
The Influence of AI in the Media Work Force: How Companies Use an Array of Legal Remedies

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The emergence of ChatGPT and other related artificial intelligence systems has posed many questions upon the impact that such tools could have on some jobs, including media workers. Serious legal concerns have arisen regarding the learning practices of AI-related companies such as OpenAI and Google. These concerns involve crawling and extracting presumably unauthorized copyright works from news repositories, whose rightholders are often media companies. In this article, we aim to categorize the newsroom practices and routines affected by artificial intelligence. We also explore copyright-law related issues, including AI-assisted reporting, its impact

on journalists and the media workforce, SEO and commercial strategies, as well as training and blocking AI engines. The legal solutions applied to solve those questions are also addressed, including technical solutions, fair use guidelines and legal solutions (litigation, legislative reform, and negotiation). Our conclusion is twofold: first, in the unequal fight against artificial intelligence systems, a utilitarian and entrepreneurial conception of intellectual property is enforced; and second, the position of journalists as authors is weakening.

Keywords: artificial intelligence, news, compensation, journalists, copyright.

One of the most influential and widely read online native Spanish newspaper, *El Confidencial*, ignited at the end of October 2023 a series of features on how artificial intelligence could affect lawyers. The headline of the first article was “How many lawyers can be dismissed in Spain?” The goal was to explain the changes that generative artificial intelligence will cause in the profession, first the tasks that will be done by machines and telling “which lawyers should be worried about their jobs”¹. There is a concern then that reaches some other professions and economic sectors as well. Media, instead, are more worried about the future of the industry than about how many jobs will be lost for journalists.

Some new concepts around artificial intelligence are appearing. To the commonly accepted “generative artificial intelligence” (we prefer, and will argue it, for both conceptual, legal, and practical reasons, “artificial-intelligence assisted” journalism), which, as a matter of fact, does not generate but predicts what comes next, some professional associations are proposing two interesting ones: “media automatization” (Bavitz, 2023) and “multimodal artificial intelligence” (Gould and Geronimo, 2023). The first is an integral approach from the organizational point of view of companies, which —and we are advancing one of our hypotheses— are placed or are making any effort to be the ones artificial intelligence companies such as OpenAI or Google are entitled to negotiate with. The second concept, which insists on the multimodal capacities of artificial intelligence (producing outlets from a different language, e.g., video from text, using, for instance, GPT-4V technologies), has several labour and legal implications, because, in our opinion, it completely falls under the legal umbrella of the derivative work, and it enforces the protection of the copyright holders, not necessarily individual authors. Journalists, thus, are protected through intervention in negotiation, lobbying, or even litigation through employers. Compensation, which seems, as we will examine as well, is a key concept not only to tackle the unwanted effects of artificial intelligence and automatization of some labour processes but also the ones of digitization, including convergence, as it has been remarked on several occasions (see, for instance, Larrondo *et al.*, 2022).

RESEARCH DESIGN

This is a revision article. The goals of this paper are twofold: first, following some other previous research (see, e.g., Túnuez-López *et al.*, 2021, and Gutiérrez-Caneda *et al.*, 2023), we will identify, through bibliography (scholarly references and professional reports, especially) the most common practice in everyday life in newsrooms so far that are being or can eventually be influenced by artificial intelligence. The potential impact of artificial intelligence in media organizations and journalism has been researched from a social point of view (Beckett, 2019; Beckett and Yaseen, 2023).

1 https://www.elconfidencial.com/juridico/2023-10-31/impacto-inteligencia-artificial-trabajo-bufetes_3763901/

Beyond that, we will apply a legal point of view, mainly from copyright law to double check to which extent human authorship of news can be complemented, affected, or even substituted by artificial intelligence and which are the main remedies copyright and other related legal areas provide. In this respect, a triangle formed by the AI industry, media industry (employers), and journalists (employees) and the changes foreseen in the attribution of rights for every one of them will be analysed. In this respect, this paper, which is of an obvious preliminary nature, complements a couple previously published (Díaz-Noci, 2023a and 2023b). The main research question is also quite clear: to which extent is the use of artificial intelligence in newsrooms going to change the legal approach to authorship and related questions, after identifying the major aspects in which this technology will have a deep influence on the journalists' everyday life. Media dimension is also considered since automation of tasks can help the industry make their business more effective economically, at least at first sight (Herrman, 2023), but can have a real influence in the long run. This is the dimension we aim to contribute to clarify, to the extent it is now possible since the advance of technology is quickly enough to make some legal areas obsolete or ineffective shortly. The response of the law to the challenges posed by the introduction of artificial intelligence in newsrooms, there is a common agreement that there is no turning back in it, should be done not in the future reform of the legal field, which is also a question we will examine, but on the current legal tools.

Methods used in this paper include revising literature (including grey literature) and applying some legal categories, namely these:

1. Authorship, exploring the possibilities of compulsory human authorship as a *sine qua non* condition for a work to be fully copyrightable, secondary authorship levels like the ones attributed to legal entities (companies), and also the emergence of *authorless works*, concretely those produced by, or with the help of, artificial intelligence systems.
2. Types of intellectual works, especially individual, derivative, and joint works, and their relationship with authorship conceptions in the different legal traditions we examine.

