

ARTIFICIAL INTELLIGENCE, COPYRIGHT LAW, other related legal aspects, and the digital news

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**INTELLECTUAL PROPERTY
AND DIGITAL MEDIA**

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Executive Summary

The popularisation of artificial intelligence systems, such as OpenAI's ChatGPT, at the end of 2022, is causing great concern in many cultural industries and among creators. The media industry, and the journalists, might well be affected by the introduction of such a disruptive technique. Some legal areas can also suffer major changes to face this new challenge. Copyright law is one of those, competition law, and media law can be profoundly affected.

This is a research study on the impact that artificial intelligence has on the media and journalists' everyday work, and how the law, especially copyright and competition law, is facing the challenge. Concepts such as authorship, and originality may be having substantial changes. The necessary human intervention, hitherto, is still guaranteed under many countries' intellectual property laws, however.

This insight tries to show which is the state of the art of the legal protection of news, especially in the digital world. In the last years, the media industry – namely the great newspaper companies – has actively lobbied in favour of their interests, for instance introducing a new ancillary press publishers' right in the EU law, or pressing to pass laws to oblige Google and Facebook to negotiate in Australia or Canada.

Many countries all over the world are considering passing specific laws to regulate artificial intelligence. The most advanced effort is the announced AI Act by the European Union. At the same time, China has passed several laws on the subject, and has, at the beginning of 2024, a well-articulated legal corpus to regulate such a sensitive topic for its economy.

The results presented in this report are to be considered quite preliminary. Law is always an ongoing field, which tries to give a proper answer to every social necessity. It is obvious

that the decided introduction of artificial intelligence systems in everyday life is one of those. Many agents – authors, companies, politicians, also scholars – are taking positions to prevent undesired consequences. In our opinion, there is a shift towards increasingly negotiation capacities attributed not to authors (journalists and other workers) but rather to media companies. Compensation (and fair remuneration) are keywords. How to ensure fair compensation for the media industry and authors?

Negotiation is, thus, a key concept. Most ways seem to lead to Rome: legal reform, litigation, fair use guidelines, and principles, are conceived with a final scope in mind: to share benefits (economic and social) in a fair way.

RESULT OF A RESEARCH STAY AT UCD

This report was written during my stay as a visiting scholar at the School of Information and Communication Studies, under its head and co-director of the UCD Centre for Digital Policy Prof Eugenia Siapera's coordination. I am grateful to Prof Siapera for all the support and for suggesting a couple of topics to be developed during my stay in Dublin – one of those, is the one we are dealing with on this pages.

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period. This is one of the results of the research-funded projects: *Automated counter-narratives against misinformation and hate speech for journalists and social media*. Ministry of Science and Innovation (Spain), 2023 –2024. TED2021-130810B-C22, and *Impact of artificial intelligence and algorithms on online media, journalists and audiences*. Spanish Ministry of Science and Innovation PID2022-138391OB-I00.

Introduction

Artificial intelligence has entered newsrooms, and this penetration is expected to increase in the next future. Both companies and practitioners have begun to be very aware of the challenges, risks, and opportunities of using such a game-changer tool at the end of 2022.

NEWS PRODUCTION, AI AND LEGAL CHANGES

The introduction of artificial intelligence systems in the production of news in media organizations is a quite recent phenomenon.¹ Some media were using their artificial intelligence tools since, at least, 2014 – and even back to the 1980’s for some aspects of weather reports, even (Pihlajarinne, Thesleff, Leppänen, Valmari, 2022: 215). It is, however, commonly accepted that the adoption of artificial intelligence in media and journalism dates back to at least 2010 (Díaz-Noci, 2020). That year, *The Guardian* and other media began using AI systems to produce some sports news. Some other similar tools were also launched in the decade of 2010, for instance, Wordsmith by Automate Insights, used since 2014 by the Associated Press agency. Just to name some other few AI-based tools designed for media: Recount, StatsMonkey, Media Brain, and Kognetics were also used in the decade of 2010. Another milestone happened in 2015, when a specific AI-based software, Dreamwriter, was created by a Chinese company, Tencent, to produce news. A year later, 2016, *The Washington Post* started using Heliograf.

Artificial intelligence has entered newsrooms, and this penetration is expected to increase in the next future (Dörr, 2016; Hansen, Roca-Sales, Keegan and King, 2017; Ventura Pocino, 2021). It is estimated that 40 percent of employment might be affected by AI, according to an International Monetary Fund’s report on AI and the future of work (Cazzaniga *et al.*, 2024). The massive introduction of artificial intelligence in everyone’s lives, also in the production, dissemination, and consumption of news, has

been outstandingly adopted, and probably with no way back, by many organizations (Peña-Fernández, Meso-Ayerdi, Larrondo-Ureta, Díaz-Noci, 2023). The media industry is one of those. Both companies and practitioners have begun to be very aware of the challenges, risks, and opportunities of using such a game-changer tool, especially since OpenAI’s ChatGPT was made publicly available at the end of 2022. Others (Stable Diffusion, Dall-E) followed, with giants such as Google or Microsoft announcing their own AI-based tools, some of them directly addressed to the production of news. The difference between the new generation of AI systems, such as ChatGPT, and the precedent ones, lays in what Natali Helberger and Nicholas Diakopoulos define as ‘dynamic context and scale of use’, which leads to popularization of us, since these are tools that can be adopted ‘by people with ordinary communication skills, lowering, therefore, significantly the threshold of who can be a user’ (Helberger & Diakopoulos, 2023).

Nothing in society is an isolated event, so this is added to some tendencies we have been explored in the recent times of journalism, especially from 2007-2008 onwards. At that precise moment, it is considered that the press initiated a definitive decline - readers, sales and revenues went down, and the financial crisis of that year helped adding another nail in the coffin of a four-hundred century old business, as we knew it -, and it was a moment in which many media organizations clearly saw how it was necessary to concentrate in the digital division and make consumers pay for the news – but also making news aggregators and another

¹ Artificial intelligence as such dates back, at least as a concept, to 1950, when Alan Turing published his article ‘Computing machinery and intelligence’, and as a term it was proposed for the first time in 1956, in a workshop held at Dartmouth College in Hanover, New Hampshire,

United States of America. AI systems became usual in the decades of 1980 and 1990, but it was not until the decade of 2010 that the most outstanding advances happened in which is considered to be the beginning of the present era of artificial intelligence (Gaon, 2021: 13-20).

new actors in the game pay, singularly Facebook and Google, since they were attracting all the advertisement that in the old times media had (Danbury, 2016, Díaz-Noci, 2018, Ferrer-Conill *et al.*, 2021, Beckertt, 2023). According to some research done in 2023 by the Swiss consultancy agency Fehr Advice & Partner commissioned by the Swiss Media Publishers Organization, concluded that the value of the content produced by the Swiss media only is 156 million euros, so Google should be paying accordingly to this. Media desperately need to monetize content – and prevent others from doing so and to do it better. After 2020, the media considered that initial period of free-for-all content on the Internet over (O’Brien, Wellbrock, & Kleer, 2020). Press lobbies had an influence on some legal reforms, and copyright law was a preferential legal field on which they pinned their hopes. Competition law was another legal aspect in which new production has been enacted to make these new actors in the information and news dissemination pay. Since professional news production is still in the hands of the media industry – and of trained professional practitioners (Omid, Dal Zotto, Picard, 2022) -, this is good because this is a guarantee for plural, verified information as a pillar for discussion and decision in healthy democracies, this needs to be protected by the states and by supranational organizations, in an increasingly interconnected world. This is the discourse coming for the media, of course, even though it is becoming evident that trust in media is decreasing and news avoidance is increasing (see, for instance, Pérez-Altable & Díaz Noci, 2023; Toff, Palmer, & Nielsen, 2024). At least in the United States, some surveys affirm that trust in news and other journalistic

pieces written with the help of artificial intelligence would be even lower than that generated by articles produced by human journalists, which is also decreasing. According to a survey carried out by the Monmouth University Polling Institute, 72% of Americans believe that sooner or later most media companies will end up systematically producing journalistic pieces with the help of artificial intelligence, and 78% consider that this is not positive (Monmouth University Polling Institute, 2023). On the other side, dissemination is more and more clearly controlled by platforms and aggregators, and they, as a result, are the ones that obtain the benefits of the commodities others produce. Google and Facebook – now Meta – argue that they are deriving visits to the media and giving them much more traffic than they ever dreamed. Consequently, media and news are much more consumed than ever, but they are obtaining much less economic benefits than ever. As a result, the media are trying to find a successful business model. In this respect, it is rather clear that artificial intelligence will have an impact on business models (Lee, Suh, Roy and Baucus, 2019; Sangil, Campos-Freire and Pérez-Latre, 2023; on the possible harmful effects of artificial intelligence on the media business model of communication, see Kint, 2023).

The Internet, besides, in general terms the digital language, has changed the way in which news is configured. Multimedia, even transmedia news is a usual thing these days (Díaz Noci, 2020), even more so if we embrace the concept of participative journalism and user-generated content.² In legal terms and according to copyright law, this means an increasing importance of joint and derivative

² Artificial intelligence can help moderate content and drive participation from active audiences (Margoni, Quintais and Schwemer, 2022; ReCreating Europe organized a webinar in December 2021 on the issue,

titled Automated content moderation. Copyright and controversial content).

works, for instance. Virtually any work accessible on the Internet can be technically modified and derived by anyone, and AI will be making things easier in this respect. In legal terms, though, this means that the original work needs to be protected all the way.

We will not examine in detail, but eventually mention, some possible technical solutions. For instance, a possible solution would be to prevent artificial intelligence systems based on the analysis of enormous amounts of (foreign) information from restricting access to protected works or being forced to pay for it. The marking of these protected works can be done through watermarks or systems similar to DRM (Digital Rights Management systems). In this way, artificial intelligence should refrain from using these works for learning, or otherwise accrue the corresponding payment in exchange, applying the fairly universal legal principle of *loss of lucrum cessans, damnus emergens*.

The importance attributed to the collective work, composed of many sole works and produced under the auspices, initiative, organization and, not to be neglected, the investment of companies (or legal entities), is key in this respect. This is one, if not the main, of the concepts around which we will examine, in the following pages, the state-of-the-art of legal protection given, from copyright, competition, and some other legal fields, to the production and dissemination – to some extent as well, to the consumption, which is also experimenting many major changes – of news. More precisely, to those initially offered within a pack named the collective work. It seems quite evident that it is through the attribution of more legal tools to defend the interests of right holders that the individual authors – the journalists, in our case – will possibly find a way to have fair compensation for their labour. As William Shakespeare once wrote, ‘you take my life, when you do take the means whereby I live’.

JOURNALISTIC PRACTICES IMPACTED BY AI

Many media organizations are taking positions (see Beckett & Yaseen, 2023). Bloomberg, for instance, went one step further and announced, at the end of April 2023, that it would launch its own artificial intelligence model based on the Large Language Model (LLM) for the analysis of financial data. On a much modest scale, AI can bring some solutions to the scarcity of journalists available to cover local topics, a way some media have already explored both in the United States and in Europe. In France, the *Est Republicaine* was experimented on during the final two months of 2023 and the initial ones of 2024 in this respect. Some experimentation in other practices of media is also under consideration, such as reading the news using real people’s voices to train the AI intelligence system, a way that the Swedish Schibsted conglomerate explored at the beginning of 2024. The group, which publishes three of the major newspapers – and their digital editions – in Sweden, *Aftenposten*, *Svenska Dagbladet*, and *Aftonbladet*, used three of their employees’ real voices (Anne Lindholm, Mari Bjaring, and Eva Johannesson’s) to train an AI tool capable of reading the news more credibly, as those voices are still recognizable. A legal issue is emerging here, since, if not full authors’ rights, at least the performers’ rights might be involved.

There is a common assumption that the most repetitive, routine tasks, such as transcription, can be smoothed through artificial intelligence. Some other tasks can be added to that routinisation. One of them is the automatic headline suggestion, a function incorporated into Content Management Systems (CMS) designed and licensed for some media organizations. The results of those processes are the intellectual property of the media. As a result, some media have started adapting their stylebooks to the professional routines in which

artificial intelligence is already helping. One of the first ones, as usual, was *Wired*, in 2023.

The most outstanding impact on the media workflows has been identified by the industry itself (Bavitz, 2023). It is the process of automation of several tasks that up to this point exclusively humans have done (Trapova and Mezei, 2021). This means helping journalists - and the media industry - to do their job. To this extent, automation of those tasks is considered, in general terms, beneficial. Using models such as GPT-4V (Gould and Geronimo, 2023) can help, for instance, in content evaluation. Legal implications of those practices are, though, to be weighed since they can rely on derivative works of preexisting authored works. Using Natural Language Processing (NLP), *The Wall Street Journal* has implemented 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). The company does not pretend to produce final articles, but drafts that a human journalist could use as a starting point and develop to produce her or his work.

Some media, such as CNET, have recognized that artificial intelligence still causes major errors in the production of articles, and, therefore, these must be reviewed by human intelligence before being published (Christian, 2023). Other media have sought other uses for artificial intelligence, thus, in June 2022 Cosmopolitan magazine published a cover whose image had been produced with the help of this technology. The German giant Axel Springer announced in March 2023 that it would also use these systems and that this could put the jobs of many journalists in the group at risk, to the extent that the computer programs take over tasks that were previously entrusted to them. to humans. An Italian media outlet, *Il Foglio*, which assures that 'innovations should not be scary,' has challenged its readers to guess

which pieces have been produced using artificial intelligence and which have not during the first half of 2023.

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. Actually, artificial intelligence has progressed especially since those systems are able to manage a large amount of available data (Gaon, 2012: 20). Data mining is a key concept. Also in this legal area, some reforms have been suggested (Fiil-Flynn *et al.*, 2019), and it has been proposed that research should be, to some extent at least, applicable to journalism. Journalists are increasingly managing big data to produce their news items and analysis. This is another issue to be considered, since this is an exception recognized by, for instance, in the EU's *Directive on Copyright in the Digital Single Market*. Some law scholars propose to examine to which extent artificial intelligence's learning strategies can be considered data breaches. When such AI learning is presumed using copyrighted works, before tackling those practices evidence on copyright infringement is also needed.

Another task is news monitoring. This common practice should, in principle, pose no problem, when the monitored works are correctly mentioned according to copyright law. It is worth reminding that there is a common exception in the news. News can, under many laws, especially in the Civil Law tradition, be used and mentioned in other news features when authors and origin are referred in due diligence, respecting the paternity moral right (see Wilkinson and Gerolami, 2009). In Spain, a digital-born medium, *El Confidencial*, is developing an engine, named Alejandria, with the help of Google News Initiative (GNI), to help journalists search for information from other media and institutional websites, and after that analyze it.

Verification of news material and fact checking is one of the main tasks identified by both scientific and professional literature as one particular help for journalists. Results are still ambivalent since such AI systems are not always capable of identifying sources properly.³

A very different purpose is the fully automated production of news. It has been used quite successfully to produce news items based mainly on numbers, such as sports, election results, or corporate earnings. Those are practices explicitly mentioned by Associated Press.. Artificial intelligence may also help in producing summaries or video shot lists. For more complex practices, artificial intelligence happen to be much more limited.

ame time, using AI has created some remarkable problems. For instance, at the end of November, 2023, *Sports Illustrated's* ownership (Arena Group) had to recognize, through an statement, that some article published by them were produced using fake, non-existent journalists identities and employing artificial intelligence. The issue is even more complicated considering that, according to the company, 'the articles in question were product reviews and were licensed content from an external, third-party company, AdVon Commerce'. All these new situations are clearly posing many problems, and the legal aspects are not a minor point.

³ Most of the software used for those purposes has been listed in Bullard, 2023.

Methodology

This text is intended to be a preliminary approach to an important issue, which is, today, far from being regulated in all its complexity. Some fundamental legal principles prevail in Law. Two, at least, are applicable here: *ubi societas, ibi ius*, that is, the Law regulates all social aspects, necessarily. Of course, the application of artificial intelligence to journalistic activity is one of them. The other general principle, at least in Civil Law countries, is that of Law to which we would like to draw attention is the completeness of legal norms. If there is any social aspect that needs to be regulated or in which the Law must intervene, there are, by definition, no legal loopholes. This means, in practical terms, that the problems that may arise - which are already arising, in fact - regarding the issue at hand must be resolved with the legal norms available, not with those that may be promulgated in the near future. Regardless of whether new laws are necessary, or profound reforms of existing ones, while these legal developments do not occur, it is prudent to adjust, in principle, to the available legal instruments.

