

Artificial intelligence must serve society and enhance human creativity

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Introduction

The world's experts [warned](#) in March 2023 about Artificial Intelligence (AI) threatening human civilisation and pleaded for a pause to refocus “on making today's powerful, state-of-the-art systems more accurate, safe, interpretable, transparent, robust, aligned, trustworthy, and loyal.” However, instead of slowing down, the development and use of AI raced.

In the audiovisual sector, AI tools have been used for years to improve visual effects and post-production processes, enhancing the visual experience of the audience. Today, technologies ingesting datasets of audiovisual works can generate audiovisual products that resemble original works with animation being the most exposed genre to generative AI products. [Showrunner](#) can create 22-minute generative AI episodes of popular TV shows. These recent developments have triggered many discussions on the pros and cons of AI for the film sector¹.

As far as audiovisual authors² are concerned, AI applications can generate ideas and concepts for screenplays and film plots; they can suggest dialogues, scenes and drafts that the authors can play with. AI can help authors to experiment with different tones, genres, and voices in their work, etc. ... until AI technologies produce reasonably similar products to existing audiovisual works at a lower cost, and the industry decides that authors can be replaced by AI. This is already happening with translators, photographers, designers, music composers and many others in the creative industries. These risks have been clearly expressed by many creators' organisations³ in Europe and the US⁴ and were part of the issues at stake in the strike of the Writers' Guild in the US.

As the European association of the collective management organisations (CMOs) for audiovisual authors, we the Society of Audiovisual Authors (SAA) would like to contribute to the debate, clarifying the specific challenges for audiovisual authors and their CMOs, and making recommendations to policymakers. Our paper focuses on 4 topics:

1. The use of audiovisual works as training data for machine learning
2. AI generated audiovisual production
3. Principles for human-centred AI regulation that fosters creativity
4. Specific recommendations on the EU AI Act and copyright

We firmly believe that with the appropriate safeguards, AI can serve authors and society, enhancing creativity and cultural diversity. But this will only happen if policymakers and AI developers put human well-being at the centre of innovation. In the end, it is crucial that AI preserves and enhances human creativity, not replaces it.

¹ [Screen](#): What are the pros and cons of AI for the independent film sector? By Geoffrey Macnab, 14 September 2023.

² The SAA focuses on screenwriters and directors. See [SAA presentation](#) on our [website](#).

³ [Initiative Urheberrecht](#): Authors and Performers Call for Safeguards Around Generative AI in the European AI Act, 19 April 2023

⁴ [The Authors Guild](#): New AI technologies necessitate legal and policy interventions that balance development of useful AI tools with protection of human authorship.

1. The use of audiovisual works as training data for machine learning (ML)

According to the [2022 EUIPO Study](#) on the impact of artificial intelligence on the infringement and enforcement of copyright and designs, AI is commonly understood as a subfield of computer science that focuses on the development of computer systems that can perform tasks that would normally require human intelligence. These systems are designed by humans and, when given a complex goal, act in the physical or digital dimension by: 1. perceiving their environment through data acquisition, 2. interpreting the collected structured or unstructured data, 3. reasoning on the knowledge, or processing the information, derived for this data and 4. deciding the best action(s) to take to achieve the given goal. AI systems can either use symbolic rules or learn a numeric model, and they can also adapt their behaviour by analysing how the environment is affected by their previous actions.

At the source of every AI system, there are massive sets of data. In the absence of information made available by generative AI developers, there are good reasons to believe that when it comes to audiovisual works many data have been scraped from the internet, content sharing platforms, TV channels and VOD services. However, some AI companies seem to also develop tools in partnership with the rightsholders⁵.