Very accurately, Daniel Gervais has identified the main legal issues related to intellectual property and artificial intelligence (Gervais, 2023). In this article, we will use a comparative (and functionalist) point of view and methodology of law (Tóthova, 2023, just to mention one recent contribution to the field). That is, how different legislations, but above all, how different legal systems, are already offering some answers to similar problems, related to the production of informative material with the help of artificial intelligence systems. We think, with Ralf Michaels, that we must investigate not only the legal norms but also “the results of their application” (Michaels, 2008: 364). Comparison will be done not between countries —although, some relevant countries will be mentioned— but between legal traditions, namely two: Comm Law and Civil Law. Common Law is represented especially by the United States, whose approach to the topic

and whose legal case can mark a milestone in what is to be considered, or not, a derivative work produced by AI, for instance. Other Common Law countries will be mentioned as well, e.g., the United Kingdom, interesting regarding authorship and artificial intelligence, and Ireland, the only fully Common Law country in the European Union after Brexit. Civil Law is represented by the European Union, whose *AI Directive* proposal, entered at the end of 2023, will be the first one in the world. To those great legal traditions, we will add another one, China, a huge, economically and demographically very powerful country that one to be a leader of artificial intelligence by 2030, and whose approach to the regulation of it happens to be more agile and flexible, also a representative of the post-communist societies.

Functionalism, we follow Christopher Whytock, is one of the most influential approaches to the study of comparative law and perhaps the most controversial, since it applies to different national legislations in comparison, as they are supposed to provide them with different solutions to similar social problems (Whytock, 2009, p. 1879). We share the assumption that societies with different legal origins are associated with different types of legal rules that, at the same time, affect important economic ones (Whytock, 2009, p. 1885).

This is the purpose of the *Journalism Preservation and Competition Act*, which, after falling out of the US legislative chambers in 2022, will be debated again in 2023 and in 2024. These laws, however, do not legislate works produced with the help of artificial intelligence, as does the British *Copyright Act*. The European Union, for example, has preferred to regulate artificial intelligence with an ad hoc directive, pending approval at the time of writing, in April 2023.

This is, as mentioned, a preliminary effort that should be combined with an empirical research study on the perception of this impact by practitioners, which is another phase of the ongoing project this paper is part of. The goal is, thus, to identify categories of analysis, both in the media workforce—this will allow us to ask practitioners about those practices and routines and the impact they foresaw artificial intelligence might have—and in the legal field. In this second respect, as it is quite likely that some movements and reforms will happen in the future years, it may be a good basis to design a solid ongoing analysis of the application of copyright—and, most probably, also competition—law to face the challenges of such a disruptive—and sometimes, technically opaque—technology to the ever-changing nature of journalism. This is a modest, albeit basic for us, effort.

A CATALOGUE OF PRACTICES

MEDIA AUTOMATION PROCESS: AI-ASSISTED REPORTING

The first clear impact on the media workflows, clearly identified by the industry itself (see, for instance, Bavitz, 2023) is process automation of several tasks done, so far, by human journalists (see Trapova and Mezei, 2021). It was one of the main advantages found in Gutiérrez-Caneda, Vázquez-Herrero, and Lopez-García's previous research. This means helping journalists—and the media industry—to

do their job. Automation of those tasks has been considered, in general terms, beneficial. It can help, for instance, in content evaluation, using models such as GPT-4V (Gould and Geronimo, 2023). Legal implications are to be carefully weighted since these processes can rely on derivative works of preexisting authored works. Let us mention an example. Using Natural Language Processing (NLP), *The Wall Street Journal* has created a tool named Draft Assistant, a real-time article generator “to create drafts based on language derived from existing WSJ articles and data APIs” (Zeisler, 2023). It is to be noted that the company does not talk about final articles, but only drafts or proposals that a human journalist could use to produce her or his work. This is an example of derivative work using artificial intelligence that respects human authorship. It is easily conceivable, though, that soon such software could produce its own derivative work that is not authored by humans. Authorless works are not conceivable in Civil Law jurisdictions, but they can be considered in Common Law countries or China (see Díaz Noci, 2023b). An interesting concept related to derivative news is that they are new, enriched works. Whereas enriching material can be suggested by artificial intelligence, added value can only be provided by human intervention.

This was also found in the aforementioned study conducted by researchers of the University of Santiago de Compostela in 2023 when they hypothesized that “AI use for journalistic purposes can be potentially dangerous from an ethical and legal perspective, which makes it necessary to regulate these tools” (Gutiérrez-Caneda *et al.*, 2023, p. 5). As previously explained in this paper’s introduction, it is, precisely, our aim to detect in some detail both those areas in which the law should take part and the remedies to those problems.

The first such task is data gathering, which can be to a more or less great extent, depending on the scope of the reporting, by machines. Data mining is the first of them. Journalists are increasingly in need of managing big data. This is a legal issue to be considered, since this is an exception recognized by, for instance, the European Directive on Copyright in the Digital Single Market. One of the possibilities that some lawyers have proposed is to examine to which extent artificial intelligence’s learning strategies can be considered data breaches. This is a more difficult way than to determine—and tackle—when such AI learning is based on copyrighted works, such as news.