SOME THEORETICAL APPROACHES TO COPYRIGHT LAW

A word or two on some concepts related to the theoretical approach of copyright law might be worth, it to begin with.

We have already mentioned the central importance of the concept of interest in the conception of copyright law, from the very historical beginning of this legal field. Several interests need to be balanced: the author's interest, with a different approach from Civil Law (a much more individually authored conception, or authors' rights), from Common Law (a much more entrepreneurial approach, thus giving much importance to the intellectual work's promoter), and from the Socialist Law, now singularly from China, where the role of the

state is crucial, and of companies – legal entities – at the sacrifice of individual authors.

To those actors a new one has been added: AI systems. Some scholars have proposed to apply the so-called *interest theory of rights*, as opposed to the will theory of rights. The interest theory of rights also considers an ethical approach to the use of such systems. The difference, as Ahmed Izzidien remarks, is that while the interest theory of rights 'holds that the principal function of human rights is to protect and promote the essential human interests possessed by all human beings', the will theory of rights 'maintains that the function of a right is to give the right-holder control over another party's duty' (Azzidien, 2023). Although many of us probably agree that the first one is preferable, because 'according to interest theorists of rights, rights function to protect the right-holders interests', and that should be enough in copyright law', in fact, it is the second one which, in our opinion, prevails in competition law, and it is becoming even more predominant due to the introduction of AI in everyday life. Regarding the media, the increasing tendency, even before the industry necessarily bowed to the adoption of AI systems in news production, is to strengthen the importance given to collective works as a means to protect media outlets from any external influence by third parties, being them aggregators, press-clippers or artificial intelligence systems. This leads to the conception of copyright as a simple economic interest and as a property, and a likely collision of copyright and competition law (Schroff, 2021). Actually, both theories could be combined if we maintain that the interest theory of rights can be modulated according to roles (Heikkinen, 2021) and that the role attributed to publishers (right-holders) to defend all interests, both of the right-holders themselves, the media companies as legal

entities, and of the authors they hire as their employees to ensure fair compensation against those companies behind the AI systems. This enforces copyright law as a set of *erga omnes* opposable rights and concedes considerable strength to legal entities but can eventually be detrimental to the individual authors' interest, especially when abusive cessions of rights happen. This is also the reason why, alongside some other scholars, we defend the necessity of such individual authors, and journalists in our specific case, to be very aware of the importance of moral rights. An adequate division of roles – and rights, moral rights as unwaivable ones in Civil Law, at least, and economic rights, shared with publishers – could benefit all parties, in the end.

The most extreme position, however, is the one defended by scholars such as David Vaver, who thinks that intellectual property protection, including copyright, could be reputed unnecessary, given that before 1710's *Statute of Anne*, 'incentive and creative work flourished throughout the world' (Vaver, 1990). We can easily accept that arts, literature and craft blossomed before intellectual property law, but we cannot so easily agree with the fact that authors were rather unprotected by privileges and licenses given by autocratic regimes, and that it was a more perfect system to enhance creation – at least, not by individuals who, legitimately, wish to make a living out of it.

The second concern about theoretical concepts is which one is predominant in copyright law these days. Usually, theories related to intellectual property and copyright are grouped into two: the utilitarian and the non-utilitarian. The utilitarian theories insist on attributing incentives to create to investment, so they are

prone to accept monopolization of the intellectual work. The non-utilitarian theories seek a balance between the interests of authors, rights holders, and the public, and the social planning theory is one of those approaches. John Rawls' theory of redistribution is often mentioned to influence this approach. The origin of the non-utilitarian theories, based on natural law theory, is mainly John Locke, whose approach was based on the necessity of individuals to benefit from their labour and to enjoy the fruits of it.⁴ This is the original English approach, which at the end became – and this is quite clear in the US doctrine around newspapers of the nineteenth and twentieth centuries- a proprietary conception linked to newspaper publishers' ownership and a much more entrepreneurial conception of copyright, and ended up being at the origin of the collective work. A more personal one was privileged by the French and German scholars (Emmanuel Kant, for instance) of the late eighteenth and nineteenth centuries, based on the right of personality. This is usually named the authors' rights doctrine. In this theory, moral rights are as important as economic rights, and more durable in time, since they are forever. Economic exploitation rights are, by nature, limited in time. Paternity, attribution, and integrity rights are the main moral ones, and they seem important to be retained also to face many of the challenges of training artificial intelligence using copyrighted material.

Both approaches are based, as Lionel Bentley and Brad Sherman remarks, on both ethical and moral arguments (giving more importance to the individual creators and to their personality rights) or to instrumental justification. The second, which has worked reasonably well for

⁴ This is an important aspect under scrutiny since some relevant scholars in the field think that a Lockean theory of labour could be 'insurmountable' (Fisher, 2001).

media, is now in crisis due to the introduction of a new very powerful tool: artificial intelligence.

The utilitarian theory ('well grounded in UK and US copyright laws, as Aviv Gaon says) seems to be the winner these days. The ultimate goal is to get the maximum benefit for the greatest number of people, so it seeks a balance between all actors involved in the process of intellectual creation. Another theoretical approach to be considered is social planning theory, since it is 'skeptical of lengthy IP terms', a question that often arises when talking about the news, a more perishable commodity when compared to some other intellectual creations.

A FUNCTIONALIST, COMPARATIVE APPROACH

We are going to focus, specifically, on those legal issues related to intellectual property and the rights of authors - and of assignees, that is, companies, which for the moment at least, are not considered authors, at least for continental civil law -, and aims to be a first approach to the type of issues that the decisive adoption of artificial intelligence systems in media newsrooms (Moravec, Macková, Sido and Ekstein, 2020), for various functions such as those we have mentioned, is already being raised and will foreseeably intensify.

We ask ourselves if, in light of the three legal traditions that we analyzed, it is possible to move the concept of authorship from the personal sphere - of journalists, in our case - to that of legal entities - the media companies that hire them, and/ or the companies that provide the AI technology that they would eventually use - and even consider these works not protected by intellectual property laws. Our hypothesis is that this has to do with the added value of the exploitation of the resulting (derived) intellectual work because it is always built, to a greater or lesser extent, on pre-existing works. Although it is possible that the

very concepts of authorship or invention will end up causing profound legal modifications, as assured by the then director general of the World Intellectual Property Organization, Francis Gurry (WIPO, 2018), the most decisive thing is that it will be more difficult to proceed from a way as univocal and unequivocal as now to the appropriation of the added value of the intellectual work.

The objective of our proposal is, therefore, for this initial stage of legislative reform around artificial intelligence, to determine what regulatory trends apply to the media. To do this, we rely on analysis categories well defined by copyright. The limited length of this article recommends that we focus on an essential concept, of authorship. In other places (Díaz-Noci, 2023) we examine in more detail the originality of the work, which is essential for all intellectual creation to be assigned to an author and protected. However, in this analysis, we will refer, in a subsidiary manner, to other categories that occupy a subordinate role in our design. The first of these concepts is that of the attribution of exploitation rights of the work, both to natural and legal persons - more accentuated in some traditions than in others - and that of the ultimate conception of the intellectual work generated with the help of artificial intelligence systems. We will base ourselves on concepts of authorship, but we will also look at the assignees of economic exploitation rights of the intellectual work. This is a point that, without going any further, the countries of the European Union enter, since, after the implementation of article 15 of the Directive on Copyright in the Digital Single Market of 2019 in the various member states (in the Reformed Text of the Spanish Intellectual Property Law 1/1996, said implementation occurred through article 32.2 in November 2021), certain default rights over individual works (each news item, for example) are

attributed to the legal persons under whose initiative and coordination the collective work is produced (a newspaper, a website): companies. This, finally, makes us consider the categories that refer to the typology of intellectual work, specifically, and in addition to original works, we will refer to collective works and derivative works.

Our research is based on a comparative analysis (Tóthová, 2023). Comparative methods are widely used in all social sciences, and also in the legal field (see, for example, Menbrugghe 2003). We are especially interested in the Law & Society (Feeley, 2007; Clark, 2012) and transnational (Cornish, 1996; Strowel, 1993; Benhamou and Farchy, 2007; Wilkinson and Gerolami, 2009; Miller and Zumbansen, 2012) approaches. We think, with Ralf Michaels, that we must investigate legal norms, but also ‘the results of their application’ (Michaels, 2008: 364). As we have said, this article, with its feet on the ground of existing standards, asks about the trends that are on the horizon. It does so from a transnational comparative perspective, that is, by asking what responses the different legal traditions or cultures are already providing to the challenges that artificial intelligence is posing in the practice of journalism. This is because, at least until the two crises of 2008 and the coronavirus crisis of 2020, Western societies are based on an increasingly transnational, even global, *modus operandi*, and this is evident concerning trade (Koutras and Papadopoulos, 2021). This means that, from a legal point of view, we are dealing, to a certain extent at least, with similar, or at least comparable, systems. As social scientists we have to explain the degree of similarity and difference (and also analogy, see Palmer, 2004). The introduction of artificial intelligence into the daily practice of the media, which is expected to intensify shortly, could introduce some new trends that we will begin to examine in this text.

There are two great legal traditions, Civil law and Common law. Most of the countries of the European Union are Civil Law countries, and when they regulate intellectual property, they anchor their legal bases in respect for the rights of authors, especially natural persons, although more and more importance is given to the exploitation rights of legal entities. The media, in our case. There is one important exception: Ireland is a common law country, like the United Kingdom, after Brexit out of the European Union.

The great country that represents the tradition of Common law, due to its geostrategic and commercial importance, is the United States. This tradition insists more on the importance of legal entities - companies - than of creators - journalists, in our case. Along with these two legal traditions, there is a third: the socialist one. China is, today, a power to which we should pay attention (Bing and Kun, 2019). Also in the topic we are dealing with. Artificial intelligence could be introducing important divergences in the three legal traditions we study, with regard, at least, to news production.

To explain these aspects, we will apply the functionalist method, since it insists on similarities rather than differences, based on ‘equivalence functionalism’ and ‘an epistemology of constructive functionalism’ (Michaels, 2008: 381, following Zweigert and Kötz, 1988; a critique of the method in Platsas, 2008). Functionalism, we follow Christopher Whytock, ‘one of the most influential approaches to the study of comparative law and perhaps the most controversial’, is applied to different national legislations in comparison, since they are supposed to provide ‘solutions to similar social problems’ (Whytock, 2009: 1879). Following Christopher A. Whytock, the functionalist approach is relevant when considering any cultural, economic, political or social context. We believe that is the case. With

C. A. Whytock, we start from the basis that, continuing to translate from the original English, ‘societies with different legal origins [...] are associated with different types of legal norms [that] affect important economic issues’ (Whytock, 2009: 1885).

Our starting point proposes, therefore, putting the emphasis on the problem (the changes and challenges that the widespread adoption of artificial intelligence in newsrooms may pose in the field of intellectual property and copyright) rather than on the norm itself. Norms are meaningless if they do not have practical social utility.

It is also interesting to take into consideration the concept of *digital copyright*, also related to competition law (Stokes, 2019).

The first concept we do not completely agree with is Generative Artificial Intelligence (GAI), since so far at least, the way those systems proceed is predictive. AI is not able to create anything out of the blue, yet. AI systems need to rely on other works to produce new ones, mimicking chains of words, sentences, or elements. They do learn from massive quantities of pre-existing works. All the generative (or predictive, as we prefer) artificial intelligence value chains rely in text and data mining (TDM), as Kalpana Tyagi says (Tyagi, 2023).

From a legal point of view, this is one of the most worrying issues, so it needs to be carefully examined. This is a question remarkably argued by Daniel Gervais back 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 productions (Gervais, 2016).

AI systems just do so, so it seems clear that they cannot create anything out of the blue. The Association of American Publishers holds the same opinion:

Copyright cannot be attributed to literary or artistic works autonomously created by AI, as human involvement in the creative process remains a requirement under international copyright law.

Originality is only expected from human authors in Civil Law countries. Artificial intelligence systems are considered mere tools to assist authors in their jobs, because intellectual skills are still required to produce the final output. Machines are able to decide nothing, so far at least. Whereas artificial intelligence is simply used to assist practitioners in reporting, it poses no legal problem, except for one: deciding to which extent the human intervention (introducing prompts, for instance) is sufficient to attribute full authorship in the resultant work. This can be more problematic, in those countries where journalists are excluded from a non-waivable recognition of their moral (especially, paternity) rights. Even in those Common Law countries, media companies tend to recognise their employees’ authorship of at least the most elaborated pieces of news, for the sake of trustworthiness.

Increasingly, artificial intelligence tools are being implemented in media organisations’ content management systems. As a result, it is even clearer that they are just tools to help journalists gather, verify, produce, translate information, or in some other repetitive, routine tasks (Bollard, 2023, Bavitz, 2023). In no way should that mean an erosion of the recognition of full authorship of journalists. Contract law should also help in this respect.

The main problem related to the use of AI-systems applied to the production of news is not related to output, important as it may be. It is a

more serious problem, for companies hitherto, how those AI systems are trained necessarily trained upon works crawled on the Internet (Elondou *et al.*, 2023). So the problem is related to copyright infringement of reproduction, and also collection and anthology rights. A second concern is how those AI systems produce derivative works, based on preexisting ones whose authors and copyright holders should be mentioned and whose paternity and economic rights should be recognized and respected.

Some remedies to those problems, especially AI systems' learning, is threefold: first, it has been proposed that new laws like EU's announced *AI Act* should be enacted, based on risk levels posed by AI companies. Google, on its turn, announced in July 2023 that it was already testing an AI news production tool named Genesis, and it was showed to *The Washington Post*, *The New York Times* and other media companies. It didn't stop *The New York Times* suing Google for copyright infringement. Many media companies which, probably to put some pressure on Google, have tackled the use of their news repositories using bots. But at the same time, some other companies, such as Associated Press, have signed agreements with OpenAI or with other AI companies, authorising them, for a fee, to use their contents back to 1985. It is unclear, fair as it should be, whether that compensation will also be shared and how with the journalists who authored those news items. Media associations, especially large newspapers, have insisted on exploring a press publishers' ancillary right (Digital Context Next, News Media Alliance) to assure the negotiation power of all collective works. This will be complemented by lobbying to reform copyright law. This is, for instance, the French way. In France, it is currently under parliamentary discussion a proposal to amend the Intellectual Property Act in order to include in it the

traceability of works created using artificial intelligence.

JOURNALISTIC PRACTICES IMPACTED BY AI

Many media organizations are taking positions (see Beckett & Yaseen, 2023). Bloomberg, for instance, went one step further and announced, at the end of April 2023, that it would launch its own artificial intelligence model based on the Large Language Model (LLM) for the analysis of financial data. On a much modest scale, AI can bring some solutions to the scarcity of journalists available to cover local topics, a way some media have already explored both in the United States and in Europe. In France, the *Est Republicaine* was experimented on during the final two months of 2023 and the initial ones of 2024 in this respect. Some experimentation in other practices of media is also under consideration, such as reading the news using real people's voices to train the AI intelligence system, a way that the Swedish Schibsted conglomerate explored at the beginning of 2024. The group, which publishes three of the major newspapers – and their digital editions – in Sweden, *Aftenposten*, *Svenska Dagbladet*, and *Aftonbladet*, used three of their employees' real voices (Anne Lindholm, Mari Bjaring, and Eva Johannesson's) to train an AI tool capable of reading the news more credibly, as those voices are still recognizable. A legal issue is emerging here, since, if not full authors' rights, at least the performers' rights might be involved.

There is a common assumption that the most repetitive, routine tasks, such as transcription, can be smoothed through artificial intelligence. Some other tasks can be added to that routinisation. One of them is the automatic headline suggestion, a function incorporated into Content Management Systems (CMS) designed and licensed for some media organizations. The results of those processes are

the intellectual property of the media. As a result, some media have started adapting their stylebooks to the professional routines in which artificial intelligence is already helping. One of the first ones, as usual, was *Wired*, in 2023.

The most outstanding impact on the media workflows has been identified by the industry itself (Bavitz, 2023). It is the process of automation of several tasks that up to this point exclusively humans have done (Trapova and Mezei, 2021). This means helping journalists - and the media industry - to do their job. To this extent, automation of those tasks is considered, in general terms, beneficial. Using models such as GPT-4V (Gould and Geronimo, 2023) can help, for instance, in content evaluation. Legal implications of those practices are, though, to be weighed since they can rely on derivative works of preexisting authored works. Using Natural Language Processing (NLP), *The Wall Street Journal* has implemented 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). The company does not pretend to produce final articles, but drafts that a human journalist could use as a starting point and develop to produce her or his work.

