

WEBINAR

Deep-dive into artificial intelligence and data ecosystems - ownership, data use and legal insights

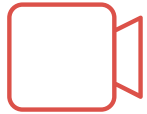
The logo for Data Europa Academy is located in the bottom left corner. It consists of the text "data.", "europa", and "academy" stacked vertically in a white, sans-serif font. The text is set against a dark blue circular background. To the right of this circle is a white circle, and both are partially enclosed by a larger, light grey circle that overlaps the bottom left edge of the slide.

data.
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academy

19 January 2024

10.00 — 11.30 CET

Rules of the game



The webinar will be recorded



For questions, please use the ClickMeeting chat.



Please reserve 3 min after the webinar to help us improve by filling in our feedback form

Introduction



Hans Graux

**Lawyer IP, IT and data protection
law, Partner at Timelex**



Eleonora Rosati

**Professor of Intellectual Property Law
at Stockholm University and Of
Counsel at Bird & Bird**



Liesa Boghaert

**Lawyer IP, IT and data
protection law at Timelex**

Agenda

10.00 – 10.10	Opening and introduction – <i>Hans Graux</i>
10.10 – 10.40	Open data and AI: an intellectual property perspective– <i>Liesa Boghaert</i>
10.40 – 11.10	Copyright and the training of generative AI: An EU and comparative perspective – <i>Eleonora Rosati</i>
11.10 – 11.25	Q&A session
11.25 – 11.30	Closing statements

Open data and AI: an intellectual property perspective

Liesa Boghaert



DEEP-DIVE INTO AI AND DATA ECOSYSTEMS: OWNERSHIP, DATA USE AND LEGAL INSIGHTS

19 January 2024

Liesa Boghaert



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OPEN DATA AND AI: AN INTELLECTUAL PROPERTY PERSPECTIVE

- Open data and AI: many questions
- Several IP rights may come into play
- Patents
 - Data base rights
 - Trademarks
 - **Copyright**
 - Neighbouring rights
 - (Trade secrets)

WHAT IS AI?

- AI : “systems that display intelligent behaviour by analysing their environment and taking actions – with some degree of autonomy – to achieve specific goals”.
- Purely software based *or* embedded in hardware devices

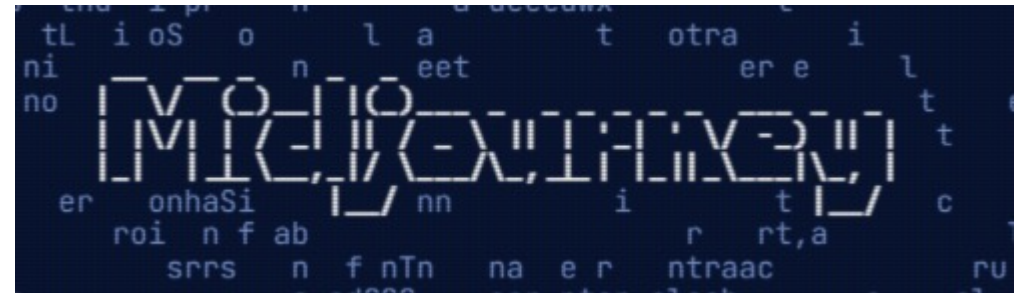
STRUCTURE

- Generative AI and copyright: two questions
 1. Can AI be an author? (output)
 2. Can AI be an infringer? (input and output)
- AI and transparency
- Liability for AI output