The second task related to data gathering is news monitoring, which, in principle, should pose no problem, when the monitored works are correctly mentioned according to copyright law, at least, when all rights upon them are not reserved. It is worth reminding that there is a common exception in news, that can be used and mentioned in other news when authors (paternity moral right, see Wilkinson and Gerolami, 2009) and origin are referred in due diligence.

Some media, such as *El Confidencial*, a native-digital daily news service in Spain, is developing such an engine, named Alejandria, with the help of Google News Initiative (GNI), to help journalists searching for information from other media and institutional websites, and analysing it. That crawled information must be correctly credited mentioning both authors and sources, according to the Spanish Intellectual Property Act.

Artificial intelligence can be also used to produce data visualization. When data origin is mentioned and there is no restriction upon their use—many times, media rely on publicly available data—, it causes no real harm since AI is just a tool to produce more accurate, quick graphics. It is worthy, if not mandatory, to mention the tool. It is not just a possibility, right now, to assign full or shared authorship of exploitation rights to the creator of the artificial intelligence system. According to copyright law's principles, whenever there is sufficient human intervention and skill behind the creation of a derivative work, right upon the newly created output should be assigned in the name of the author or of the legal entity (a company, usually) on behalf of whom the collective work—media are such— has been organized and created. In general terms, any tools based on artificial intelligence used to analyse data pose a great legal problem at all. In our opinion, modules or courses on authors' rights, intellectual property, and copyright should be added to future teaching stuff on artificial intelligence for training journalists (Lopezosa *et al.*, 2023).

There is a common assumption that the most repetitive, routine tasks, such as transcription, can be avoided using artificial intelligence. Some others can be added, for instance, automatic headline suggestions, a function incorporated into Content Management Systems (CMS) designed and licensed for media organizations, whose results using those tools are their intellectual property. Headlines can be also tested afterward. Some media have started re-writing their stylebooks to adapt the professional routines to artificial intelligence. One of the first ones, as usual, has been *Wired*, at a time in which a Spanish-language version was also launched in 2023².

Another very different question is the fully automated production of news using raw data. So far, it has been quite successfully used for news of the day based mainly on numbers, such as sports results, election results, or corporate earnings, areas in which, for instance, Associated Press explicitly uses AI. It can also help in producing summaries or video shot lists. It is a quite common practice in media at least since 2014. For more complex practices, however, artificial intelligence has shown its limitations. As an example, in September 2023 Gannett decided to quit using artificial intelligence to produce sports features after many mistakes were detected.

Verification of news material is one of the main tasks identified by both scientific and professional literature as one particular help for journalists: fact-checking, which is a crucial thing to be done all the way, with ambivalent results, so far, because not always sources are correctly identified (see, e.g., Cuartielles *et al.*, 2023).

Many of the software to be used for those applications have been listed in Bullard, 2023.

2 <https://es.wired.com/articulos/como-utilizara-wired-herramientas-de-inteligencia-artificial-generativa>. The English version is accessible at <https://www.wired.com/about/generative-ai-policy/>

PRODUCING THE NEWS USING AI. SUPPRESSING JOBS?

Suppressing jobs and substituting journalists and other media workers is the biggest impact foreseen when adopting artificial intelligence services³. Legacy media such as the *Washington Post* are well aware of this risk (Verma and Vynck, 2023). For financial reasons, it is happening in one of the most vulnerable media sectors: small legacy media, for instance in the local American market, where the process of shutting down or merging local newspapers has been accelerating in the last year. In the United States, 130 newspapers have disappeared recently, and, since 2005, 2,900 newspapers have vanished in the air and 43,000 journalists have lost their jobs⁴. Local information cannot be covered by local media, so they turn their eyes to artificial intelligence. As an example, the editor-in-chief of a local newspaper from Vermont, the *White River Valley Herald*, decided in dire straits to upload a bunch of municipal meeting documents to ChatGPT and see what happened. Clearly enough, it needs human supervision, at least to amend mistakes and provide content. In September 2023 two entrepreneurs created a tool named Inside Arlington to do precisely so.

According to this opinion, there is no job that is “automation-proof”, so the first practices examined here, automation of repetitive processes welcome to help workers —journalists in our case— would be just the threshold to job substitution processes. If this happens, then media companies need to rely on a legal concept: the author of the work produced using artificial intelligence, or with its aid so far, is to attribute exploitation rights to the company that owns or commissions the services of such software services, as the legitimate copyright holder.

In order to go further in this process of full, autonomous production of news using artificial intelligence, systems need to improve to avoid “hallucinations” or absurd, inconsistent results. It is to be expected, for the time being at least, that those outlets need to be double-checked by human journalists. It is unclear, however, if the revision (or supervision, in the best case) task is enough to justify the consideration of human journalists as co-authors and their salaries (Poncet, 2023). Agreements like the one signed by Associated Press with OpenAI are thought to avoid these issues, and the argument is that AI is helpful “to streamline workflows to enable our journalists to concentrate on higher-order work”.