Some media, such as CNET, have recognized that artificial intelligence still causes major errors in the production of articles, and, therefore, these must be reviewed by human intelligence before being published (Christian, 2023). Other media have sought other uses for artificial intelligence, thus, in June 2022 *Cosmopolitan* magazine published a cover whose image had been produced with the help of this technology. The German giant Axel Springer announced in March 2023 that it would also use these systems and that this could put the jobs of many journalists in the group at risk, to the extent that the computer programs take over tasks that were previously entrusted to

them. to humans. An Italian media outlet, *Il Foglio*, which assures that 'innovations should not be scary,' has challenged its readers to guess which pieces have been produced using artificial intelligence and which have not during the first half of 2023.

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. Actually, artificial intelligence has progressed especially since those systems are able to manage a large amount of available data (Gaon, 2012: 20). Data mining is a key concept. Also in this legal area, some reforms have been suggested (Fiil-Flynn *et al.*, 2019), and it has been proposed that research should be, to some extent at least, applicable to journalism. Journalists are increasingly managing big data to produce their news items and analysis. This is another issue to be considered, since this is an exception recognized by, for instance, in the EU's *Directive on Copyright in the Digital Single Market*. Some law scholars propose to examine to which extent artificial intelligence's learning strategies can be considered data breaches. When such AI learning is presumed using copyrighted works, before tackling those practices evidence on copyright infringement is also needed.

Another task is news monitoring. This common practice should, in principle, pose no problem, when the monitored works are correctly mentioned according to copyright law. It is worth reminding that there is a common exception in the news. News can, under many laws, especially in the Civil Law tradition, be used and mentioned in other news features when authors and origin are referred in due diligence, respecting the paternity moral right (see Wilkinson and Gerolami, 2009). In Spain, a digital-born medium, *El Confidencial*, is developing an engine, named Alejandria, with the help of Google News Initiative (GNI), to help

journalists search for information from other media and institutional websites, and after that analyze it.

Verification of news material and fact checking is one of the main tasks identified by both scientific and professional literature as one particular help for journalists. Results are still ambivalent since such AI systems are not always capable of identifying sources properly.⁵

A very different purpose is the fully automated production of news. It has been used quite successfully to produce news items based mainly on numbers, such as sports, election results, or corporate earnings. Those are practices explicitly mentioned by Associated Press.. Artificial intelligence may also help in producing summaries or video shot lists. For more complex practices, artificial intelligence happen to be much more limited.

ame time, using AI has created some remarkable problems. For instance, at the end of November, 2023, *Sports Illustrated's* ownership (Arena Group) had to recognize, through an statement, that some article published by them were produced using fake, non-existent journalists identities and employing artificial intelligence. The issue is even more complicated considering that, according to the company, 'the articles in question were product reviews and were licensed content from an external, third-party company, AdVon Commerce'. All these new situations are clearly posing many problems, and the legal aspects are not a minor point.

⁵ Most of the software used for those purposes has been listed in Bullard, 2023.

SECTION Concepts on Copyright Law

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In this section, we explain three main concepts of copyright law which are basic to understanding the problems posed by artificial intelligence: the different approaches to authorship in the main legal traditions, the originality requirement and the type of works.

AUTHORSHIP

Authorship (or legal personhood, as Gaon, 2021, names it) is a fundamental concept in these times of artificial intelligence. Still, let us make a difference between authorship and legal personhood. Following Aviv Gaon, 'legal personhood is attributed to funds, corporations' and other legal entities (Gaon, 2021: 37). So our initial hypothesis, from both a legal point and a social, communicative point of view, an aspect that we certainly never lose sight of, is that production of news always and unfailingly needs initial human intervention. As a result, we do believe that there are insufficient reasons to award any author rights to AI systems or to consider that such a thing as authorless work could be protected by copyright law. It is always a human author who gives the instructions (in technical terms, writes the prompt, Murray, 2023) according to which AI tools can produce a work. It has been defined as the *causation requirement*, especially in Civil Law and in the EU authors' rights system. An additional reason is that in order to find out the ultimately responsible of some copyright infringement, some authorship is required.

Where 'free and creative choices in the final expression' can be found, a causation test is successful, and it might constitute evidence of the link between an author and their work (Rognstad, 2022). At this point of artificial intelligence, it is more than dubious that hardware or software is capable of thinking. This means that before any intellectual work is created in any way, intention and planning are needed.

Although the very concepts of authorship or invention may end up causing profound legal modifications, as assured by the then director general of the World Intellectual Property Organization, Francis Gurry (WIPO, 2018), the most decisive thing is that it will be more difficult to proceed from a way as univocal and unequivocal as now to the appropriation of the added value of the intellectual work. In fact, and although, like everything that surrounds artificial intelligence, it is difficult to discern whether it is a passing and ephemeral fad or something more stable, new jobs have already been created, such as that of an expert in giving orders to artificial intelligence ('speaking its language', we could say): the prompt engineer. It would be useful to ask ourselves, from the point of view that we use in this article, the legal one, what possible claims of authorship the performance of that work could give rise to.

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Ultimately, and for the moment the quality of the texts generated by artificial intelligence makes it advisable, it is also someone human who reviews these results so that they are coherent before being published. Therefore, it would be better to talk, for the moment, about news not so much generated but produced with the help of artificial intelligence (AI-aided news).

Considering AI not as an object, but a subject of copyright law, seems a risky possibility right now (on the topic, see Ballardini and Hoven van Genderen, 2022). Other scholars, such as Kevin Flood from Ireland, consider, on the other hand, that AI systems are like any other tool (a pen, a typewriter), so works produced using it should receive a distinctive treatment. He recommends a 'copyright light scheme', so those works could benefit from a shorter term of protection than others. It is to be understood that such works would enter into the public domain after that, which is consistent with what has been proposed for news (Flood, 2020). Anyway, this is not an optimal solution when considering that news is no longer ephemeral (today's scoops no longer are tomorrow's fish wrap, so to say), since they are gathered and made available in databases, presumably used by AI systems to train the engines and, eventually, produce derivative works

Sometimes the programmer has been proposed as the author of the works produced using such AI software, both awarding authorship only to the author of the AI system or to both that company and the people who use it (Gaon, 201: 162), but this is, we agree, far from being the optimal solution, especially considering the practices that such AI-systems, not commissioned by specific companies to perform specific tasks, but based on massive data (owned by others, in many cases) to be trained. It is worth remembering that in many countries computer programs are protected through *sui generis* copyright, or alternatively or cumulatively through industrial property (especially in Civil Law countries), and that internationally and AI systems can be well covered by article 10.1 of the *TRIPS Agreement* ('Computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention (1971).') It is also to be remembered that both the *TRIPS Agreement* of 1994 (article 9.2) and *WIPO Copyright Treaty* of 1996 stipulate that ideas, and algorithms ('mathematical concepts', in *WIPO Treaty's* wording) consequently, cannot be subject to copyright.

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The final user of those AI systems, such as OpenAI's ChatGPT and others, could be also considered the author. To be considered as authors, users need to fulfill the requirements of minimal originality and contribution to the final work, but so far, this seems to be the situation.

Works with no author, or authorless, or with an authorship difficult to be determined, have also been considered. Possible solutions are for those works to go directly to the public domain, in which case economic exploitation of derivative works is accessible to anyone. This is not a good solution neither for media companies nor for hired journalists. We will mention it in another section (the one about types of works), but to consider AI-aimed creations as orphan works is also problematic, and it should be used only in some very specific cases. For instance, when it is not possible to identify, after doing all the efforts – which is a necessary requirement for a work to be considered an orphan one –, the human author behind a machine-generated work. Even so, if that work has been created, for instance within a collective work, provided 'the arrangements necessary for the creation' of that individual work (as, e.g., the British *Copyright, Designs and Patents Act* stipulates), it easily falls under copyright protection for someone. The chances mentioned by Pablo Fernández Carballo-Calero (the author is that of the program, it is the user of the program it is the software itself, or it is nobody) should be solved in favour of the user. The question here is if the user is to be considered the journalist who undertakes the necessary means to get the job done or, especially when there is no sufficient intellectual skill involved, the legal entity that hires the worker is to be considered, if not the author, at least the right holder of the work. This is because all economic exploitation of a work made for hire is assigned to the media company, unless otherwise agreed. Article 15 of the EU *Directive on Copyright in the Digital Single Market* and the called press publisher's right goes in the same direction. Some scholars have proposed that companies can 'hire' AI systems, and avoid any human intervention of their workers (the so-called 'AI work made for hire'). Hitherto, it is difficult to think this is even possible in legal terms. Certainly, it goes against authors' and workers' interests, and further development of the matter should be carefully scrutinized by professional associations.

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In short, the first issue related to the protection provided by the intellectual property to creations in whose production artificial intelligence has intervened is 'authorial suspicion', in the sense of determining whether These systems have been created from other works that they do not cite, and that are a *sine qua non* for the emergence of the derivative work. If we are facing some type of plagiarism or misuse or appropriation of another's work.

The key, however, is not so much the specific one but the more general one of who can be attributed the authorship, and the economic exploitation, of a work obtained through the application of artificial intelligence. To the company that uses it? To the human who merely introduces the prompts that guide her? Who guides the decisions? And what happens when, as is systematically the case, the production of new work is nothing more than a derivative of other works, and to what extent can this cause intellectual property conflicts or even unfair competition such as the one that already exists? we mentioned above, and that will foreseeably confront journalists from CNN, *Wall Street Journal*, and other media with new artificial intelligence tools? The greats of artificial intelligence argue that they only use these works to 'learn' (machine learning, see, from a legal point of view, Grant and Wishcik, 2020), but in reality, it could well be argued that they use them to produce works that do not they generate, but they recreate. Getty Images also announced in January 2023 its intention to sue Stable Diffusion for the same reason: improper use of copyrighted images to generate new works. In that sense, it is essential to develop tools like Glaze, from the University of Chicago, to track which previous works artificial intelligence has used to (re)create their own.

THE CIVIL LAW-EU APPROACH

Civil law strips the intellectual work of the characteristics of true property, to begin with, because it is not absolute - except for its moral rights (Miernicki and NG, 2020), which are inalienable and non-transferable. How do those rights remain in the case of authorless works? -, to begin with because they are limited in time: the entire life of the author or authors and a few more to protect the rights of the heirs. It is, rather, a system of licenses for creations where human effort and intellect take part.

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The entire copyright system of the Civil Law legal tradition is based on the fundamental assumption that authorship is the result of personal effort. However, the 2019 European *Directive on Copyright*, specifically its article 15, which recognizes original rights of press publishers enforceable against news aggregators (again, Google is thought of), is proceeding to a certain drainage of the rights of natural persons for the benefit of legal persons. In some ways, it is recognized that media companies are those in the best position to negotiate agreements (normally opaque as they are subject to confidentiality clauses) with Google or Facebook (on the convenience of adopting such ancillary, press publishers' right, see Duby-Muller & García, 2022).

Natural persons, journalists, could only access compensatory benefits, as long as they do not agree otherwise. The question of the impact of AI in this specific, ancillary right attributed to right holders rather than to authors – albeit they can, but are not necessarily nor mandatorily need to be compensated by employers – is of undeniable interest, and has been examined, for instance, by Juha Vesala and by Maria-Daphne Papadopoulou and Evanthia-Maria Moustaka. The question here is whether, if some of the outputs commissioned by companies using artificial intelligence do not fall under the protectability requirements of copyright law, above all because there is not a recognizable human author behind those news items, whether the press publishers' right can be applied or not. Could suffice that 'a press publication is published under the initiative, control and editorial responsibility of a service provider' (Vesala, 2022: 269), or would those AI-aided news potentially be excluded from copyright protection? This is where competition law might be a more reliable legal instrument, and where the rationale behind such a controversial right (Papadopoulou and Moustaka, 2020) needs to be re-examined. The question of the necessity of protecting the necessary investment – and the profits derived from it – and at the same time doing so through copyright law, which in Civil Law tradition is almost and fundamentally based on human intervention, is when artificial intelligence is introducing so many legal questions, an obvious necessity, leading to even questioning the viability, feasibility, and convenience of keeping alive such a right as it is now. Except in countries like France or Holland, with powerful professional associations, in others like Spain, the usual practice is that journalists' compensation is very low and that they certainly do not participate in those negotiations between press editors and aggregators.

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Similar criticism has arisen in some other European countries. Ireland is one of those. The Copyright Directive of 2019 stipulates that authors will receive an ‘appropriate share’ of the revenues, but the implementation of it (2021) provides little guidance on what is it or how is it to be done. So it is left to ‘contract adjustment mechanisms’ (Fry *et al.*, 2021). This path is what has been followed or is intended to be followed in other Common Law countries, and specifically in Australia, Canada and the United States, as we have already mentioned. Therefore, we are witnessing a general shift in the concept of authorship from the natural person to the legal person that the use of artificial intelligence, by reducing the creative contribution of the journalist in the production of some pieces, at least, could accentuate.

Prominent academics have already examined for the European Commission the impact that artificial intelligence can have on the legal system for the protection of intellectual works (Hartmann, Allan, Hugenholtz, Quintais and Gervais, 2020), and have insisted on being attentive to the moment when artificial intelligence systems, more than generative, become autonomous. The aforementioned report concludes, for the journalistic sector, that it is a system that helps production and distribution, especially the so-called chatbots, which can sometimes interact by answering user questions.) and news aggregation, as well as automatic translation, all of which have already been mentioned in the previous section. The aforementioned academics insist that these are cases where human intervention is necessary, a necessary condition for a work to be considered original from a legal point of view and legally protectable, through the attribution of the corresponding authorship rights. They distinguish, aligned with the jurisprudence of the Court of Justice of the European Union, three phases: conception, execution and drafting. The first is exclusively human, in the others, machines can intervene to one extent or another, and only in the second, the execution of orders itself, does artificial intelligence take on a predominant role. From the point of view of legal reasoning, human authorship is, theoretically at least, protected, as long as the contribution is sufficient and necessary. This legal tradition has insisted on this aspect and its relationship with information production, for example, in the Czech case: the perception that authority could disappear would lead to a dissolution of responsibility (Krausová and Moravec, 2022).

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A crucial practice to understand how intellectual protection legislation should protect the creations that are achieved by applying artificial intelligence is data mining, as one of the exceptions precisely contemplated by the 2019 Directive. That would be a possible loophole to avoid an application stricter, such as that in principle provided for by the draft Directive on artificial intelligence that at the beginning of 2023 was still under discussion in the European institutions. In that project, a threshold of human creativity required for every intellectual work was insisted upon at all times, and it was remembered that data per se did not fall into this category, although they are nevertheless protectable as a *sui generis* right comparable to property rights. intellectual, but not comparable to that of the authors. This proposal is based on a neutral definition of artificial intelligence and the concept of risk: minimal, acceptable with transparency obligations, high or unacceptable. For some academics, the high risk could refer to the problems that there may be for fundamental rights such as freedom of expression or the right to privacy (Helberger and Diakopoulos, 2022), although we will have to wait for the final drafting of the Directive to see whether the assumption is included or not. Let us remember the importance of the protection of personal data in the European Union. In fact, first, the Italian regulator and then a good part of the member states took action on the matter. In April 2023, the Spanish Data Protection Agency (AEPD) opened an *ex officio* investigation into OpenAI for possible violation of Directive 95/46/EC on the Protection of Personal Data, and the European Council for the Protection of Personal Data created a working group to examine the issue. Italy went further, vetoing - in what is perhaps an attempt to open the door to the field - access to ChatGPT until these problems are resolved. As will be mentioned later, this is a fundamental divergence with the Chinese solution, where the possible collision with fundamental rights is not seriously contemplated. Another possible solution, always from the EU legal approach, is that if there are some outputs with no human intervention, or without sufficient human intervention, to fall into the public domain (Pihlajarinne, Thesleff, Leppänen, Valmari, 2022), but then the press publishers' right after the application of article 15 of the *Directive on Copyright in the Single Digital Market*, 2019, can be an obstacle to it, since also those outputs have been produced under the organization and investment of legal entities, such as those press publishers. This proposal can also discourage innovation and investment and go against the incentive copyright doctrine.

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THE COMMON LAW APPROACH

The other great legal tradition, that of Common Law, allows in some cases to attribute authorship by default, when it comes to works produced with the help of artificial intelligence in which no human author can be identified, to certain people, too (in practice, mainly) legal. This is the case of the British (section 9(3) of the *Copyright, Designs and Patents Act*) and Irish intellectual property laws (*Copyright Act*). The British law is interesting since it is quite permissive about computer-generated works, defined in section 178 as ‘a work [...] generated in circumstance such that there is no human author’, and therefore to such works it is difficult, if not impossible, for the originality test to be applied.

