

Presentation to the **Swedish Copyright Society**  
28 November 2022

# AI & Copyright

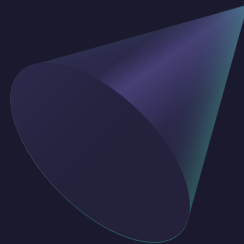
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Vanderbilt University

Professor II, University of Oslo

# outline

- 1) The US Copyright Office's **refusal to register** a work claimed to be “authored” by a machine
- 2) Legal Issues concerning **machine “authorship”**
- 3) Legal Issues concerning **infringement**
- 4) Legal Issues concerning **text and data mining**
- 5) **Policy Outlook**

Note: the last slide contains **links** to material mentioned in this presentation



ARTIFICIAL INTELLIGENCE

# The scary truth about AI copyright is nobody knows what will happen next

The last year has seen a boom in AI models that create art, music, and code by learning from others' work. But as these tools become more prominent, unanswered legal questions could shape the future of the field.

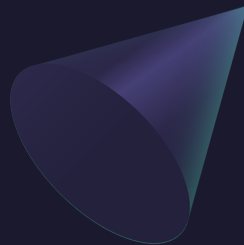
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# The US Copyright Office (USCO)'s Refusal to Register

- 1) **Registration is required** under US law for works of US authors to enforce their rights
  - And for foreign authors to obtain certain remedies
- 2) However, a **refusal** by the US Copyright Office (USCO) does not prevent a lawsuit from proceeding.
  - The issue is then decided by the court
- 3) Under US administrative law, a decision by the USCO are **reviewable by federal courts**, and because this application to register was a test case (a la DABUS), that is what is happening
- 4) The USCO's decision is in line with its published "**Compendium**" and of course all applicable precedents under which the law is that works "that have not been created by a human being... do not satisfy [the] requirement"





UNITED STATES COPYRIGHT OFFICE

**COMPENDIUM OF  
U.S. COPYRIGHT OFFICE PRACTICES**

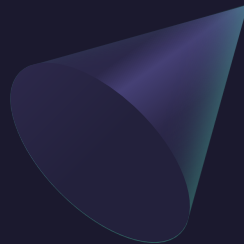
THIRD EDITION

JANUARY 2021



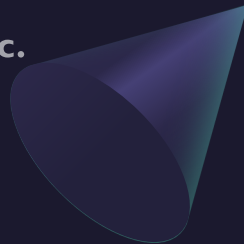
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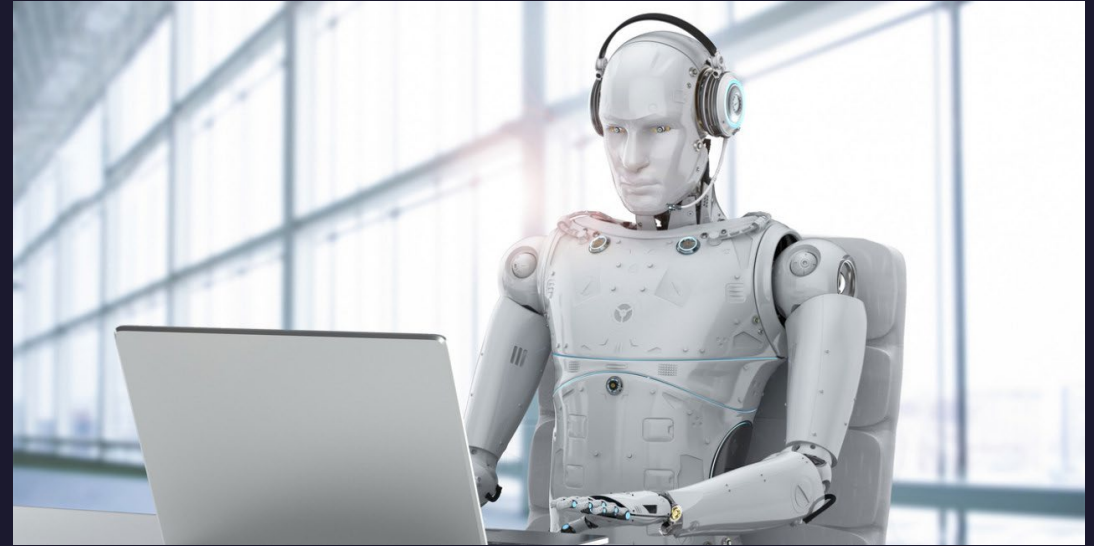
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  - This excludes works created by **animals** etc.