The non-authorized ingestion of copyright-protected works by AI systems raise multiple concerns to the authors:

- + They have no information on their works being used
- + They do not receive any remuneration for this use
- + They cannot control this use and possible breach of their moral rights
- + They cannot oppose and prohibit such a use, if so desired

If generative AI continues feeding on authors' works and creations to train the applications without their knowledge, consent, and without any remuneration, in breach of authors' moral and economic rights, these systems and their developers will unacceptably leech on creators' original works at the expense of their career and livelihood. Great damages have already been done as AI systems cannot unlearn. These damages have triggered legal action by authors in several ongoing court cases, that could multiply if nothing is done.

There is therefore **an urgent need to provide authors and AI developers legal certainty on the status of copyright-protected works ingested by AI systems and to reaffirm the need for the authorisation and licensing of these works when used to train AI systems**. As Tom Chatfield, author and tech philosopher said "lack of traceability creates lack of trust", hindering the development of valuable AI systems for the audience. Until such principles are clearly enforced, partnerships between rightholders and AI companies cannot emerge to develop high quality AI systems that would benefit society.

Such a virtuous development can only happen if no exception to copyright is raised to justify the use of protected works without the authorisation of the rightsholders. The current interpretation by the Commission⁶ of the text-and-data mining exception of Article 4 DSM Directive as applying to generative AI appears as an obstacle to the simultaneous healthy development of AI and the European creative sector. The unpracticable opt-out option of this exception is further addressed in the section about specific recommendations for copyright rules.

⁵ European examples: [Largo.ai](#), [Publikum](#).

⁶ [Answer](#) of the Commission to a question by Emmanuel Maurel MEP on Works of art generated by artificial intelligence and artists' rights, 31 March 2023

2. AI generated audiovisual production

a) AI-assisted versus AI-generated

A distinction is usually made between “AI-assisted works” and “AI-generated production”.

AI-assisted works are generated with material human intervention and/or direction. They are human-created works with the assistance of AI systems, tools or techniques. In the audiovisual sector, there are many examples of AI-based applications for the generation of audiovisual content: in script-writing (e.g. Deepstory by the company ScriptBook, Sunspring by AI Benjamin), animation (e.g. DeepMotion for real-time animation of moving persons) and post-production (e.g. EditShare’s EFS and Avid Media’s Composer facial/object recognition software, CrumplePop’s WindRemover AI that removes background wind, Flawless AI which generates automated lip-synced visualisations).

AI-generated production refers to the generating of an output by an AI system without any human intervention. In this case, AI can change its behaviour during operations to respond to unanticipated information or events⁷ There are already AI systems capable of generating audiovisual production without any human intervention in the animation sector. They can for example produce new episodes based on existing series⁸.

b) Copyright protection

In the field of visual art, in the US, Dr Stephen Thaler, the inventor of Creativity Machine, submitted to the US Copyright Office (USCO) “A Recent Entrance to Paradise” an image “autonomously created by a computer algorithm running on a machine”, and he was “seeking to register this computer-generated work as a work-for-hire to the owner of the Creativity Machine”.

On 14 February 2022, the Copyright Review Board of the USCO refused the application for copyright protection of the AI creation submitted by Dr Stephen Thaler. The Copyright Review Board noted that the work in question was created by AI without any creative contribution from a human actor. In accordance with the case-law of the US Supreme Court, it denied the registration on the basis that **human authorship is an essential element of copyright protection**. On 18 August 2023, the US District Court of Columbia confirmed the decision⁹ explaining that the human authorship requirement in copyright law foreclosed protection for the AI-generated work, since it was not the product of a human’s creativity.

In Europe too, the condition of originality plays a decisive role in the protectability of cultural works generated with the support of an AI solution. When the AI solution appears to come only as a tool supporting the creative process, the creative work should be protected under copyright. A case-by-case assessment of whether the effort results in an “original” creation is needed. The courts would apply the general rule of human intervention and determine, on the sliding scale of human/robot collaboration, whether human efforts are required to find an “original expression”¹⁰.

