

ID-DRITT

Edition XXXIV

2024

Published by Ghaqda Studenti tal-Liġi

The Advent of AI: The Latest Conundrum for Traditional Copyright Law

Maria Chetcuti Cauchi and Susanna Grech Deguara

Dr Maria Chetcuti Cauchi B.A., LL.M.(Warwick), LL.D., TEP heads the Property and Projects practice as well as the Intellectual Property & ICT Practice of Chetcuti Cauchi Advocates. Specific to real estate work, together with her team, they have handled investment projects, buy-to-let proposals and leasing & student accommodation matters for local and international clients. Dr Chetcuti Cauchi has also represented various international brand owners and generic pharma companies in their investment in Malta and has worked on specific intellectual property structuring plans and protection projects.

Dr Susanna Grech Deguara is a Senior Associate at Chetcuti Cauchi Advocates. Having an avid interest in technology and a marketing background, Susanna specialises in Intellectual Property protection. She has undergone various courses with the EU Intellectual Property Office, and in her studies, Dr Grech Deguara has written her thesis on the legal implications of domain name cybersquatting. Furthermore, she works closely with clients to ascertain their needs and develop a holistic IP strategy based on the main aims and goals of the client. Susanna is ranked as a rising star by Legal500.

Abstract

The article discusses how artificial intelligence affects intellectual property, analysing how copyright legislation relates to work created by AI. It explores the uncertain nature of ownership and authorship, highlighting how challenging it is to identify human input in content produced by AI. It highlights legal ambiguities and asks for flexible regulatory frameworks that strike a compromise between the interests of the general public, AI developers, and creators. The article stresses the necessity for liability attribution in AI-generated output and pushes for changing content ownership arrangements. Finally, it emphasises the need for the AI Act's proposed revisions to standard intellectual property laws in order to address the particular difficulties presented by AI.

1. Understanding the Basics of AI

The advent of artificial intelligence (AI) has heralded an intense transformation in the domain of intellectual property (IP) law. From smartphones, financial fraud alerts, virtual assistants and bots, personalised marketing techniques, smart vehicles, or political personalised ads, AI has permeated every aspect of modern life.

It is interesting to note that AI scientific exploration is not a recent phenomenon. The occurrence of AI dates as far back as the mid-20th century. The Dartmouth Conference of 1956 is often considered the birth-nest of AI, where a group of researchers were brought together and explored ways of creating machines that would simulate human intelligence.¹ John McCarthy (1927-2011) played a vital role in this and even gained recognition for heralding the term 'artificial intelligence'. He organised the Dartmouth Conference itself and his input laid the foundation for investigating the concept of computational learning, knowledge representation, and problem-solving within the area of machine development.

¹ A Lakshminat and Mukund Sarda, 'Digital Revolution and Artificial Intelligence - Challenges to Legal Education and Legal Research' (2011-2012) 2 CNLU Law Journal 1.

Intellectual Property Law

McCarthy defined AI as the process by which a program, upon receiving information / input, would process such information in a manner parallel to how an intelligent human being would respond to receiving similar intelligence. Such ‘system processing’ verging on ‘human-like’ creativity was dubbed as ‘artificial intelligence’.²

Between the 1950s-1960s, following Dartmouth, researchers began developing early AI programs. To name a few: Arthur Samuel created the ‘checkers-playing program’ (1952), Allen Newell and Herbert A Simon developed the ‘Logic Theorist’ (1956), and Newell, Simon, and JC Shaw invented the ‘General Problem Solver’ (GPS) (1957). Later, the concept of machine learning emerged, focusing on the development of algorithms that enable machines to learn from data (Machine Learning and Neural Networks - 1950s-1960s) and in 1957, Frank Rosenblatt introduced the perceptron, an early form of neural network. Between the 1970s and 1980s, interest for neural networks waned, partly due to limitations in computing power, lack of significant technological developments, and decrease in funding. In the decade leading to the 1990s, the world witnessed renewed interest in neural networks, contributing to the evolution of contemporary AI. From the year 2000 onwards, there was a thrust that led to substantial advancements in machine learning owing to increased computational power and the availability of big data. These recent developments in computing power, higher numbers of data sets, and powerful algorithms have heralded a new era with vast deployment of AI in a whole spectrum of sectors.³

The dawn of machines in human history has always centred around the contraption that such devices could assist humans and ease their burden from strenuous

² Raquel Acosta, ‘Artificial Intelligence and Authorship Rights’ (JOLT Digest, 17 February 2012) <<https://jolt.law.harvard.edu/digest/artificial-intelligence-and-authorship-rights>> accessed 27 November 2023.

