# Tool, Pirate or Creator? Copyright in Al-Created Works





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## **Overview**



1 Why is this even relevant?

Who owns Al generated content?

In how far can Al providers use existing content?

4 Is this just a case of moral rights?

Is this only about the money?

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## Why is this even relevant?

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## How can we **define** "Artificial Intelligence"?





~ Entwurf der EU-Kommission zur KI-VO "Al Tools and Technologies means **Software** that is developed with one or more **computational techniques** such as machine learning approaches, including supervised, unsupervised and reinforcement learning, deep learning, and can, for a given set of **human-defined objectives**, **generate Outputs** such as content, predictions, recommendations, or decisions."

## SPRINGER NATURE

"To provide clarity and guidance for Member Institutions and Authorized Users, DEAL Operating Entity and Publisher agree to jointly monitor the legal and technological developments regarding artificial intelligence tools in relation to the use of Content during the Term of this Agreement, and align on such in a joint working group"

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## Are there any **statutory definitions**? (1)



### **Article 3 Artificial Intelligence Act 2024/1689 – Definitions**

For the purposes of this Regulation, the following definitions apply:

(1) 'Al system' means a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments;

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## Are there any **statutory definitions**? (2)



### **Article 3 Artificial Intelligence Act 2024/1689 – Definitions**

For the purposes of this Regulation, the following definitions apply:

(63) 'general-purpose AI model' means an AI model, including where such an AI model is trained with a large amount of data using self-supervision at scale, that displays significant generality and is capable of competently performing a wide range of distinct tasks regardless of the way the model is placed on the market and that can be integrated into a variety of downstream systems or applications, except AI models that are used for research, development or prototyping activities before they are placed on the market;

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## Let's bring **OpenAl** to Court!



Major U.S. newspapers sue OpenAI, Microsoft for copyright infringement



TON CHO 

MAY 21, 2024 5:09PM

Updated Apr 30, 2024 - Business



Indian news agency sues OpenAl alleging copyright infringement



heise online heise+ entdecken







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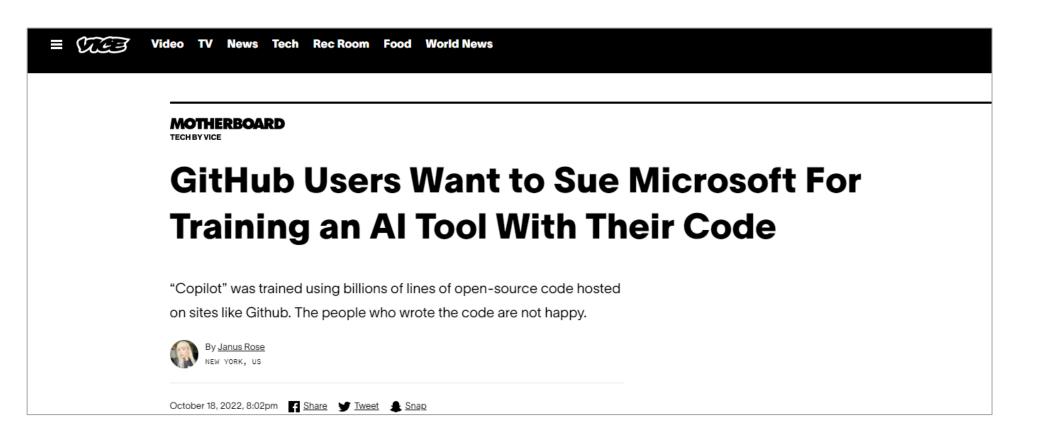
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## Is this <u>exclusively</u> about pictures, music, voice-recordings and movies?





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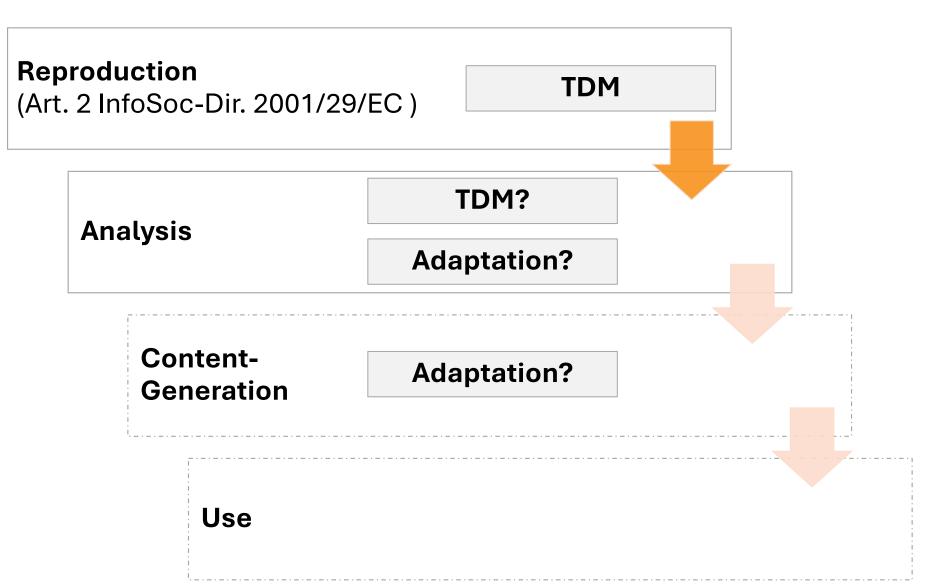
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**No**, this is about any kind of copyrighted (or otherwise protected) source used as a base for AI-generated results.

## **How** does Artificial Intelligence relate to copyright?





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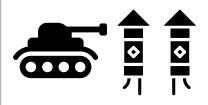
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## What possible means of regulation are available?