As Hartmann *et al.*, 2020, point out, it could go so far as to make these provisions on intellectual property incompatible with Community rules, which, unlike those of Ireland or the United States, do not allow works without an author. This door has been opened in Australia for some time now, through jurisprudence - which, let us remember, in the Common Law tradition is a creator of law, since said tradition is often defined as judge-made law - , the possibility of there being works without a human author, in the case *Acohs PTY Ltd v Ucorp Pty Ltd*, of 2012, and has declared, like the United States Copyright Office, that intellectual property law does not apply to it.

Something else happens, however, with images, where the generative capacity of artificial intelligence may seem, in principle at least, more notable (Hervey, 2023). One of the most current cases, which indicate where things could go, is the administrative decision adopted on February 21, 2023 by the US Copyright Office (Lindbergh, 2023). This administrative instance, not a judicial one, partially revoked a previous decision on whether some images generated by artificial intelligence were protectable by US intellectual property legislation and whether they could be registered - as is mandatory in that country - in the name of an author, Kristina Kashtanova., under whose orders those new images contained in the comic titled *Zarya of the Dawn* were created. The Office concluded that only part of the original work is protectable under copyright law, namely ‘the selection, coordination, and arrangement of the written and visual elements of the work,’ which is no small feat.

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The author of the images is considered not to be Kashtanova, as they were produced using the Midjourney software, but the comic itself is still considered a creation of the natural person and is protected as such by law. This case, and many others that could follow in the near future - Kristina Kashtanova has announced her intention to appeal the decision before the American courts - raises some interesting questions.

The decision of the US Copyright Office does not clarify, however, who should be considered the author of such drawings - or if they are - nor, although it may be considered a pedestrian discussion, who - person or company - has the right to economically exploit the work. In other jurisdictions, such as all Civil Law jurisdictions (the United States is a country considered Common Law, the other great legal tradition) it is not possible, today, to consider that an intellectual work does not have an author. It is precisely the situation described by Daniel J. Gervais a few years earlier: 'The doctrine of copyright is equally refractory to the protection of non-human productions. The first of the doctrinal arguments is that machines cannot take the creative decisions necessary to generate originality, and originality is a sine qua non of copyright. In short, current legislation does not protect machine productions' (Gervais, 2020b, p. 2106, and Gervais, 2020a). With some exceptions, though.

THE CHINESE APPROACH

A very different option is the one adopted by countries from a third legal tradition, such as China, which were a socialist country (the third great legal family), but which, at least from a legal point of view, Currently they show features, with regard to intellectual property laws at least, hybrids between Civil law and Common law.

China, which was one of the few countries representing the purest socialism (or, unambiguously, communism) (today, practically only Cuba remains as a representative of that legal tradition, and its economic power is insignificant compared to that of the giant Asia), a system of state capitalism was opened following Deng Xiaoping's reforms, begun in 1978 and consolidated in the 1990s, where private and state investment coexist, but where state tutelage is overwhelming. It is, so to speak, a hybrid economic system whose analysis goes beyond the objectives of this article, but which reflects its intellectual property legislation, which is certainly as recent as the political and economic system it serves.

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Specifically, the use of artificial intelligence in Chinese media and intellectual property laws, is an issue examined by Joanne Kuai, Raul Ferrer-Conill and Michael Karlsson. The Intellectual Property Law (copyright, strictly), which is only very recently present in the Chinese legal system (it is about 30 years old, nothing more) incorporates a third amendment since June 2021 that has also already been jurisprudentially developed by cases such as the aforementioned *Tencent v Ynigxun*⁶ and *Film v Baidu*. The solution of Chinese legislation, which is recent and hybrid, is to separate the concepts of ownership and authorship.

An important decision was made in 2020. A company called Tencent created an automated news writing program, Dreamwriter, in 2015, capable of producing financial news. The Shanghai Yingxun Technology company reproduced a text created with Dreamwriter without authorization and was successfully sued by Tencent. The Shenzhen Nahan District People's Court decided that the defendant was liable for copyright infringement. One of the plaintiff's legal advisors, Wang Guohua, put his finger on the issue by stating that 'according to our copyright law as well as some international conventions, the definition of a work first emphasizes that the creation is original, reproducible and produced based on human intellectual activity, so human intelligence is the core and premise' (mentioned in Yan, 2020).

Another important decision, in a case concerning the automated generation of images similar to the US case previously mentioned and examined by the Copyright Office (the images for a comic produced by Kristina Kashtanova) was made by the Beijing Internet Court in November 2023. The decision of the case Jing 0491 Min Chu No. 11279 (2023) was about infringement of the right of authorship and the right of dissemination, and determined that the defendant, who had used without permission a young woman's image generated by the plaintiff using Stable Diffusion, had to compensate the author – thus, the one who ideated the prompts under whom the image was produced. In this decision, the Beijing Court attributed authorship to the user of the AI system, a solution very different from the one suggested *iuris tantum* by the US Copyright Office.

⁶ Decision of the People's Court of Nanshan (District of Shenzhen) 24 December 2019 – Case No. (2019) Yue 0305 Min Chu No. 14010

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The Chinese law modifies this concept and, together with that of originality, central to the continental legal system, accepts that of 'creativity, and, yes, it recognizes it in machine productions. Through these two mechanisms' (Kuai, Ferrer-Conill and Karlsson, 2022) the Chinese legislator solves in one fell swoop the Western dichotomies that we have briefly examined in the present sections. China is betting, unlike the majority of Western thought, Anglo-Saxon or not, on a 'hard' approach to the presence of artificial intelligence in newsrooms. Where the majority of Western scholars defend human intervention, from an individualistic conception of what intellectual creation is (especially present in the conception of the French-rooted *droit d'auteur*, more than in the copyright inaugurated in 1710 by the *Statute of Anne*) the Chinese academy is committed to a supposed balance between this and investment in technology, between producers (companies and, from this point of view and to a lesser extent because it involves the workforce, journalists) and technological platforms, where their economy is especially strong (Ørstavik, 2022). This contrasts sharply with the Western perspective, even in those authors who consider whether the concept of creativity should be modified in the legal bases of intellectual property as we know it (Bonadio, Lucchi, Mazzioti, 2022), since the majority of Authors are in favor of maintaining this legal system without major modification, until generative artificial intelligence systems effectively eliminate the author after the conception of the work, which is not the case - except, perhaps, in music. The authors also remember that we follow, because this commitment to platforms reinforces economic and political interventionism, thus limiting - which is another issue to be developed in the future - freedom of expression.

China oppositely resolves this dichotomy. In any case, the recommendation they made in 2020 was to keep the legal bases on the intellectual property of the European Union unchanged, without substantially modifying the categorization of works, and in any case delve into related rights and *sui generis* rights, for example, on databases, to address the problems that artificial intelligence may cause. In Europe, that database *sui generis* right 'protects the substantial investment' (Fernández Carballo-Calero, 2022, 80). The European doctrine seems, again, a feasible way to protect all the news items (and other creations, such as videos, images, infographics, and so on) contained in such huge databases that are now behind the front-end interfaces accessible through media's websites.

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Other jurisdictions that contemplate, even partially, the possibility of granting legal protection to works generated by artificial intelligence are India (on this country, see Banerjee, in Liu and Racherla, 2019), New Zealand, the United Kingdom (Hervey, 2023). The British legislator justifies this position because he considers that artificial intelligence is in an early phase of its development.

ORIGINALITY

Originality is, in both main legal traditions (Common law and Civil law) a *sine qua non* requisite for any intellectual work to be protected under copyright laws. The concept of originality is linked to creativity -attributed in many legal traditions, especially in Civil Law's authorial tradition exclusively to humans -, to intentionality, which is particularly important when dealing with AI-aimed outputs (Gaon, 2021: 241) and to the sufficient application of someone's intellectual skills or 'sweat of the brow' doctrine, especially important in the Common Law tradition. Works do not need to be excellent in artistic terms (for a comparison of originality in both legal systems, Gervais, 2002), but, still, in an increasingly globalized world, where many jurisdictions may be applicable, 'bridging the originality gap' between them is necessary (Gaon, 2021: 246), so at least a minimum threshold is needed. Also in the Common Law doctrine creativity is reserved for human beings, for instance, in some early US leading cases, such as *Burrow-Giles Lithographic Co v Sarony of 1884*, and *Bleistein v Donaldson Lithographing Co.*, both mentioned in Fernández Carballo-Calero, 2022: 62).

The most presumed creative or generative artificial intelligence systems pose major legal problems, much more than the other types of AI applied to, for instance, the business of news: assistive and distributive (Trapova and Mezei, 2021).

News, as an individual work, is protected. Its originality can be traced back to an ultimate author, who feeds the system and indicates, if she or he sues AI, which kind of output is desired. One challenge for artificial intelligence is, precisely, to develop tools to find out the ultimate authors behind the works used by other artificial intelligence systems to make derivative works. It is not science fiction in any way. Researchers from Chicago University in the United States have created such an app, called Glaze (Mitchum, 2023).

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The collective work is also protected by copyright. But in this case companies or legal entities are entitled. The difference is that fully (and, in some legal as right-holders). At least in Common law countries, where copyright law is much more entrepreneurial than in the Civil law tradition, where the author is placed amid the legal coverage, the work-made-for-hire legal figure can be easily used to attribute economic rights to companies which actually pay human or artificial workers to produce news. As Annemarie Bridy reminds, work for hire is just ‘a mechanism for vesting copyright directly in a legal person who is acknowledged *not* to be the author-in-fact of the work in question’, a ‘legal fiction’ (Bridy, 2012, p. 27). Since automated journalism (also called ‘robot journalism’) is becoming more and more frequent in newsrooms all over the world, it is not surprising that new jobs related to it emerge. In February 2023, the *Financial Times* appointed journalist Madhumita Murgia as AI editor, thus, specialized in searching for stories about how AI is changing the industry. Equally, many media are commissioning journalist to supervise automated creation of news, and to verify their consistency. Like it or not, AI systems never create anything -we insist- out of the blue, but following a prompt introduced by humans.

If the user pretends to be the author of works that are in reality an output created by AI systems such as ChatGPT -for instance, a student who submits a paper for qualification produced exclusively by AI, without further revision- could easily fall under the canonical definition of plagiarism: pretending to be the author of a work produced by others and, in this case, derived from some other people’s works.

Some new concepts around artificial intelligence are appearing. One of the commonly accepted terms is ‘generative artificial intelligence’. We prefer, for both conceptual, legal, and practical reasons, ‘artificial-intelligence-assisted’ journalism. *Assisted* is a word and a concept used by many relevant scholars of the field (see, for instance, Hugenholtz and Quintais, 2021). Most, if not all, works created using AI are ‘assisted outputs’, not works spontaneously conceived and executed exclusively by machines. This is, so far, to dream impossible things. If we accept that, then we need to agree with P. Bernt Hugenholtz and Joao Pedro Quintais, and assume that ‘[the] conclusion is that current EU copyright rules are generally suitable and sufficiently flexible to deal with the challenges posed by AI-assisted output.’ AI, as a matter of fact does not generate but predicts what comes next.

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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 doing any effort to be the ones artificial intelligence companies such as OpenAI or Google are entitled to negotiate with. The second concept, which insists in 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 labor 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 the 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 labor processes, but also the ones of digitization, including convergence, as it has been remarked on several occasions (Larrondo, Díaz-Noci and Erdal, 2023).

TYPES OF WORKS

Individual works, created by someone, are related to sole authorship, but can also be made under joint authorship. In the old times of copyright, these were the main works, and the ones that the lawmaker had in mind. Especially, in the Civil Law area, where the importance given to individual creation leads to a strong authorial protection system. Soon, though, some other types of work became apparent: the collective work and the derivative works are among those.

This is also related to authorship. Individual works have one or several (human) authors, but the introduction of AI systems poses some changes to this assumption. Is it possible, for instance, a joint authorship between a human being (the one who provides the orders, commands, prompts, purpose, and intentionality without which the work cannot be born, so to speak) and the AI system? If so, then, which share of the final work, and the benefits, is to be attributed to the machine – or the person, natural or legal, behind it?

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It needs to be discarded, we understand, an AI system's sole authorship of such individual works, and, even if we need to examine case by case the whole thing, we agree with Pablo Fernández Carballo-Calero that 'the condition of author and holder of the rights over the AI system (software) does not *per se* imply the condition of author and holder of the rights over the results generated or produced by it' (Fernández Carballo-Calero, 2022: 118). Eventually, the user of such AI systems is to be considered the joint author. It can be a human being, a journalist for instance, or – if not a full author, at least the right holder – the company that decides to use that system, or even -which was, until recently, the case- that commissions someone to produce a software. In this respect, the adoption of specific AI systems, such as the announced Google's Genesis, to be incorporated by the media content management systems, once it is effectively implemented, should shed some light on the question.

The question of derivative works is central to the development of copyright law (Samuelson, 2013). An interesting concept related to derivative news is that they are enriched new works. Whereas enriching material can be suggested by artificial intelligence, added value can only be provided by human intervention.

Authorless works are not conceivable in Civil Law jurisdictions, but they can be considered in Common Law countries or in China (see Díaz Noci, 2023b).

These works, in any case, should not be understood to be assimilated to **orphan works**, which is a different case and whose scope, we believe, would not be appropriate to extend in any way to those produced by artificial intelligence, and much less to works in the domain public. In this sense, Hartmann *et al.*, 2020. They recommend, in any case, taking advantage of the concept of related rights (*droits voisins* or neighboring or ancillary rights). Of this type are those attributed ex art. 15 of the Directive on Copyright in the Digital Single Market of 2019 (and ex art. 32.2 TRLPI 1/1996 in Spain) to press producers. In any case, the Court of Justice of the European Union established clear jurisprudence in this regard, in C-5/08 Infopaq International A/S v *Danske DagbaldesForening*), a decision in which it established that to be

protected by the right of the author the work must contain a minimum degree of originality.

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Vice versa, and here is the crux of the matter, from this perspective, any work that presents a degree of originality must have a (human) author and must be protected by intellectual property laws. It is at this point that the two Western legal traditions begin to differ substantially. It is to be reminded that in 2020 the European Commission started revising the existing *Orphan Works Directive 2012/28/EU*. This Directive was enacted to enhance the digitization and dissemination of cultural heritage, but it has some risks, especially when considering the impact of artificial intelligence. Such AI systems can make use of orphan works, many of them contained in historical media's large archives or repositories. Once again, it can be very reasonably argued that those works are protected under the collective works' umbrella, and sometimes protected under technical resources such as paywalls, but it is also arguable that, considering that many news items are not -at least, seemingly- authored or signed, they cannot be attributed to anyone, and fall under the definition of orphan works. This an additional consideration here: in the example mentioned, those works are not out of the commercial circuit, since they have been digitized by media companies, some of them still operating, and are well within the business interests of such organisations.

Lawmaking and reform

Reforming the law or enacting new provisions for artificial intelligence is the first remedy we will mention. The most advanced effort – not the only one, though – is the proposed EU *AI Act* or, more properly, *Artificial Intelligence Directive*, prepared by the European Commission, that could be passed in 2024, then be enacted in every one of the state members of the Union.

Other countries are inclined to revise the existing laws. For instance, the United Kingdom launched a policy paper, *A pro-innovation approach to AI-regulation* in March 2023.⁷ 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*.

Concerns about the advances and challenges of artificial intelligence moved some governments and parliaments to commission white papers on the subject. The British parliament, for instance, established the Select Committee on Artificial Intelligence in 2017 and it proposed a code on artificial intelligence in the report published the following year, *AI in the UK: Ready, willing, and able?* Almost at the same time, the European Commission whose president was Ursula von der Leyen took action on the matter and proposed an EU policy on artificial intelligence. That very same year (2017) China, a country that explicitly wants to lead artificial intelligence by 2030, launched its *Next generation for artificial intelligence plan*, first, and the *Beijing principles*, later. All these movements gave birth to a fundamental discussion: does having an AI policy mean enacting a new law specifically addressed to regulate it? Whilst many countries have decided not to follow this way, the European Union has decidedly gone through it.

In November 2023, prior to the approval of the *Bletchley Declaration*, the G7 countries – the United States, Canada, the United Kingdom, France, Germany, Italy, and Japan – launched the *Hiroshima Process International Guiding Principles for Organizations Developing Advanced AI Systems*,

⁷ <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper>

leading to a code of conduct for AI developers based on voluntary adherence. The principles are addressed to identify risks – a milestone for the EU’s legislation as well, and a recommendation of the *Bletchley Declaration* –, insist on the necessity of transparency and accountability, and safeguarding both personal data and intellectual property rights. Just a month later, 29 countries, including many of the European Union, the United States, and China, approved in a world summit on AI the *Bletchley Declaration*⁸. In the same fashion, on October 30, 2023, the US Government published an *Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence*.