AIVA

The Artificial Intelligence composing emotional soundtrack music

WATCH - Sunspring, A Film Written Entirely By An AI

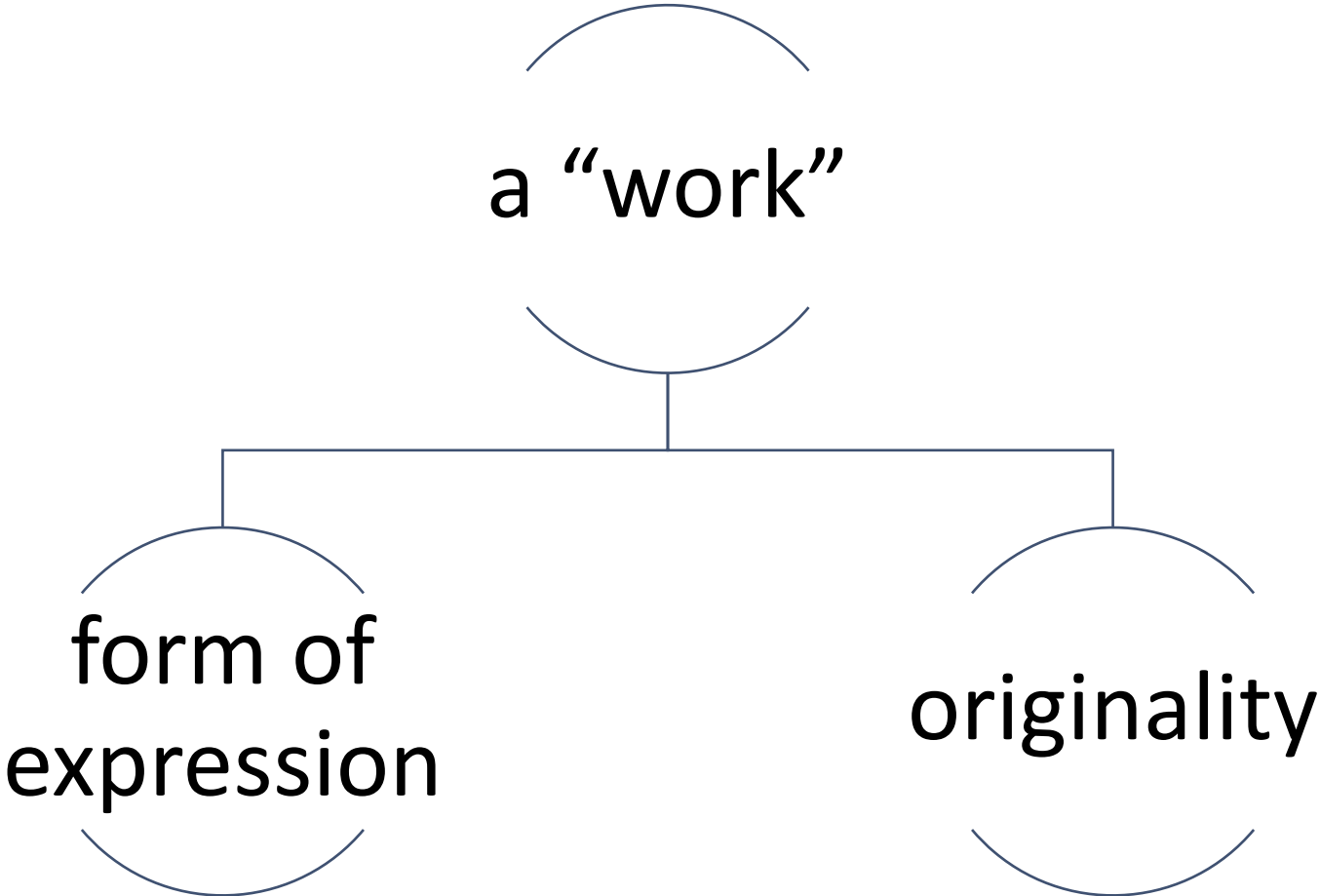


ChatGPT ●

'New Rembrandt' to be unveiled in Amsterdam

Portrait is not a lost work by Dutch master but a 3D printed painting made by software that distilled the features of a Rembrandt

AUTHORSHIP OF AI OUPUT



AUTHORSHIP OF AI OUTPUT



- Must contain elements which are the expression of the **intellectual creation of the author of the work**
- Author's own intellectual creation **reflecting the personality of the author**
 - Author should have been able to express creative abilities in the production of the work by making **free and creative choices**
- Stamp the work created with his **“personal touch”**



AUTHORSHIP OF AI OUTPUT

- Authorship requires a **physical person**



First owner of copyright: author



Term of protection: death of author +
x years



Protection of author in copyright
contract law/resale right artworks



Copyright exceptions if author is
acknowledged / equitably remunerated



Moral rights



IP rights: fundamental human rights

AUTHORSHIP OF AI OUTPUT

- The AI output spectrum



AI-assisted output

- AI as a “tool” to assist human creativity
- “executor lacking creative capabilities”
- Human intervention



AI-generated output

- AI that independently generates a “creative” work, which cannot be distinguished by experts from a work generated by a human
- No human intervention

“The next Rembrandt”

AUTHORSHIP OF AI OUTPUT

- AI-assisted output
 - Not a new legal problem
 - Protection by copyright if original work in expressed form
 - Authors: one or more natural persons
- AI-generated output
 - AI cannot be an author
 - No originality – “author’s own intellectual creation”
 - Alternatives?

OWNERSHIP OF AI OUTPUT?

- Who should own AI output?

AI system

user

data owner

public domain

joint ownership

investor

programmer



AI-Generated Comic Book 'Zarya of the Dawn' Keeps Copyright but Key Images Excluded

SOLUTION FOR NON-HUMAN CREATIONS?

- Legal fiction in copyright laws of UK, Ireland, New-Zealand, South-Africa, India
- UK: *“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”*
 - No moral rights
 - Shorter term of protection
- Solution?

COPYRIGHT, NEW IP RIGHT OR NEIGHBOURING RIGHT?

Additional incentive needed?

Market effects of
copyright for AI-
generated output?

Can humans compete with
AI output?

Ownership
for whom?

Fragmentation
of IP rights?

Human creativity and machine creativity equal?

Market failure?

TRANSPARENCY

- Should AI output indicate that it was generated by or with the assistance of AI?
 - Currently: no transparency obligation
 - However: general duty of care
 - Risk of misleading
 - Misleading market practices
 - AI Act
 - “Common position” of Council of EU position
 - Self-regulation in certain sectors (e.g. journalists)

INFRINGEMENT AND LIABILITY

- Can AI output infringe on copyrights?
 - “Style” is not protected
 - Does AI output copy a substantial part of the copyrighted work, without permission of the rightsholder?
 - Autonomous creation?
 - Do exceptions apply?
- But also personality rights: right of image/voice



An oil painting of a woman typing on a smartphone in the style of Johannes Vermeer

Creative controls

DALL-E 3 is designed to decline requests that ask for an image in the style of a living artist. We also offer the option for creators to opt their images out from training of our future image generation models.

