans. However, after consulting with sources familiar with the way *Sports Illustrated* content is created, *Futurism* investigators remained skeptical about how the articles in question were written.[18] The discovery of the headshots of the alleged writers on a website that sells AI-generated images did not help *Sports Illustrated's* case.[19]

The *Sports Illustrated* fiasco was not an isolated incident. Other media groups, including *BuzzFeed* and Gannett, the publisher of *USA Today*, have also been scrutinized for the use of generative AI in their newsrooms. After *BuzzFeed* CEO Jonah Perretti condemned using generative AI for "content farming" — churning out a large quantity of low-quality material to increase advertising revenue — and promised to instead use the technologies for quality reporting and for *BuzzFeed*'s interactive media components, the media organization "quietly started publishing fully AI-generated articles produced by non-editorial staff."[20] Most of these articles were light-hearted travel blogs or guides to different tourist destinations around the world, written by generative AI tools to appear as if a human author had documented their traveling experiences.[21] These stories had very similar headlines to each other and read like they were written through the use of a template. Though *BuzzFeed* was transparent in its use of generative AI technologies, Perretti and his company faced great criticism for the lackluster

[17] Harrison Dupré, "Sports Illustrated."
[18] Harrison Dupré, "Sports Illustrated."
[19] Harrison Dupré, "Sports Illustrated."
[20] Noor Al-Sibai and Jon Christian, "BuzzFeed Is Quietly Publishing Whole AI-Generated Articles, Not Just Quizzes," *Futurism*, March 30, 2023, https://futurism.com/buzzfeed-publishing-articles-by-ai.
[21] Al-Sibai and Christian, "Buzzfeed Is Quietly Publishing."

content generated by these tools.[22] Quality issues were also underscored in Gannett's experiences using these tools; AI-generated stories often included unwanted sentence structure repetition, awkward phrasing, and a need for corrections by human editors.[23] Although seemingly insignificant, these issues undermine the ethos of media organizations, thus detracting from reporters' ability to provide the American public with the information they need to understand the world around them.

Stylistic concerns are only one facet of the worry that has grown around generative AI's role in the newsroom. AI-generated stories have the potential to confuse or mislead readers, especially if large language models return made-up information to their users. As generative AI becomes increasingly popular and more accessible, newsrooms have quickly adapted their internal policies to address the use of these technologies. *The Journalist's Resource*, a project born out of the Harvard Kennedy School, recently researched the guidelines and policies of 52 news organizations to learn about how newsrooms are handling the rise of generative AI.[24] Although not all 52 studied organizations are U.S. newsrooms, the key takeaways remain the same across the news industry on a global scale. The December 2023 report found that commercial news organizations — those that do not receive public funding — are more likely to have detailed information on permitted and prohibited applications of generative AI.[25] Commercial news organizations are also more likely to emphasize source protection and caution their reporters against using generative AI to analyze confidential information.[26] The majority of

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[22] James Farrell, "BuzzFeed's new AI-generated travel articles are a dystopian bad dream," *Silicon Angle*, March 20, 2023, https://siliconangle.com/2023/03/30/buzzfeeds-new-ai-generated-travel-articles-dystopian-bad-dream/.
[23] Clare Duffy, "Gannett to pause AI experiment after botched high school sports articles," *CNN*, August 31, 2023, https://www.cnn.com/2023/08/30/tech/gannett-ai-experiment-paused/index.html.
[24] Clark Merrefield, "Researchers compare AI policies and guidelines at 52 news organizations around the world," *The Journalist's Resource*, December 12, 2023, https://journalistsresource.org/home/generative-ai-policies-newsrooms/.
[25] Merrefield, "Researchers compare AI policies."
[26] Merrefield, "Researchers compare AI policies."

major newsrooms in the U.S. are commercial news organizations, so these trends are likely to hold across the American news industry. Because smaller media organizations are known to follow in the steps of national newsrooms regarding style guides, leading stories, and staff-wide policies, those that do not yet have AI-related policies will likely follow suit with similar guidelines.

Other trends seen in newsroom guidelines and policies across the world include an emphasis on human oversight. The findings from *The Journalist's Resource* highlighted the importance newsrooms place on journalistic values such as public service, objectivity, autonomy, immediacy, and ethics; 71% of newsroom guidelines and policy documents mentioned these values.[27] These values are upheld, in part, by reporters and editors doing their duty to the truth by fact-checking the information they publish. Furthermore, 69% of examined guidelines and policy documents mentioned the shortcomings of generative AI.[28] One of the most common pitfalls is "hallucinating" — when generative AI makes up information. Research conducted in 2023 shows that depending on which generative AI chatbot one uses, hallucinations can occur from as infrequently as 3% of the time to as frequently as 27% of the time.[29] Publishing a news article that contains hallucinated information is detrimental to the credibility of reporters, whose job is to serve as authority figures who empower constituents with the knowledge to make informed decisions on Election Day. Newsroom emphasis on potential pitfalls goes to show that although some journalists believe these new technologies may be useful, generative AI cannot fully be relied on to carry out reporting. Although the level to which generative AI will be used in the

[27] Merrefield, "Researchers compare AI policies."
[28] Merrefield, "Researchers compare AI policies."
[29] Cade Metz, "Chatbots May 'Hallucinate' More Often Than Many Realize," *The New York Times*, November 6, 2023, https://www.nytimes.com/2023/11/06/technology/chatbots-hallucination-rates.html.

newsroom is currently unclear, this shows that in theory, these technologies will at least be used by reporters with the awareness that model-generated outputs will not always be fit to print.