Prohibition with highly specific exceptions granted by the state





Driver License Model: Initial approval / review procedure





Mere Warning and specific ex-post rights (e.g. compensation)



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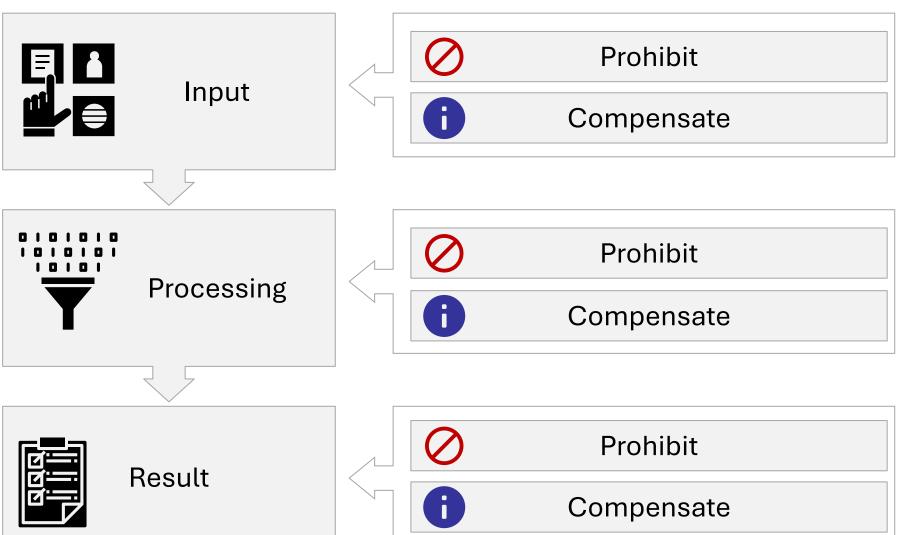
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## What **phase** should we regulate?





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## Who owns Al generated content?

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## Can we "detect" Al-generated content?

## Süddeutsche Zeitung

Burda-Verlag

#### KI mit Soße

Mai 2023, 16:31 Uhr Lesezeit: 3 Min.





Zusammengeköchelt von künstlicher Intelligenz: Für Burdas "Lisa Kochen & Backen"-Extraheft mit 99 Pasta-Rezepten stand niemand in der Testküche. (Foto: Anna Ernst/SZ)

Schmeckt's? Das Burda-Heft präsentiert "99 Pasta-Rezepte" weitgehend mittels künstlicher Intelligenz. Die Leser erfahren davon nichts. Im Verlag herrscht Unruhe.



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## Can we "detect" Al-generated content?



## Art. 50 AI-Act - Transparency obligations for providers and deployers of certain AI systems

Providers of AI systems, including general-purpose AI systems, generating synthetic audio, image, video or text content, shall ensure that the outputs of the Al system are marked in a machine-readable format and detectable as artificially generated or manipulated. Providers shall ensure their technical solutions are effective, interoperable, robust and reliable as far as this is technically feasible, taking into account the specificities and limitations of various types of content, the costs of implementation and the generally acknowledged state of the art, as may be reflected in relevant technical standards.

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## Does Watermarking work?

## OpenAl's New o3/o4-mini Models Add Invisible Characters to Text, Sparking Watermark Debate

The discovery of non-standard space characters in OpenAl's o3/o4-mini output has raised questions about Al watermarking, though it remains unclear if it's intentional.



By Markus Kasanmascheff April 21, 2025 11:09 am CEST



Watermarking Al-generated text and video with SynthID

14 MAY 2024



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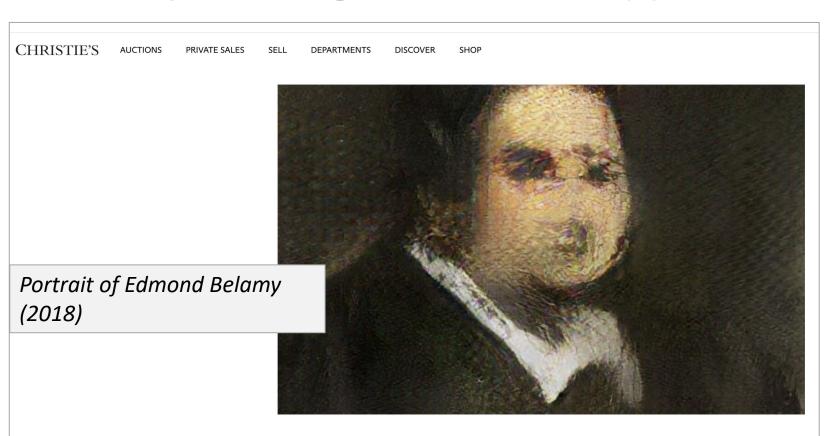
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## **Should** we protect Al generated works? (1)



Is artificial intelligence set to become art's next medium?

12 December 2018

PHOTOGRAPHS & PRINTS | INTERVIEW Al artwork sells for \$432,500 — nearly 45 times its high estimate — as Christie's becomes the first auction house to offer a work of art created by an algorithm



Juristische Fakultät CC-BY 4.0 – M. Beurskens

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## **Should** we protect Al generated works? (2)

"The works in this auction are using artificial intelligence to enhance their bodies of work, not to replace human creativity. These artists are pushing the boundaries of what's possible with AI rather than relying on it as a shortcut."





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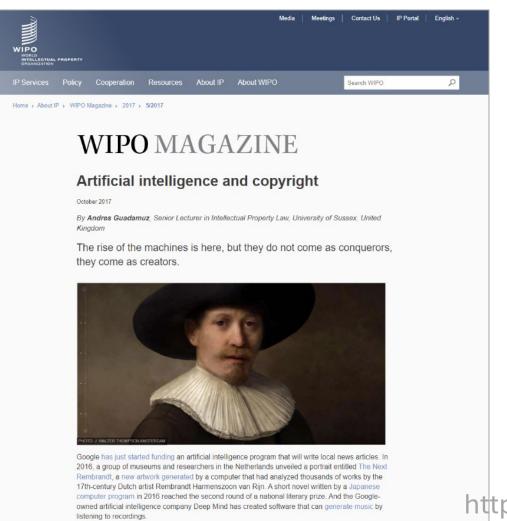
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## Is this a **new question**? (1)





Other projects have seen computers write poems, edit photographs and even compose a musical.

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https://www.wipo.int/wipo\_magazine/en/2017/05/article\_0003.html

#### Who owns Al generated content?

## Is this a <u>new question</u>? (2)





9.00 General session: Al and IP

First part: What are we talking about?