“Stable Diffusion at times produces images that are highly similar to and derivative of the Getty Images proprietary content that Stability AI copied extensively in the course of training the model,” the lawsuit reads.

LIABILITY

- Who is liable for IP infringement?
 - AI systems? Lack of legal personality
 - IP infringements: user of output
- Other fields of law:
 - Objective liability
 - Product liability
 - Sui generis liability for AI system
 - Strict liability
 - Risk management approach + mandatory insurance
 - Draft AI liability directive and revision of product liability directive

THANK YOU!

Liesa Boghaert

liesa.boghaert@timelex.eu

www.timelex.eu



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Copyright and the training of generative AI: An EU and comparative perspective

Eleonora Rosati



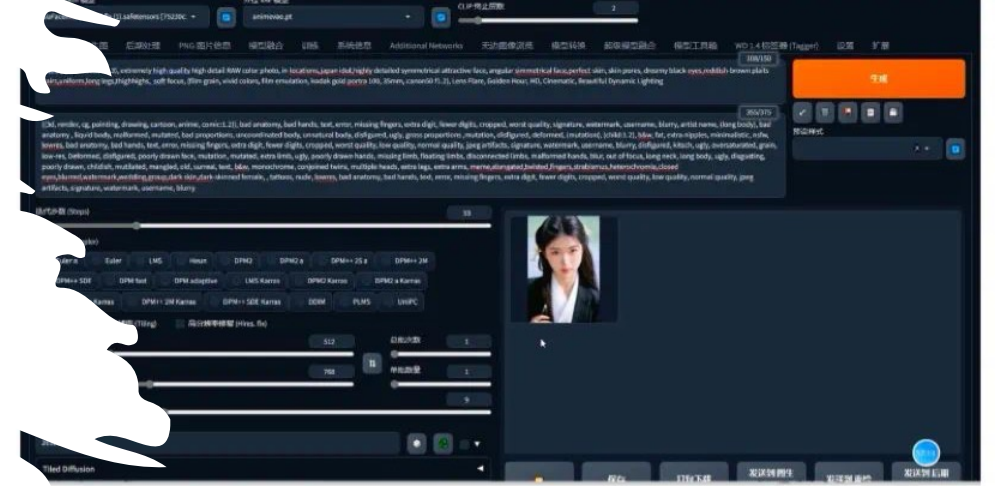
A woman with long dark hair and a human-like face stands in an art studio. Her body is transparent, revealing intricate blue and silver mechanical components, including joints, wires, and a central circular sensor. She is positioned in front of an easel holding a white bust. The studio is filled with various art supplies, including a painting of a human head, a sculpture of a bee, and a model of a house. The scene is dimly lit, with a blue tint.

Copyright and the training of generative AI: An EU and comparative perspective

Eleonora Rosati
19 January 2024

AI “creativity”: how do we get there?

- Overview of AI applications of machine learning processes
- Text and data mining (TDM) at the basis of machine learning: The copyright dimension
- Regulating TDM: Overview of approaches and the EU experience



(图 2)



(图 3)

6. 在上述参数不变的情况下，将“Additional-Networks”中的模型 `lord-hanfugirl-v1-5_safetensors` 的权重修改为 0.75。生成结果如图 4 所示。

Overview of AI applications of machine learning processes

StreetStyle: Exploring world-wide clothing styles from millions of photos

Kevin Matzen *

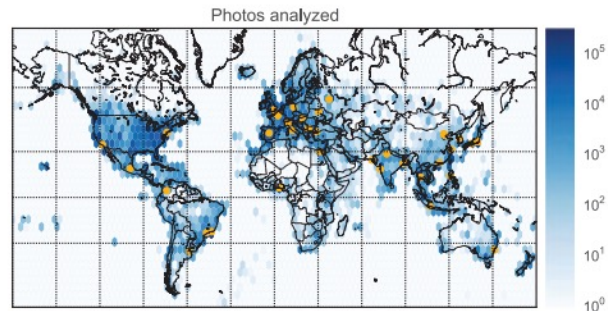
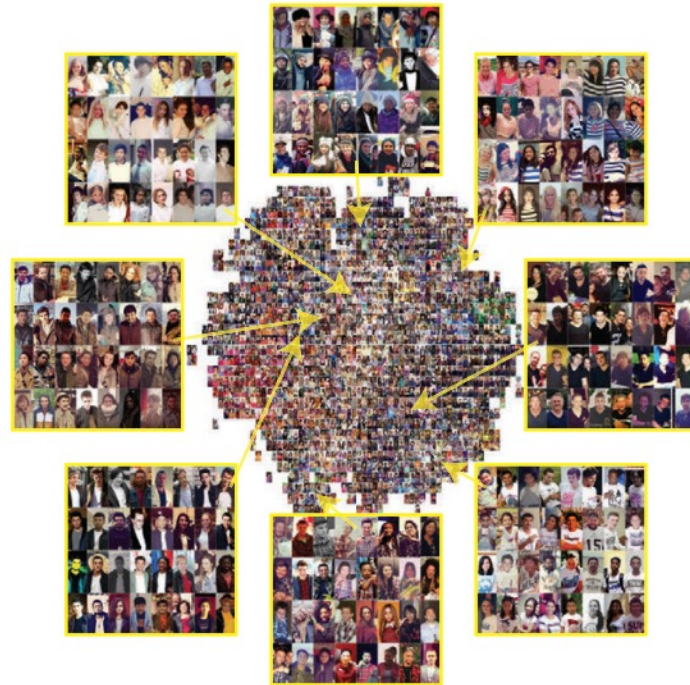
Kavita Bala †