Another common element present in newsroom guidelines related to generative AI is the acknowledgment of how quickly the technology landscape is changing; therefore, guidelines and policies are likely to be modified as these tools are updated.[30] Some newsrooms are even using their resources to establish teams and appoint individuals to lead the development of policies about the use of generative AI. *The New York Times*, one of the organizations setting precedents in handling these new tools in the newsroom, appointed journalist and media entrepreneur Zach Seward as its editorial director of AI initiatives. The paper's executive editor, Joseph Kahn, and one of its deputy managing editors, Sam Dolnick, wrote that among Seward's responsibilities is working alongside newsroom leadership to establish principles for AI use.[31] Seward will also "build a small team in the newsroom to experiment" with AI technologies as tools for journalists, and he will "track the industry's quickly shifting landscape to help ensure that *The Times* keeps pace."[32] Kahn and Dolnick also underscored that stories written by *The New York Times* will always be reported, written, and edited by reporters, and the role of AI tools is primarily to supplement the role of journalists and expand reporting opportunities.[33]

In a similar vein, the *AP*, known for its influence in the news industry through its style guide, national polling, and wire photos, unveiled its AI initiatives that leverage new technologies "to advance the power of facts."[34] On its website, the *AP* presents newsroom AI tools as a means to allow its reporters to focus on higher-impact journalism as opposed to

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[30] Merrefield, "Researchers compare AI policies."
[31] Joe Kahn and Sam Dolnick, "Zach Seward Is the Newsroom's Editorial Director of A.I. Initiatives," *The New York Times*, December 12, 2023, https://www.nytco.com/press/zach-seward-is-the-newsrooms-editorial-director-of-a-i-initiatives/.
[32] Kahn and Dolnick, "Zach Seward."
[33] Kahn and Dolnick, "Zach Seward."
[34] "Leveraging AI to advance the power of facts: Artificial intelligence at The Associated Press," *Associated Press*, accessed February 23, 2024, https://www.ap.org/discover/artificial-intelligence.

"important but repetitive" coverage.[35] The organization will use generative AI and other non-generative AI technologies to fact-check information found online, generate summaries of stories, and use image recognition to assist with news distribution.[36] By looking beyond generative AI for the production process and exploring its use for distribution, the *AP* recognizes the broader applications of these tools and will likely continue to adapt as the abilities of these technologies expand.

So, to what extent should newsrooms be using these technologies, and would the reliance of American reporters on generative AI impact their duty to democracy? The answers change depending on who one asks. Nicholas Carlson, editor-in-chief of *Business Insider*, wrote in a note to his staff writers that "ChatGPT is not a journalist," but he still encouraged reporters to experiment with the tool to research and brainstorm story ideas.[37] He also said that no content generated by AI should be copied and pasted into stories and published by *Insider*, but the tool can be used to edit drafts before they are filed with editors.[38] *Wired*, on the other hand, stated in its guidelines no text edited by AI will be published: "editing is… a matter of judgment about what is most relevant, original, or entertaining about the piece. This judgment depends on understanding both the subject and the readership, neither of which AI can do," the policy reads.[39] Tricky ethical questions on how human oversight should be balanced with generative AI tools continue to be weighed by newsrooms. Because questions of journalism ethics do not have clear answers, different newsrooms will likely continue to follow their unique policies as opposed to conforming to a universal set of guidelines.

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[35] "Leveraging AI to advance the power of facts."
[36] "Leveraging AI to advance the power of facts."
[37] Nicholas Carlson, "My editor's note to the newsroom on AI: Let's think of it like a 'bicycle of the mind,'" *Business Insider*, April 13, 2023, https://www.businessinsider.com/how-insider-newsroom-will-use-ai-2023-4.
[38] Carlson, "My editor's note."
[39] "How WIRED Will Use Generative AI Tools," *Wired*, May 22, 2023, https://www.wired.com/about/generative-ai-policy/.

Those who work outside of the newsroom, such as academics, media researchers, and policy experts, have also opined on how journalists ought to use these technologies. In generating policies around the use of AI, University of Amsterdam postdoctoral researcher Hannes Cools and Northwestern University professor Nick Diakopoulos emphasized the necessity for drawing upon pre-existing journalistic guidelines, as opposed to starting from scratch.[40] They further contended that these guidelines ought to be written by a diverse set of stakeholders — not just journalists but also individuals from sales and marketing teams — recognizing that risks that arise in the newsroom also pose "company-wide risks that transcend the day-to-day workflows of journalists."[41] Other non-newsroom entities, such as the Knight Foundation, have poured money into initiatives to integrate AI technologies with American newsrooms.[42] The Partnership on AI, a non-profit coalition committed to the responsible use of AI technologies, received $600,000 in funding from the Knight Foundation to support a project to "identify the major ethical challenges for the use of AI across the news lifecycle and develop best practices for the responsible use of AI in journalism."[43] Their 10-step guide for adopting AI technologies in newsrooms includes establishing performance benchmarks, interviewing tool developers, and understanding the life cycle of these tools.[44] Researchers from the Partnership on AI also cautioned newsrooms against integrating AI without having clear objectives and active supervision from newsroom staff.[45]

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[40] Hannes Cools, "Towards Guidelines for Guidelines on the Use of Generative AI in Newsrooms," *Generative AI in the Newsroom*, July 9, 2023, https://generative-ai-newsroom.com/towards-guidelines-for-guidelines-on-the-use-of-generative-ai-in-newsrooms-55b0c2c1d960.
[41] Cools, "Towards Guidelines for Guidelines."
[42] Paul Cheung, "AI for local news: advancing business sustainability in newsrooms," *Knight Foundation*, May 12, 2021, https://knightfoundation.org/articles/ai-for-local-news-advancing-business-sustainability-in-newsrooms/.
[43] PAI Staff, "Partnership on AI Awarded Knight Foundation Grant to Support Local News," *Partnership on AI*, May 13, 2021, https://partnershiponai.org/knight-ai-for-local-news-grant/.
[44] Claire Leibowicz et al., "AI Adoption for Newsrooms: A 10-Step Guide," *Partnership on AI*, accessed March 2, 2024, https://partnershiponai.org/ai-for-newsrooms/.
[45] Leibowicz et al., "AI Adoption for Newsrooms."

Despite a lack of clear consensus among newsroom leadership and researchers on how generative AI should be used, these tools are likely here to stay. *Columbia Journalism Review*, which publishes articles specifically for journalists and academics interested in the news, recently released a report that speculates on how artificial intelligence may impact journalism and the public arena. Through interviews conducted with news workers and AI experts, the February 2024 report concluded that the situation with AI in the newsroom will "neither be as dire as the doomsayers predict nor as utopian as the enthusiasts hope."[46] Furthermore, the report mentions the necessity of developing frameworks to balance technological innovation with concerns around copyright and other harms.[47] It seems likely that, alongside researchers and academics, the leaders of media organizations will continue to explore the potential uses of AI technologies for their reporters. These leaders are united in their approach by worries about the pitfalls of generative AI and the need for human oversight. Though the newsroom is currently nowhere near a full AI takeover, that could be subject to change as these tools are further integrated into the media landscape.