What is AI? What is an AI creation?

Moderator: Karsten Königer, Harmsen Utescher, Hamburg, Germany

Panelists:

Al specialist (scientific) TBC EPO representative TBC

10.00 Second part: Influence of the AI creations on the IP rules (conditions of protectab scope of protection, etc.)

Moderator: Guillaume Henry, Szleper Henry Avocats, Paris, France

Panel a): Protection of AI-related technical creations: including IoT and Software-Based Patent Protection (with reference to the recent EPO guidelines)

Stephan Freischem, Freischem & Partner, Cologne, Germany Mathieu Objois, Regimbeau, Lyon, France Dr. Marek Bury, Bury & Bury, Warsaw, Poland

#### 11.00 Coffee Break

11.30 Continuation of the Second part Panel b): Al-generated works and copyright and designs

Prof. Edouard Treppoz, Lyon University, Lyon, France Marcin Fijałkowski, Baker McKenzie, Warsaw, Poland Reinhardt Oertli, Meyerlustenberg Lachenal Ltd, Zurich, Switzerland John Osha, Osha Liang LLP, Houston, USA

13.00 Lunch break

International Association for the Protection of Intellectual Property – World Congress 2019



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## Is this a **new question**? (3)

COPYRIGHT LAW/AI

#### IntellectualProperty

## Do Al generated works qualify for copyright?

Summary of the German report to the AIPPI 2019 Study Question on copyright in artificially generated works

By Jan Freialdenhoven, Niklas Maamar, Sonja Mroß, Prof. Dr. Jan Bernd Nordemann, LL.M.



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Niklas Maamar LL.M. (Harvard). Humboldt-Universität zu Berlin wissenschaftlicher Mitarbeiter am Lehrstuhl von Prof. Dr. Axel Metzger

rtificial intelligence (AI) is on everyone's lips. A painting created by AI is auctioned for hundreds of thousands of dollars. Sony works on AI to create new music. Researchers work on AI to create poems like Shakespeare's. These are just a few examples of the increase in creative uses of AI. Consequently, not only the AIPPI (Association Internationale pour la Protection de la Propriété Intellectuelle) considers AI to be a potential game changer. This article aims to summarize the report (siehe hier die PDF) of the German group to the AIPPI's 2019 Study Question on copyright in artificially generated works outlining the requirements under which AI generated works are protected by copyright and related rights. The German group consisted of the following members: Anselm Brandi-Dohrn, Anja Fischhold, Jan Freialdenhoven, Björn Joachim, Sabine Kossak, Niklas Maamar, Sonja Mroß, Jan Bernd Nordemann and Michael Renner. The German report, together with 32 international reports, eventually led to a resolution (siehe hier die PDF) on the AIPPI World Congress held in London in September 2019 including suggestions to harmonize the scope protection for AI generated works.



Dr. Sonja Mroß Senior Associate, DLA Piper, Köln Rechtsanwältin

www.dlapiper.com



Prof. Dr. Jan Bernd Nordemann Urheber- und Medienrecht, NORDEMANN Rechtsanwalt, Partner

#### How AI generates works

For the purpose of the Study Question (siehe hier die PDF), a working example was provided, to be analysed under the respective national law. The working example consists of three steps. In a first step, a human creates algorithms which are able to receive training data as input and then interpret and "learn" from such inputs to achieve a desired output. Step two is the training of the AI with training data, e.g. with paintings, music or poems. For this second step two alternative scenarios are given. In the first scenario, the specific training data is selected by a human, in the second scenario no such human selection occurs. In the third step, either a selection of the final AI generated work from different AI outputs takes place, or not such human intervention is involved.

#### Copyright only protects works created by a human author

Copyrightable works can only be created by humans. Pursuant to sect. 2 para. 2 German Copyright Act, a work is protectable only if it qualifies as the "author's own intellectual creation". Since copyright law is based on the idea that the works created by a human author have a strong link to the author's personality rights, only works that originate in the human mind can be considered to fulfil this requirement. Consequently, creations made by machines and corporations are excluded from Copyright protection.

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## Why shouldn't we simply have "AI Copyright

## Owners"?

Al has no assets (apart from possible copyright claim)

Al is unable to enforce / defend copyright

"mere tool" (no © to the brush!)

Al has no interest in "moral rights"

Al would have no use for license fees, damages, etc.



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## Should we grant copyright to the user?



### § 9 Copyright, Designs and Patents Act 1988

(3)In the case of a literary, dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken.

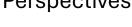
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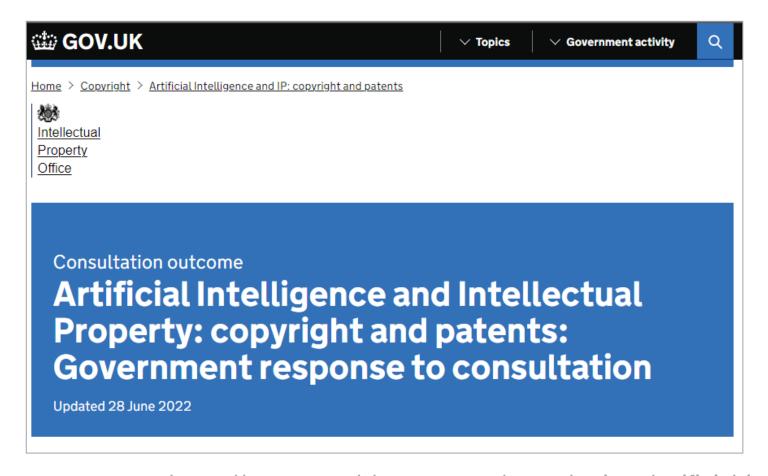
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## Is it time to rethink copyright as such?



https://www.gov.uk/government/consultations/artificial-intelligence-and-ip-copyright-and-patents/outcome/artificial-intelligence-and-intellectual-property-copyright-and-patents-government-response-to-consultation



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# Art. 6 Directive 2006/116/EC of the European Parliament and of the Council of 12 December 2006 on the term of protection of copyright and certain related rights

A photographic work within the meaning of the Berne Convention is to be considered original if it is **the author's own intellectual creation reflecting his personality**, no other criteria such as merit or purpose being taken into account.