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# The USCO's Refusal to Register

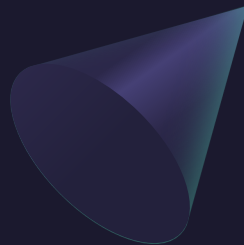
- 1) **Registration is required** under US law for works of US authors to enforce their rights and for non-US authors to obtain certain remedies
- 2) **HOWEVER**, a **refusal** by the US Copyright Office (USCO) allows a lawsuit to proceed. The issue of copyrightability is then typically decided by the court
- 3) Under US administrative law, a decision by the USCO are **reviewable by federal courts**, and because this application to register was a test case (a la DABUS), that is what is happening
- 4) The USCO's decision is in line with its published "**Compendium**" and of course all applicable precedents under which the law is that works "that have not been created by a human being... do not satisfy [the] requirement"
  - This excludes works created by animals etc.
- 5) The **challenge** to the decision is that the law must "adapt" to (generative) AI

# Legal Issues: Authorship 1/2

- 1) If a computer-”authored” work can be protected under US law as a “*work of authorship*,” (which is what US copyright law protects) then it implies that the work is “**original**,” a term defined by the US Supreme Court as meaning that the work is the result of **creative choices**
  - In terms that are similar to CJEU jurisprudence
- 2) The Court would then have to create a doctrine to “find” a **legal person to own the rights**
- 3) The **work-made for-hire (WMFH)** doctrine is **not helpful** because it can **ONLY** apply if:
  - 1) The author is an **employee** under agency (basically employment) law (which a computer system cannot be)
  - 2) The work is commissioned and fits one of the **enumerated categories** of WMFH that can be made by non-employees, namely “a contribution to a collective work, as a part of a motion picture or other audiovisual work, as a translation, as a supplementary work, as a compilation, as an instructional text, as a test, as answer material for a test, or as an atlas:
  - 3) **AND, IN THE SECOND CASE**, the “**Parties**” must “**agree in writing**” that the work is a WMFH, which a computer system cannot do because it has no legal agency

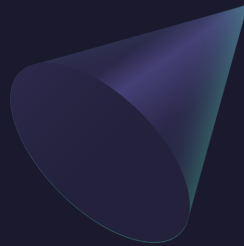
# Legal Issues: Authorship 2/2

- 1) It is **NOT US** law that everything with potential commercial value must be protected by one or more IP rights
  - This means that the “**if value then right**” argument should **fail**
- 2) Just as the law does not see any form of free-riding as infringement
  - Back to infringement later



# A related legal issue: Co-“Authorship” with Machines

- 1) If we are excluding machine “authorship,” this is not a hard case, as far as the law is concerned
- 2) It is like when new works are produced using public domain works