³ European Parliament, *Report on Intellectual Property Rights for the Development of Artificial Intelligence Technologies* (A9-0176/2020) 2 October 2020 <https://www.europarl.europa.eu/doceo/document/A-9-2020-0176_EN.html> accessed 27 November 2023.

and repetitive jobs. Since the creation of early machines and, subsequently, the emergence of more sophisticated AI systems, global perspectives on this matter have been split into two distinct groups. Some postulate that AI will herald a paradigm shift and has the potential to usher in a new era which will significantly improve the quality of human existence and bring a transformative change in the prevailing way of thinking. The other faction fears that AI could surpass human intellect across all domains, enabling machines to autonomously rewrite their own software and code, ultimately evolving into the more dominant being and eventually resulting in the demise of the Homo sapiens. This fear emanates from the fact that, in the realm of machine learning, such technologies have acquired the ability to obtain knowledge and execute tasks independently, with even the recent ability of computer systems to make independent decisions. While the anticipation of computers and AI facilitating practical creations has become prevalent, the notion of AI engaging in creativeness, verging on the inspirational, has been far more challenging to comprehend and until recently, this notion remained largely confined to the realm of fantasy and fiction, hence the difficulty and fear in fathoming such a phenomenon.

2. AI & Intellectual Property: Intersecting Horizons

It is now widely accepted that through the presence of systems-imbuing machines that hold anthropomorphic intelligence, human behaviours and capabilities are being emulated. However, these developments have also impacted the creative and inventive realms and crossed paths with intellectual property regulation.

Intellectual property rights refer to ‘creations of the mind’, and include inventions, literary and artistic works, designs, and symbols, trade names, and images used in commerce.⁴ Historically, patents have primarily safeguarded practical innovations, whilst the realm of creative pursuits has been governed by copyright law. Copyright law developed at a time when only humans could express creative manifestation.

⁴ WIPO, ‘What is Intellectual Property?’ <<https://www.wipo.int/about-ip/en/>> accessed 27 November 2023.

Intellectual Property Law

The rise of smart algorithms means that individuals no longer have a monopoly on creativity. Therefore, it is hardly unexpected that any proposed interaction between copyright law and AI will give rise to controversy.

In the last decade, we have witnessed AI systems becoming so increasingly sophisticated, that they are now generating remarkable inventions and creations autonomously, without any human intervention. This is resulting in the generation of more sophisticated artistic and creative outputs, in the form of AI-generated images, texts, sounds, and inventions. All this is impacting the interpretation and understanding of traditional IP law regimes.

Since the initial introduction of AI, creators and researchers have published more than 1.6 million scientific publications and submitted patent applications for nearly 340,000 inventions related to this area.⁵

This has presented a complex, legal landscape that continues to evolve daily and with each technological advancement, leaving no traditional IP laws or courts exempt from such intricacies and complications. The diverse domestic regulations covering AI-generated creations, the global implications of interpretation, local and international jurisprudence, and case law as well as the potential criminal liability of content produced by these advanced technologies, are but a few concerns raised by AI crossing paths with IP.

The European Commission has introduced a proposal known as the ‘Artificial Intelligence Act’, with the aim of overseeing the regulation of AI within the EU. The main objective of this proposition is to ensure the reliability of AI systems, whilst keeping a strong focus on human-centred principles and the preservation of fundamental rights and values.⁶ Among the various elements addressed within the

⁵ WIPO, *Artificial Intelligence* (WIPO Technology Trends 2019) (Report) <https://www.wipo.int/edocs/pubdocs/en/wipo_pub_1055.pdf>.

⁶ European Parliament, ‘European Parliament: State of Play on Negotiations’ <<https://futurium.ec.europa.eu/en/european-ai-alliance/document/european-parliament-state-play-ai-act-negotiations>> accessed 27 November 2023.

proposed Act, it includes provisions related to Intellectual Property Rights (IPR) concerning the development and utilisation of AI systems.