Art. 1 Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs

(3) A computer program shall be protected if it is original in the sense that it is **the author's own intellectual creation**. No other criteria shall be applied to determine its eligibility for protection.

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In the case of works containing Al-generated material, the Office will consider whether the Al contributions are the result of "mechanical" reproduction" or instead of an author's "own original mental conception, to which [the author] gave visible form." The answer will depend on the circumstances, particularly how the AI tool operates and how it was used to create the final work. This is necessarily a case-by-case inquiry.



#### UNITED STATES COPYRIGHT OFFICE

#### Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence

PUBLISHED ON THURSDAY, MARCH 16, 202 16190 FEDERAL REGISTER, VOL. 88, NO. 51 RULES AND REGULATIONS

37 CFR PART 202

ACTION: Statement of policy

SUMMARY: The Copyright Office issues this statement of policy to clarify its practices for examining and registering works that contain material generated by the use of artificial intelligence technology.

DATES: This statement of policy is effective March 16, 2023.

FOR FURTHER INFORMATION CONTACT: Rhea Efthimiadis, Assistant to the General Counsel, by email at meft@copyright.gov or telephone at 202–707–8150.

#### SUPPLEMENTARY INFORMATION

#### I. Background

The Copyright Office (the "Office") is the Federal agency tasked with administering the copyright registration system, as well as advising Congress, other agencies, and the Federal judiciary on copyright and related matters.¹ Because the Office has overseen copyright registration since its origins in 1870, it has developed substantial experience and expertise regarding "the distinction between copyrightable and noncopyrightable works.³ The Office is empowered by the Copyright Act to establish the application used by applicants seeking registration of their copyrighted works.³ While the Act identifies certain minimum requirements, the Register may determine that additional information is necessary for the Office to evaluate the "existence, ownership, or duration of the copyright." 4 Because the Office receives roughly half a million applications for registration each year, it sees new trends in registration activity that may require modifying or expanding the information required to be disclosed on an application.

One such recent development is the use of sophisticated artificial intelligence ("AI") technologies capable of producing expressive material. These technologies "train" on vast quantities of preexisting human-authored works and use inferences from that training to generate new content. Some systems operate in response to a user's textual instruction, called a "prompt." The resulting output may be textual, visual, or audio, and is determined by the AI based on its design and the material it has been trained on. These technologies, often described as "generative AI," raise questions about whether the material they produce

1 | Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence

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Decision of the Supreme Court of Cassation of Italy, Civil Division, Section I (Corte Suprema di Cassazione, Sez. 1 Civ.) 16 January 2023 – Case No. 1107/2023; ECLI:IT:CASS:2023:1107CIV

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- 1. An image generation using software is compatible with developing a creative work of the intellect.
- 2. A more rigorous examination of the degree of creativity involved suffices.

## Is there an international standard? (1)

# UNIVERSITÄT PASSAU Juristische Fakultät CC-BY 4.0 – M. Beurskens

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#### SMART NEWS

## U.S. Copyright Office Rules A.I. Art Can't Be Copyrighted

An image generated through artificial intelligence lacked the "human authorship" necessary for protection



#### Jane Recker

Daily Correspondent
March 24, 2022

https://www.smithsonianmag.com/smart-news/us-copyright-office-rules-ai-art-cant-be-copyrighted-180979808/

## Is there an international standard? (2)





UNITED STATES COPYRIGHT OFFICE

#### Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence

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One such recent development is the use of sophisticated artificial intelligence ("AI") technologies capable of producing expressive material. These technologies "train" on vast quantities of preexisting human-authored works and use inferences from that training to generate new content. Some systems operate in response to a user's textual instruction, called a "prompt." The resulting output may be textual, visual, or audio, and is determined by the AI based on its design and the material it has been trained on. These technologies, often described as "generative AI," raise questions about whether the material they produce

1 | Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence

https://www.copyright.gov/ai/ai\_policy\_guidance.pdf

Individuals who use AI technology in creating a work may claim copyright protection for their own contributions to that work. ... For example, an applicant who incorporates AI-generated text into a larger textual work should claim the portions of the textual work that is human-authored.

• • •

Al-generated content that is more than de minimis should be explicitly excluded from the application. Introduction

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#### Beijing Internet Court A Civil Judgment

(2023) Jing 0491 Min Chu No. 11279 (2023)

Plaintiff: LI

Agent ad litem 1: Sun Yan, lawyer at Beijing Tian Yuan Law Firm Agent ad litem 2: Li Yufan, lawyer at Beijing Tian Yuan Law Firm

Defendant: LIU

The case of LI (the plaintiff) v. LIU (the defendant) over infrir authorship and the right of dissemination on the information network on May 25, 2023. A collegial panel was formed in accordance with procedures being applied. After a pre-trial meeting, a public hearing v 2023. The plaintiff LI and his agents Sun Yan and Li Yufan, and the the trial via the e-litigation platform of the Court. The case has now bee

The plaintiff LI requested that: 1. The defendant issue a public sta account involved to apologize to the plaintiff and eliminate the impact. The defendant compensate 5,000 yuan for the plaintiff's economic los case: On February 24, 2023, the plaintiff generated the picture involv words in Stable Diffusion, an open source software, and then publish Red Book, a social media platform, under the title "Spring Breeze Bri the plaintiff found that the picture was used in an article titled "Love Blossoms," which was published by the defendant under the baijiaha

March 2, 2023. The defendant had used the picture without the plaintiff's permission and even removed the plaintiff's watermark on Little Red Book, causing viewers to believe that the defendant was the author of the picture. The defendant's behavior seriously violated the plaintiff's right of authorship and of dissemination on the information network. The defendant should compensate the plaintiff for his economic losses and make an apology to eliminate the impact. Accordingly, the plaintiff filed a lawsuit to the Court and requested the above.

The defendant LIU argued that: 1. The defendant searched the Internet and obtained the picture involved and used it as an illustration for his original poem "Love in March, in the

The plaintiff claimed that the picture was generated via Stable Diffusion on February 24, 2023. He submitted a video that demonstrates the process of generating the picture involved.