# Co-“authorship” is more the current norm than the hype of totally autonomous creation

## The Machine as Author

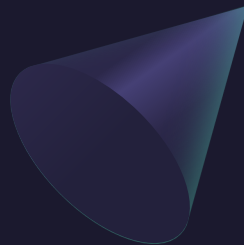
*Daniel J. Gervais, PhD\**

ONLINE:  
IOWA LAW REVIEW

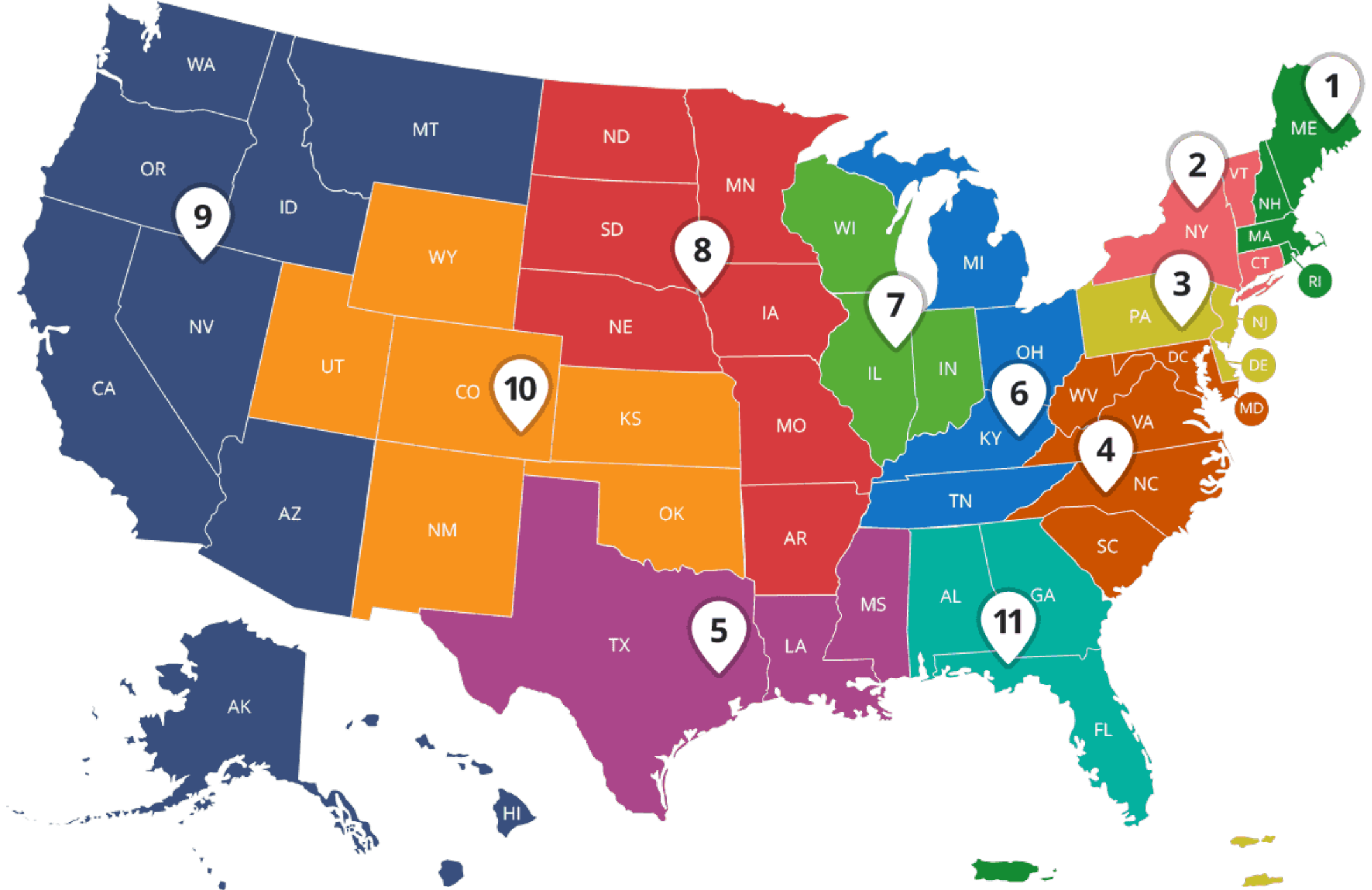


# Legal Issues: Infringement 1/2

- 1) The **US federal court system** is divided in geographic **circuits** (except for patents). Each circuit can make its own law, except when it is bound to follow a **US Supreme Court case**







Northern Mariana Islands

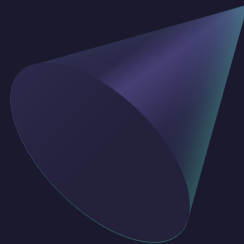
Guam

Puerto Rico

U.S. Virgin Islands

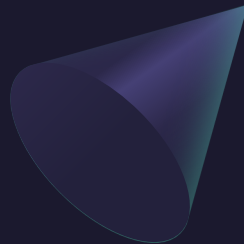
# Legal Issues: Infringement 1/2

- 1) The **US federal court system** is divided in geographic **circuits** (except for patents). Each circuit can make its own law, except when it is bound to follow a **US Supreme Court case**
- 2) In many circuits, the plaintiff in a copyright infringement case must show that the defendant's **“volition”** caused the infringement, which is like the notion of **“proximate cause”** in tort law
  - **Query:** what if there is no **human “cause”** to the infringement?
- 3) The most common way to infringe copyright rights under **US law** is to **“copy”** protected expression in the plaintiff's work. Another way to infringe is to **“prepare a derivative work”**
  - The same use can infringe both rights.
- 4) Because **AI machines** typically **produce from copies** of existing works (due to machine learning), they are likely to produce outputs that copy one or more existing works, or that are derivative of one or more existing works