There are some steps up to this time that have been taken. The most consistent one for media companies is to litigate or block ChatGPT while negotiating with Google. Newspaper publishers seem to have learned that it is better to reach

3 At the same time, great media companies are hiring people specialized in artificial intelligence. For instance, in 2023 *The New York Times* was seeking a senior editor “to lead the newsroom’s efforts to ambitiously and responsibly make use of generative artificial intelligence” so the newspaper company could be a leader in the application of generative artificial intelligence in newsrooms.

4 See *State of Local News* de la *Medill School of Journalism* de la *Northwestern University*. <https://localnewsinitiative.northwestern.edu/projects/state-of-local-news/explore/#/>

agreements with Google than to fight against such a global giant —which is the way followed in many parts of the world using copyright law, e.g., in the European Union through the Directive on Copyright in the Single Digital Market, 2019, the Australian News Media Bargaining Code, 2020, the Canadian Online News Act, 2023, and the Journalism Preservation and Competition Act, which, after falling out of the US legislative chambers in 2022, was debated again in 2023. These laws, however, do not legislate works produced with the help of artificial intelligence, as does the British Copyright Act. The European Union, for example, has preferred to regulate artificial intelligence as a whole with an *ad hoc* directive, pending approval at the time of writing this paper in November 2023. All of them are focused on forcing Google to negotiate with media conglomerates to share benefits. Google, through its News Initiative, worked during 2023 in its own news-producing artificial intelligence system, named Genesis.

The bare truth is that artificial intelligence has started to replace humans, at least in some sectors related to news. News clipping is one of them. In September 2023, the French company Onclusive announced that 200 jobs would be lost and replaced by artificial intelligence.

Another job that artificial intelligence might be taking from human people is anchoring or presenting the news. It is not such a new practice, since in the first years of the century some avatars were created, with limited realism and success, to do so: Ananova, Bob Megabyte or Mya were the names of such digital anchors, virtual beings able to read some text using Text to Speech (TTS) technology and applying a bunch of gestures related to the topic and tone of the news. That technology has been enormously improved thanks to artificial intelligence, and realistic artificial anchors have been created. They are called *composite anchors*, now based on machine learning, able to read the news all the time. The Chinese news agency, Xinhua, began using those digital anchors in November 2023. The technology behind it was not recent, though: it was being developed at least from 2004 by a Chinese search engine, Sogou. China has 800 million Internet users. Those composite anchors can tell the news in several languages in addition. It is not just happening in China. In October 2023, an artificially generated anchor, created by a company named National World, started presenting weather news for the London area in an online service named London World. Presenting the news is not authoring them, and no anchor or presented should be considered an author according to copyright law, but they are, instead, recognized as performers, with limited rights.

INFLUENCE ON SEO

Especially, Google's Genesis initiative might have a huge influence on media SEO practices as we know them (Højris Bæk, 2023). The existence of that ongoing tool was revealed by *The New York Times* in July 2023⁵. It was shown to editors in chief

5 <https://www.nytimes.com/2023/07/19/business/google-artificial-intelligence-news-articles.html>

of *The New York Times*, *The Wall Street Journal*, and *The Washington Post*, among others, at the same time. In November of that year, it was revealed that several small media attached to Local Independent Online News in the United States and Canada. Google's Genesis would be able to rewrite some news items and features with a different colour or style, or to create newsletters. It is promoted as a personal assistant for journalists, in the vogue of releasing them from boring tasks so they can put all their intellectual skills into more creative occupations. It is presented as summarizing all the implications mentioned before, according to what Jennifer Crider, spokesperson for Google, stated: "Quite simply, these tools are not intended to, and cannot, replace the essential role journalists have in reporting, creating and fact-checking their articles". Also, it is thought that it will be made easier to create automatic posts for social networks or e-mail messages to users to attract both their attention and their trust. Trust is reinforced when users perceive that a news article has not been produced using artificial intelligence, and they are not inclined to pay for AI-produced news outlets, so it has a clear financial influence as well (Vogler *et al.*, 2023; Yang *et al.*, 2023). Since many media are involved or interested in that tool, it would help mitigating the disagreements caused by the monopolistic practices on digital advertisement by Google (up to 92 percent of all advertising traffic on the Internet in 2023, according to StatCounter), that had led to great newspaper publishers to lobby in favour of copyright law reform to be granted an ancillary right for them or to make Google negotiate with them, like the Canadian and Australian acts. By doing so, Google is smartly driving publishers away from litigation and legal modifications and attracting them to negotiation.

At the same time, Google is preparing new advertising formats adapted to searches through artificial intelligence, and this makes total sense, since this is the main business target of the company and its main revenue source. This is done through the so-called Search Generative Experience (SGE), to generate more effectively personalized ads based on searches. This can be combined with what can be defined, in general terms, as adaptive artificial intelligence, to produce automated user needs analysis, attached to the code of a news item so it can adapt to each users' convenience, a technology a company named Smartocoto is announcing to enhance efficiency and responsiveness⁶. A combination of different tools has been suggested as more effective (Pilar Alcántara, 2023). Even a new journalist genre could be emerging, the so-called *flexicle*.