Litigation

The controversial nature of artificial intelligence systems’ application to the production of news has led to litigation. Media companies complain and have decided to go to court. This is especially important in Common Law countries, since court decisions are precedents, and courts are lawmakers too. While copyright and competition law are mainly statutory laws themselves, the many aspects that remain unresolved need to be clarified by courts. During 2023, just the year after the introduction of ChatGPT and the like, some major media conglomerates have chosen this way.

These are, in many cases, the same companies that are, at the same time, trying to reach agreements with AI companies, such as OpenAI, or that are in the process of getting a new AI system, specially designed for media production, implemented thanks to Google, another major actor in the battle for a hegemonic position in the new artificial intelligence landscape. Litigation is often used also in combination with technical tackling: those very same great companies, namely *The New York Times*, have also explored the possibilities of technical tackling, to prevent such AI systems from training themselves upon their copyrighted contents. Since ChatGPT, Common Crawl, or Stable Diffusion, just to mention a couple, learn from pre-existing (and not infrequently proprietary) datasets and use some other people’s texts, images, videos, or even code, lawsuits will become more and more frequent. Technical tackling, and litigation, are also a way to prevent unauthorized derivative works produced using without recognition or compensation original, copyrighted, authored works.

⁸ <https://www.gov.uk/government/publications/ai-safety-summit-2023-the-bletchley-declaration/dbc58681-1b68-47e0-8e3f-f91435fdf8ce>

Normally, legal entities such as media companies or publishers are the one that suit AI companies. Authors' legal complaints are much less frequent. It is interesting to examine, as Nordemann and Strobl did in 2022, the definition of what is a publisher in light of article 16 of the EU DSM Directive 2019/790, just because when the authors have granted the publisher as a right holder, they can claim for a compensatory mechanism for, e.g., stocked images. These scholars' recommendation is to adopt a broader meaning of what is a publisher, so they can protect both their rights and those of the image authors too.

Litigation has been mainly instigated by companies as right holders, more than by authors. Just to mention one of those lawsuits, Getty Images announced in January 2023 that they would sue Stable Diffusion in the United Kingdom for using their images and infringing copyright (Kafka, 2023). By the end of December 2023, the court decided that the court could go to trial. Getty Images sued Stable Diffusion also in the United States. There are two such lawsuits waiting for trial and decision: *Getty Images vs Stable Diffusion and Tremblay P.* and *Awad M. v. OpenAI INC. et al*, filed under a US Copyright class action in June 2023.

Most especially, litigation has the form of US class actions, in which a group of individuals has the chance of suing altogether, in this case, great AI companies. One of those class actions is the one 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.

Another US class action is the one taken by some individuals against OpenAI, for data breach or, as it mentioned in the complaint, 'defendant's [OpenAI] theft of user data in excess of reasonable content' and of 'industry standards', which, at the same time, is thought to possibly cause harm and violation of privacy. At the same time, the plaintiffs consider that competition law is harmed.

Some other similar lawsuits have followed. Just to mention a few of them, some individuals, most of the book authors, filed a class action complaint (*Kadrey v Meta*) to be ruled by the US District Court of Northern California (San Francisco) against Meta for copyright and intellectual property infringement. Once again, this is a sue because the plaintiffs consider that Meta's LLaMA, the large language model created by Meta, is being trained using unauthorisedly some other third parties' contents. Both direct and vicarious copyright infringement is alleged. Whilst direct copyright infringement is mentioned because presumably Meta is using some other people's copyright contents, vicarious infringement is mentioned because the plaintiffs consider that Meta is producing new derivative works without neither mentioning the authors or the right holders of the original works nor accruing benefits to them. In December 2023, the so-called

Spanish Asociación de Medios de Información (Media Association, AMI) sued Meta on the basis of unfair competition, for a presumed data breach infringement between 2018 and 2023. AMI represented more than eighty Spanish media alleged that Meta was not respecting the EU data protection law and that by using those media's content with no authorization, Meta was obtaining all revenues derived from fragmented advertisement illegally. At the same time, according to data made publicly available by the Reuters Institute for the Study of Journalism, the traffic that Meta derives to the media decreased as much as 48 percent in 2023.

The most resounding lawsuit, already to be decided by the US District Court of Southern New York, is the one filed by *The New York Times* Company against OpenAI in the last days of December 2023. Aiming to defend 'independent journalism' as 'vital for our democracy', the *New York Times* defends that OpenAI is using its copyrighted works to train its system 'in widescale'. In the lawsuit, the plaintiff mentions many times the human resources employed by the company, the value of human work, and the investment. As a consequence, not only economy but democracy will be harmed:

With less revenue, news organizations will have fewer journalists able to dedicate time and resources to important, in-depth stories, which creates a risk that those stories will go untold. Less journalism will be produced, and the cost to society will be enormous.

Many of those cases deal with AI systems training, presumably using large quantities of information accessible on the Internet, for free or behind a paywall, in many cases, as aforementioned, violating both data protection, competition law principles, and even privacy. OpenAI's response was bitter. Answering specifically *The New York Times'* lawsuit, the AI company considered it 'without merit', and still defended that OpenAI 'supports journalism and partners with many media organizations'. In legal terms, OpenAI maintains that training its systems using third parties' copyrighted contents – a practice that the company does not deny – is fair use.

Fair use is a more flexible instrument to allow AI systems to be trained upon pre-existent copyrighted works, especially in some countries, such as the United States, the United Kingdom, and Japan, whereas it is an operation performed with non-commercial (on non-enjoyment, in the Japanese legislation) purposes, but still, publishers have shown their concern. Actually, Google and some others rely on a decision held in 2015 in a case filed by the Authors Guild of America, for scanning many books and making them partially, but not fully available to the public. The court found that there was no copyright infringement, but fair use for 'transformational uses'. The exception system, typical of the European Union, is tighter since it allows an opt-out mechanism for commercial purposes, not for non-commercial purposes, when an exception for just research and cultural purposes is enacted under the *Directive on Copyright*

in the Single Digital Market, 2019 (Tyagi, 2023). This is what the French collecting society Sacem, which represents the interests of many music composers and publishers of music in the country, did in October 2023, on the basis of article L122-5-3 of the French Intellectual Property Code, the one that implements article 4(3) of Directive(EU) 2019/790. While it is much easier in Europe to make it clear what AI systems do when feeding and training their engines cannot be considered to be done for research or cultural purposes, but with an ultimate commercial intention – regardless of the output produced after that – it is a more difficult question to be immediately solved under copyright law in Common Law countries, where, if a derivative work is not produced, or can be clearly stated, fair use may be invoked. For this reason, some scholars believe that the EU law could become the world framework for opting out (Keller, 2023) and, in general, ‘the Act will not only impose requirements for AI in the EU, a population of 450 million people, but also set precedent for AI regulation around the world (the Brussels effect), policymakers across the globe are already drawing inspiration from the AI Act’ (Bommasani, Klyman, Zhang & Liang, 2024).

In the long run, it will become, in our opinion, progressively hard to defend, though, since the very large, massive amount of works those systems use in an opaque way – algorithms have never made public – makes it unclassifiable under fair use. In this respect, it is crucially important to distinguish (we follow Pamela Samuelson here), ‘transformative fair uses from infringing derivative works (Samuelson, 2023). Besides, OpenAI does not mention the works they use, or ask for authorization, which one of the legal basis *The New York Times Company* mentions in the lawsuit – as in some of the aforementioned class action other plaintiffs do. Nevertheless, OpenAI offers an opt-out option to media in order to prevent the utilization of their works. OpenAI offered this option in August 2023 to 1,153 news organizations, and at least half of them accepted. Otherwise, it is to be presumed, that companies implicitly authorize the massive use of data and copyrighted works. This is a strange move, since in many jurisdictions, authorization needs to be explicitly required and given. Even more, considering that OpenAI is neither using those works for news or informative purposes nor mentioning the origin. Such use of third parties’ works and data is not awarded by law unless otherwise decided by those parties. An ‘all rights reserved’ clause, alongside technical tackling – that can be inadvertently cracked, by the way – will enforce the plaintiff’s position, but it is not in any way required to prevent unfair utilization of those copyrighted works. Not to mention, again, the possibility of derivative works, once again unauthorized and with no authors’ or right holder’s mention. All in all, as we wait for the courts’ decisions, OpenAI’s position seems legally weak. This vision is enforced by the US legislative as well. While the US Senate examines for

the second time the proposal for a *Journalism Preservation and Competition Act*, Condé Nast's CEO Roger Lynch warned in January 2024 at the US Congress that many media companies will get out of business in the meantime. He insisted: publishers need to be compensated.

Negotiation and agreements (including principles)

Negotiation is the third, and main in our humble opinion, if not the best or most desirable at least the quickest way to make things work between media companies and AI system companies. Recent as the popularization of OpenAI and the like is, some media companies have taken a position and made a move towards negotiation and agreements.

Agreements are signed, first, to license - sometimes, after technically tackling free access to copyrighted works in media repositories or databases - the use of news to train artificial intelligence LLM systems. The ultimate goal is to obtain compensation for companies – and, subsidiarily and depending on labour contracts, mainly, with authors.

Axel Springer, one of the main if not the greatest German news publishers, who was also behind the lobbying activity to enact a new ancillary right in the German Copyright Act, which proved to be unsuccessful in making Google News pay (Google reminded that there is always an opt-out option if the companies did not wish for their contents to be indexed), made some moves at the end of 2023 regarding AI systems. Almost at the same time that Upday News service was liquidated – some of those contents were reproduced by Meta, a practice some journalists complained about because they were hired by Upday, which was using the contents they which was presumedly licensing their content to Meta without the authors' consent – Axel Springer launched a service based on ChatGPT, named Hey_, included in one of its main newspaper, *Bild*. The system enables readers to have a more 'personalized and interactive' experience, and at the same time the medium can develop AI-based articles. The British *Daily Mirror* and *Daily Express* were exploring similar tools. OpenAI and Axel Springer reached an agreement in December 2023, allowing ChatGPT, under a non-exclusive basis, to use in their responses to users content taken from media owned, and paywalled even, by the German mogul, including *Politico*, *Bild*, *Welt*, and *Business Insider*. OpenAI is also allowed to use all those contents and some others from Axel Springer's archives to train ChatGPT. It is unknown whether journalists, presently hired or the authors of those contents from the company's database, are to be compensated.⁹ OpenAi was offering,

⁹ <https://openai.com/blog/axel-springer-partnership>

according to some sources, \$1 to \$5 million to each media company a year in exchange for enabling ChatGPT's company to use their licensed content, not surprisingly and most probably spurred by the threat posed by the *New York Times'* lawsuit.

In February 2024, NewsCorp's CEO Robert Thomson recognized that the conglomerate was negotiating to reach agreements with AI companies, and said that they prefer 'courtship to courtrooms' when dealing with them. NewsCorp definitely 'will prioritise negotiation over litigation to finalise deals'.¹⁰

On the other hand, some tech giants are also taking a position in the field of the use of great news sets to train their AI systems. Apple, which until then was keeping a low profile, decided to negotiate in this direction at the end of 2023 with Condé Nast, NBC News and IAC, at least, for \$50 million. Some other companies, apparently, were more reluctant.

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 available.¹¹ 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 and especially to protect their jobs. Some journalists have found a way to agree 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 faith.¹²

¹⁰ In Barret, J. (2024, February 8). News Corp in 'advanced negotiations' with AI companies over access to content, CEO says. *The Guardian*. <https://www.theguardian.com/media/2024/feb/08/news-corp-in-advanced-negotiations-with-ai-companies-over-access-to-content-ceo-says>

¹¹ 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.

¹² 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.'

One of the organizations which published some recommendations before ChatGPT to ensure a convenient adoption of artificial intelligence was OECD. Its *AI Principles* were launched in May 2019, insisting in a human-centered approach and in some well-known principles for media organizations, such as transparency and accountability (see, for instance, Rodríguez-Castro and González Tosat, 2023: 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 in 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 principles 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'. Since companies are usually the ones under whose direction and investment collective works, such as newspaper or websites, are created, and the ones that have a control upon licenses granted to them by authors through contracts - usually, labor 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 copyright 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', the legal fundament upon such claims are 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.

The way of proposing some principles is the way followed also by the International Authors Forum (*Principles for Artificial Intelligence and Authorship*, September 2023), being the first of them all authorisation, fair compensation and transparency (also accountability), which are values also required to media organisations to ensure a good information quality and could be gathered in the EU AI Act proposal. Respect to moral and to privacy right are also mentioned.

Some other media associations have followed. News/Media Alliance (NMA) reproduced those principles in April 2023. They enlengthened them in their response and comments to the Artificial Intelligence and Copyright consultation launched by the US Copyrihgt 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 literally largely reproduce some of those by Digital Content Next. As the American association, those publishers claimed for artificial intelligence system to 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' right are recognized and protected, since only humans can be considered full authors. In this tradition, and in these principles, creators are individual authors and publishers are rightholders – both add users. This is the reason why principle three differs from their American counterparts and put 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 principles follow verbatim the one we have already mentioned: publishers are entitled to negotiate with artificial intelligence system companies and to ensure a fair compensation. Principles related to transparency and accountability, and to competition law, are also identical. Both set 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 mentions, since it insists in ethic solutions rather than in 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 seemingly more useful when used inside media organizations than when they are pretending to impose conditions on AI companies. Guidelines are an instrument based, using legal terms, on good faith or *bona fides*. Breach of confidence can be claimed when those guidelines are incorporated as contractual clauses and 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 Union, it is not used, except in Ireland, where it is known as 'fair dealing' (Chapter 6 of the *Copyright and Related Rights Act, 2000*).¹³

¹³ 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.'

Ireland is an interesting case regarding fair use, since, according to a report by the Irish National Union of Journalists ‘Irish copyright law exists in an uncomfortable no-man’s-land between the free for all of US fair use and the full recognition of creators’ rights enshrined in the laws of many EU countries’ (Brady *et al.*, s.d.). Directly addressing Google and Facebook, the National Union of Journalists considered that the European copyright law is not a barrier to innovation. Those Irish journalists consider that fair use is not good for practitioners, and recommend that ‘fair use doctrine not be introduced into Irish law and that the Irish Government does not lobby for its introduction at a European level’. Actually, some amendments were introduced in the Irish Copyright Act in 2019 to implement some exceptions aligned with the EU so-called *Info Soc Directive*, one of those referred to news reporting.

A possible way to be followed is fair use guidelines for media and journalists (OpenAI allegedly follows fair use when training its software upon such a great amount and variety of copyrighted sources, but is very doubtful that this practice could, actually, be protected under such legal umbrella), so they can be sure about how to proceed when, for instance, copyright is supposedly infringed or, otherwise, how not to infringe some other authors’ copyright when asking their own AI tools to produce news or images.

Fair use, or fair dealing, as it is named in the United Kingdom and Ireland, is not applicable in many other countries (on the subtle distinction between the both, see Saw, 2023). So, the European Union explicitly prefers and only tolerates a list of qualified exceptions, regardless of the opinion of many legal scholars, who would prefer a more flexible approach to the question. Data are not copyrightable, as ideas are not, but pre-existing works fall under copyright law’s protection. It is hard to be sure that the output produced using an AI system once we have introduced some prompts is not searching, mining, and merging authored works. This is a concern adopted by the European institutions, once again in article 15 of the *Directive on Copyright in the Digital Single Market* of 2019 -in this case, trying to ensure that users are not infringing copyright when creating derivative works, a job AI-systems can do much more quickly and efficiently, by the way. In the forthcoming regulation of artificial intelligence, the European Commission has tentatively defined it in the sense we have underlined before, namely a system designed to operate with some autonomy from data provided by both humans and machines.¹⁴

¹⁴ The definition of artificial intelligence proposed by the European Commission is the one proposed in *Artificial intelligence for Europe* (2018): ‘Artificial intelligence (AI) refers to systems that display intelligent behavior by analyzing their environment and taking actions – with some degree of autonomy – to achieve specific goals. AI-based systems can be purely software-based, acting in the virtual world (e.g. voice assistants, image analysis software, search engines,

Some practices, still, are covered by those exceptions. Let us remember that speeches delivered by politicians, for instance, can be reproduced (German Federal Supreme Court, Judgment of 30 April 2020, I ZR 228/15, following CJUE's *Spiegel Online GmbH v Volker Beck*, C-516/17. The German Federal Supreme Court ruled that in some cases there is no need for asking explicit authorization in order to reproduce some contents, because 'the unauthorized publication by the press of already published works for the purpose of informing the public about current events must neither require the prior consent of the copyright holder nor be allowed ex lege only when it is unreasonable to obtain such consent' (see Priora & Jütte, 2020). This is not the situation when OpenAi or other gigantic companies behind AI systems are training their models using copyrighted works.