Generative Artificial Intelligence and Newsroom Copyright Concerns

In addition to impacting the production of news, generative AI technologies pose significant implications for the products of reporting. Although generative AI can be used to assist reporters with writing and editing content, the process of creating these tools can harm newsrooms by using journalists' work as training data without providing them credit or financial compensation. One major qualm with generative AI models is that they are trained on

[46] Felix M. Simon, "Artificial Intelligence in the News: How AI Retools, Rationalizes, and Reshapes Journalism and the Public Arena," *Columbia Journalism Review*, February 6, 2024, https://www.cjr.org/tow_center_reports/artificial-intelligence-in-the-news.php.
[47] Simon, "Artificial Intelligence in the News."

copyrighted works scraped from the Internet. This complaint echoes across industries and has given rise to lawsuits alleging that in training these models without permission from copyright holders, developers have broken copyright laws. *Los Angeles Times* reporter Jill Leovy, whose work has been used non-consensually by technology companies to train generative AI models, added that this copyright infringement also poses ethical concerns.[48] These concerns are especially present in a reporter's agreements with their sources, who arguably share information with the media for a specific story — not for training generative AI tools.[49]

The outcomes of lawsuits alleging copyright infringement will likely regulate how technology companies create generative AI tools. Indeed, Axios technology journalist Megan Morrone wrote in January 2024 that fights over copyright are more likely to quickly influence the course of AI development than legislation or regulation.[50] In her reporting, Morrone points to the flurry of lawsuits that were initiated by content creators last year in an attempt to protect their works from "getting gobbled up and repackaged by generative AI tools."[51] Court rulings on these cases, she argues, could impact the progress of AI innovation.[52] In the past year, software companies that create generative AI technologies such as OpenAI, Microsoft, Anthropic, Midjourney, Stability AI, and DeviantArt, have been alleged to have committed copyright infringement by illegally training their models on copyrighted content from media companies.[53]

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[48] Chase DiFeliciantonio, "Could OpenAI save journalism? Bay Area news outlets using their money to try," *San Francisco Chronicle*, February 21, 2024, https://www.sfchronicle.com/bayarea/article/open-ai-journalism-chatgpt-nytimes-lawsuit-18652364.php.
[49] DiFeliciantonio, "Could OpenAI save journalism?"
[50] Megan Morrone, "Copyright law is AI's 2024 battlefield," *Axios*, January 2, 2024, https://www.axios.com/2024/01/02/copyright-law-violation-artificial-intelligence-courts.
[51] Morrone, "Copyright law battlefield."
[52] Morrone, "Copyright law battlefield."
[53] Joe Panettieri, "Generative AI Lawsuits Timeline: Legal Cases vs. OpenAI, Microsoft, Anthropic and More," *Sustainable Tech Partner*, March 1, 2024, https://sustainabletechpartner.com/topics/ai/generative-ai-lawsuit-timeline/.

To understand these lawsuits, however, it is first necessary to understand the origins and intentions of copyright law. The constitutional purpose of copyright is "to promote the process of Science and useful Arts."[54] According to digital copyright scholar Pamela Samuelson, this means that in practice, copyright should "foster the creation and dissemination of knowledge for the public good."[55] In other words, the primary aim of copyright is to set incentives for the continued creation of technology and art. It is not meant to protect the livelihoods or privacy of individual creators nor shield them from defamation.[56] Furthermore, a legal analyst from *Bloomberg News* wrote that courts recognize that "the primary and ultimate beneficiary of copyright laws is the public, who consume copyrighted works to expand their knowledge and understanding of the world."[57] Thus, this is also a consideration in determining copyright infringement. In her talk titled "Large Language Models Meet Copyright Law," Samuelson states that copyright law only cares about a work's original expression — the way authors showcase their ideas — not the ideas themselves.[58] Developers of generative AI systems are typically not interested in the expression of copyrighted works but rather in the data they embody.[59] Therefore, the data, facts, and ideas present in generative AI outputs would not fall within the scope of copyright law, which makes it difficult to allege copyright infringement. Infringement occurs when one's work embodies substantially similar expression appropriated from a copyrighted work, which is generally uncharacteristic of outputs from generative AI systems.

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[54] "Constitution Annotated: Analysis and Interpretation of the U.S. Constitution," *Library of Congress*, accessed March 5, 2024, https://constitution.congress.gov/browse/article-1/section-8/clause-8/.
[55] Pamela Samuelson, "Generative AI Meets Copyright: Ongoing lawsuits could affect everyone who uses generative AI," *Science* 381, no. 6654 (July 2023): 158-161, https://www.science.org/doi/10.1126/science.adi0656.
[56] Pamela Samuelson, "Large Language Models Meet Copyright Law," filmed August 16, 2023 at the University of California, Berkeley, Berkeley, CA, video, 1:10:20, https://simons.berkeley.edu/talks/pamela-samuelson-uc-berkeley-2023-08-16.
[57] Golriz Chrostowski, "ANALYSIS: Generative AI to Test the Boundaries of Fair Use," *Bloomberg Law*, November 5, 2023. https://news.bloomberglaw.com/bloomberg-law-analysis/analysis-generative-ai-to-test-the-boundaries-of-fair-use.
[58] Samuelson, "Large Language Models."
[59] Samuelson, "Large Language Models."

Because copyright infringement hinges on outputs that demonstrate substantially similar expression to copyrighted works, lawsuits filed against generative AI developers have yet to yield favorable outcomes in court. Comedian Sarah Silverman, who is part of class-action lawsuits against OpenAI and Meta, has faced hurdles in court; a federal judge has already dismissed part of her lawsuit against Meta because outputs of the company's large language model, LLaMa, have not been shown to be substantially similar to Silverman's book.[60] Another federal judge dismissed copyright infringement claims by digital artists, who filed lawsuits last year against technology companies Stability AI, Midjourney, and Deviant Art.[61] Technology companies have often used the legal doctrine of "fair use" to justify training their generative AI models. Courts consider four key factors in determining whether the use of copyrighted work is fair: the purpose and character of the use, the nature of the copyrighted work, the amount and substantiality of the work taken, and the effects of the use.[62] It is acceptable to use copyrighted works for teaching, research scholarship, news, criticism, and comment purposes.[63] Furthermore, whether the use of copyrighted works is "transformative" has become the standard for determining what constitutes fair usage of copyrighted material.[64] Transformative uses of copyrighted works include parodies and works that have different purposes than the original work.[65] Companies that create generative AI technologies argue that their use of copyrighted works is transformative, and thus contend that they are not infringing copyright law.[66]

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[60] Andrew Albanese, "Judge Will Toss Part of Authors' AI Copyright Lawsuit," *Publishers Weekly*, November 13, 2023, https://www.publishersweekly.com/pw/by-topic/industry-news/publisher-news/article/93726-judge-will-toss-part-of-authors-ai-copyright-lawsuit.html.
[61] Albanese, "Judge Will Toss."
[62] Samuelson, "Large Language Models."
[63] Samuelson, "Large Language Models."
[64] Samuelson, "Large Language Models."
[65] Samuelson, "Large Language Models."
[66] Chrostowski, "Boundaries of Fair Use."