Current international and national copyright rules exclude copyright protection being awarded to AI-generated production in the absence of human intervention. The SAA supports this. Any attempt to change, like Dr Stephen Thaler’s challenge of the US Copyright Office’s decision, providing copyright protection to production without any human authorship would deprive creators of their incentive to create and would deviate undue protection to AI developers/companies or users. The SAA strongly opposes this.

⁷ [Artificial intelligence \(AI\): The qualification of AI creations as “works” under EU copyright law.](#)

⁸ Showrunner AI, [Forbes’ article](#), 18 July 2023.

⁹ Thaler’s attorney indicated that he will be appealing the ruling to the D.C. Circuit court of appeals.

¹⁰ [European Commission](#): Study on copyright and new technologies - Copyright data management and artificial intelligence, 2022.

c) Unfair competition

Creators bring what AI cannot, they add emotion, intuition, authenticity and the human experience. AI alone generates unoriginal predictions, while human work stands out for their uniqueness and unpredictability. Moreover, humans also have the role to quality control the AI output and make the ethical considerations that the machine cannot. Relying solely on AI devalues human creativity and interventions. It would disrupt the creative industry and result in a generation of creators that not only will no longer oversee their creative processes, but it will also become almost impossible to make a sustainable living out of their creative labour and craftsmanship.

AI-generated production might enter in direct competition with the (human-created) works the AI systems were trained with. Producing and disseminating AI-generated content will be much cheaper for studios, broadcasters and platforms than commissioning human works and performances to third parties for which a licence may have to be obtained and a royalty paid. AI-generated production at low-cost results in unfair competition with human-created works, reducing the incentives for human creativity and its value. It is therefore the responsibility of policy makers to avoid this unfair competition situations to happen and to regulate AI.

3. Principles for human-centred AI regulation that fosters creativity

For AI to serve society and enhance human creativity, the fundamental principles of authorisation/licensing, remuneration and transparency should apply. The role of the audiovisual authors' CMOs to facilitate the enforcement of these principles should also be emphasised.

a) Authorisation/licensing

As a matter of principle, audiovisual authors should be in a position to authorise or prohibit the ingestion of their works by generative AI systems. The use of copyright-protected works by AI should be considered a use subject to copyright authorisation (it involves at least the right of reproduction). Such a recognition is essential for the enforcement of the authors' rights to be able to permit or refuse the use of their works, and to trigger remuneration for such a use.

No exception should apply that would deprive authors of the control of the exploitation of their works for generative AI purposes.

b) Remuneration

It is only with the affirmation of the right to authorise or prohibit that audiovisual authors can negotiate remuneration for the use of their works for generative AI purposes. Taking into account the importance of copyright-protected works' role in training generative AI systems, authors should undoubtedly get fairly remunerated when they authorise the use of their works, in order to be able to maintain a sustainable livelihood through their creative work and craftsmanship. To guarantee that audiovisual authors as the original rightsholders get remuneration, an unwaivable and non-transferable right to remuneration with mandatory collective management should be envisaged for AI usages of their original works.

c) Transparency

Transparency is a principle that shall apply at multiple levels:

Transparency shall apply at the level of ingestion of copyright-protected works by AI systems. Collective authorisation/licensing shall identify the works used for the **authors' information** and for them to receive their associated remuneration. In addition, a summary of the training data protected under copyright law shall be published by the AI companies for the **users' information**.

Transparency shall also apply at the level of the output to inform the public of the nature of the content they are enjoying. **Any AI-generated production shall be labelled as such** to avoid confusion with human created works.

Film funds financially supporting the production of films and audiovisual programmes should also be entitled to know about the use of AI in the financed productions.

d) The role of CMOs

Audiovisual authors' CMOs should play a role in licensing the use of the audiovisual works on behalf of the authors who wish so. They are the best placed to collectively represent audiovisual authors and negotiate with AI developers/companies.