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4. Enter the following prompt words: "(ultra photorealistic: 1.3), extremely high quality highdetail RAW color photo, in locations, japan idol, highly detailed symmetrical attractive face, angular simmetrical face, perfectskin, skin pores, dreamy black eyes, reddish-brown plaits hairs, uniform, long legs, thighhighs, soft focus, (film grain, vivid colors, film emulation, kodak gold portra 100, 35mm, canon50 f1.2) Lens Flare, Golden Hour, HD, Cinematic, Beautiful Dynamic Lighting".

Enter the following negative prompt words: "((3d comic:1.2)), bad anatomy, bad handed quality, signature, water malformed, mut proportions, muta nsfw, lowres, bada quality, low quality kitsch, ugly, oversa extra limb, ugly, poo

Among them, "((3d render, CG, painting, drawing, cartoon, anime, comic: 1.2))" ed. worst comes from the defendant himself, and the uid body, y, gross rest are directly copied from an online forum. malistic, argits, cropped, worst Jonnark, username, blurry, disfigured, a, aistigured, poorly drawn face, mutation, mutated, missing limb, floating limbs, disconnected limbs, malformed hands,

blur, out of focus, long body, ugly, disgusting, poorly drawn, childish, mutilated, mangled, old, surreal, text, b&w, monochrome, conjoined twins, multiple heads, extra legs, extra arms, meme, elongated, twisted, fingers, strabismus, heterochromia, closed eyes, blurred, watermark, wedding, group, dark skin, dark-skinned female, tattoos, nude, lowres, badanatomy, badhands, text, error, missing fingers, extra digit, fewer digits, cropped, worst quality, low quality, normal quality, jpeg artifacts, signature, watermark, username, blurry"

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n, anime,

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6.With the above parameters unchanged, modify the weight of "lord-hanfugirl-v1-5.safetensors" in "Addition-Networks" to 0.75. The result is shown in Figure 4.

7. With the above parameters unchanged, modify random seed to 2692150199. The result is shown in Figure 5.











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With the above parameters unchanged, add the following prompt words: "shy, elegant, cute, lust, cool pose, teen, viewing at camera, masterpiece, best quality",



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This picture is **not a ready made one** that can be obtained through a search engine, **nor is it an arrangement or combination of various elements preset by the software designer**. ...

Based on the initially generated picture, the plaintiff added some prompt words, modified the parameters, and finally got the picture he wanted. From the time the plaintiff had an idea about the picture to his final selection of the picture involved, the plaintiff did some intellectual investment, such as designing the presentation of the character, selecting prompt words, arranging the order of prompt words, setting parameters, and selecting the picture that he wanted.

The **picture involved reflects the plaintiff's intellectual investment**, so it meets the element of "intellectual achievement".

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The plaintiff input prompt words and set parameters and got the first picture; then he added some prompt words, modified the parameters, and finally got the picture involved.

Such adjustment and modification also reflect the plaintiff's aesthetic choice and personal judgment. During the trial, the plaintiff generated different pictures by changing the prompt words or the parameters.

One can infer that with this model, different people can generate different pictures by entering different prompt words and setting different parameters.

Therefore, the picture involved is **not a "mechanical intellectual achievement"**.

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"Currently, the generative AI model has no free will and is not a legal subject. Therefore, when people use an AI model to generate pictures, there is no question about who is the creator. In essence, it is a process of man using tools to create, that is, it is man who does intellectual investment throughout the creation process, the not AI model.

The core purpose of the copyright system is to **encourage creation**. And creation and AI technology can only prosper by properly applying the copyright system and using the legal means to encourage more people to use the latest tools to create. "

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## Where are the <u>limits</u>? (1)



Case 1:22-cv-01564-BAH Document 24 Filed 08/18/23 Page 1 of 15

#### UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

Civil Action No. 22-1564 (BAH) Judge Beryl A. Howell

STEPHEN THALER.

Plaintil

v.

SHIRA PERLMUTTER, Register of Copyrights and Director of the United States Copyright Office, et al.

Defendants.

#### MEMORANDUM OPINION

Plaintiff Stephen Thaler owns a computer system he calls the "Creativity Machine," which he claims generated a piece of visual art of its own accord. He sought to register the work for a copyright, listing the computer system as the author and explaining that the copyright should transfer to him as the owner of the machine. The Copyright Office denied the application on the grounds that the work lacked human authorship, a prerequisite for a valid copyright to issue, in the view of the Register of Copyrights. Plaintiff challenged that denial, culminating in this lawsuit against the United States Copyright Office and Shira Perlmutter, in her official capacity as the Register of Copyrights and the Director of the United States Copyright Office ("defendants"). Both parties have now moved for summary judgment, which motions present the sole issue of whether a work generated entirely by an artificial system absent human involvement should be eligible for copyright. See Pl.'s Mot. Summ. J. (Pl.'s Mot."), ECF No. 16; Defs.' Cross-Mot. Summ. J. ("Defs.' Mot."), ECF No. 17. For the reasons explained below, defendants are correct that human authorship is an essential part of a valid copyright claim, and

Recent Entrance to Paradise ("Creativity Machine")

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## Where are the <u>limits</u>? (2)



After its creation, plaintiff attempted to register this work with the Copyright Office. In his application, he identified the author as the Creativity Machine, and explained the work had been "autonomously created by a computer algorithm running on a machine," but that plaintiff sought to claim the copyright of the "computer-generated work" himself "as a work-for-hire to the owner of the Creativity Machine." ...

Plaintiff requested reconsideration of his application, confirming that the work "was autonomously generated by an Al" and "lack[ed] traditional human authorship," but contesting the Copyright Office's human authorship requirement and urging that Al should be "acknowledge[d]... as an author where it otherwise meets authorship criteria, with any copyright ownership vesting in the Al's owner."

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## Where are the <u>limits</u>? (3)



While plaintiff attempts to transform the issue presented here, by asserting new facts that he "provided instructions and directed his AI to create the Work," that "the AI is entirely controlled by [him]," and that "the AI only operates at [his] direction," Pl.'s Mem. at 36–37—implying that he played a controlling role in generating the work—these statements directly contradict the administrative record. Judicial review of a final agency action under the APA is limited to the administrative record...