Generative AI companies currently rely on a couple of key legal precedents in their defense against copyright infringement allegations. In *Field v. Google, Inc.*, a case decided in the U.S. District Court for the District of Nevada, plaintiff Blake Field argued that "by allowing Internet users to access copies of 51 of his copyrighted works stored by Google in an online repository, Google violated Field's exclusive rights to reproduce copies and distribute copies of those works."[67] In its ruling, the District Court held that Google engaged in fair use of these works, setting the precedent that technology companies can use copyrighted content when caching and indexing Internet sites.[68] In another case, *Authors Guild v. Google, Inc.*, the U.S. Court of Appeals for the Second Circuit held that Google's use of copyrighted books to return responses to its users' search queries counted as transformative fair use.[69] In these two cases, Google made it easier for users to find copyrighted works, which arguably benefitted the authors who own the rights to these works. Indeed, Samuelson states in her lecture that in general, courts have recognized that individuals do not consult search engines to read entire books; search engines allow authors' works to be found.[70] Additionally, Google's technologies that utilize these copyrighted works do not produce outputs to compete with these works, thus not posing any economic harm to copyright holders. The potential of AI-generated content to create market harm, alleged by the first lawsuit against generative AI developers by a news organization, raises new questions for the courts to answer.

In December 2023, *The New York Times* became the first major media organization in the U.S. to sue technology companies over copyright issues.[71] Unlike the plaintiffs in *Field* and

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[67] "Field v. Google, Inc.," *Casetext*, January 19, 2006, https://casetext.com/case/field-v-google-inc.
[68] "Field v. Google, Inc."
[69] "Authors Guild v. Google, Inc., No. 13-4829 (2d Cir. 2015)," *Justia: US Law*, October 16, 2015, https://law.justia.com/cases/federal/appellate-courts/ca2/13-4829/13-4829-2015-10-16.html.
[70] Samuelson, "Large Language Models."
[71] Michael M. Grynbaum and Ryan Mac, "The Times Sues OpenAI and Microsoft Over A.I. Use of Copyrighted Work," *The New York Times*, December 27, 2023. https://www.nytimes.com/2023/12/27/business/media/new-york-times-open-ai-microsoft-lawsuit.html.

Authors Guild, *The Times*' lawsuit against OpenAI and Microsoft carries the additional allegation that the "millions of articles published by *The Times* were used to train automated chatbots that now compete with the news outlet as a source of reliable information."[72] This additional assertion concerning competition in the news market sets *The Times*' lawsuit apart from others that merely contend that using copyrighted data to train models is infringement, which *The Times*' complaint also alleges.[73] If the outputs of generative AI technologies can compete with original copyrighted works, then the first and fourth factors in determining fair use — the purpose and character of the use and the effects of the use — are impacted. *The Times*' complaint elaborates on this by stating that developers' claims of transformative fair use are false, alleging that their use cannot be considered transformative because generative AI utilizes the media organization's content "without payment to create products that substitute for *The Times* and steal audiences away from it."[74]

There are legal precedents that mention competition created by works produced using copyrighted content, according to *Washington Post* technology reporter Will Oremus and media reporter Elahe Izadi. In their article, "AI's future could hinge on one thorny legal question," Oremus and Izadi write that last year, the U.S. Supreme Court found in *Andy Warhol Foundation for the Visual Arts, Inc. v. Goldsmith* that "if the copying is done to compete with the original work, 'that weighs against fair use' as a defense."[75] Therefore, Oremus and Izadi contend, that *The Times*' case may depend on whether it can show that generative AI technologies harm its business. Two months after *The Times*' lawsuit, OpenAI responded by filing a motion to dismiss

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[72] Grynbaum and Mac, "The Times Sues OpenAI."
[73] "Complaint," *The New York Times*, December 27, 2023, https://nytco-assets.nytimes.com/2023/12/NYT_Complaint_Dec2023.pdf.
[74] "Complaint."
[75] Will Oremus and Elahe Izadi, "AI's future could hinge on one thorny legal question," *The Washington Post*, January 4, 2024. https://www.washingtonpost.com/technology/2024/01/04/nyt-ai-copyright-lawsuit-fair-use/.

certain elements of the complaint, including the competition aspect of the allegations.[76] "ChatGPT is not in any way a substitute for a subscription to *The New York Times*," the motion reads.[77] It states that users of ChatGPT do not use the technology for the purpose of reading the news.[78]

On top of claims that generative AI outputs compete with copyrighted stories, *The Times* has done what Silverman and her co-plaintiffs could not: show outputs that are identical to their articles. *The Times*' lawsuit points to instances where the information produced by OpenAI's generative AI technologies returned near-verbatim excerpts from *New York Times* articles.[79] These examples could fill the gaps that were present in Silverman's allegations; they show outputs that are "substantially similar" to copyrighted works.[80] A lack of these outputs justified the dismissal of Silverman's claims, so with this evidence, *The Times* potentially has a stronger case. However, OpenAI's lawyers responded by stating that nearly identical outputs were "highly anomalous" and the result of numerous attempts by *The Times* using deceptive prompts to generate the outputs.[81] Furthermore, OpenAI claims that the near-perfect similarity between the outputs and the copyrighted articles occurred because of a bug, which the company has pledged to fix.[82]