3. Copyright Law: the IP in AI?

Copyright is an IPR whose existence centres around the notion of protecting literary, dramatic, musical, and artistic works.⁷ Copyright protects the creative or artistic expression of an idea, not the idea itself. It is a legal right granted to the creator of an original work, allowing him or her exclusive rights for its use and distribution. The rationale and justification behind this are two notions merged – the idea that the author is an originator and Locke’s economic theory of ‘Possessive Individualism’ which states that an individual deserves to reap the rewards of his/her labour.⁸

The speed at which AI systems have grown in the last few years has been remarkable. With ever-increasing seamless integration through sophisticated software, we are now at a stage where these AI-enabled systems have evolved beyond basic calculations, with current capabilities spanning into the creative arts and the generation of works of poetry, art, music, and much more.

Some of the fundamental copyright problems related to AI include matters *of ownership and authorship* of the generated work; **originality** of the work produced; issues related to **fair use** of original works; **algorithmic bias**, which crops up if AI systems are trained on biased or copyrighted data and issues of **licensing and potential royalty** payments that might be due.

3.1 Authorship and Ownership

When AI and copyright law intersect, we face several challenges. As had occurred decades ago with the advent of printing, and more recently with the proliferation of

⁷ C Davies, ‘An Evolutionary Step in Intellectual Property Rights - Artificial Intelligence and Intellectual Property’ (2011) 27(6) Computer Law & Science Review 601, 605-606.

⁸ Tripathi Swapnil and Chadni Ghatak, ‘Artificial Intelligence and Intellectual Property’ (2018) 7(1) Christ University Law Journal 83, 86.

the internet, current IP traditional laws do not cater for the speed and ease at which AI systems can generate, manipulate, and distribute content. Although the dawn of AI is not the initial instance of technology intersecting with the arts, the present-day novelty and wide-ranging capabilities of AI prompt us to reconsider, yet again, how technology influences the authenticity of art and who holds the opportunity to engage in it. Therefore, **authorship of the creation and ownership of the rights** are key issues which present several multifaceted challenges and questions in this area.

3.1.1 The Software

Regarding the issue of copyright ownership of the **software** itself, this subject does not require much detailed analysis per se. There seems to be quite some consensus on this question. The AI software itself can be protected by both copyright and patent law that can apply to protect different aspects of AI software itself, hence shielding the technology product (code and data) from unlawful use and reproduction.

The software code behind the algorithm, such as the code behind 'ChatGPT' or 'Bing Chat' (in the case of content) or behind 'Midjourney' or 'Dall E-2' (in the case of image generation from textual descriptions), is subject to copyright. This falls under general, established rules on this matter, largely Copyright and Patent Acts in different jurisdictions, which mainly provide that the ownership rights on such software belong to the software writer himself.

The software code per se is treated as a literary work and can enjoy the same legal protection as any other literary or artistic work protected under traditional laws. When posed this same question, ChatGPT itself affirms that

The copyright on ChatGPT belongs to OpenAI, the company that developed me. OpenAI has the rights to the model and the information it generates. This includes the copyrights on the programming code, the machine learning model, and other related aspects.

3.1.2 Content & Output

This leads us to other different questions, mostly related to the work generated by the AI machine itself. Who is the author of the AI-created content? Would it be the AI machine itself, the creator of the program or is it the individual who trained and fine-tuned the AI to create such work?

This tension is aptly delineated by the World Intellectual Property Organisation (WIPO) itself in its paper entitled ‘Conversation on Intellectual Property Policy and Artificial Intelligence’⁹ which has the aim of ‘formulating the questions that the policymakers need to ask’ when drafting laws related to this matter.

WIPO states that:

AI applications are increasingly capable of generating literary and artistic works. This capacity raises major policy questions for the copyright system, which has always been intimately associated with the human creative spirit and with respect and reward for, and the encouragement of, the expression of human creativity. The policy positions adopted in relation to the attribution of copyright to AI-generated works will go to the heart of the social purpose for which the copyright system exists. If AI-generated works were excluded from eligibility for copyright protection, the copyright system would be seen as an instrument for encouraging and favouring the dignity of human creativity over machine creativity. If copyright protection were accorded to AI-generated works, the copyright system would tend to be seen as an instrument favouring the availability for the consumer of the largest number of creative works and of placing an equal value on human and machine creativity.

Contention still exists on AI-generated material, such as writings, text, programming code, musical pieces, pictures, or images and their eligibility for copyright protection.