Noah Snaveley ‡

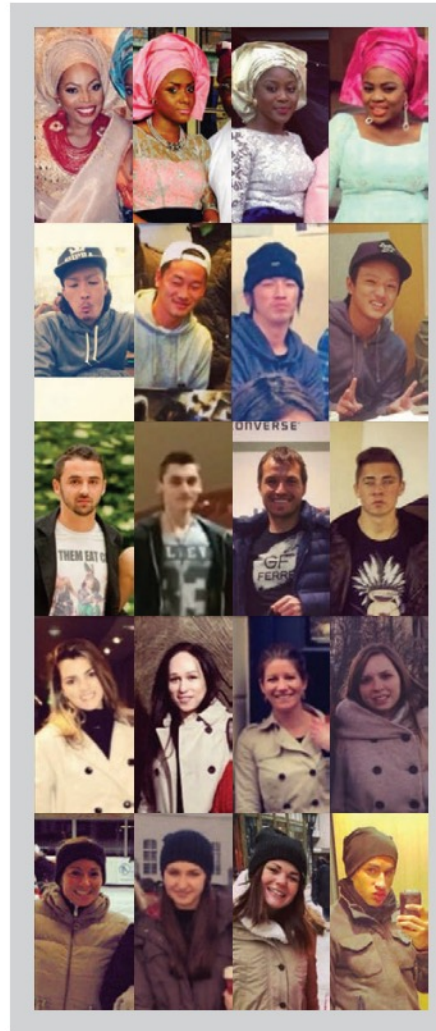
Cornell University



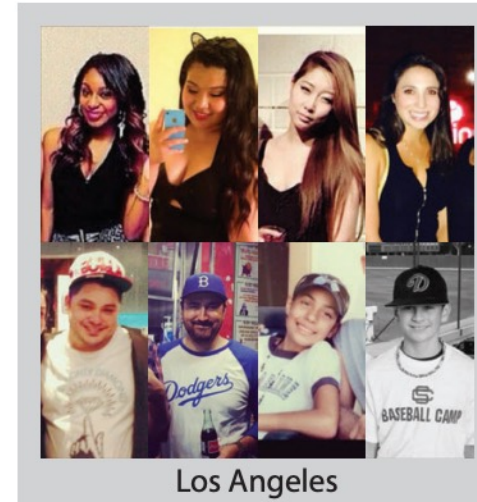
ANALYSIS



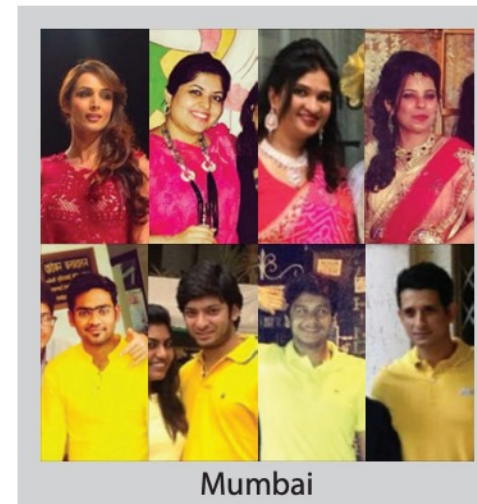
(a) Massive dataset of people



(b) Global clusters



Los Angeles



Mumbai

(c) Representative clusters per-city

By Cherie Hu

DECEMBER 11, 2018



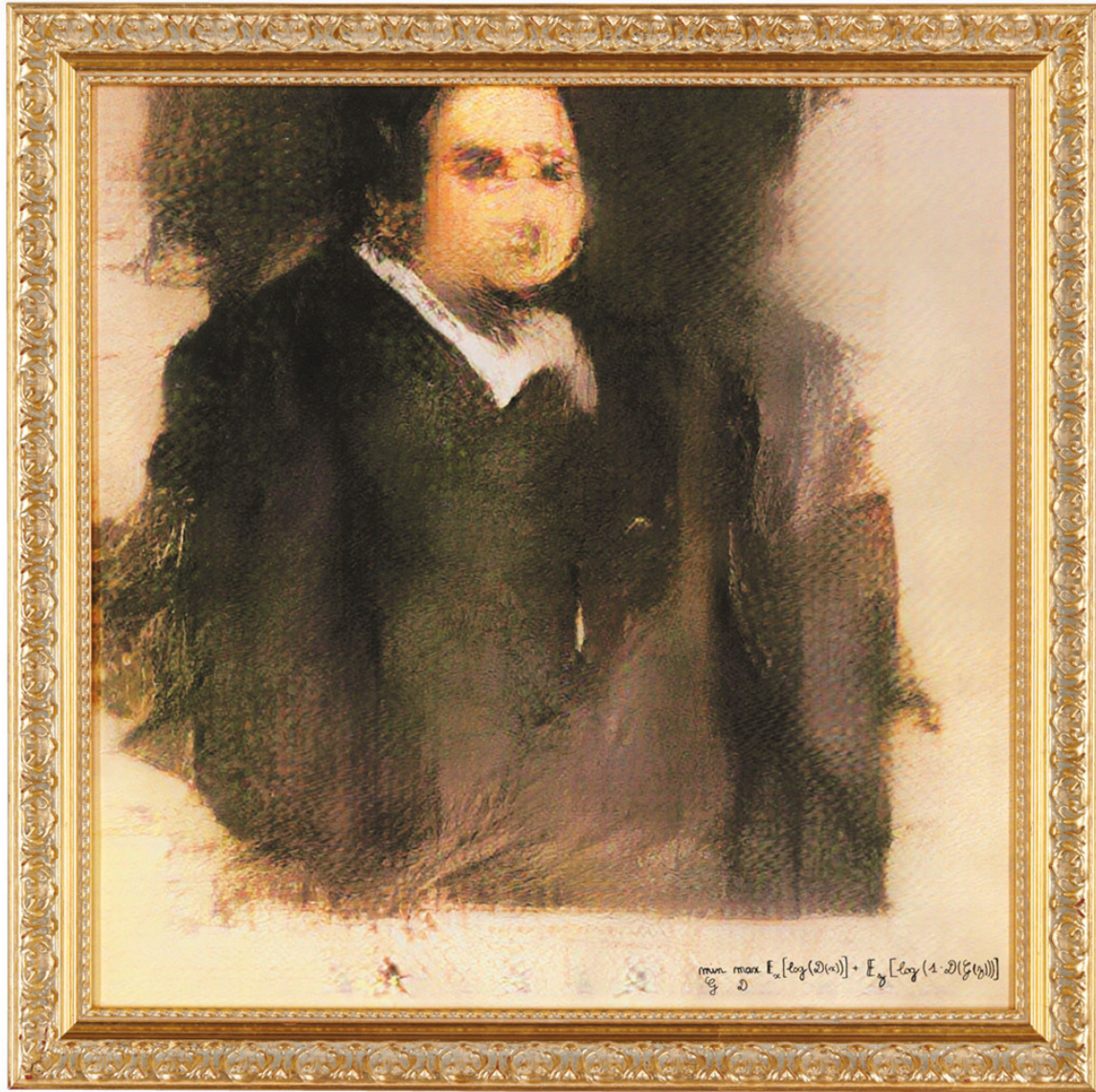
ULAR

ve a name for end
: scope creep

Celebrating Johann Sebastian Bach



<https://www.google.com/doodles/celebrating-johann-sebastian-bach>



<https://uncrate.com/ai-generated-portrait-of-edmond-belamy/>

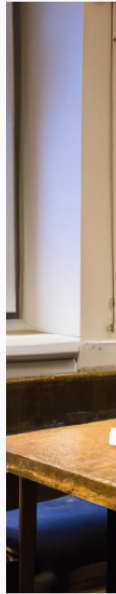
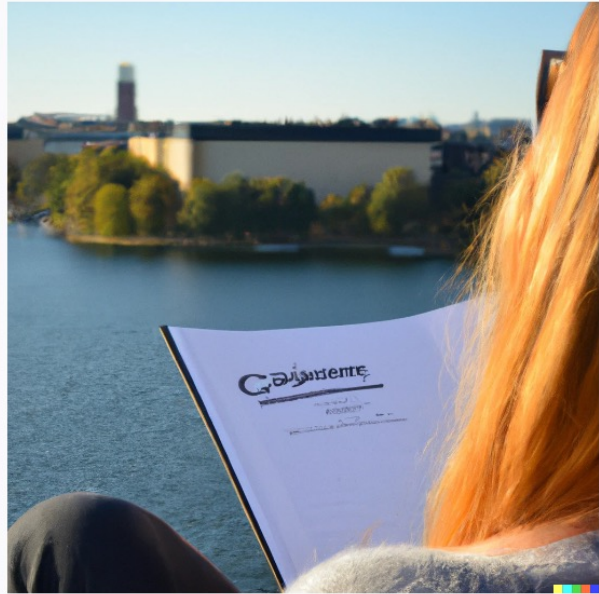


A Recent Entrance to Paradise ([Thaler v Perlmutter](#))



Edit the detailed description

Student in Stockholm studying copyright law



Photographer admits prize-winning image was AI-generated

German artist Boris Eldagsen says entry to Sony world photography awards was designed to provoke debate



Surprise me

Upload →

Generate



+ New chat

Today

New chat  

New chat

Previous 7 Days

Copyright Definition

January

New chat

Decline Party Invitation



write a university essay on the notion of authorship in copyright law



Introduction:

The concept of authorship is central to copyright law. Copyright law provides legal protection to original works of authorship, such as literary, artistic, and musical works, by giving exclusive rights to the authors or creators of these works. This essay will explore the notion of authorship in copyright law and examine the legal and philosophical issues that arise from this concept.

Defining Authorship:

Authorship refers to the act of creating an original work of art, literature, or music. The Copyright Act defines an author as the person who creates an original work of authorship that is fixed in a █

Stop generating

Send a message. ...

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NEW

 Eleonora Rosati ...