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[76] "Memorandum of Law in Support of OpenAI Defendants' Motion to Dismiss," *The New York Times*, February 26, 2024, https://static01.nyt.com/newsgraphics/documenttools/82a013b9ba852548/9d4b1790-full.pdf.
[77] "Memorandum of Law."
[78] "Memorandum of Law."
[79] Cade Metz and Katie Robertson, "OpenAI Seeks to Dismiss Parts of The New York Times's Lawsuit," *The New York Times*, February 27, 2024, https://www.nytimes.com/2024/02/27/technology/openai-new-york-times-lawsuit.html.
[80] Joshua Benton, "The legal framework for AI is being built in real time, and a ruling in the Sarah Silverman case should give publishers pause," *Nieman Lab*, November 27, 2023, https://www.niemanlab.org/2023/11/the-legal-framework-for-ai-is-being-built-in-real-time-and-a-ruling-in-the-sarah-silverman-case-should-give-publishers-pause/.
[81] Metz and Robertson, "OpenAI Seeks to Dismiss."
[82] Ina Fried, "OpenAI says NYT 'hacked' ChatGPT to produce allegedly infringing results," *Axios*, February 27, 2024, https://www.axios.com/2024/02/27/openai-says-nyt-hacked-chatgpt-to-produce-allegedly-infringing-results.

Other newsrooms have also seen instances where generative AI technologies have returned outputs with wording taken from their articles. Just a couple of months after *The Times*, a leading media organization in the reporting industry, filed its lawsuit against OpenAI and Microsoft, news organizations *The Intercept*, *Raw Story*, and *AlterNet* followed suit by accusing OpenAI of using copyrighted articles to train ChatGPT in two lawsuits.[83] The allegations are very similar to those made by *The Times*; the media organizations' attorneys allege that ChatGPT provides users with AI-generated responses that regurgitate articles "verbatim or nearly verbatim" without providing credit to the writers or mentioning source information.[84] The courts have yet to issue any rulings on the cases brought against generative AI developers by newsroom organizations.

In the meantime, some news organizations have moved to block AI "web crawlers" from accessing their content. Web crawlers are tools used by companies that create AI technologies to scrape information from websites to train their models. Information gathered from these web crawlers can also be used by search engines to generate responses to queries made by users. Media organizations have recently pushed back against these practices, citing the need for financial compensation if their data is non-consensually used to train AI technologies. Other news agencies criticized web crawlers for other reasons including the potential for generative AI outputs to misinform viewers. These newsrooms claim that generative AI tools could distort or misrepresent information found on news websites.[85] A February 2024 study by the Reuters Institute examined the extent to which media organizations around the world have blocked web

[83] Blake Brittain, "OpenAI hit with new lawsuits from news outlets over AI training," *Reuters*, February 28, 2024, https://www.reuters.com/legal/litigation/openai-hit-with-new-lawsuits-news-outlets-over-ai-training-2024-02-28/.
[84] "Complaint," *Reuters*, February 28, 2024. https://fingfx.thomsonreuters.com/gfx/legaldocs/lbvgbwxjkpq/OPENAI%20RAW%20STORY%20LAWSUIT%20complaint.pdf.
[85] Richard Fletcher, "How many news websites block AI crawlers?" *Reuters Institute*, February 22, 2024, https://reutersinstitute.politics.ox.ac.uk/how-many-news-websites-block-ai-crawlers.

crawlers from accessing their websites.[86] The study revealed that out of the 15 most widely-used news sources in 10 different countries, 48% of these media outlets actively blocked OpenAI's web crawlers.[87] Another 24% blocked web crawlers from Google.[88] This could have negative impacts on the quality of AI-generated outputs relating to the news, and it could also affect the public's ability to find relevant news articles. If web crawlers are not allowed to access news websites, then relevant articles may no longer appear on search engines, leading to financial consequences for media outlets and a lack of information for news seekers.

Some newsrooms have sat out disputes with generative AI developers in favor of a more collaborative approach. Amidst all the chaos between media organizations and technology companies, these newsrooms have entered deals with companies that create generative AI tools. In July 2023, the *AP* entered an agreement with OpenAI.[89] The collaboration between the two allows OpenAI to use part of the *AP*'s text archive for developing new tools, while the *AP* can use OpenAI's technologies to enhance its newsroom initiatives.[90] OpenAI Chief Operating Officer Brad Lightcap stated that the research organization is "eager to learn" from the *AP* and hopes that its AI models "can have a positive impact on the news industry."[91] The *AP* is not alone. Axel Springer, the media company that owns *Politico* and *Business Insider*, is also allowing OpenAI to use its paid content to train ChatGPT. The model's answers to user queries will include attribution and links to the full articles for transparency and further information," Axel Springer's leadership wrote.[92] Gannett, News Corp, which owns *The Wall Street Journal*,

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[86] Fletcher, "AI crawlers."
[87] Fletcher, "AI crawlers."
[88] Fletcher, "AI crawlers."
[89] "AP, Open AI agree to share select news content and technology in new collaboration," *Associated Press*, July 13, 2023. https://www.ap.org/press-releases/2023/ap-open-ai-agree-to-share-select-news-content-and-technology-in-new-collaboration.
[90] "AP, Open AI agree."
[91] "AP, Open AI agree."
[92] Adib Sisani and Julia Sommerfeld, "Axel Springer and OpenAI partner to deepen beneficial use of AI in journalism," *Axel Springer*, December 13, 2023, https://www.axelspringer.com/en/ax-press-release/axel-springer

and other publishers have also been involved in talks with OpenAI.[93] Apple, which has largely been left out of public discussions of AI, has discussed deals worth millions of dollars with news organizations but has yet to enter any formal agreements.[94] However, a January 2024 article by *The Information*, a technology-focused business publication, revealed that OpenAI has offered media firms as little as $1 million annually to license news articles for training — "a tiny amount even for small publishers" — so it is unclear as to how many deals will be made.[95]

Ultimately, only time will tell what role newsrooms will play in the development of generative AI technologies. If the lawsuits filed by *The Times* and other media organizations succeed in court, then there could be gains for the news industry, which has been declining ever since the rise of the Internet.[96] Paid partnerships with companies that develop generative AI could help fund dying newsrooms. Axel Springer acknowledged this by stating that its partnership with OpenAI could contribute to "creating new financial opportunities that support a sustainable future for journalism."[97] Additionally, it is important to note that conflicts between creators of copyrighted works and those developing new technologies have been precedented by legal battles over cable television, photocopiers, and MP3 players; all of these copyright infringement lawsuits against the creatives of these technologies failed in court.[98] Based on historical precedent, it does not seem likely that generative AI developers will be found to have infringed copyright. Even if they are, it is unclear as to whether partnerships with technology