This will probably change the way SEO journalists work. Search Engine Optimization determines the orientation of news writing. Digital journalism scholars usually insist on the fact that we do not just write for people, they write for search engines – especially Google. Google provides up to 70 percent of the access to news since users do not only arrive at information using the search engine, now based on artificial intelligence (Bard) but also Google Discover and,

6 <https://smartocoto.com/blog/start-using-ai-newsroom>

to a lesser extent, Google News⁷. Subscription models are, in many cases, getting no more than 15 percent of all revenues for media companies. For this reason, companies are experimenting with some other commercial practices related to the distribution of news, another crucial aspect in which AI can make a difference for media companies. This is an aspect that is being “accelerated” by artificial intelligence (see Rodríguez-Castro and González Tosat, 2023) and, consequently, the subscription model many of them are implementing especially from 2020 onwards (see Díaz-Noci, 2021) is under scrutiny. Once again, the Associated Press has taken a step forward, promising the AI will help “surface content more easily” and will optimize content, also using image recognition to improve tags in pictures and videos.

The thing is, as a matter of fact, that except great media companies such as *Wall Street Journal* or *The New York Times* are only able to get scarcely 15 percent of all their revenues from subscribed readers. The rest come for Google, and Google will decide on SEO strategies according to Search Engine Experience using artificial intelligence algorithms. That is the reason why it is so important for Google, in the first place, to have full access to all news repositories to train it, and for media companies to be in good terms with Google.

TRAINING (AND BLOCKING) AI ENGINES

One of the most sensitive practices in which obviously artificial intelligence is having a deep effect in media industry is not related to the output, but on how AI systems are trained, presumedly in a quite opaque way, using with no permission or even knowledge huge amounts of works, most of them copyrighted, available on the Internet. News is one of those. According to some reliable research, news are the third main sources used for LLM, especially Google (News/Media Alliance, 2023). The ultimate goal is for those I-systems to be able to reproduce a neural network. It is not the situation yet, but it may well happen in the next future (Lake and Baroni, 2023).

Many media companies, private or public, are suspicious of this practice, and have begun to tackle it using both technology and the law (see Rodríguez-Castro and González Tosat, 2023). It is also interesting not just because of it. It is related to the fact that many media companies are planning to monetize contents through artificial intelligence. In this respect, the public British multimedia service, BBC, has taken some steps. During 2023, Rhordri Talfan Davies, director of Nations and of Cymru Wales at the BBC—the influence, for better or worse, of artificial intelligence on minority languages and the media is another promising field of study, by the way—announced that the company will launch a number of projects to explore the possibilities of applying artificial intelligence to the media workflow, based on three principles: the public interest, as it corresponds to one of the oldest and strongest public media services in Europe and the

7 Google News fired more than forty journalists in October 2023.

world, whereas preserving trust in media, a declining fact these days; enhance journalists' creativity and rights; and being transparent. Transparency is key in both ways: how news is used to train artificial intelligence and how artificial intelligence is used to produce the news. This is a premise upon which we base our own research, too.

The BBC case is interesting not only because it is one of the most influential media services in the world. It is meaningful because they openly manifest that they are likely to give priority to the digital division, and because they are moving to a subscription and advertisement model to complement public revenues coming from a license fee. This is a major change, and it is consistent with what is happening in many other media companies all over the world, especially after the 2008 crisis. In order to attract reader revenues (see Brown, 2023), trust in news needs to be more solid than it is now. Artificial intelligence might have a say in it, once again, for better or worse. So, media companies need to rely on AI, and at the same time, they need artificial intelligence to be trustworthy. There are two ways media companies are using so far: first, they are tackling AI companies to use their news with no permission or license.

At the same time, some media companies are signing agreements with AI companies to do so. Associated Press has such an agreement, which includes compensation, and which explicitly mentions the advantages of using AI for all the value chain ("including gathering, producing and distributing the news"), with OpenAI. The impact on value chain has led some scholars to define this period of media history as "the fourth wave of digital journalism" (Rodríguez-Castro and González Tosat, 2023, p. 94). At the same time, AP experiments with at least five artificial intelligence tools. It is to be thought that further such agreements will be closed with some other media companies, at least the most powerful ones. From a legal point of view, this is the legal instrument used when reforming copyright law in Europe (article 15 of the Directive of Copyright in the Single Digital Market, 2019), and some other acts in Australia (News Media Bargaining Act, 2020) and Canada (Online News Act, 2023): to force news aggregator, namely Google and Facebook, to pay for using the news. A study of 2023, conducted by The Brattle Group alongside scholars of the universities of Columbia and Texas in Houston calculated that Meta and Google should pay, only in the United States, more than 12,000 million dollars to press publishers. They suggest that both giants should share 50 percent of all revenues obtained by using third parties' news (Holder *et al.*, 2023). In Europe, we should say that the most advanced country is France. For instance, and it was not the first time, in October 2023 Google agreed to sign a document with the Société des Droits Voisins to set a new standard for ancillary rights' compensation developing article 15 of the European Directive on Copyright 2019 and its implementation in the *Loi de Propriété Intellectuelle* the following year. Some other countries, such as Spain, have instead privileged individual, opaque agreements between Google and media companies, subject to confidentiality clauses.