⁹ WIPO, ‘Revised Issues Paper on Intellectual Property Policy and Artificial Intelligence’ (21 May 2020) <https://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ip_ai_2_ge_20/wipo_ip_ai_2_ge_20_1_rev.pdf>.

3.2 Definition of 'Work'

Under copyright law, the term 'works' is broadly defined to encompass a wide range of creative and intellectual constructions including literary works (books, novels, articles, and computer software); musical works, including compositions and their accompanying lyrics; dramatic works, for instance plays, scripts, and screenplays; pictorial, graphic, and sculptural works, such as paintings, drawings, sculptures, and photographs; audiovisual works, for example movies, television shows, and video games; sound recordings, which include the actual recorded performances or sounds; and architectural works, such as the design of buildings.

In the US,¹⁰ copyright protection commences as soon as a work is created and fixed in a tangible medium of expression, and whilst registration with the US Copyright Office (USCO) is not a *sine qua non* for copyright protection to kick off, it provides certain legal benefits such as legal evidence of one's ownership and eventual enforcement of rights if such work is used or copied without permission.

In the United Kingdom,¹¹ the definition of 'works' is very similar to that in the United States, and copyright initiates automatically upon creation and fixation, with no registration being required.

Under Maltese law,¹² the term 'works' also refers to any original literary, dramatic, musical, or artistic creation, irrespective of its form or manner of expression. Registration is also not required.

3.3 Originality

In artistic creations, originality stands as a fundamental requirement. This standard comprises two key components: the work must not have been copied and the work must present an intellectual creation. While the former requirement can be fulfilled by AI, the latter cannot. Machines nowadays can create independent

¹⁰ Copyright Act 1976, Title 17 of the United States Code.

¹¹ Copyright, Designs and Patents Act 1988 (UK).

¹² Copyright Act, Chapter 415 of the Laws of Malta.

works that deviate sufficiently from the style they learned from and therefore can be considered novel.¹³ The second element is inherently linked to a human person, highlighting the pivotal role the author has in an anthropocentric system.¹⁴

3.4 Creative Step

It is generally accepted, under EU and US law and in case law, that a work benefits from copyright protection only if the author exercised independent, personal, and creative decisions that reflect his/her unique personality.¹⁵ Mere technical skill or financial investment, with no element of personal expression and character, does not qualify for copyright protection.¹⁶

The above is distinctively in stark contrast to the *modus operandi* of AI systems. Machines operate through strictly mechanical and predetermined processes, relying solely on provided information and programming. This process is fundamentally divergent from human creativity, which often springs from internal inspiration and lacks prior external conditioning.

Therefore, in general, the creative work needs to be original and benefit from a creative step to qualify for copyright protection.

4. Generative AI

Generative AI is a type of artificial intelligence technology that is devised to create new content, such as text, art and images, music, designs, and videos. Generative AI would be typically trained on patterns and examples and unlike traditional software that follows predefined rules, generative AI can create original content

¹³ Martin Senftleben and Laurens Buijtelaa, 'Robot Creativity: An Incentive-Based Neighbouring Rights Approach' (2020) 42(12) European Intellectual Property Review 797, 799.

¹⁴ Case C-469/17 *Funke Medien NRW GmbH v Federal Republic of Germany* [2019] (GC, 29 July 2019), Opinion of AG Szpunar, para 60.

¹⁵ Case C-683/17 *Cofemel — Sociedade de Vestuário SA v G-Star Raw CV* [2019] (Third Chamber, 12 September 2019) para 30; Case C-833/18 *SI and Brompton Bicycle Ltd v Chedech / Get2Get* [2020] (Fifth Chamber, 11 June 2020) para 230.

¹⁶ Case C-604/10 *Football Dataco Ltd and Others v Yahoo! UK Ltd and Others* [2012] (Third Chamber, 11 March 2012) para 42; *Feist Publications, Inc. v Rural Telephone Service Co.*, 499 US 340, 346 (1991).

by learning from large datasets, data samples, and maps. Generative AI can edit, classify, summarise, respond to questions, suggest words or phrases, draft new content, and create derivative works from existing data sets and patterns thereof. Such systems learn patterns and correlations from data, allowing them to construct new content or make predictions autonomously. Generative AI can be used in creative tasks, language, and image generation, and it involves learning from data rather than relying on predefined rules.