-and-openai-partner-to-deepen-beneficial-use-of-ai-in-journalism.
[93] Benjamin Mullin, "Inside the News Industry's Uneasy Negotiations With OpenAI," *The New York Times*, December 29, 2023, https://www.nytimes.com/2023/12/29/business/media/media-openai-chatgpt.html.
[94] Benjamin Mullin and Tripp Mickle, "Apple Explores A.I. Deals With News Publishers," *The New York Times*, December 22, 2023, https://www.nytimes.com/2023/12/22/technology/apple-ai-news-publishers.html.
[95] Sahil Patel and Stephanie Palazzolo, "OpenAI Offers Publishers as Little as $1 Million a Year," *The Information*, January 4, 2024, https://www.theinformation.com/articles/openai-offers-publishers-as-little-as-1-million-a-year.
[96] Oremus and Izadi, "AI's future."
[97] Sisani and Sommerfeld, "Axel Springer and OpenAI."
[98] Samuelson, "Generative AI Meets Copyright."

companies would make a dent in the declining news industry in the long term, as developers are seemingly reluctant to spend a large amount of money on licensing deals.[99]

Discussion

This literature review displays a snapshot of generative AI technologies' impacts on U.S. newsrooms as of March 2024. These impacts are multi-faceted and include evolving newsroom content creation practices to ongoing legal fights between media organizations and developers of AI technologies. Because the landscape continues to transform by the day, it is important to be cognizant of when this literature review was written.

Through AI-specific guidelines and in some cases, the hiring of new newsroom leaders, it is clear that AI tools are shaping the workflows of media organizations. Points of concern across the industry include the ethical implications of AI technology use, copyright infringement claims, and upholding journalistic integrity. These concerns are weighed against considerations about how generative AI can streamline the processes behind the production of news. Some organizations, like the *AP*, have shown that generative AI technologies can be used to increase efficiency and free up reporters' time to pursue more meaningful tasks. However, ethical dilemmas around maintaining journalistic standards such as accuracy, fairness, and transparency ought to be taken into account as well — especially because these standards are meant to go hand-in-hand with journalists' duty to the democratic process.[100]

The misuse of generative AI tools by *Sports Illustrated* and the lack of transparency from *Buzzfeed* highlight the importance of editorial oversight and stricter policies to prevent the spread of misinformation and the publication of low-quality news content. American media

[99] Patel and Palazzolo, "OpenAI Offers Publishers."
[100] Marconi, "AI and Journalism."

organizations remain largely unique in their individual approaches to handling generative AI tools in their newsrooms. As the newsroom leaders of *Wired* place emphasis on the importance of human editors, *Business Insider*'s guidelines state that drafts of articles can be edited by large language models like ChatGPT to assist editors. However, the majority of newsrooms seem to agree on one thing: when using these generative AI tools, there is a need for human oversight.[101] In the eyes of many newsroom policymakers, reported content should only be published if written by a human being. Newsroom leaders also collectively concur that because the industry is rapidly changing, their newsroom guidelines must be dynamic.

On top of production concerns, legal concerns regarding the use of journalists' work must be considered when assessing the impacts of generative AI tools. The lawsuits filed by media organizations against companies that develop generative AI technologies emphasize the potential copyright infringement that occurs not only during the training of large language models but also in their outputs. *The Times*' lawsuit also uniquely addresses the potential market harms caused by AI-generated outputs, and though OpenAI has filed a motion disputing these claims, the courts have yet to opine on the commercial aspects of the case. These legal disputes raise important questions about fair use, when a work can be considered transformative, and the economic implications of AI-generated content.

The outcomes of these lawsuits could have long-term effects on the development of generative AI technologies and the future of the declining news industry. If the courts side with developers, media organizations will have less control over the products of their reporting and could potentially lose out on millions of dollars for the use of their work. In a recent study, researchers determined that technology companies could owe news organizations between $11.9

[101] Merrefield, "Researchers compare AI policies."

and $13.9 billion annually for using copyrighted articles on their search platforms.[102] This money could go a long way in an industry in which a third of the jobs have disappeared in the past 15 years.[103] Despite there being other ways to regulate technology companies' use of copyrighted articles in developing generative AI, as Congress drags its feet, the trajectory of the generative AI industry is more likely to be impacted by court decisions before any nationwide legislation can be passed to address the issue.[104]

One option to reconcile the tensions between news organizations and generative AI developers would be to pursue collaborative projects between the two entities. As seen through the *AP*'s partnership with OpenAI, cooperation can benefit both the newsroom — which generates new revenue and access to AI tools — and developers — who legally obtain works to use to train their models. However, the *AP*'s collaboration with OpenAI is still relatively recent and unique of its kind despite other newsrooms reportedly talking to generative AI developers. It is still too early to make any judgments on how these types of projects will affect the industry as a whole.

In conclusion, the current discussion around the effects of generative AI on American newsrooms emphasizes the ongoing transformation of journalistic practices and the need for oversight — whether it be initiated by newsroom leaders or the court system. Moving forward, stakeholders across the media industry ought to engage in collaborative dialogue while keeping in mind ethical considerations as they continue to examine the use of generative AI in journalism. In all of these discussions, engaged stakeholders must also remember the key role

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[102] Courthouse News Staff, "Google is the death ray for journalists," *Courthouse News Service*, March 9, 2024, https://www.courthousenews.com/google-is-the-death-ray-for-journalists/.
[103] A.G. Sulzberger, "'Mutual incomprehension now exists seemingly everywhere': The New York Times' publisher responds to its critics," *Nieman Lab*, March 5, 2024. https://www.niemanlab.org/2024/03/mutual-incomprehension-now-exists-seemingly-everywhere-the-new-york-times-publisher-responds-to-its-critics/.
[104] Morrone, "Copyright law battlefield."

journalists play in upholding the pillars of democracy. As champions of truth, reporters should seek to empower the public with the knowledge they need to make informed decisions. By striving to maximize the benefits derived from generative AI technologies and addressing potential risks, the news industry should responsibly use these tools to enhance journalistic integrity and preserve the democratic process.