“

[Drake's] voice,
his likeness,
his right to control his image,
and tell his own stories
were **stolen** from him.

Patrick Rogers
CEO
Music Canada



Text and data mining (TDM) at the basis of machine learning: The copyright dimension

Text and data mining (TDM): How do you get to Step 3?

Step 3 - Mining of text and/or data and knowledge discovery

Pre-processing

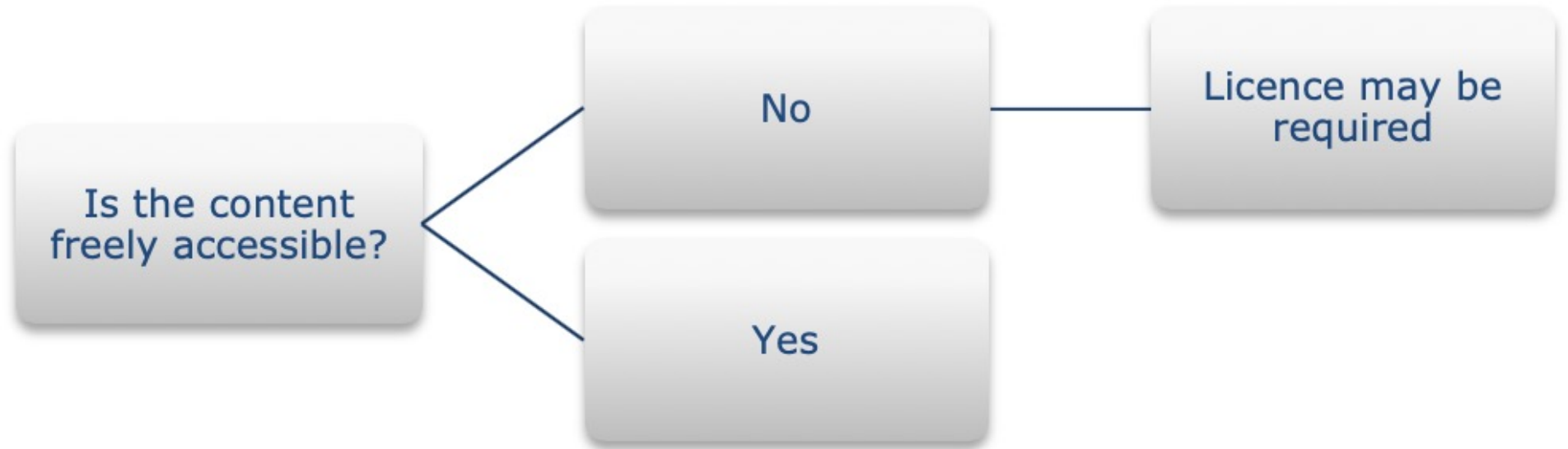
- Removal of unnecessary or unwanted information
- Dealing with tables, figures, formulas
- (Normalization of text/data)

Extraction

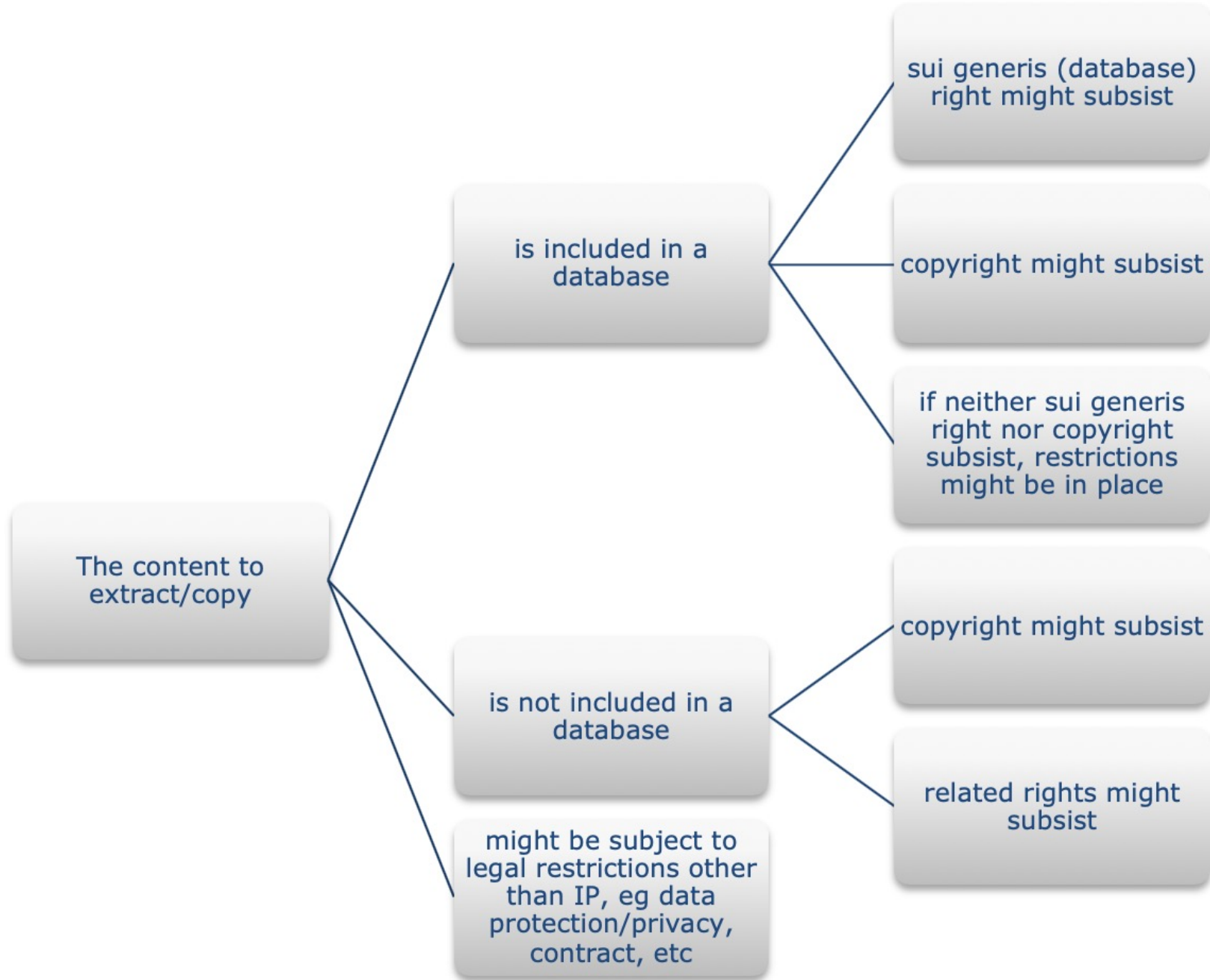
- Tokenization
- Identification of synonyms
- Text transformation
- Identification of equivalence classes