Preventing AI systems from learning unauthorizedly from news *owned* (actually, *licensed* for certain uses by authors according to labour contracts —this is where the *work made for hire*, a legal concept from the Common Law system becomes

central) is the first step to consolidate this situation. The *White Paper* by News Media Alliance goes in this direction. The title of the report is meaningful enough: *The pervasive copying of expressive works to train and fuel generative artificial intelligence systems is copyright infringement and not a fair use*. They point directly to OpenAI, Google, and Microsoft, which have incorporated artificial intelligence into their search engines. Google added, in the first place just for the British and American market, functions based on AI, such as notes and the possibility of following topics. Generative Artificial Intelligence (GAI) and Large Language Models (LLM) make intensive use of copyrighted works (News/Media Alliance, 2023).

REMEDIES

TECHNICAL SOLUTIONS

The first solution is technical, especially to avoid unauthorized use of copyrightable content by LLM systems. We have mentioned some of them. Original contents are tagged or watermarked. Digital Rights Management Systems (DRMS) can also be used. The protection can be cracked, but this is intellectual property infringement.

We have already mentioned how many media companies have decided, in the first place, to prevent artificial intelligence systems from being fed upon their own huge news repositories. In November 2023, using robots.txt, more than 500 media all over the world blocked OpenAI's ChatGPT, preventing its bot from scanning their websites⁸. They have added Google AI and the non-profit organization Common Crawl. Google is doing so, presumably, with academic repositories.

Technical solutions can also be applied to plagiarism detection, Originality.AI works like. Most technical tools have a common problem. One is that especially tackling bots is similar to what bots for indexing content do.

This is not but a transitory tool to make AI companies negotiate with media companies, as we will examine in the next section, since most of those companies are, at the same time, negotiating with Google or testing Genesis, the new GAI tool addressed to newsrooms.

On the other hand, for the sake of transparency, labels or tags may guarantee readers that contents have not been produced solely by artificial intelligence is another possible solution. It would improve the trust in news, questioned by many readers, at least in countries such as Switzerland or the United States, as we have examined.

⁸ The list is accessible at <https://palewi.re/docs/news-homepages/openai-gptbot-robots-txt.html>

THE ROLE OF PROFESSIONAL ASSOCIATIONS AND TRADE UNIONS: FAIR USE GUIDELINES

Concerned about the advent of artificial intelligence, and balancing both advantages and problems, many organizations have launched guidelines to take full profit of its possibilities —and avoiding all disadvantages. Most of them have been released in 2023, the year in which OpenAI's ChatGPT and some other artificial intelligence tools, such as Stable Diffusion, have been made publicly available⁹. Professional associations and trade unions have been much less diligent in adopting such recommendations, though. Media companies and copyright holders have taken an advantageous position. Trade unions and journalists' association, though, must have a decisive say in the way artificial intelligence has been adopted in newsrooms especially to protect their jobs. Some journalists have found a way to agree on a response to artificial intelligence with their employers. For instance, in summer 2023 the journalists of the *Financial Times* ratified one of the first contracts on it, which includes the right to bargain, and not just discuss as the company initially announced, the effects of this new technology. How it will be materialized is unclear, so far, since the clause is based in good faith¹⁰.

One of the organizations that published some recommendations before ChatGPT to ensure a convenient adoption of artificial intelligence was the OECD. Its *AI Principles* were launched in May 2019, insisting on a human-centered approach and some well-known principles for media organizations, such as transparency and accountability (see, for instance, Rodríguez-Castro and González Tosat, 2023, p. 97). China, whose strategy related to artificial intelligence is ambitious, and in copyright law terms authorship is subordinated to ownership and property, revealed in 2017 the *Beijing AI Principles*. The country wants to be a leader in the field by 2030.

Media publishers' organizations came later. One of the most influential media associations, Digital Content Next, whose partners are some of the most powerful newspaper publishers all over the world, insisted in 2023 on assuring their rights through authors' rights. Actually, the *Principles for development and governance of AI* do not mention *authors* as such, but *creators*. Creators can be human journalists or media companies (legal entities), and the third principle reinforces this perspective assuring that (only?) "publishers are entitled to negotiate for and receive fair compensation for use of their IP", through copyright laws protecting creators "from the unlicensed use of their works".

9 According to a survey conducted by McKinley Global, 70 percent of the people was exposed to artificial intelligence in 2023. And 46 percent thought that it could cause some kind of legal problems.

10 The clause says literally: "The Company shall discuss in advance the introduction of any new technology, and the Guild [of journalists] shall have the right to bargain expeditiously over the effects of the changes".