Bibliography

Abernathy, Penny. “The State of Local News.” *Northwestern University*, June 29, 2022. https://localnewsinitiative.northwestern.edu/research/state-of-local-news/report/.

Albanese, Andrew. “Judge Will Toss Part of Authors’ AI Copyright Lawsuit.” *Publishers Weekly*, November 13, 2023. https://www.publishersweekly.com/pw/by-topic/industry-news/publisher-news/article/93726-judge-will-toss-part-of-authors-ai-copyright-lawsuit.html.

Al-Sibai, Noor, and Jon Christian. “BuzzFeed Is Quietly Publishing Whole AI-Generated Articles, Not Just Quizzes.” *Futurism*, March 30, 2023. https://futurism.com/buzzfeed-publishing-articles-by-ai.

Associated Press. “AP, Open AI agree to share select news content and technology in new collaboration.” July 13, 2023. https://www.ap.org/press-releases/2023/ap-open-ai-agree-to-share-select-news-content-and-technology-in-new-collaboration.

Associated Press. “Leveraging AI to advance the power of facts: Artificial intelligence at The Associated Press.” Accessed February 23, 2024. https://www.ap.org/discover/artificial-intelligence.

Benton, Joshua. “The legal framework for AI is being built in real time, and a ruling in the Sarah Silverman case should give publishers pause.” *Nieman Lab*, November 27, 2023. https://www.niemanlab.org/2023/11/the-legal-framework-for-ai-is-being-built-in-real-time-and-a-ruling-in-the-sarah-silverman-case-should-give-publishers-pause/.

Brittain, Blake. “OpenAI hit with new lawsuits from news outlets over AI training.” *Reuters*, February 28, 2024. https://www.reuters.com/legal/litigation/openai-hit-with-new-lawsuits-news-outlets-over-ai-training-2024-02-28/.

Carlson, Nicholas. “My editor's note to the newsroom on AI: Let's think of it like a ‘bicycle of the mind.’” *Business Insider*, April 13, 2023. https://www.businessinsider.com/how-insider-newsroom-will-use-ai-2023-4.

Casetext. “Field v. Google, Inc.” January 19, 2006. https://casetext.com/case/field-v-google-inc.

Cheung, Paul. “AI for local news: advancing business sustainability in newsrooms.” *Knight Foundation*, May 12, 2021. https://knightfoundation.org/articles/ai-for-local-news-advancing-business-sustainability-in-newsrooms/.

Chrostowski, Golriz. “ANALYSIS: Generative AI to Test the Boundaries of Fair Use.” *Bloomberg Law*, November 5, 2023. https://news.bloomberglaw.com/bloomberg-law-analysis/analysis-generative-ai-to-test-the-boundaries-of-fair-use.

Cools, Hannes. “Towards Guidelines for Guidelines on the Use of Generative AI in Newsrooms.” *Generative AI in the Newsroom*, July 9, 2023. https://generative-ai-newsroom.com/towards-guidelines-for-guidelines-on-the-use-of-generative-ai-in-newsrooms-55b0c2c1d960.

Courthouse News Staff. “Google is the death ray for journalists.” *Courthouse News Service*, March 9, 2024. https://www.courthousenews.com/google-is-the-death-ray-for-journalists/.

Coyle, Jake. “In Hollywood writers’ battle against AI, humans win (for now).” *Associated Press*, September 27, 2023. https://apnews.com/article/hollywood-ai-strike-wga-artificial-Intelligence-39ab72582c3a15f77510c9c30a45ffc8.

Biden Jr., Joseph R. “Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence.” *The White House*, October 30, 2023. https://www.white

house.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/.

De Vynck, Gerrit, and Cat Zakrzewski. “In Big Tech’s backyard, California lawmaker unveils landmark AI bill.” *The Washington Post*, February 8, 2024. https://www.washingtonpost.com/technology/2024/02/08/california-legislation-artificial-intelligence-regulation/.

DiFeliciantonio, Chase. “Could OpenAI save journalism? Bay Area news outlets using their money to try.” *San Francisco Chronicle*, February 21, 2024. https://www.sfchronicle.com/bayarea/article/open-ai-journalism-chatgpt-nytimes-lawsuit-18652364.php.

Duffy, Clare. “Gannett to pause AI experiment after botched high school sports articles.” *CNN*, August 31, 2023. https://www.cnn.com/2023/08/30/tech/gannett-ai-experiment-paused/index.html.

Farrell, James. “BuzzFeed’s new AI-generated travel articles are a dystopian bad dream.” *Silicon Angle*, March 20, 2023. https://siliconangle.com/2023/03/30/buzzfeeds-new-ai-generated-travel-articles-dystopian-bad-dream/.

Fletcher, Richard. “How many news websites block AI crawlers?” *Reuters Institute*, February 22, 2024. https://reutersinstitute.politics.ox.ac.uk/how-many-news-websites-block-ai-crawlers.

Fried, Ina. “OpenAI says NYT ‘hacked’ ChatGPT to produce allegedly infringing results.” *Axios*, February 27, 2024. https://www.axios.com/2024/02/27/openai-says-nyt-hacked-chatgpt-to-produce-allegedly-infringing-results.

Grynbaum, Michael M., and Ryan Mac. “The Times Sues OpenAI and Microsoft Over A.I. Use of Copyrighted Work.” *The New York Times*. December 27, 2023. https://www.nytimes.com/2023/12/27/business/media/new-york-times-open-ai-microsoft-lawsuit.html.

Harrison Dupré, Maggie. “Sports Illustrated Published Articles by Fake, AI-Generated Writers.” *Futurism*, November 27, 2023. https://futurism.com/sports-illustrated-ai-generated-writers.

Justia: US Law. “Authors Guild v. Google, Inc., No. 13-4829 (2d Cir. 2015).” October 16, 2015. https://law.justia.com/cases/federal/appellate-courts/ca2/13-4829/13-4829-2015-10-16.html.

Kahn, Joe and Sam Dolnick. “Zach Seward Is the Newsroom’s Editorial Director of A.I. Initiatives.” *The New York Times*, December 12, 2023. https://www.nytco.com/press/zach-seward-is-the-newsrooms-editorial-director-of-a-i-initiatives/.