As Prof. Daniel Gervais wrote in a [memo](#) for the Copyright Clearance Center, "Larger right holders may be able to negotiate direct licenses with major players in the ML space. Some of them already have. However, ML will happen throughout the world, and will be performed by both small and large companies and institutions. An effective and efficient solution would thus cover as much of the "repertory" of works that may be used for ML and be available in as many jurisdictions as possible. This points to a central role for CMOs active in the licensing of text and image works. Their international network and expertise would seem particularly appropriate in this context." He concluded: "Licensing is an effective mechanism to ensure fair treatment of copyright owners, provide security to the businesses using AI services, and accelerate the development of the industry. It can also assist in providing transparency in protected works used to train AI machines. As there are innumerable right holders, all over the world, whose copyrighted material has been or can be used for ML purposes, a collective licensing solution would seem like the most logical step forward."

The SAA network of 33 audiovisual authors' CMOs in 25 European countries is there to protect the rights of the audiovisual authors and to represent and defend them when new usages appear. They are looking forward to playing a decisive role in the licensing of AI usages to the best interest of the authors, whether through voluntary collective licensing or the mandatory collective management of an unwaivable and non-transferable right to remuneration for the authors.

4. Specific recommendations

a) AI Act

On 14 June 2023, the SAA [welcomed](#) the European Parliament's report on the Artificial Intelligence Act and its proposals to impose **transparency obligations** (including on the use of copyrighted training data) but considered them insufficient to address the urgent need for clear rules to protect and promote the continued development of human creativity and original works.

We welcomed the transparency obligation of the providers of foundation models to document and make publicly available a sufficiently detailed summary of the use of training data protected under copyright law "without prejudice to national or Union legislation on copyright" (Art 28b.4c). Such a mention "without prejudice to national or Union legislation on copyright" is essential to leave copyright rules out of the scope of the AI Act. This is a condition for the AI Act to be a future proof horizontal instrument. Copyright rules must be addressed separately.

However, we believe that a summary of training data alone is not sufficient to ensure that authors can enforce their claims. Instead, a **comprehensive and up-to-date list of the protected works used by generative AI systems for training purpose** is required.

In addition, we ask for **clear and strict rules on the labelling of AI generated production as such**. We consider that the labelling of content, when artificially generated or manipulated, shall not suffer any exception for the so-called exercise of the right to freedom of expression and the right to freedom

of the arts (Art 52.3a). We do not see any contradiction between these fundamental freedoms and the transparency principle on the use of AI.

We therefore call on the Council, Parliament and Commission engaged in the trilogue negotiations finalising the AI Act, to incorporate these proposals.

b) Copyright rules

i) No application of the TDM exception to feed generative AI systems

The main challenge for the audiovisual authors in relation to copyright today is the approach of the European Commission¹¹ promoting the **text and data mining exception** (TDM) of the Article 4 of the 2019 Copyright Directive as allowing any AI company to use copyright-protected works, unless rightholders have reserved this use, putting the burden of action and proof on the rightholders instead of on AI companies.

There are three main reasons to dismiss the application of the TDM exception to feed machine learning for generative AI purposes: this was not the target of the exception, the impracticality of the opt-out option and the violation of the three-step-test.

Article 2(2) of the DSM Directive defines text and data mining as “any automated analytical technique aimed at analysing text and data in digital form in order to generate information which includes but is not limited to patterns, trends and correlations”. The Directive does not mention generative AI anywhere in the text and the risks it raises for creators. Such applications were not available yet. If some scientists may have foreseen such a development, **generative AI was not part of the political debate and negotiations of the DSM Directive**. Combined with the principle of strict interpretation of exceptions, this would normally suffice to eliminate the application of this exception to the use of protected-works to feed machine learning for generative AI purpose which were not envisaged at that time.