Generative AI can be employed in a vast range of applications, including:

- **Text Generation:** exemplified by systems such as GPT (Generative Pre-trained Transformer) and involves the creation and production of human-like text based on a given prompt.
- **Image Creation:** as seen in cutting-edge technologies such as GANs (Generative Adversarial Networks) and is used to craft realistic images and artistic works.
- **Music Compositions:** where AI models can compose music, draft lyrics, and even create new tunes based on pre-existing music.
- **Video Production:** where AI can be applied to create video content, encompassing tasks such as video summarisation, deepfake videos, or even generating animated sequences.
- **Art and Design:** where generative AI is employed in art and design to create unique visual or interactive encounters.

AI systems have produced artworks mirroring the diverse features and artistic panaches of renowned creators. Such works include pieces like ‘Comte de Bellamy’, the initial AI-produced artwork auctioned by Christie’s, and the Microsoft creation emulating Rembrandt’s paintings entitled ‘Next Rembrandt’. Music has not been left untouched, as seen in initiatives like the Dutch broadcaster VPRO’s yearly AI song contest, crafting Eurovision-style songs using AI. Additionally, the April 2023 release of the AI-generated Drake and The Weeknd song titled ‘Heart on My Sleeve’, which sounded like it was sung by two of the world’s most famous artists, was in fact produced by an individual using an AI tool to mimic their voices.

The AI and IP discussion centres around a debate on whether any content produced by generative AI systems would meet the criteria outlined under traditional copyright laws and the definition of ‘works’, ‘originality’ and ‘creativity’ as listed above. Generative AI content exclusively depends on the algorithmic application by an inert entity (the ‘AI system’). Therefore, it seems that, at face value, under traditional intellectual property laws, there would be an automatic negation of any protection of such work, due to the lack of an appropriate level of the human inventive step.

4.1 The *Thaler* Cases

Due reference should be made to some landmark cases that cropped up this year - the so-called *Thaler* cases. Stephen Thaler, a Missouri-based inventor and AI researcher, gained a reputation for lodging litigation on behalf of DABUS,¹⁷ an AI machine and system. In the barrage of cases that Thaler lodged, some relate to copyright and some to patents.

Thaler’s aim is to ‘humanise’ technology, so he sought to protect output through file **patent** applications in different countries, including the US, UK, EU, Australia, and South Africa in the name of DABUS itself. DABUS is an advanced AI system that emulates the neural processes in the human brain using modules that can be trained, with each module holding related memories representing different concepts. Thaler also sought protection in various countries under copyright laws.¹⁸

South Africa is the only country that accepted Dr Thaler’s patent application in the name of DABUS for a patent in respect of inventions generated by the machine itself. In July 2021, the South African Companies and Intellectual Property Commission (CIPC) released a notice of issuance for the first-ever patent granted for an AI invention. Despite this global milestone, South Africa’s intellectual

¹⁷ DABUS: Device for the Autonomous Bootstrapping of Unified Sentience.

¹⁸ *Stephen Thaler v Vidal* 2021-2347 US 2 (Fed Cir 2022).

Intellectual Property Law

property office does not conduct formal patent examinations and therefore, there remains the possibility of opposition to the registration.

Similar applications were filed by Thaler to the United Kingdom Intellectual Property Office (UKIPO) on the 17th of October and 7th of November 2018. In the UK cases, while the UKIPO published a decision setting out its reasoning, the European Patent Office simply stated at the time that the applications did ‘not meet the legal requirement of the European Patent Convention (EPC) that an inventor designated in the application has to be a human being, and not a machine.’¹⁹

When it comes to **copyright** protection, Thaler sought copyright protection for a ‘computer-generated work’²⁰ created by an AI system autonomously.²¹ Thaler merely claimed his own title based on his ownership of the AI system itself, as a ‘work-for-hire’ for the Creativity Machine.²²

The USCO rejected his application on the grounds that the creation lacked human effort and authorship, an essential criterion for obtaining copyright protection. Thaler then proceeded with a lawsuit against the Copyright Office in the District Court of Columbia alleging that the Copyright Office’s denial of registration for his AI-generated work violated the Administrative Procedure Act.²³

The Court ruled in favour of the Copyright Office, emphasising that US copyright law has consistently required human creativity as the core element for copyright eligibility. Even though the US Copyright Act does not define ‘author’, the Court emphasised that the prevailing understanding is that an author must be a human

¹⁹ European Patent Office, ‘EPO Publishes Grounds for its Decision to Refuse Two Patent Applications Naming a Machine as Inventor’ (28 January 2020) <<https://www.epo.org/en/news-events/news/epo-publishes-grounds-its-decision-refuse-two-patent-applications-naming-machine>> accessed 27 November 2023.