Leibowicz, Claire, Stephanie Bell, Hudson Hongo and Neil Uhl. “AI Adoption for Newsrooms: A 10-Step Guide.” *Partnership on AI*. Accessed March 2, 2024. https://partnershiponai.org/ai-for-newsrooms/.

Li, Victor, and Duane Pozza. “What could AI regulation in the US look like?” *American Bar Association Journal*. Podcast audio. June 14, 2023. https://www.americanbar.org/groups/journal/podcast/what-could-ai-regulation-in-the-us-look-like/.

Library of Congress. “Constitution Annotated: Analysis and Interpretation of the U.S. Constitution.” Accessed March 5, 2024. https://constitution.congress.gov/browse/article-1/section-8/clause-8/.

Marconi, Francesco. “AI and Journalism Need Each Other.” *Wall Street Journal*, December 28, 2023. https://www.wsj.com/articles/ai-and-journalism-need-each-other-nyt-lawsuit-fair-price-news-565d744d.

Merrefield, Clark. “Researchers compare AI policies and guidelines at 52 news organizations around the world.” *The Journalist’s Resource*, December 12, 2023. https://journalists

resource.org/home/generative-ai-policies-newsrooms/.

Metz, Cade. “Chatbots May ‘Hallucinate’ More Often Than Many Realize,” *The New York Times*, November 6, 2023, https://www.nytimes.com/2023/11/06/technology/chatbots-hallucination-rates.html.

Metz, Cade and Katie Robertson. “OpenAI Seeks to Dismiss Parts of The New York Times’s Lawsuit.” *The New York Times*, February 27, 2024. https://www.nytimes.com/2024/02/27/technology/openai-new-york-times-lawsuit.html.

Morrone, Megan. “Copyright law is AI's 2024 battlefield.” *Axios*, January 2, 2024. https://www.axios.com/2024/01/02/copyright-law-violation-artificial-intelligence-courts.

Mullin, Benjamin. “Inside the News Industry’s Uneasy Negotiations With OpenAI.” *The New York Times*, December 29, 2023. https://www.nytimes.com/2023/12/29/business/media/media-openai-chatgpt.html.

Mullin, Benjamin and Tripp Mickle. “Apple Explores A.I. Deals With News Publishers.” *The New York Times*, December 22, 2023. https://www.nytimes.com/2023/12/22/technology/apple-ai-news-publishers.html.

Oremus, Will, and Elahe Izadi. “AI’s future could hinge on one thorny legal question.” *The Washington Post*, January 4, 2024. https://www.washingtonpost.com/technology/2024/01/04/nyt-ai-copyright-lawsuit-fair-use/.

PAI Staff. “Partnership on AI Awarded Knight Foundation Grant to Support Local News.” *Partnership on AI*, May 13, 2021. https://partnershiponai.org/knight-ai-for-local-news-grant/.

Panettieri, Joe. “Generative AI Lawsuits Timeline: Legal Cases vs. OpenAI, Microsoft, Anthropic and More.” *Sustainable Tech Partner*, March 1, 2024. https://sustainable

techpartner.com/topics/ai/generative-ai-lawsuit-timeline/.

Patel, Sahil, and Stephanie Palazzolo. “OpenAI Offers Publishers as Little as $1 Million a Year.” *The Information*, January 4, 2024. https://www.theinformation.com/articles/openai-offers-publishers-as-little-as-1-million-a-year.

Reuters. “Complaint.” February 28, 2024. https://fingfx.thomsonreuters.com/gfx/legaldocs/lbvgbwxjkpq/OPENAI%20RAW%20STORY%20LAWSUIT%20complaint.pdf.

Samuelson, Pamela. “Generative AI Meets Copyright: Ongoing lawsuits could affect everyone who uses generative AI.” *Science* 381, no. 6654 (July 2023): 158-161. https://www.science.org/doi/10.1126/science.adi0656.

Samuelson, Pamela. “Large Language Models Meet Copyright Law.” Filmed August 16, 2023 at the University of California, Berkeley, Berkeley, CA. Video, 1:10:20. https://simons.berkeley.edu/talks/pamela-samuelson-uc-berkeley-2023-08-16.

Simon, Felix M. “Artificial Intelligence in the News: How AI Retools, Rationalizes, and Reshapes Journalism and the Public Arena.” *Columbia Journalism Review*, February 6, 2024. https://www.cjr.org/tow_center_reports/artificial-intelligence-in-the-news.php.

Sisani, Adib and Julia Sommerfeld. “Axel Springer and OpenAI partner to deepen beneficial use of AI in journalism.” *Axel Springer*, December 13, 2023. https://www.axelspringer.com/en/ax-press-release/axel-springer-and-openai-partner-to-deepen-beneficial-use-of-ai-in-journalism.

Society of Professional Journalists. “SPJ Code of Ethics.” Accessed February 27, 2024. https://www.spj.org/ethicscode.asp.

Stearns, Josh, and Christine Schmidt. “How We Know Journalism is Good for Democracy.” *Democracy Fund*, September 15, 2022, https://democracyfund.org/idea/how-we-know-

journalism-is-good-for-democracy/.

Sulzberger, A.G. "'Mutual incomprehension now exists seemingly everywhere': The New York Times' publisher responds to its critics." *Nieman Lab*, March 5, 2024. https://www.niemanlab.org/2024/03/mutual-incomprehension-now-exists-seemingly-everywhere-the-new-york-times-publisher-responds-to-its-critics/.

The New York Times. "Complaint." December 27, 2023. https://nytco-assets.nytimes.com/2023/12/NYT_Complaint_Dec2023.pdf.

The New York Times. "Memorandum of Law in Support of OpenAI Defendants' Motion to Dismiss." February 26, 2024. https://static01.nyt.com/newsgraphics/documenttools/82a013b9ba852548/9d4b1790-full.pdf.

U.S. Copyright Office. "Artificial Intelligence and Copyright." Accessed February 22, 2024. https://www.regulations.gov/docket/COLC-2023-0006/comments.

Weiser, Benjamin, and Nate Schweber. "The ChatGPT Lawyer Explains Himself." *The New York Times*, June 8, 2023. https://www.nytimes.com/2023/06/08/nyregion/lawyer-chatgpt-sanctions.html.

Wired. "How WIRED Will Use Generative AI Tools." May 22, 2023. https://www.wired.com/about/generative-ai-policy/.