On the record designed by plaintiff from the outset of his application for copyright registration, this case presents only the question of whether a work generated autonomously by a computer system is eligible for copyright. In the absence of any human involvement in the creation of the work, the clear and straightforward answer is the one given by the Register: No.

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In how far can Al providers use

### What is the **economic issue**?



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Cost to create training data

Cost to develop tools

Cost to train neural network

Cost to request result

Cost to generate result

## What is "Text- and Datamining" ("TDM")?



#### Art. 2 DSM-Dir. 2019/790 - Definitions

For the purposes of this Directive, the following definitions apply:

2. 'text and data mining' means 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

Digital Automated Generate Information

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## And how does this relate to **Artificial Intelligence**?



#### Recital 105 Al-Act 2024/1669

... 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 authorisation of the rightsholder concerned unless relevant copyright exceptions and limitations apply.

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## And how does this relate to **Artificial Intelligence**?



#### Recital 105 Al-Act 2024/1669

Directive (EU) 2019/790 introduced exceptions and limitations allowing reproductions and extractions of works or other subject matter, for the purpose 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 has been expressly reserved in an appropriate manner, providers of general-purpose Al models need to obtain an authorisation from rightsholders if they want to carry out text and data mining over such works.

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## Does **EU-Copyright Law** apply to text mining?



# Art. 8 Rome II Regulation 864/2007 - Infringement of intellectual property rights

- 1. The law applicable to a non-contractual obligation arising from an infringement of an intellectual property right shall be the **law of the country for which protection is claimed**. ...
- 3. The law applicable under this Article may not be derogated from by an agreement pursuant to Article 14.

Relevant Act: Reproduction (Art. 2 InfoSocDir 2001/29/EC) by Download / Copy into AI-System (as Input- or Trainingsdata)

In Germany / in USA / in China...

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## And how does this relate to **Artificial Intelligence**?



## Art. 53 AI-Act 2024/1669 - Obligations for providers of general-purpose AI models

- 1. Providers of general-purpose AI models shall:
  - (c) put in place a **policy to comply with Union law on copyright and related rights**, 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;
  - (d) draw up and make publicly available a **sufficiently detailed summary about the content used for training** of the general-purpose AI model, according to a template provided by the AI Office.

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## How does the EU treat data mining?



# Article 4 DSM-Dir. (EU) 2019/790 – Exception or limitation for text and data mining

- 1. Member States shall provide for an exception or limitation to the rights provided for in Article 5(a) and Article 7(1) of Directive 96/9/EC, Article 2 of Directive 2001/29/EC, Article 4(1)(a) and (b) of Directive 2009/24/EC and Article 15(1) of this Directive for reproductions and extractions of lawfully accessible works and other subject matter for the purposes of text and data mining....
- 3. The exception or limitation provided for in paragraph 1 shall apply on condition that the use of works and other subject matter referred to in that paragraph has not been expressly reserved by their rightholders in an appropriate manner, such as machine-readable means in the case of content made publicly available online.

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## How does the EU treat data mining?



## Art. 3 DSM-Dir. (EU) 2019/790 - Text and data mining for the purposes of scientific research

- 1. Member States shall provide for an exception to the rights provided for in Article 5(a) and Article 7(1) of Directive 96/9/EC, Article 2 of Directive 2001/29/EC, and Article 15(1) of this Directive for reproductions and extractions made by research organisations and cultural heritage institutions in order to carry out, for the purposes of scientific research, text and data mining of works or other subject matter to which they have lawful access.
- 2. Copies of works or other subject matter made in compliance with paragraph 1 shall be stored with an appropriate level of security and may be retained for the purposes of scientific research, including for the verification of research results.

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## Can we deviate by contractual agreements?



### One can commit oneself to omit legal acts

#### however:

#### Art. 7 DSM-Dir. (EU) 2019/790 - Common provisions

1. Any contractual provision contrary to the exceptions provided for in Articles 3, 5 and 6 shall be unenforceable.

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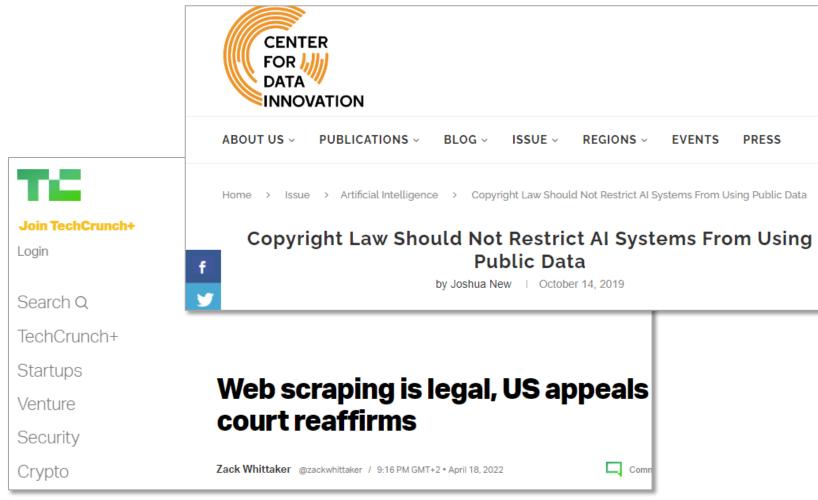
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## Is this only a **European perspective**?

https://datainnovation.org/2019/10/copyright-law-should-not-restrict-ai-systems-from-using-public-data/





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### What about **CC-Licences**?



© creative commons

WHO WE ARE WHAT WE DO LICENSES AND TOOLS BLOG SUPPORT

Better Internet, Licenses & Tools, Open Creativity, Technology

## UNDERSTANDING CC LICENSES AND GENERATIVE AI

by Kat Walsh

Many wonder what role CC licenses, and CC as an organization, can and should play in the future of generative AI. The legal and ethical uncertainty over using copyrighted inputs for training, the uncertainty over the legal status and best practices around works produced by generative AI, and the implications for this technology on the growth and sustainability of the open commons have led CC to examine these issues more closely. We want to address some common questions, while acknowledging that the answers may be complex or still unknown.