The EU alternative to fair use (or fair dealing) is a closed list of exceptions, one of which is referred to as the news of the day, that can be used by other media as well always mentioning author and origin. Data protection¹⁵ is also to be considered, as some scholars have remarked, taking into consideration the doctrine of some CJUE's cases, such as *Satakunnan Markkinapörssi* (Korpisaari, 2022), in which the 'journalistic purpose' is a central concept, to be interpreted in a broad sense at the light of 'general interest', according to the European court. Once again, the increasing production of news aided by AI tools, or even entirely produced by it, can make this doctrine questionable or need to be revised. This is the reason why some authors recommend not going beyond introducing new exclusive right if the rationale behind this particular legal field is to ensure a free flow of data, instead, he proposes 'promoting contractual models, standardization agreements, and standardized tools that allow access, processing, collection, and interoperability of data' (Banterle, 2020: 223). This does not mean at all, in our opinion, that all news, also that any media output, authored or authorless – if it is even possible -, has to be considered data available for AI systems' training.

Technical solutions

Finally, some technical solutions, especially to avoid unauthorized used of copyrightable content by LLM systems, have been used. We have

speech and face recognition systems) or AI can be embedded in hardware devices (e.g., advanced robots, autonomous cars, drones or Internet of Things applications'.

¹⁵ General Data Protection Regulation, 2016, enforced since 2018. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation, GDPR) [2016] OJ L119/1.

mentioned some of them. Original contents are tagged or watermarked. Digital Rights Management Systems (DRMS) can also be used. The protection might be eventually cracked, but in turn, this constitutes an intellectual property infringement.

Another tool is a digital register or publications, like the one proposed by the Spanish collecting society CEDRO, assigning digital fingerprints to those works. It can work for unitary works like books, but it is more technically difficult to digitally mark each and every one of the many items produced by media on a 24/7 basis.

Monitoring media and their content is another way proposed by the Press Database and Licensing Network (PDLN), affiliated to the International Federation of Reproduction Rights Organisations (IFRRO), to obtain voluntary licensing and guarantee reproduction rights for publishers. In this respect, we need to insist in the fact that what is reproduced is, normally, not a whole issue of a collective work (a newspaper, for instance), but some individual items published on them. This makes it even more necessary for journalists to ensure a fair share and compensation of those revenues. This is a solution intended for press-clipping activity, but eventually could be also applied to the use of such content by AI systems.

Competition law

Competition law is a legal field closely related to copyright, to the extent that, in our opinion, we can hardly understand one without the other. As a matter of fact, media lobbying is clearly combining both to ensure more effective protection of their outputs and their investment. This is a tendency in the scholarly literature on the so-called digital copyright law (Stokes, 2019). The question is that the harm caused by Google or Facebook to digital advertising is huge. In Spain, the official National Commission of the Markets and Competition (CNMC) published a report (*Estudio sobre las condiciones de competencia en el sector de la publicidad online en España, 2021*) in which it was calculated that almost three-quarters of the incomes went to those global giants because they were able to accumulate a massive amount of data and the vertical and horizontal integration of their services.

Litigation also goes partially in this direction. Whilst collaborating with Google in the development of new AI engines, like Genesis, many media are also suspicious of its dominant position in the market. For this reason, in March 2023, the former technology editor for *The Guardian*, Charles Arthur, filed a collective claim lawsuit (equal to the US class action) in the Competition Appeal Tribunal of the United Kingdom claiming a £3.4bn (€4bn) compensation for publishers for lost revenue. The Spanish press publishers – at least, the greatest ones – also chose litigation to face unfair competition. In December 2023, the Spanish Media Association (Asociación de Medios de Información, AMI), representing more than 83 media, namely newspapers, sued Meta for damages and claimed for a compensation of €550 million.

During 2023, the British Competition and Markets Authority (CMA) investigated Google for unfair practices. Similarly, in January 2023 the US Justice Department accused Google of similar unfair practices against competition law, ‘by engaging in a systematic campaign to seize control of the wide swath of high-tech tools used by publishers’. France was more successful, and in 2021 the *Autorité de la Concurrence* fined Google to pay €220m for unfair competition in the online advertising sector’. Google reacted to these lawsuits stating that this is a ‘speculative and opportunistic’ movement. In its opinion, Google ‘help millions of websites

and apps fund their content, and enable businesses of all sizes to effectively reach new customers'. Be it as it may, in October 2023 Google signed a three-year agreement with the French *Société des Droits Voisins de la Presse* under the EU *Copyright Directive 2019* and the French *Loi de la Propriété Intellectuelle*, compensating press publishers. Some other 2,600 such agreements have been signed, with individual companies – this is the case of Spain ex article 32.2. of the *Intellectual Property Act 1/1996*, as revised in 2020; confidentiality clauses keep those opaque – or with national associations, for instance in Belgium, Italy, or with the Danish Press Publisher's Collecting Society (DPCMO). Additionally, Google launched the so-called Extended News Previews Program, offering 'agreements to news websites covered by the law in order to show preview content such as snippets and thumbnails that may be covered by the law, in exchange for a licensing fee from Google.'

The so-called press publishers' right, an ancillary one enacted in most of the European Union's member states ex article 15 of the EU *Directive on Copyright in the Digital Single Market, 2019*, is a way explored, successfully to some extent, and a model for other countries after that. The origin of it should be traced back to the legal reforms of the German and Spanish copyright acts, directly addressed to making news aggregators, and singularly Google News, pay (Díaz-Noci, 2015 and 2019). It was an initiative clearly addressed to bend Google to negotiate and compensate press publishers, unsuccessful in Brazil in 2011, much more successful in France, through negotiation mainly, and Belgium, after litigation in 2007 (the so-called *Copiepresse* case), and in appeal in 2011. Google was sued by France Presse in 2005, accused of using protected pictures and other copyrighted content. Google decided to pay in 2007 after an agreement with AFP, Associated Press, Press Association, and The Canadian Press, which prevented both legal reform and further litigation. From then onwards, France has been one of the most successful countries in making Google pay.

Some other countries have enacted legal dispositions to make aggregators negotiate with media publishers. This is the case of both the Australian *News Media Bargaining Act (2020)* and of the Canadian *Online News Act (2022)*. It is also the way explored in the United States by another legal proposal, the *Journalism Preservation and Competition Act*. Actually, a report of the US Register of Copyright dated June 2022 (*Copyright Protections for Press Publishers*) examined the EU press publishers' right and recommended not to use any additional copyright measures to prevent deterioration of media's revenues, and advised competition law as a better way to protect the interest of the media industry, including 'a levy on digital advertising revenue, increased public funding, or tax breaks for journalism'. All of them, as the EU press publishers' right, are directly

aimed at giving media publishers an additional legal tool to negotiate on equal terms with technological giants such as Google.

To which extent are those able to do so, and also applicable to the issues posed by the introduction and use of artificial intelligence in the economic sector, is a matter for further analysis. Suffice it to say here that they are motivated by the losses that the media industry suffers because of, principally, Meta and Google's practices concerning the news. A report by two Brattle Group's specialists and two American scholars determined that the harm caused by Meta and Google is, only in the United States, of up to almost \$14 billion a year, and that this is, precisely, the quantity ideally to be collected if the *Journalism Preservation and Competition Act* would be finally enacted (Holder, Mateen, Schiffrin & Tabakovic, 2023).

After the press publishers' right enactment ex EU *Directive on Copyright in the Single Digital Market*, 2019, Australia went first. The *News Media and Digital Platforms Mandatory Bargaining Code* (this is its complete title) was enforced in 2021, to make Google and Meta (and, eventually, others) negotiate adequate compensation with media, namely press, publishers. Where agreements were not reached, the Australian Government could intervene and oblige to bargain, which is, as the title of the act says, mandatory. In response, Facebook, now Meta, negotiated with press publishers, after complaining ostentatiously.¹⁶ It lacks, as recognized by the Australian authorities, a mechanism to extend the legal provisions to other platforms. A report made available a year after the implementation of the code states that 'over 30 commercial agreements between digital platforms (Google and Meta) and a cross-section of Australian news businesses have been struck, agreements that were highly unlikely to have been made without the Code'. As happens in the Spanish case, such agreements are subject to confidentiality clauses, which makes virtually impossible to know their scope and terms – and the amount of money paid in compensation (a list of those agreements on page 6 of the *News Media and Digital Platforms Mandatory Bargaining Code. The Code's first year of operation*, by the Treasury of the Australian Government, 2022).

The following country which enacted legal provisions to mandatorily make Google and Meta bow to negotiate with press, or media publishers was Canada. The *Online News Act* was passed at the end of 2022 (Bill C-18, *An Act respecting online communications platforms that make news content available to persons in Canada*). Before that, Canada experimented with giving a tax credit to enhance digital subscriptions, a measure also tried in the United States through the *Local Journalism Sustainability Act* (2021), in this case offering 'individual taxpayers a tax credit up to \$250 in any

¹⁶ <https://about.fb.com/wp-content/uploads/2020/08/Facebooks-response-to-Australias-proposed-News-Media-and-Digital-Platforms-Mandatory-Bargaining-Code.pdf>

taxable year for subscriptions to one or more local newspapers for the taxpayer's personal use'.

The Canadian *Online News Act* is aimed at 'leveling the digital play field', after much discussion. One of the arguments against it is that such legal instruments could give Meta and Google a great influence on media organizations since agreements are individually reached with every news company. Another one, also mentioned when Spain tried for the first time in 2014 to introduce a press publishers' right, is that such measure could be beneficial for great companies, but hurtful for startups and smaller ones.

Be it as it may, the truth is that at least Google negotiated. Meta did not. At the end of November 2023, the Federal Government of Canada reached an agreement with Google, just three weeks before the *Online Canadian Act* came into force. Google decided, after previously testing blocking news from the country, not to get out of the Canadian market and in return it offered to pay an annual compensation of around \$100 million to press publishers. One of the complaints posed by Google to the act is that, unlike the Australian code, it does not require 'a publisher to adhere to basic journalistic standards to be considered an *eligible news business*'. Also, a payment-for-link (or 'pay per click') mandatory rule was considered harmful by Google. This is, by the way, a further question to be considered, since the EU doctrine could be against such a similar provision to be extended to Europe.

The Canadian *Online News Act* does mention copyright, so, like in the EU press publishers' right, a competition law's regulation is combined, or based, on protecting copyright to some extent. Namely, the the *Journalism Preservation and Competition Act* is not based on copyright protection. The proposal, after falling out of the US legislative chambers in 2022,¹⁷ was debated again in 2023 and although it was thought that it could be passed in 2023 it has been placed on hold in 2024. We have mentioned that a non-copyright solution was recommended by the US Copyright Office (2022), actually in section 10(b) of the proposed bill both anti-trust and copyright laws are mentioned, in such a general way so for the new act to circumvent any possible obstacle related to intellectual property right. The proposal covers both eligible platforms and broadcasters, publishers, and digital providers, so the same criticism made to the Canadian Act is applicable here: the rule could be too broad. It is aimed to prevent small companies from applying, though, since the proposal states that 'at least \$100,000 in annual revenue from its editorial content in the previous calendar year' is needed. Joint negotiations are

¹⁷ Another *Journalism Preservation and Competition Act* failed in 2008, see Martin, 2008. Before that, in 1987, a *Newspaper Preservation Act* was also discussed, to enhance joint operations, as proposed by Gannett and Knight-Ridder to the US General Attorney in the spring of 1986. See Busterna, 1987.

encouraged, but still, the same problem posed in all EU, Australian, and Canadian legal provisions regarding the publishers' right to be compensated by giants such as Google or Meta remains: individual agreements will be reached, and inequality will be an obvious result: the most powerful media conglomerates will be the winners and enjoy the highest benefits of mandatory negotiation. This is also a problem remarked by the Electronic Frontier Foundation, which considers that the act will not enhance 'neither preservation nor competition'. 'Fix the ads, not the links' is the solution they propose.

Facebook-Meta, as it did in Australia, threatened to block all the news produced by American media on its platform. One of the most powerful press publishers' associations, News/Media Alliance, applauded the reintroduction of the bill, since they considered that 'it would provide digital journalism providers the ability to collectively negotiate with Facebook and Google for fair compensation for the use of their valuable content'. The problem posed by US press publishers, and of all from many other sides of the globe, is that they consider that they are in an unequal, unfair, and weaker position: 'Currently, publishers do not have the ability to negotiate these deals on their own, as the dominant tech platforms capture the majority of U.S. digital ad revenue, leaving publishers with little to reinvest in the production of high-quality journalism'.

These laws, however, do not legislate works produced with the help of artificial intelligence.

AI law

Regulating properly and concentrating on the legal effects of the impact of artificial intelligence is the most recent way of action. It has been weighed, and then discarded, in some countries.

The American approach, based on the US National AI R&D Strategic Plan by the National Science and Technology Council is also based on principles more than on compulsory obligations. Nevertheless, the United States considered passing an *Artificial Intelligence Act*, and, surprisingly enough, even OpenAI's CEO Sam Altman asked the US Congress to do it in May 2023, 'to avoid causing significant harm to the world' but finally the Congress did not go any further. New York was then considering regulating it, so in October 2023 that possibility was mentioned in *AI Action Plan*¹⁸. At a federal level, policymaking is expected too. In May 2023, the Committee on Artificial Intelligence of the National Science and Technology published a *Research and Development Strategic Plan*. In August that year, the US

¹⁸ <https://www.nyc.gov/assets/oti/downloads/pdf/reports/artificial-intelligence-action-plan.pdf>

Copyright Office (Library of the Congress) made publicly available a notice of inquiry on artificial intelligence and copyright, after launching at the beginning of 2023 a, initiative on artificial intelligence. Questions on how AI systems are being trained using copyrighted works were central in that inquiry.

Foreseeable policymaking is the most cautious way adopted by many countries, so far. The United Kingdom, since Brexit outside the European Union, made its position public in March 2023, when a policy paper was addressed to the Secretary of State for Science, Innovation and Technology¹⁹, recommending using ‘existing protections of copyright and intellectual property law’, guaranteeing access to public data and, while the government should hold ‘a clear policy position on the relationship between intellectual property law and generative AI to provide confidence to innovators and investors’. As a result, from June 2023 the UK government was working in the development and adoption of a code of practice on copyright and AI, ‘to make licences for data mining more available’. This is a quite liberal approach. The code is expected to be launched during 2024.

Within the European Union, France is the country that has gone furthest, since a brand-new law specifically to address to regulate artificial intelligence is on its way. First, the so-called *Comité de l’intelligence artificielle générative* was formed, and saluted enthusiastically by cultural producers’ associations. On the 12th of September, 2023, a bill (*Proposition de Loi visant à encadrer l’intelligence artificielle par le droit d’auteur*) was addressed to the National Assembly to regulate artificial intelligence within the copyright (or authors’ law) framework. It is being discussed in 2024, and its aim is to amend the existing Intellectual Property Act, to ensure fair compensation, via taxation, and to ensure as well transparency of the works made using artificial intelligence, which, if the proposal is finally passed, should mandatorily incorporate a mention or general knowledge.

Some EU member states have begun examining their policy lines to regulate artificial intelligence systems and to minimise its impact on their economy. One of those is the Netherlands, ‘unwilling to leave the future socioeconomic security of the Netherlands exclusively in the hands of major tech companies,’ so the Government decided in January 2024 that the Social and Economic Council should examine the impact of AI in labour and productivity.

Nevertheless, it has been the European Union who has taken action on the matter and is, at the time of writing these lines, debating a draft

¹⁹ A pro-innovation approach to AI regulation. <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper>

directive on artificial intelligence and intellectual property (*Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on artificial intelligence*, preceded by a White paper from June 2020). This is a legislative initiative initiated in 2021 as a result of the 2018 European strategy on artificial intelligence. In parallel, various studies have been released (for example, the Study on the impact of artificial intelligence on the infringement and enforcement of copyright and designs, by the European Union Intellectual Property Office, in March 2022), to define the impact it may have on the laws of the Union and each and every one of its member states. This future directive will have its importance in the information sector, as authors such as Natali Helberger and Nicholas Diakopoulos have already shown (Helberger and Diakopoulos, 2022).