²⁰ A painting entitled ‘A Recent Entrance to Paradise’.

²¹ Named the ‘Creativity Machine’.

²² ‘Work-for-Hire’ is a principle where copyright on a work generated by employees automatically vests in the employer if such work is created within the scope of the employee’s employment.

²³ *Thaler v Perlmutter and Others* 22-1564 US (2023).

capable of intelligent, artistic, or creative work. This means that copyright protection is a right privy to human beings only. On the 18th of August 2023, District Judge Beryl A Howell, whilst acknowledging the challenging questions arising out of ‘new frontiers’ presented by the phenomenon of AI, emphasised the lack of ‘human authorship’ in the creation of the work and the ensuing conclusion that therefore copyright could not be granted. The judge held that ‘Copyright has never stretched so far [...] as to protect works generated by new forms of technology operating absent any guiding human hand, as plaintiff urges here. **Human authorship is a bedrock requirement of copyright.**²⁴

4.2 *Zarya of the Dawn* Case

Another interesting, recent case is referred to as the *Zarya of the Dawn* case.²⁵

Kristina Kashtanova, the author, attempted to copyright her graphic novel *Zarya of the Dawn*, in which production, images were produced using the AI-image generator called ‘Midjourney’.²⁶ Initially, the USCO granted Kashtanova full protection rights on the work,²⁷ including the said AI-generated images. However, later, in October 2022, the USCO initiated a revision of such decision (after learning that the images were AI-generated) and had the initial pronouncement overturned.²⁸ The Office concluded that the graphic novel, in its entirety, constituted copyrightable work, however, the individual AI-generated images themselves, generated by a non-human entity, could not be protected by copyright.

USCO’s final ruling was rooted in the fundamental IP principle that protection is restricted to human authors. According to the Office, Kashtanova did not apply enough creative flair to Midjourney’s deliverables, leading to a significant ‘gap’

²⁴ *ibid* (emphasis added).

²⁵ Robert J Kasunic, ‘Zarya of the Dawn (Registration # VAu001480196) Letter’ (US Copyright Office 2023) <<https://www.copyright.gov/docs/zarya-of-the-dawn.pdf>>.

²⁶ ‘Midjourney’ is an AI platform that produces images based on text prompts.

²⁷ September 2022.

²⁸ February 2023.

between the user's input and the resulting final production by the AI.

5. The New EU Artificial Intelligence Act

On 13 March 2024, the European Parliament approved the world's first, comprehensive, legal framework on artificial intelligence – the landmark Artificial Intelligence Act (the 'AI Act' or the 'Act').²⁹ The AI Act lays out the burgeoning landscape of AI legislation.

As part of its digital strategy, the EU's work on AI goes back to April 2018, where the European Commission, Parliament, and Council started analysing how to comprehensively regulate Artificial Intelligence in the European Union's Single Market. In June of 2018, the Commission appointed a 'High Level Expert Group on Artificial Intelligence' (HLEG) designed to support the execution of the EU Communication on Artificial Intelligence (published in April 2018).³⁰ A list was designed with seven key requirements that AI systems should meet in order to be trustworthy, namely: human agency and oversight; technical robustness and safety; privacy and data governance; transparency; diversity, non-discrimination, and fairness; societal and environmental well-being; and accountability.³¹

The new AI Act is now in place, and it is an EU-wide legal framework (Regulation) that sets out clear transparency and reporting obligations for any enterprise placing an AI system on the EU market, or companies whose system outputs are employed within the EU (regardless of where systems are developed or deployed). The underpinning principle of the AI Act is quite straightforward: the riskier the

²⁹ Artificial Intelligence Act, European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts <https://www.europarl.europa.eu/doceo/document/TA-9-2024-0138_EN.pdf> accessed 10 April 2024.

³⁰ Commission, 'Artificial Intelligence for Europe' (Communication) COM (2018) 237 final.

³¹ High Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission, 8 April 2019) <<https://op.europa.eu/en/publication-detail/-/publication/d3988569-0434-11ea-8c1f-01aa75ed71a1>> accessed 15 April 2024.

AI system, the higher the threshold for regulation.