"CC Icon Statue" by Creative Commons, generated in part by the DALL-E 2 AI platform. CC dedicates any rights it holds to this image to the public domain via CCO.

#### 66

We use "artificial intelligence" and "AI" as shorthand terms for what we know is a complex field of technologies and practices, currently involving machine learning and large language models (LLMs). Using the abbreviation "AI" is handy, but not ideal, because we recognize that AI is not really "artificial" (in that AI is created and used by humans), nor "intelligent" (at least in the way we think of human intelligence).

CC-0: Clear

CC-BY: Attribution?

Model under CC-BY-SA when using CC-BY-SA

No sharing of Model when using CC-BY-ND

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## Is there **compulsory compensation** for TDM?



#### ErwGr. 17 DSM-RL 2019/790

In view of the nature and scope of the exception, which is limited to entities carrying out scientific research, any potential harm created to rightholders through this exception would be minimal.

Member States should, therefore, not provide for compensation for rightholders as regards uses under the text and data mining exceptions introduced by this Directive.

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Is this just a case of moral rights?

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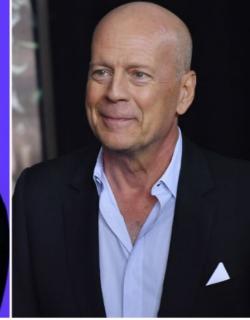
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# Should an <u>actor</u> decide how digital look-alikes are used?









Tech

YIPPEE AI YAY Bruce Willis sells rights to 'Al twin' that could see him back on screen after brain disorder diagnosis

12:37 ET, Sep 29 2022 | Updated: 15:59 ET, Sep 29 2022



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## Is there any **legal basis** for that claim?



### **Article 5 Beijing Treaty on Audiovisual Performances – Moral Rights**

- (1) Independently of a performer's economic rights, and even after the transfer of those rights, the performer shall, as regards his live performances or performances fixed in audiovisual fixations, have the right:
  - (i) to claim to be **identified** as the performer of his performances, except where omission is dictated by the manner of the use of the performance; and
  - (ii) to object to any distortion, mutilation or other **modification of his performances that would be prejudicial to his reputation**, taking due account of the nature of audiovisual fixations.

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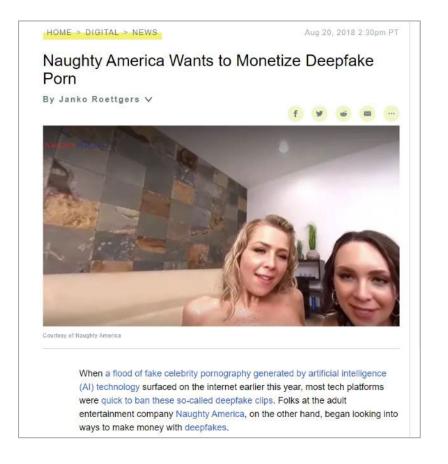
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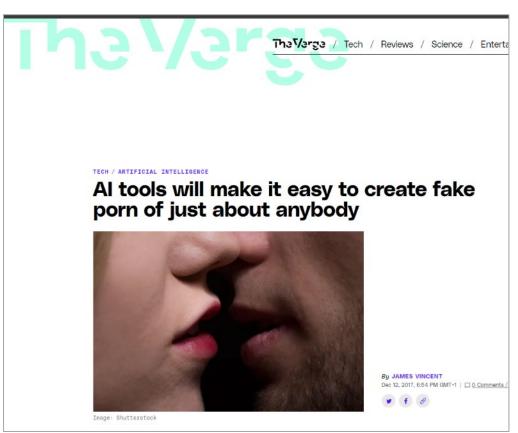
#### Moral Rights

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## What about **porn**?





Juristische Fakultät CC-BY 4.0 – M. Beurskens

UNIVERSITÄT

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https://www.theverge.com/2017/12/12/1676659 6/ai-fake-porn-celebrities-machine-learning

https://variety.com/2018/digital/news/deepfakeporn-custom-clips-naughty-america-1202910584/

## Can't this be easily resolved by the **legislator**?





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# But what about cases <u>without any(determinable)</u> <u>person</u> used as a base?





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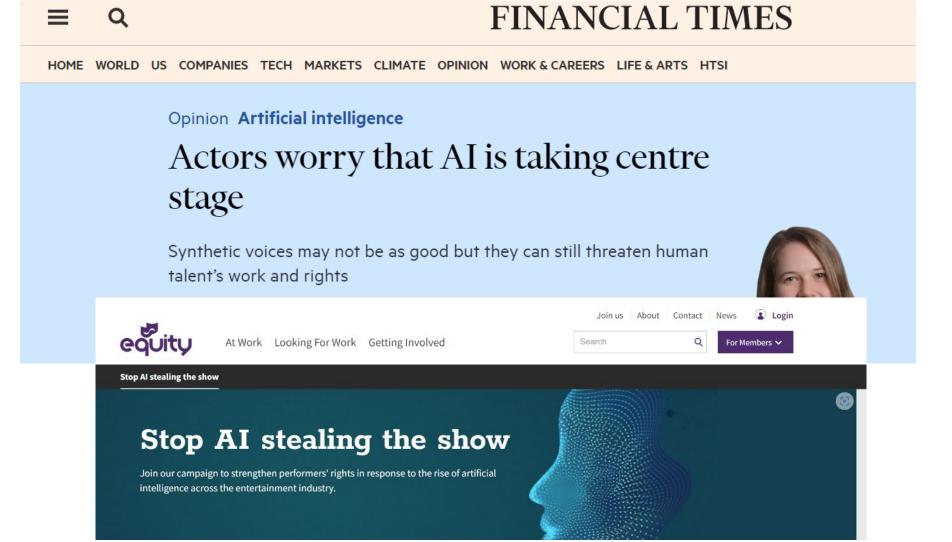
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# Why are (especially) **voice actors** worried about increasing AI use?





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## Is there any **reason** to be worried?





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## Is there a **legal basis** for that claim?