It is a system based mainly on risks. Also, copyright is mentioned in the final draft to be discussed, and leaked at the end of January 2024. Copyright is stated in the introduction of the proposed act as a general framework to be respected, as important for media (and other cultural and intellectual property producers) to face the challenges posed by AI, one of them, media literacy, developed in article 4b. Startup companies are specially mentioned – let us remember that it was a general criticism in other legal approaches, see the previous section on competition law). Particularly, the *AI Act* insists on many of the aspects we have been examining so far, summarized in the introductory 60(1) *considerandum* of the proposal:

The development and training of such models require access to vast amounts of text, images, videos, and other data. Text and data mining techniques may be used extensively in this context for the retrieval and analysis of such content, which may be protected by copyright and related rights. Any use of copyright-protected content requires the authorization of the rightsholder concerned unless relevant copyright exceptions and limitations apply. *Directive (EU) 2019/790* introduced exceptions and limitations allowing reproductions and extractions of works or other subject matter, for the purposes of text and data mining, under certain conditions. Under these rules, rightsholders may choose to reserve their rights over their works or other subject matter to prevent text and data mining, unless this is done for the purposes of scientific research. Where the rights to opt-out have been expressly reserved in an appropriate manner, providers of general-purpose AI models need to obtain an authorisation from rightsholders if they want to carry out text and data mining over such works.

As we can see, the *AI Act proposal's* copyright protection is based on a restrictive interpretation of article 4 of the EU Directive on Copyright in the Single Digital Market on data mining, on the possibilities to prevent such unauthorized data mining of copyrighted contents by AI systems

through an ‘all rights reserved’ option, and an opt-out mechanism, also mentioned by, for instance, OpenAI, and followed by several media companies to prevent utilization of news to train ChatGPT and related AI systems. Since the proposed directive aims to have territorial effects beyond the European Union, making all companies - without a doubt, think of the big ones, like Google - have to comply with European regulations when doing business on the continent, the European institutions are concerned about such AI giants (most of them, US-based companies) to take advantage of lower copyright protection standards in the European Union.

The definitive passing of the EU AI Act (in January 2024 Committee of Permanent Representatives approved the final draft of the proposal, to be finally discussed at some point of the year by the European Parliament) will most probably prove to be controversial, since it is clearly addressed to counterbalance the power, and practices, of Google, OpenAI, Microsoft, and Meta, and their languages PaLM-2, LLM, LLaMA and others. Some European member states (France, Germany, Italy) showed their reluctance to the final wording of the proposal, and the first proved to be the most reluctant one, arguing that legislating in a more restrictive way than other countries (clearly thinking about the US, UK, and China) could be harmful for innovation. It points to the fact that the French presidency is trying to protect its own AI system, Mistral, against the opinion of the minister of Culture, for, precisely, issues related to copyright. A study by researchers from Stanford University published in January 2024²⁰ proved that most of those giants do not comply with most of the requirements of the latest versions of the EU AI Act (Bommasani, Klyman, Zhang & Liang, 2024). As Paul Keller says, ‘the major players in the field of generative AI have been largely silent on how they intend to comply with the obligations under the EU copyright framework’. (Keller, 2023). One of the most sensitive points highlighted in that Stanford University report is, precisely, copyright:

Disclosure of copyrighted training data is the area where we find foundation model providers achieve the worst compliance. Legislators, regulators and courts should clarify how copyright relates to (i) the training procedure, including the conditions under which copyright or licenses must be respected during training as well as the measures model providers should take to reduce the risk of copyright infringement and (ii) the output of generative models, including the conditions under which machine-generated content infringes on the rights of content creators in the same market (Bommasani, Klyman, Zhang & Liang, 2024).

²⁰ <https://crfm.stanford.edu/2023/06/15/eu-ai-act.html>

Further provisions are also interesting, in this respect. Once again, although initially reluctant to an strict EU AI Act, it is the case of the French proposition to amend the Intellectual Property Act (*Loi de la Propriété Intellectuelle*), the final draft of the EU AI Act proposes a higher transparency requirement, ‘on the data that is used in the pre-training and training of general purpose AI models, including text and data protected by copyright law, it is adequate that providers of such models draw up and make publicly available a sufficiently detailed summary of the content used for training the general purpose model’, and ‘a summary of the content used for training’ to be submitted to the foreseen AI Office.

AI is partially regulated in some other countries, such as Canada, whose *Digital Charter Implementation Act (Bill C-27)* contains a whole section (*Part 3*) on it.²¹ It is based on the so-called impact levels, a concept close to the EU’s concept of risks. The initiative was launched in 2022.²²

The way that some developing countries, such as India and China are regulating artificial intelligence is of utmost interest, considering the fact that the size of its economy is huge and that it is a different legal system. The development of artificial intelligence is considered a top priority by the Chinese Popular Republic’s government from at least 2017, when it was decided that China should be a world leader on AI by 2030, so as a result the field has been legislated. Instead of passing just an act on artificial intelligence, the way privileged has been to enact a legislative articulated corpus. On the other hand, also those developing countries are facing major challenges regarding the affectation of workforce because of the use of artificial intelligence. According to figures by the World Bank made publicly available in 2016, 77 percent of the Chinese workers and 69 percent of the Indian ones could be ‘facing threats for automatability’ (Dadhich, 2018). Needless to say, AI will affect Chinese journalism as well (Kuai, Ferrer-Conill & Carlsson, 2022), for instance, minimizing journalistic creativity (Barredo-Ibáñez, Jamil & De la Garza, 2023). The Chinese state-run media showed a remarkable interest in using artificial intelligence back in 2018, when Xinhua News agency started using an AI-system named Media Brain, later to be updated under Magic’s name, ‘from finding leads to news gathering, editing, distribution, and, finally, feedback analysis’, and even able to create a piece of short video news in just 10 seconds-time. Making a long story short, it was labelled as ‘fast-speed news production’ (Ables, 2018). The Chinese

²¹ The complete title of the act is *An Act to enact the Consumer Privacy Protection Act, the Personal Information and Data Protection Tribunal Act and the Artificial Intelligence and Data Act and to make consequential and related amendments to other Acts*.

²² A complete map of the initiatives to regulate artificial intelligence can be seen in Roberts, Ziosi, & Osborne, 2023.

authorities are interested in controlling news production as well as avoiding undesired information. One of those problems is the great amount of fake news – many of them, produced using AI - that the Chinese citizens consume on a regular basis (Barredo-Ibáñez, Jamil & De la Garza, 2023).

Copyright law is very recent in China, only after the decade of 1980 was it regulated in that country. It was revised in 2020, just a couple of years before the boom of ChatGPT and the like. As a consequence, some characteristics from the Civil and Common law system have been adopted, but there are still some gaps, such as fair use and term of protection. However, according to some scholars, ‘the user should be more likely to be the author to facilitate the generation of new intellectual output’ (Wang, 2023). In 2023, following the *Algorithm Provisions* in 2021 and the *Deep Synthesis Provisions* in 2022, the Chinese authorities passed several legal texts concerning artificial intelligence. In August of that year, the Chinese Cyberspace Administration some measures to regulate generative artificial intelligence systems (*Provisional Administrative Measures of Generative Artificial Intelligence Services*), aligned with at least three Chinese acts regarding data protection. Any product generated by AI should respect the principles of socialism, ethics, and intellectual property rights. Internet providers would be the ultimately responsible for any data breach, personal data breach, or copyright infringement – especially when using third parties’ data and works to train those AI systems. It should ensure effective control of what is produced by AI in China by the government and has been considered an ideological control. Anyway, responsibility on providers is also the way that some EU Directives impose of unauthorized user-created contents (art. 17 of the *Directive on Copyright in the Digital Single Market*). Actually, the Chinese *Private Information Protection Law* is inspired by the EU’s *General Data Protection Directive* of 2018. Even though the ultimate goals might be different, the legal techniques are pretty much the same.

The Chinese approach has been defined as ‘people-centric’, in accordance with the socialist origin of the state and institutions. However, some court decision enforces human authorship, as we have mentioned. By doing so, the Chinese authorities are trying to avoid risks and harm to the people and society by using AI systems. The legal procedure followed in China is to pass several legal provisions while a more general and comprehensive AI Act is discussed and eventually passed. So, it seems a more step-by-step, agile way to legally face the challenges posed by artificial intelligence (see Sheehan, 2023), and makes China a first-mover in this field.

Another difference is that both China and the European Union prefer to develop legislation on AI in a unified and centralised way, while the United States rely on specialized agencies and, as the British government, are more

prone to voluntary commitment by the agents implied in the development and employment of AI systems, (MacCarthy, 2023).

Worried about the advances of China in the regulation of artificial intelligence, the presidency of the United States was suspicious that it could be easy to feed the Chinese AI systems using data stored by foreign entities, including of course American ones. In order to tackle those practices, the US Secretary of Commerce Gina Raimondi announced at the end of January 2023 some measures because ‘we can't have non-state actors or China or folks who we don't want accessing our cloud to train their models’. The idea was to require ‘US cloud companies to tell us every time a non-US entity uses their cloud to train a large language model (LLM)’. The National Institute of Standards and Technology will be in charge of creating before July 2024 an Artificial Intelligence Safety Institute to set up new standards. A similar proposal was made by the Secretary of State for Science, Innovation and Technology to the British Parliament for approval in November 2023. Coinciding with this initiative, the US Federal Trade Commission put OpenAI and Anthropic and their relation with Google, Microsoft, and Amazon under scrutiny, and urged them to explain the investments made by, for instance, Microsoft in OpenAI and the shares of Anthropic by Amazon and Google, and their impact in the competition. At the same time, the agreements reached by some media with OpenAI seem to be out of that scrutiny, so far at least.

Media law

Another extremely important aspect to be mentioned is how to regulate the impact that AI systems might have, or are already having, on other aspects of the media organisation and output. Disinformation is also one of the main risks that, according to the *Bletchley Declaration*, AI systems can amplify. Deep fakes, for instance, can be easily produced. Generally speaking, these are major concerns everywhere, thus the regulation, through copyright, competition, or properly designed artificial intelligence law. The European Union has decided to regulate also the media system itself. The reports of the Committee of Experts on increasing resilience of media (MSI-RES) go in this direction. So far, there are two that need to be mentioned. The first one is the final draft on *Good practices for sustainable news media financing* (Brogi & Sjøvaag, 2023). It summarized the background which is behind not just the movements to face the challenges that artificial intelligence is posing to the functioning of the media industry. One of the recommendations for media companies is to invest in training and continuing education, collaboration and synergies with other actors, keeping ethical standards, and developing self-regulatory policies. It is also behind the movement already mentioned to

keep a position in a market dominated, since the irruption of the World Wide Web in the decade of 1990, by additional agents such as Google or Facebook, news aggregators, digital advertising (presumably unfair) competitor and, as matter of fact, a hybrid media system in which financing the media is one of the central issues (Díaz-Noci & Pérez-Altable, 2023).

The European Commission adopted in September 2016 the so-called *European Media Freedom Act*, whose main principles are ‘no political interference, no spying, stable funding’. Transparency is encouraged, especially regarding ownership of media, as it is pluralism and the protection of media content. The proposal, completed by the *Commission Recommendation (EU) 2022/1634 of 16 September 2022 on internal safeguards for editorial independence transparency in the media sector* is seen as complementary to copyright legislation and is intended to enhance fair competition, which is, in the end, the main purpose of the whole legal corpus we are examining in this paper. It is concerned also about a very sensitive issue: disinformation, so in this respect, the act aims to complement the *EU 2022 Code of Practice on Disinformation*. In this code, artificial intelligence is considered, and ‘manipulative practices’ are mentioned in the first place. Remission to those practices in the *EU AI Act* is made. According to the text of the proposal leaked on January 2024, those disinformation practices are within the risk of ‘harming privacy with threats to democratic values and human rights’, not to mention, needless to say, potential risks to freedom of speech (Shahbaz *et al.*, 2023). In this respect, once again, the American and European approaches diverge, since in the United States ‘the Supreme Court has affirmed the harm principle multiple times in regard to punishment for the publication of false news,’ so ‘in order to prevent any interference and abuse by the government for critical thinking, the protection of the First Amendment for freedom of expression is granted to all speech, regardless of its truthfulness, which ultimately cannot be tested’, while the EU point of view is to encourage member states ‘to adopt legislation that restricts this right’ (Tani, 2020), but at the same time the European legislation seems to some not to be sufficiently clear on providing ‘specific ways in which editorial independence and compliance with the regulatory standards attached to editorial responsibility should be understood’ (Seipp, Ó Fathaigh & Van Drunen, 2023: 50).

Foreign interference in information and electoral process is one of the main concerns. Artificial intelligence can make those harmful practices easier, including, for instance, deepfakes of images and videos (see Tan, 2023). For this reason, the Steering Committee on Media and Information Society (CDMSI) adopted *Guidelines on the responsible implementation of artificial intelligence (AI) systems in journalism*, elaborated by the Committee of Experts on Increasing Resilience of Media (MSI-RES). In

those guidelines, in accordance with the foreseen *AI Act*, the experts recommend that media conduct a systematic risk assessment, and show their concern about the temptation of replacing journalists with technical staff. The experts insist in the values of classical, audience-centred values of journalism, but provide few or no directly applicable measures.

There is, on the other hand, considerable concern about whether focusing so much as the *European Media Freedom Act* would on the industry would not 'exclude some of the most vulnerable actors in the media ecosystem, including (individual) journalists' (Seipp, Ó Fathaigh & Van Drunen, 2023). It is a concern that overshadows this entire study. Regulation of issues concerning the production and dissemination of news, from copyright to competition and then to the most dangerous practices around artificial intelligence does not contemplate the necessities of media workers.

Discussion

Press publishers and editors have mixed feelings about the advent of artificial intelligence and its adoption in newsrooms. In a forum held at the beginning of 2024, some editors saw AI as an ‘existential threat’ and assumed that ‘our content has been stolen’, while at the same time ‘enthusiasm for using AI to do journalism in new ways was also quite common among participants’ (Caswell, 2024). The battle has just begun. According to data released by Open Secrets organization, in the United States only in 2023 the lobbying activity by more than 350 companies, trade groups, universities, and other groups doubled the efforts done in 2022.

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. According to it, Web and digital interface designers should also fear the implementation of artificial intelligence tools in their everyday work. News analysts, reporters and journalists come later, these are the top five most endangered jobs (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). Journalists and other media workers should only fear a drop in job positions, they should also be aware of the likely drops in earnings. If artificial intelligence finally replaces many of the tasks journalists currently do, the best possible solution is, in the first place, to make all human skills valuable, if not essential. In this respect, some efforts have been already made, e.g., a new tool for journalists, based on artificial intelligence, to gather and analyze news on climate change that respects intellectual property of the original authors. It is named *Spinoza* and it was developed in 2023 by Reporters sans frontières (RSF) and Alliance de la presse d’information générale (Apig)²³. Both French organizations are also behind the *Paris charter on AI and journalism*, also launched in the second semester of 2023.

²³ <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>

Whilst it can well be a good assistance to journalists' everyday jobs, hitherto we see more pros than cons in the early adoption and experimentation of AI systems (for instance, *The New York Times* announced in January 2024 that a team of both engineers and editors to explore new ways of using generative AI in the newsroom) in a non-critical or irreflexive way. Journalists would do well to watch their backs. Artificial intelligence is not, to this point at least, able to autonomously produce anything, with no human intervention. This is a ground and a line that should not be surpassed. At the same time, the adoption of AI tools will decrease production costs. It could easily mean substituting employees. Experts have warned, as we have seen, about this possibility, and have advised media organisations not to do so. However, AI systems will find their way into every aspect of social life, also in labour. As Alina Trapova says, 'being the first one to utilise generative techniques that are trustworthy, transparent, accurate and zeroing discrimination brings enough benefits to companies resorting to NLG techniques, even in the lack of intellectual property, especially copyright protection' (Trapova, 2023). It is even feasible that artificial intelligence may help in some areas of journalistic work, for instance, verifying every news offered to audiences. The risk of AI systems being used for disinformation is also a very realistic possibility. As with any other technology, this is neither good nor bad, it is all about the social use of it. The thing is that decisions should not rely uniquely upon market decisions, especially if they are adopted just in terms of cutting costs. That strategy could be successful in the short, but never in the long run, in such a social activity still necessary but in the permanent crisis of a declining media industry²⁴, not to mention the increasingly precarised profession of journalist, in a worst-case scenario when they are finding more and more difficult to tackle disinformation and to recover the lost interest of readers, an increased news avoidance and weakening trust in news.