# Legal Issues: Infringement 2/2

- 1) **Fair use** is a defense to both and generally depends on a showing that the defendant's production is "transformative," as in a parody for example
  - **Query:** will courts find machine "copies" or "derivative works" fair?
  - Can a machine even produce a "derivative work" **if it cannot be an author?**
- 2) There will be hard issues concerning copying of protected expression vs unprotected "ideas"
  - **Query:** where does an artist's **style** fit into this?
- 3) Infringement may also happen as part of **text and data mining** (for machine learning)
  - **Back to that in a minute**

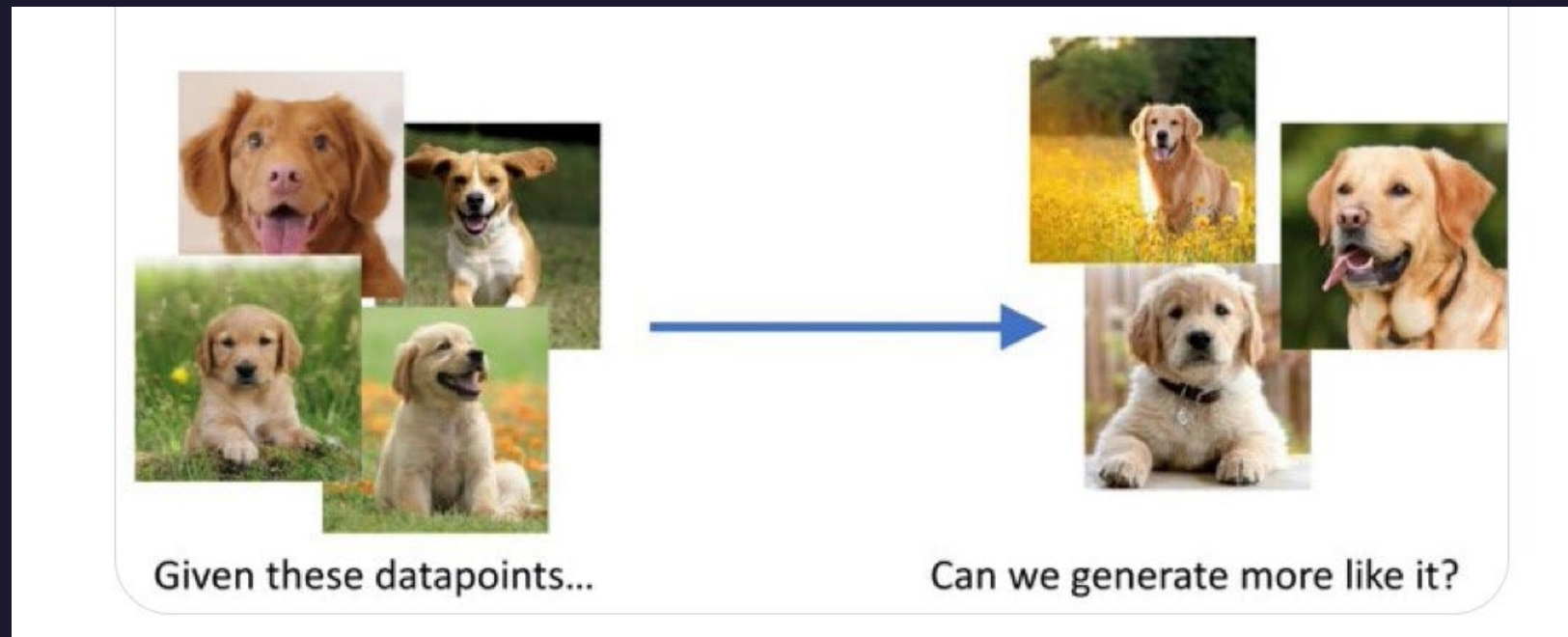


# Recall That We Are Generally Talking About Machine **Learning**

1) Machines are trained on **datasets** composed of text, images, etc.