Article 12 Convention for the Protection of Literary and Artistic Works (Berne Convention)

Authors of literary or artistic works shall enjoy the exclusive right of authorizing adaptations, arrangements and other alterations of their works.

Mere Remix / Recombination?

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## Why not **profit** without (further) work?



Juristische Fakultät CC-BY 4.0 – M. Beurskens

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#### Zeena Qureshi

CEO & Co-founder

June 3, 2021

## The short answer is no: Al voices will never replace actors

If game, animation, and film studios can access extremely realistic, expressive Al voices, will real-life actors lose their jobs? The short answer is no: Al voices will never replace actors. And in fact, the development of Al voice models and the use of those Al voices by studios benefit not only the studios but the actors as well.

#### Generating new sources of income

From the moment we started building our product, we wanted to ensure that our actors would benefit financially from their partnership with us. Each time a client uses an actor's voice model, the actor receives a profit share. Since multiple Sonantic clients can—and often do—use the same actor's voice simultaneously, each actor could potentially gain a substantial passive revenue stream.

## Is this only a question of <u>licensing</u>?





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https://www.theverge.com/2019/3/1 4/18265826/creative-commonsphotos-facial-recognition-database

#### Is this only about the money?

### What about **misrepresentation** vis-a-vis consumers?



TECH CULTURE STAR WARS AI

## James Earl Jones gives his blessing to AI recreation of Darth Vader voice

Jones is stepping away from the role

By Rob Thubron September 27, 2022 at 5:20 AM



In brief: James Earl Jones, known for providing the legendary voice of Darth Vader, is stepping away from the iconic character, but we'll still get to hear those recognizable tones in future Star Wars media thanks to the magic of AI.

Unfair competition (false endorsement)?

#### MOST READ



Intel Core i5-13600K vs. AMD Ryzen 5 7600X

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## 6 How can we solve this issue?

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### What **could** we do?



Machine Learning /
Data Analysis

Prohibit?

Compensate?



Content Use



**Content Generation** 



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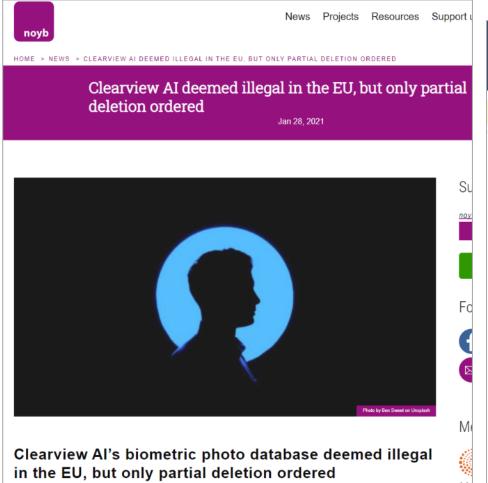
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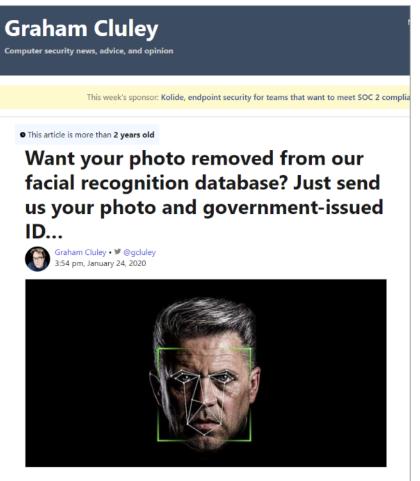
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## Can't we just clean up **after** the fact?





https://grahamcluley.com/clearview-ai-facial-recognition-database-twitter/



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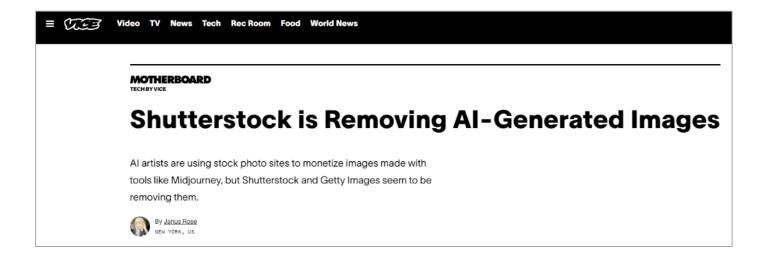
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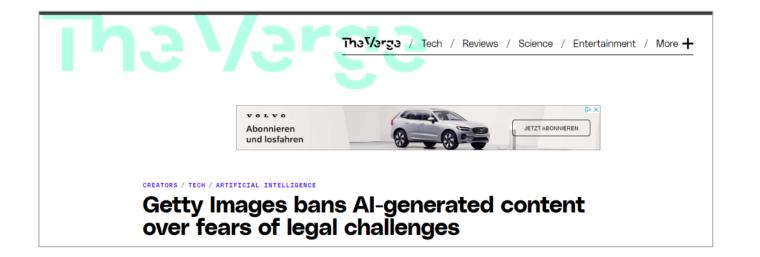
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## Can't we just **stop trading** in Al-generated content?







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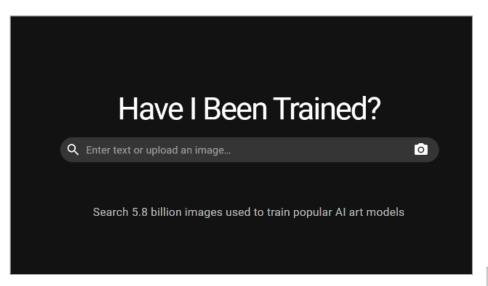
Content

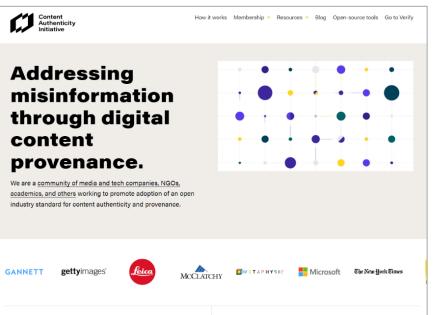
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## Is there a **technical solution** (to a technical problem)?







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