Schematically, we foresee two main approaches to the issues posed by the adoption – like it or not – of AI systems in media organisations. The first approach is a convergent solution. It means, in the first place, protecting intellectual property rights through collective works. Here is where ancillary, press publishers' rights, and also bargaining rights like the ones enacted in Australia and Canada, find their way. The second approach is a divergent solution, separating authorship and property, as enacted in the Chinese Copyright Act. With some nuances, as we have examined in the sections before, the Courts have insisted on the necessity of human authorship and originality as well. Nevertheless, the emerging concept of

²⁴ See, in this respect, Jeff Jarvis' deposition in the US Senate in January 2024, developed in an entry of his [blog](https://buzzmachine.com/2024/01/24/is-it-time-to-give-up-on-old-news/). His conclusion couldn't be more catastrophic: 'The old news industry has failed at adapting to the internet', so, says Jarvis, 'It may finally be time to give up on old journalism and its legacy industry.' <https://buzzmachine.com/2024/01/24/is-it-time-to-give-up-on-old-news/>

authorless work is worrying, and it is clearly not the best possible solution – especially for journalists.

We have analyzed certain legal conceptions, apparently divergent in the three legal traditions we examined, regarding the concept of authorship: personal, linked to human creativity in the case of Civil law, which does not conceive the concept of authorless work; the Common Law concept most favorable to recognizing as authors the producers or legal entities under whose coordination and initiative the collective work is produced (for example, the media), to the point of, for journalists, accepting, as British legislation does, that a journalistic company has no obligation to cite as the author (which is a moral right, inalienable in Civil law) the journalist it hires, and the openness to recognize, at least in the United States, that the AI produces works without an author; and the even more flexible concept, in favor of protecting property rather than authorship, of a hybrid system, the result of a socialist ideology, like the Chinese one. They are all coming together in the attribution of more and more rights, if not of authorship, then of negotiation in favor of media editors, legal entities therefore, in the first two traditions.

To protect investment and innovation in artificial intelligence systems, and not depend on third-party legal entities, the Anglo-Saxon legal tradition is clearly committed to being more flexible than continental civil law in accepting original works without a determinable author, which, in turn, again, it is not without risks. On the other hand, recourse to collaborative work is not contemplated, a Civil law figure that could mean recourse to shared authorship in any case and a legal basis to hold on to for the distribution of benefits. In this last tradition, that of continental civil law, companies will surely explore the second route that we mentioned: that of industrial property, to the extent that they seek, if they succeed, to commission their own closed systems of work production with the competition of artificial intelligence, which is what they have done at least since 2014. That could change if, instead of proprietary software, the use of systems with access to enormous amounts of data on the World Wide Web, such as those mentioned, spreads. ChatGTP, Stable Diffusion, Dall-E or Midjourney. The volume of intellectual works that will be produced will increase, and this will make it difficult to assign rights (Gurry in WIPO, 2023). Another thing is how the clear use that these systems make of pre-existing works, with identifiable authors and assignees of rights, will be resolved, also by media companies, perhaps through digital watermarks or digital rights management systems (DRM). It is also important to define in what position they will be able to negotiate some type of compensation like the one they have fought for decades to obtain from Google, and which has been translated into legal instruments such as the aforementioned European Directive of 2019, the Australian *News Media Bargaining Code*, or the *Online News Act* of Canada, approved in 2023, all

of them aimed at forcing Google, Facebook, and other giants to negotiate with the media. Google already took some significant steps in 2017, subsidizing projects on local news writing using artificial intelligence (Guadamuz, 2017). Press publishers are fighting for their interests. In 2024, the so-called Urhebrrecht Initiative in Germany joined the efforts of many press associations and more than 140,000 authors and addressed a letter to prime minister Olaf Scholz claiming for compensation and asking for a compulsory licensing system. Also in February 2024, Noreen Gillespie, Microsoft's Journalism Director, announced that the company would help many media companies to implement AI systems in the newsrooms, as Google did in July 2023, when it was made public that it was testing such a tool, named Genesis.

The trends that are pointed out - and the tensions that are guessed - are not new and affect those observed for decades in everything related to copyright and the economic exploitation of journalistic works. They are those that confront the rights of individual authors, journalists, illustrators, and other workers in the information and communication sector, whose ultimate authorial reason and whose negotiating position will foreseeably be weakened by the extension - which has not arrived, that has been produced long ago - of artificial intelligence in newsrooms, and the rights of companies, which in the civil law system are not authors per se. Legal entities, that is, these media organizations, can try to control what is produced under their auspices through artificial intelligence, we believe that always with necessarily human intervention, through two means: copyright or industrial property. Let us remember that this is a distinction between industrial and intellectual property, typical of the legal tradition of Civil Law since that of Common law encompasses both under the umbrella of intellectual property law. Perhaps it is worth remembering, stubbornly, that we are not facing a system of real property, that is, over things, but rather a legal system that is based on licenses for intellectual works. Through the first (the Anglo-Saxon copyright), and although they are considered mere producers of the intellectual work, even the European Union, through article 15 of the Copyright Directive in the Digital Single Market of 2019 (and its implementation at the level national, in Spain ex art. 32.2 of the TRLPI 1/1996 already mentioned) has attributed them considerable rights that, although they are clearly secondary exploitation of the work (ancillary rights in English) are sufficiently broad, and, what is worse, renounceable by individual authors, who otherwise would always have a right as such to economic compensation, to be able to try to negotiate the repercussions of artificial intelligence with a certain advantage. This route of the European Union, which practically automatically attributes the rights of secondary exploitation of the work (for example, when it is reproduced, even partially and in the form of snippets, in aggregators) of everything produced by the employees of the

company that hires them, equates it with work made for hire of the Anglo-Saxon legal system. In fact, under better conditions, since, through the use of these computer systems, through use licenses, everything that is produced with their help would become exploitable by the company. Even worse in the case of Common Law, a legal tradition that tends to protect even more clearly economic investment and the producer of intellectual work, since some administrative decisions such as the American one that we have mentioned open the door to authorless works, unthinkable. In the legal system of Civil law, although always safeguarding the final authorship of the collective work or joint work where they are contained (Krausová and Moravec, 2022).

We will likely find ourselves facing hybrid legal solutions, such as that of Chinese intellectual property law, compromise solutions between the authorial aspect of the continental civil law system and the more clearly entrepreneurial ones of the Anglo-Saxon system. In the European context, there is no shortage of those who propose, from the field of journalism, strengthening personal rights in the face of the possible consequences of the use of artificial intelligence, and demanding, through ethical codes or legal means, transparency and accountability, the responsibility of the media industry (Krausová and Moravec, 2022). The concept of authorial transfer (Lu, 2021) could become imposed as a solution, even if it is temporary. In this way, authorship, which in the non-Anglo-Saxon Western legal system is personal, can be transferred to media companies and those behind the artificial intelligence systems that may be used. Once again, a complex licensing and compensation system will come into play. The negotiating capacity of the different sectors and economic agents at play will be evident: the strength of the large producers of artificial intelligence systems, backed by Microsoft (which integrated them into its Bing search engine in 2023) or Google.

One of the keys will be in the concept of a derivative work and in the rights to transform pre-existing works, and in not allowing that to be the kingdom where whoever is behind the artificial intelligence systems that we will all use sooner or later, reigns and rules. It remains to be seen what journalists can do to ensure adequate compensation. Even a constitutional right to remuneration has been proposed by authors such as Christophe Geiger and Vincenzo Iaia (Geiger & Iaia, 2023). At least, as Martin Senftleben has proposed, 'it is preferable to follow an alternative path and introduce an output-oriented levy system that imposes a general payment obligation on all providers of generative AI systems' (Senftleben, 2023).

Lockean labour theory versus utilitarian theory based on investment, it seems to be the dichotomy. The utilitarian approach to copyright law, which seems to be predominant, will underline the economic value of works, but works have an author, and hitherto it is not a machine, but a human being. 'Machines unlike human beings, have no consciousness that

can be rewarded by an eventual protection of their efforts,' we could not agree more (Fernández Carballo-Calero, 2022: 56).

All roads might lead to Rome: the defense of news production in the name of copyright infringement is a torch by employers, not by employees, by companies, not by workers or authors. 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.

The movements adopted by media companies to defend their position in the market are clear. Many of them lead to negotiations with artificial intelligence system companies like OpenAI and digital giants like Google. These include technical measures such as tackling those companies for using their contents to train those engines (Google accepted an opt-out solution, much more feasible in the European system than in the American one, by the way) without harming positioning and SEO, litigation, lobbying for legal reform, and negotiation. A tension between fair use and a closed list of exceptions is also on the table. Fair use (journalists of countries like Ireland find it 'not fair play') seems more slippery ground for journalists, and in our opinion, it should not be the legal basis to allow AI companies to feed their systems with no limit. Moreover, this should in no case be allowed when, as hard these words by Martin Senftleben may seem, they make a 'parasitic use of human works' (Senftleben, 2023).

The fight is unequal, and mainly done on a national basis, which makes things more complicated since companies have to deal with different legal systems. Human authors face an even much more unequal situation in present and future fights, because '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' (Gaon, 2021: 11). We agree with Martin Senftleben: 'Generative AI systems are only capable of mimicking human creativity because human works have been used as training material' (Senftleben, 2023). Companies, legal entities that have invested great sums of money and resources and under whose direction and initiative the collective work is created, are in a better position as copyright holders.

Legal reform and specific laws on artificial intelligence are welcome by media companies, but they are well aware of them to 'create distraction and uncertainty' (Gaon, 2021). This is complemented with an utilitarian approach to artificial intelligence and to copyright law: if a company invested 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, and Fernández Carballo-Calero, 2022: 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. Some relevant scholars, for instance Aviv Gaon, insist on the importance of moral rights as an alternative and feasible way to protect AI-aimed creations, which is riskier for journalists, since he proposes ‘allocating moral rights for non-human AI creations [...] while also reserving economic rights allocation for human creators’ (Gaon, 2021: 139 ss.) The concept of digital moral rights is also interesting (), so it is extremely important that in any case journalists and other for-hire media workers, even freelancers, never waive or get rid of those rights. Even if many other rights (exploitation or economic rights) are almost necessarily attributed to legal entities such as media companies and organizations, that could protect in a better way theirs and their author workers’ interest using the concept of collective work, it is much more questionable whether this is also equally applicable to moral rights. Those can also be protected personally or through professional trade unions or associations.

There is also the way of considering that all such works not directly and completely attributable to human authors can be considered to fall into the public domain. It would be possible if we accept that ‘AI systems [are] capable of generating works in a completely autonomous manner’ (Fernández Carballo-Calero, 2022: 87), but we do think that they are not. There is a common agreement that no authorship rights are to be assigned to such artificial intelligence systems: algorithms are not protected by copyright law and they will not likely be – they should not be, either way. ‘Even the most sophisticated generative machines [...] are no more than complex sets of algorithmic instructions whose abilities are entirely attributable to how programmers train them with input data, and how programmers instruct them to analyze that input data’ (Ginsburg and Budjardio, 2019). We add that they are unable to produce anything unless someone gives it the necessary orders – and provides it with a purpose and an intentionality – to do so. Traceability is key for the legal protection of pre-existent copyrighted works, and one can easily imagine that other AI systems will help detect the traces. AI systems will compete between them.

Since machines can create, or at least help create intellectual works. Competition will arise, between AI systems and humans, and between AI and media companies, whereas AI is excellent at helping produce commodities with economic value.

Be that as it may, the situation today is that ‘data collection and processing, news coverage could expand exponentially’ (Trapova and Mezei, 2021). From an optimistic point of view, we wish to align with Daniel J. Gervais, when he says that ‘the presence of creative choices in the making of the work is the only adequate test to determine whether the work is worthy of copyright protection’ (Gervais, 2002, p. 981).

Copyright law and competition law (also some other related areas) will be combined to create a safer harbour for (large, mainly) media companies and for authors, at the same time that innovation brought by artificial intelligence is also enhanced. As we have mentioned, this has been already tried, but we agree with Claudio Lombardi: the ‘relationship between copyright and competition law in this sector is’, in the best case scenario, ‘ambivalent’ (Lombardi, 2023). Many of those legal reforms, in both copyright and competition law, have been done with major players in mind and can be not so convenient for minor players, such as small or medium-sized media companies, so we join Karen Lee and Sacha Molitorisz when they recommend to ‘anticipate the need to develop additional measures that support smaller, but registrable, news media businesses in parallel’ (Lee & Molitorisz, 2021). Additionally, recommendations and guidelines, especially from the EU area, are well-meaning, but since they are not compulsory, or are just based on general values, they could be of limited effectiveness.

As a final remark, so far: compensation should be the main concept, and negotiation between media companies and AI-system companies, the instrument to achieve that goal. Litigation and technical vetoing or tackling seems to be just another way to force AI companies and the huge conglomerates that back them to negotiate in fair terms with copyright holders of the collective work, under whose umbrella intellectual property should be claimed and protected. Which is the place for authors, and whether collective negotiation or individual agreements (or contractual clauses) with companies in a landscape in which work made for hire is in the core of the system (Fu, 2023), is a central question to be solved as well. So the next logic step should be asking journalists and editors about their attitudes and perceptions on the magnitude of the legal changes -as many others- artificial intelligence brings to their job (Vogler *et al.*, 2023).

Limitations and further research

As we have examined in the previous pages and sections, this is an extremely sensitive topic whose further development needs to be followed with close attention. This is far from being solved, and it might even introduce major changes not only in existent laws, but in the creation of new legal documents (the announced EU AI Act is one of those, and the first one to be enacted), and in profound modifications of some legal fields as we know them, for instance, both copyright and competition law. All of them are dynamic areas, no doubt (Pihlajarinne, Thesleff, Leppänen, Valmari, 2022: 239). This is a situation perfectly summarised, in our opinion, by a staff writer at the influential *New Yorker* magazine, Louis Menand,

the existential threats of A.I. will not be addressed by copyright law. What we're looking at right now is a struggle over money. Licensing agreements, copyright protections, employment contracts—it's all going to result in a fantastically complex regulatory regime in which the legal fiction of information 'ownership' gives some parties a bigger piece of the action than other parties. Life in an A.I. world will be very good for lawyers (Menand, 2024).

The decisive emergence - decided by who? This is, most probably, the first and most important question to elucidate - of artificial intelligence in our daily lives, especially after the launch at the end of 2022 of ChatGPT and other services, such as Dell-E, raises numerous questions. There is no use in locking the stable door once the horse has bolted, but nor it is uncritically accepting that the companies behind AI could impose the old *laissez faire, laissez passer*. Likewise, and it is not exactly a new issue, it is also worth asking ourselves to what extent artificial intelligence is going to help resolve multiple social - and economic - inequalities, or, on the contrary, and as Virginia Eubanks, among others, has already warned or Timnit Gebru, is accentuating them.

While we examine acts and other legal documents (lawsuits, agreements, legal principles) we need to do some research on how these are means to play a major game, which is the negotiation between parties. We do think that is the social application of the legal instruments, and the examination of different solutions provided from different legal traditions to the same challenges posed by the introduction of artificial intelligence in the news business is a promising path to be followed.

In this respect, not enough time has already passed for those solutions to be consolidated, and as a matter of fact, many doubts emerge, for instance from the media industry itself. According to the Reuters Institute for the Study of Journalism's *Trends and Predictions 2024* report,²⁵ approximately half of the media editors interviewed all over the world (48 percent of them) thought that licensing content to be used for AI training will report short money, and thus, it will not compensate. A significant part of them, 35 percent of them all, considered that it would only benefit some very few large media companies. This is a greater concern in some specific geographical areas, such as the global south. Even if licensing is recommended, this needs to be combined with policy making strategies and a flexible adaptation of existent laws, all the way some scholars stress that a central theme is about creating 'an appropriate balance between protecting creators' interests and facilitating public access to digital content' (Vargas and Torres, 2024), but in this schema the interests of

²⁵ <https://reutersinstitute.politics.ox.ac.uk/journalism-media-and-technology-trends-and-predictions>

right holders (companies and conglomerates, in our case) need to be included (on the question of interest related to copyright law, see Sitdikova, 2019), since copyright and competition law are also designed to protect investment. This is where recent reforms such as the EU press publishers' right, but also the ones protected by the Australian *News Media Bargaining Code* or the Canadian *Online News Act*, show up to remind us that in the market capitalism system both labour and investment are to be protected.

Another major concept, whose legal development needs to be examined as well, is transparency. Transparency in the algorithm, and its legal regulation, shows up as a central theme, since this is not only a legal, but even an ethical requirement (Alén-Savikko, 2022; Tang, 2022).

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