Since companies are usually the ones under whose direction and investment collective works, such as newspapers or websites, are created, and the ones that have control upon licenses granted to them by authors through contracts—usually, labour contracts, to ensure that anything produced during the work hours and compensated with a salary is managed by employers—it seems quite clear that this fourth principle refers to them, and not to journalists. It is not only copyrighted the legal area which is invoked as an instrument to face unlicensed use of copyrighted works, since “unfair market or competition outcomes are also mentioned”, but the legal fundament upon such claims are also based is competition law as well. “Transparency” is also mentioned in principle four, as an obligation for generative artificial intelligence to make it clear how have they been trained. Some other media associations have followed. News/Media Alliance (NMA) reproduced those principles in April 2023. They enlenghtened them in their response and comments to the Artificial Intelligence and Copyright consultation launched by the US Copyright Office in October that same year. In August 2023, a group of them launched in Europe, Canada, Japan, and Brazil the so-called *Global principles in artificial intelligence*. Those principles largely reproduce some of those by Digital Content Next. According to the American Association, those publishers claimed that artificial intelligence systems respect any intellectual property rights. Unlike Digital Context Next, they added ancillary rights, the ones recognized by both the European Union’s Directive on Copyright in the Single Digital Market and the *Online News Act* of Canada, for instance. These are rights attributed to media companies, especially newspaper publishers, initially designed to face aggregators like Google News’ practices and to bow them to negotiate. At least, those *Global principles* do mention “creative professionals”. The set of principles comes from a Civil Law perspective, in which individual authors’ rights are recognized and protected since only humans can be considered full authors. In this tradition, and these principles, creators are individual authors and publishers are rightsholders—both add users. This is the reason why principle three differs from its American counterparts and puts at the same level “copyright and ancillary rights” to protect “content creators and owners from the unlicensed use of their content”. Altogether, the rest of the principles follow verbatim the one we have already mentioned: publishers are entitled to negotiate with artificial intelligence system companies and to ensure fair compensation.

Principles related to transparency and accountability, and to competition law, are also identical. Both sets of principles are the same, adapted to each one’s legal perspective. Finally, also in November 2023, the *Paris charter on AI and journalism* was launched. It is different compared with the other guidelines mentioned since it insists on ethical solutions rather than legal ones, but it is coincidental in claiming for transparency (especially, to distinguish humanly produced and synthetically produced contents and accountability as pillars for a human-centered perspective of the use of artificial intelligence in newsrooms.

Guidelines are more useful when used inside media organization than they are to impose conditions to AI companies, since it is an instrument based on good faith or *bona fides*. Breach of confidence can be legally argued only when

a contract has been signed, or when such declaration or fair use guidelines have been adhered by all parties. Fair use, on the other hand, is a legal instrument whose applicability beyond the boundaries of Common Law is insecure—in Civil Law countries, especially in the European Unions, it is not used, except in Ireland, where it is known as “fair dealing” (Chapter 6 of the Copyright and Related Rights Act, 2000)¹¹.

LEGAL SOLUTIONS

Legal solutions include three ways: litigation, law reforming, and negotiating to reach agreements. The most fruitful one has been and will probably be the last one.

Litigations are being used in combination with technical tackling. It can arguably be used for data breaches but is much more likely employed to prevent unauthorized derivative works produced upon unrecognized original, copyrighted, authored works. Generative artificial intelligence is a definition commonly accepted, but it works as a predictive technology. So far at least, it is not able to create anything out of the blue. As Daniel Gervais affirmed in 2016, “Copyright doctrine is similarly refractory to the protection of nonhuman productions. First among the doctrinal arguments is that machines cannot make the creative choices that are required to generate originality, and originality is a *sine qua non* of copyright. In short, current law does not protect machine production” (Gervais, 2016).

Litigation is a resource already used—decisions will come later—in cases such as Getty Images vs Stable Diffusion and Tremblay P. and Awad M. v. OpenAI INC. et al, US Copyright class action, June 2023. Most especially, the great litigation comes from another US class action against Google Bard to be held at the Northern District Court of California (J.L. v. Alphabet Inc.). One of the plaintiffs is an unidentified *New York Times* investigative journalist.

Apart from that case, litigation has been instigated by companies as rightsholders and not by individual authors. All roads lead to Rome: the defense of news production in the name of copyright infringement is a torch by employers, not by employees, by companies and not by workers or authors. Anyway, journalists, at least in more authorial Civil Law countries, should carefully consider moral rights (paternity and integrity rights, namely) as a useful instrument in this respect.

Reforming the law or enacting new provisions for artificial intelligence is the second legal solution, but it takes time. The European Commission is preparing a proposal for an Artificial Intelligence Directive that could be passed in 2024, and then be enacted in each and every one of the state members of the Union. It is based on risk levels. Other countries, now outside the EU, are more inclined

¹¹ Article 51.2: “Fair dealing for the purpose of reporting current events shall not infringe copyright in that work, where the report is accompanied by a sufficient acknowledgement”.

to revise the existing law. This is the case of the United Kingdom, that launched a policy paper, *A pro-innovation approach to AI-regulation* in March 2023¹². This is the way followed in the United States as well. In May 2023 the Committee on Artificial Intelligence of the National Science and Technology Council launched the *National Artificial Intelligence Research and Development Strategic Plan*.

Agreements are signed with companies such as OpenIA and Google in three respects: first, to license —many times, after tackling free access to news repositories— the use of news to train artificial intelligence LLM systems on the basis of compensation to companies. It is desirable, but it is to be doublechecked in the future, whether and how media companies share compensation with the ultimate authors of news: journalists and other media workers. This is a tendency in which the authorial conception of copyright law and moral rights have a say.