Essentially, the Act aims at balancing the safety and reliability of AI used for people across Europe. It holds an outright ban on artificial intelligence applications which carry unacceptable risks for the security, livelihoods, and rights of the EU citizen (including social scoring or biometric identification/facial recognition). This law could be seen as a precedent for other countries struggling to control AI's rapid advancement and it is being hoped that the so-called 'Brussels effect' will be felt in this area and that other jurisdictions will follow suit with similar legislation as the EU's.

Primarily, it is worth noting that the AI Act was not originally envisioned to deal with copyright matters. It was supposed to be a regulation designed to classify various artificial intelligence technologies into several risk categories, going from unacceptable risk, to minimal or no risk systems. However, with the rapid advancement of AI in the last 5 years, copyright-related concerns skyrocketed, reaching climax in 2022, with the public release of several 'generative' AI systems such as ChatGPT, which allowed consumers to generate text, images, and other types of content. This became increasingly problematic with complaints from authors and the creative industry, claiming that their works had been used without authorisation for the training of large language models underlying generative AI systems.

The EU reacted instantly by proposing new obligations for 'general purpose AI systems' and these proposals were taken on board. The new AI Act imposes a transparency obligation that includes two provisions related to copyright. It states that providers of general-purpose AI models shall:

1. *'put in place a policy to comply with Union copyright law, and in particular to identify and comply with, including through state-of-the-art technologies, a reservation of rights expressed pursuant to Article 4(3) of Directive (EU) 2019/790'*³² and

³² Artificial Intelligence Act (n 29) Article 53(1)(c).

2. *'draw up and make publicly available a sufficiently detailed summary about the content used for training of the general-purpose AI model'*.³³

6. The Future

Overall, the intersection of AI across various intellectual property realms poses both opportunities and hurdles. Legal and regulatory structures need to be nimble and evolve regularly to keep up with the pace of AI advancements while ensuring that innovation and creativity are given fair recognition. Striking a balance between the interests of AI developers, data providers, creators, and the public remains an ongoing responsibility for legislators and legal specialists alike.

When it comes to evaluating whether an AI-generated work can be protected under traditional copyright laws, the main point of contention is the level of human involvement in place. How much work was generated autonomously by the machine itself? What level of input does the human creator put into the creation?

The general test revolves around the idea of whether AI tools were employed to spawn concepts that are then moulded by a human artist into a finished piece or whether the AI itself entirely generated the complete work. If AI was used as a tool, then it is likely that the entirety of the artwork is protected by traditional copyright law. On the other hand, works exclusively generated by the AI system itself seem to not be safeguarded.

During this early phase of the existence of AI, it is advisable to establish agreements aimed at defining ownership of the content between the AI operator/trainer or the original content creator. The AI Act admits the potential for AI systems to originate content or play a vital role in producing new content, art or inventions, that could qualify for intellectual property rights protection. Yet, it also acknowledges that the current local IPR legal frameworks and regulations might not appropriately address the distinctive challenges and prospects presented by this new phenomenon of AI. As a result, one might consider a reevaluation of the

³³ *ibid* (d).

traditional IPR laws and regulations in this context, alongside discussions with stakeholders to address these matters.

During negotiations of the AI Act, one could say that the provisions related to copyright were included at a relatively late stage, hence resulting in provisions that can be regarded by some as rather weak. However, Article 52(1)(c) and (d) are still a welcome development for any copyright holders. The requirement to establish policies that respect copyright essentially serves as a reminder to abide by existing laws and respect the rights of content owners. The AI Act also presents limited exceptions for text and data mining, acknowledging the importance of balancing copyright protection with promoting innovation and research. The Act also stresses the importance of attaining authorisation from rightsholders for any use of copyrighted content in training AI models, unless relevant copyright exceptions and limitations apply.

In essence, the EU AI Act marks a critical step towards accountable AI governance whilst at the same time balancing innovation with the protection of fundamental rights. Having said that, in the intellectual property realm, although the AI Act represents a progress in regulating the juncture between AI and copyright law, the journey is far from being complete. The full applicability of the Act will be phased over a period of time and this gradual implementation underscores the complexities involved and emphasises the need for thorough planning by all stakeholders. Whereas generative AI presents boundless potential for enhancing creativity and innovation in the cultural and creative industries, its deployment must be approached carefully and ethically to mitigate possible drawbacks and uphold artists' creative integrity and rights.