2) **Diffusion models** allow them to create outputs that are more likely to be liked

- They make mistakes but don't take “chances” like humans
- They tend to produce “more of the same”

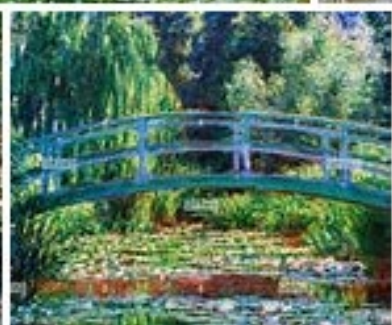


# Anders Zorn Portraits



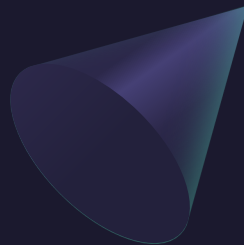
# Or Fanny Brate's Scenes of “Everyday life”





# Legal Issues: Text and Data Mining

- 1) A crucial distinction must be made between **input** and **output** of the machine-learning process
- 2) It is more likely than not that machine-learning is **fair use**
  - Because scanning of entire libraries by Google was found to be fair (by the Second Circuit)
  - But this will be tested again
  - The Supreme Court has not yet opined on this
  - A pending case involving **Andy Warhol's reuse** of a photograph (heard in October) may shed light on the current Court's view of fair use
    - Justice Breyer's departure may change things



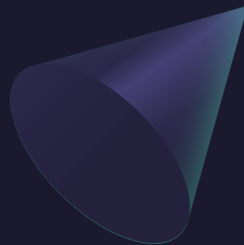


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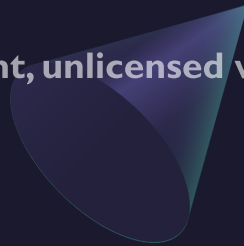
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3) This does **not** mean that **the output is fair**

- In Google's case, the output for in-copyright, unlicensed works is limited to **snippets**



# Policy Outlook

- 1) If owners and or programmers want to claim that they own copyright rights in what machines have produced, then they must accept that they are **liable when what the machine produces is infringing**. They cannot have it both ways.
  - Historically, that is how it has worked for authors
- 2) If works “authored” by machines are protected by copyright, then commercial publishers and producers will have an **incentive to replace human authors** as quickly as possible
- 3) There is a potentially **huge and irreversible societal loss** in having machines replace authors in what had been our defining feature as a species
  - The use of our **higher mental faculties** for creativity and innovation
- 4) At a very minimum, the use of AI changes **cognition** in important ways, and this warrants **caution**
- 5) Delegating to machines the **task of helping us interpret our world** has profound consequences. It is through this interpretation that humans become true agents in the world and ultimately change it
  - Delegating this very purpose to machines is pregnant with major implications for the future, good, bad, or both

# Useful links

Here are links to material I will be mentioning during my talk, in case you want to circulate to attendees (in order in which they appear in the presentation):

- Article in *The Verge*: <https://www.theverge.com/23444685/generative-ai-copyright-infringement-legal-fair-use-training-data>
- US Copyright Office Compendium: <https://www.copyright.gov/comp3/>
- Report prepared for EU Commission on Trends and Developments in Artificial Intelligence: [https://www.ivir.nl/publicaties/download/Trends\\_and\\_Developments\\_in\\_Artificial\\_Intelligence.pdf](https://www.ivir.nl/publicaties/download/Trends_and_Developments_in_Artificial_Intelligence.pdf)
- Recreating Europe Report on AI Music Outputs: <https://zenodo.org/record/6405796#.Y4SM8BTMI7d>
- Iowa Law Review article “The Machine as Author”: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3359524](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3359524)
- Press article (*LA Times*) on Warhol litigation: <https://www.latimes.com/opinion/story/2022-09-29/andy-warhol-prince-lynn-goldsmith-copyright-fair-use-supreme-court>
- Also of possible interest, a book chapter entitled “The Human Cause” (about to be published): [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3857844](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3857844)

Tack för din  
uppmärksamhet