This is especially evident in Civil Law, authors' rights countries, where paternity and integrity rights are unwaivable, inalienable rights. In Common Law countries, in which copyright law shows a much more entrepreneurial approach, journalists' moral rights are not automatically recognized (for instance, in the United Kingdom or, within the European Union, Ireland¹³), so companies have no obligation to mention their hired journalists as authors at all— unless otherwise agreed, which is quite usual, since signed news articles are more trustful. Wisely enough, press publishers in Europe, where Civil Law is predominant, achieved an unwaivable ancillary compensation right. Even that right needs to be practically enforced through agreements, which is the case of France or Spain. There are huge differences, still: while in France professional associations are entitled to negotiate and set standard conditions for all media and journalists, in Spain an individual negotiation between Google and publishers has been privileged, which most likely leads to unequal agreements and conditions.

Licensing content is considered a good revenue source. Associated Press or BBC are probing this way. Even more decidedly, News Corporation, owned by one of the world's greatest and richest media moguls, Rupert Murdoch, hopes to obtain a good share of benefits licensing their contents to artificial intelligence systems, as Robert Thomson its CEO affirmed in November 2023. The corporation identified three areas in which generative artificial intelligence will use third parties' news content like theirs: training, conversational bots, and aggregation. Agreements covering all three practices are in their way. It is easier, by the way, to get his way using copyright law than arguing data breach —data mining is an exception in some jurisdiction, but a narrower interpretation of it has been already asked by, for instance, News/Media Alliance—, but it can also be considered.

12 <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper>

13 Copyright and Related Rights Act, 2000, article 108.3 and 4: "The paternity right shall not apply in relation to a work made for the purpose of reporting current events [and] shall not apply to a work made for the purposes of a newspaper or periodical".

CONCLUSIONS

Recent studies show that journalists, and any professional whose skills and jobs are based on gathering, structuring, and writing information are endangered by ChatGPT artificial intelligence systems and the like. Web and digital interface designers should fear the emergence and consolidation of artificial intelligence systems, in the first place. News analysts, reporters, and journalists come later, ranked the top five most endangered jobs, according to some models of exposure to the labour risks of the technology (Elondou *et al.*, 2023). This is confirmed by some other scholars, such as Hui, Reshef, and Zhou, 2023, from Washington and New York Universities, and Dell'Acqua *et al.*, 2023, from Harvard University. The concerns are not only the drop in job positions, also the drops in earnings. If artificial intelligence replaces some of the tasks journalists do, they should insist on making all human skills remain valuable, if not essential. At least, some joint efforts have been launched, e.g., a new tool for journalists, especially those working on news on climate change, named *Spinoza* and developed by Reporters sans frontières (RSF) and Alliance de la presse d'information générale (Apig)¹⁴. It is a tool based on artificial intelligence to gather and analyse news on climate change that respects intellectual property of the original authors.

Both French organizations are also behind the *Paris charter on AI and journalism*. Concerns about the many issues that using artificial intelligence generative systems may pose on many aspects of the journalist job from a legal perspective have become more than evident in a very short period, from the introduction of ChatGPT and its adoption by many users and organizations at the end of 2022. Just one year later, literature on legal problems grows every day. Putting aside serious concerns, such as the influence that artificial intelligence might have on freedom of speech (Masinsin *et al.*, 2023; Ananny and Karr, 2023) —an issue that deserves in itself a whole research design—, copyright and competition law are evidently the major concerns of the media industry so far.

The movements taken by media companies to defend their position in the market happen to be clear, and of all of them lead to negotiation with artificial intelligence system companies like OpenAI and digital giants like Google, including litigation. It is quite an unequal aim since it is fought on a national basis, with different legal systems. In this situation, media prefer entrepreneurial solutions, which in copyright law terms mean relying more on Common Law solutions than in Civil Law authorial grounds and considering artificial intelligence systems as a toaster. As a result, human authors face an even much more unequal situation in the battles foreseen, especially if, as some legal scholars have underlined (see Gaon, 2021, p. 11) “it seems that there is a consensus that we will reach human-level intelligence (or artificial general intelligence) within the next three decades, between 2020 and 2050”. Companies, as investors and as

14 <https://rsf.org/fr/projet-spinoza-rsf-et-l-alliance-de-la-presse-d-information-g%C3%A9n%C3%A9rale-partenaires-pour-d%C3%A9velopper>

legal entities under whose direction and initiative the collective work is created, and in which many other individual, collaborative, or derivative works are contained, are in a better position as copyright holders. The legal philosophy behind all this is to strengthen legal personhood.

Legal reform and specific laws on artificial intelligence are welcome by media companies, but they are well aware that they “create distraction and uncertainty” (Gaon, 2021). This is complemented by a utilitarian approach to artificial intelligence and copyright law: if a company invests in and pays for it, then the exploitation rights on the results of those works should be attributed to them, regardless of the intervention degree of both machines and human workers (Gaon, 2021; Fernández Carballo-Calero, 2022, p. 55). Personal rights, such as moral rights, are an ace up journalists’ sleeve, but they are not universally recognized rights. Common Law countries, including Ireland in the European Union, do not recognize this should be an instantly applicable right for journalists. There is also the risk of considering that all such works not directly and completely attributable to human authors to be considered public domain, since it seems to be a common agreement that no authorship rights are to be recognized to artificial intelligence systems: algorithms are not protected by copyright law, and they won’t likely be. So, the risk of a weakening role of journalists as authors is very real, and the romantic perception of themselves as such, at the same level as playwrights or plastic artists is more than questionable.

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