Identification of patterns and events extraction

Step 1 – Access to content



Step 2 – Extraction and/or copying of content



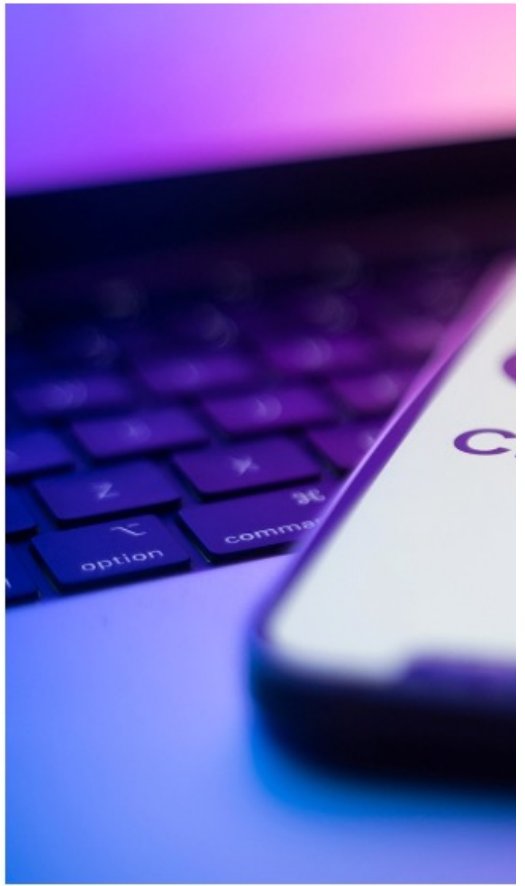
HOME > DIGITAL

BOT COURT

New ChatGPT Lawsuits: AI's Legal Storm

OpenAI faces allegations of privacy invasion, but this may be just the tip of the iceberg.

BY MILES KLEE



Scarlett App That Advertisers

By Ethan S

The Times Sues OpenAI and Microsoft Over A.I. Use of Copyrighted Work

Millions of articles from The New York Times were used to train chatbots that now compete with it, the lawsuit said.

Share full article [Share] [Bookmark] [Comments 1.3K]



A lawsuit by The New York Times could test the emerging legal contours of generative A.I. technologies. Sasha Maslov for The New York Times

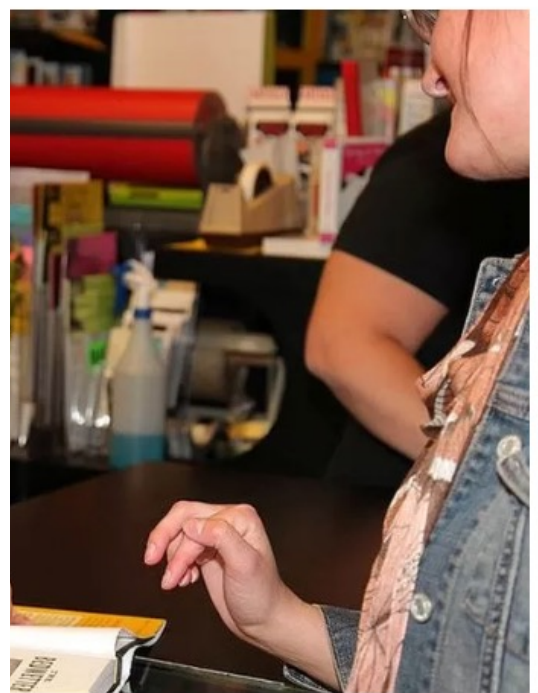
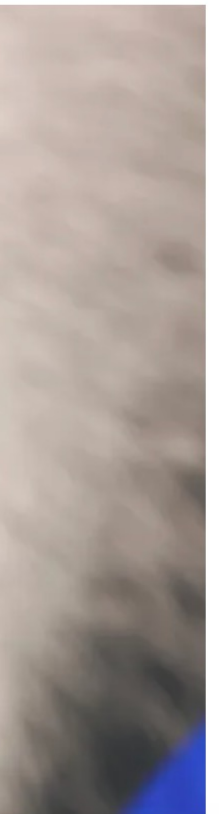
11:57am PT