On the **opt-out option**, there are so many unanswered questions that its unenforceability is blatant: how can authors express their opposition if they are not asked for their authorisation? Does the Commission want to set up and maintain a central repository of work-by-work oppositions by individual rightholders to the use of their works by AI companies in all fields of creation (audiovisual, music, literary, visual arts, etc.)? How can authors express their opposition in the absence of such central repository? How to combine such a central repository with the prohibition of registration as a condition for copyright protection? How would AI companies know about authors’ opposition? Would AI companies consult one or several repositories on a regular basis for any update? Would they build their own repository? How would authors know to which AI company notify their opposition?

All these questions would find a solution if AI companies had an obligation to get an authorisation. They would be incentivized to approach representative organisations of the authors (CMOs in particular) to negotiate licences that would take all these parameters into account.

The **absence of remuneration** to the authors is an additional reason to disqualify the application of the TDM exception to generative AI. The international treaties and European concept of the **three-step-test** requires exceptions to only apply in certain special cases which do not conflict with the normal exploitation of the copyright-protected works and do not unreasonably prejudice the legitimate interests of the rightholders.

- + The application of the TDM exception to generative AI in the absence of a clear mention of such an application and of a defined scope does not qualify as a special case;

¹¹ [Answer](#) of the Commission to a question by Emmanuel Maurel MEP on Works of art generated by artificial intelligence and artists’ rights, 31 March 2023.

- + Generative AI creates unfair competition with human-made creative works, thus hindering the normal exploitation of the protected works;
- + By banning any remuneration from the exception, it prejudices the legitimate interests of the authors.

In the US, a broad coalition of authors' organisations¹² called on the US government to use all available means to bring the EU in compliance with the Berne convention, in connection with the application of Article 3 and 4 DSM to generative AI. They consider that allowing these exceptions to be applied to copying for ingestion and reuse by generative AI systems constitutes a significant violation of the obligations of EU Member States as parties to the Berne Convention and the WIPO Copyright Treaty. They argue that the exceptions do not satisfy the three-step-test of Article 9.2 of the Berne Convention as copying copyright protected-works for AI development directly conflict with the normal exploitation of these works and unreasonably prejudice the legitimate interests of authors. They also consider that the opt-out condition of Article 4 is meaningless and impracticable and note that neither the European Commission nor the EUIPO have issued guidance regarding any "appropriate manner" in which rightsholders can reserve their TDM rights. In addition, they consider that the opt-out requirement constitutes a formality prohibited by Article 5 of the Berne Convention. Eventually, they urge the EU and its Member States to promptly promulgate regulations or guidance to clarify definitively that the exceptions in Articles 3 and 4 do not apply to copying for purposes of developing generative AI software.

We therefore call on the European Union and its Member States to clarify that the TDM exception does not apply to generative AI and that the right to authorise or prohibit such a use shall remain with the authors of protected works and apply in a generative AI context.

ii) No copyright protection for AI-generated production

We reiterate here our opposition to granting copyright protection to AI-generated production with no author attached. We stand firm on the role of copyright protection to incentivise and reward human creativity. AI does not need copyright as an incentive to create outputs.

iii) No sui generis right or neighbouring right for AI-generated production

We oppose any intellectual property rights' protection of generative AI production based on a sui generis right or a neighbouring right. We believe that neighbouring rights should be linked to the copyright protection of human-created works, to reward the investment in human-created works and promote these works. In the absence of copyright protection for AI-generated production, the investment put in those systems by AI companies should not be eligible to any sui generis or neighbouring right's protection.

Conclusion

We call on the policymakers to establish a responsible and equitable use of AI in the creative fields, securing audiovisual authors' remuneration for the exploitation of their works, allowing them to continue their creative work and make a living out of their labour and craftsmanship. Citizens and society at large must be at the centre of any policy decision.

We remain at your disposal to share with you our European experience of audiovisual authors' rights and remuneration, and collective rights' management, and discuss our proposals.

¹² [Appeal for action](#) on violations of the Berne Convention by the application to copying of creative works for AI development of the TDM exception in Articles 3 and 4 of the 2019 EU Directive on Copyright, July 2023.