Inst AI

Business | Politics | Culture | Tech

Sues OpenAI and

[Email] [More]



Regulating TDM: Overview of approaches and the EU experience

Approaches to TDM

USA: “to furnish statistical information to Internet users about the frequency of word and phrase usage over centuries” Authors Guild v Google, Inc, No. 13-4829 (2d Cir. 2015)

Fair use doctrine: Section 107 US Copyright Act

Japan (non-enjoyment), Singapore, but not Hong Kong

Certain EU Member States (first was UK – Article 5(3)(a) InfoSoc Directive)

Now 2 mandatory exceptions at the EU level (Articles 3 and 4 DSM Directive 2019/790)

But what is the
scope?
The input /
output divide

Articles 3 and 4 DSM Directive 2019/790

	Art 3	Art 4
Beneficiaries	Research organizations and cultural heritage institutions	No restrictions
Public-private partnerships	👍 (but not if decisive influence)	N/A
Scope	<ul style="list-style-type: none"> • Rights of reproduction under Directive 96/9 and Directive 2001/29 • Press publishers' right • Database (sui generis) right in Directive 96/9 	Also rights in computer programs
Storage of copies	v (with appropriate security level)	Not mentioned
Retention of copies	👍 (for scientific research purposes)	👍 (but as long as necessary for TDM purposes)
Reservation	🚫	"in an appropriate manner"
Compliance with three-step test	👍	👍

Key issue is reservation under Article 4




Spanish presidency pitches obligations for foundation models in EU's AI law

AI IMPACT

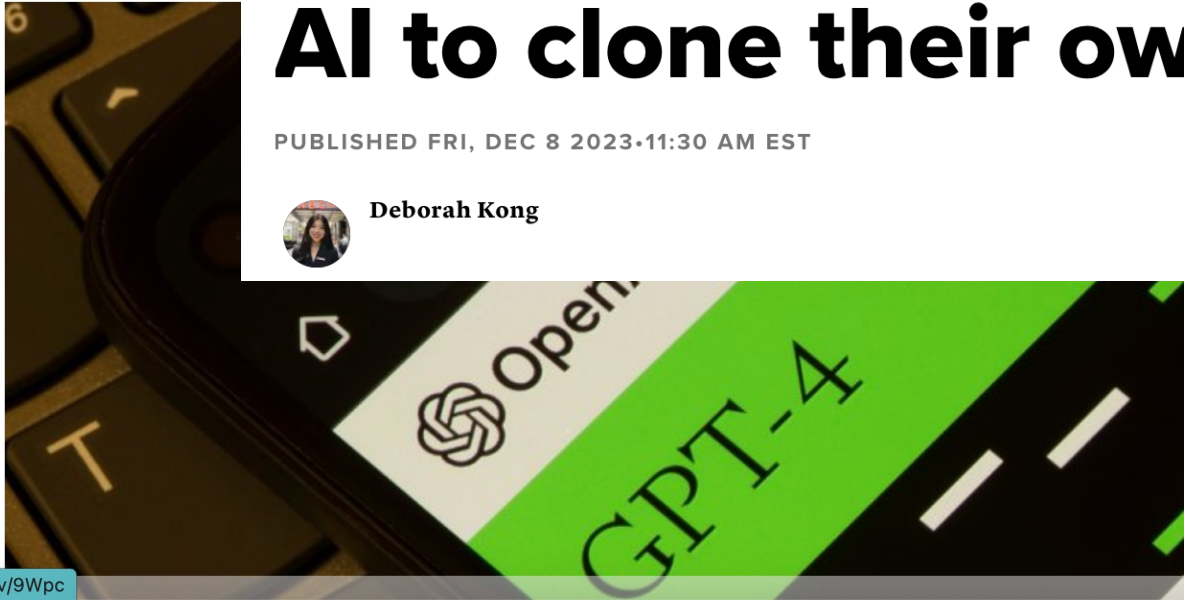
By Luca Bertuzzi | Eura
Content-Type: News

DJ duo The Chainsmokers want to use AI to clone their own voices

PUBLISHED FRI, DEC 8 2023-11:30 AM EST

 Deborah Kong

SHARE    



A woman with dark hair and a blue top is shown from the chest up. Her right hand is a complex, silver and black prosthetic with a paintbrush attached. She is looking towards the camera. To her left is a large, abstract painting with a mosaic of green and yellow triangles. The background is a classical-style wall with a relief sculpture.

Conclusion

- Litigation ongoing in several countries around the world
- Key point: Input phase more important than output protection
- Global race to the bottom or race to the top? Issues of conflicts of laws?



Thanks for your attention!

Eleonora Rosati

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Further reading: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4629528

Questions & Answers

Hans Graux



Eleonora Rosati



Liesa Boghaert



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