Intellectual Property Rights

Ownership Dilemmas in an Age of Creative Machines (IP rights)

- "These AI technologies challenge the fundamental building blocks of existing intellectual property (IP) laws and institutions, which are misaligned with AI-driven innovation on multiple fronts. IP rights are intended to provide incentives for innovators to engage in creative endeavors and to bring the fruits of these activities to society, while simultaneously balancing the need for market competition and dissemination of new knowledge."
- Psychologists: creativity is "the generation of a product or service that is novel and judged to be appropriate, useful, or valuable by a knowledgeable social group, and simultaneously generates a measure of surprise, beauty, or amazement."
 - "The particulars of how these systems function is not as important as understanding that htey are producing work that appears to be the product of creative thinking"
 - → We are mistaking "creativity" for replication
 - Art is an innately creative process, and generative AI that copies an existing art style is not creative, we think it's a cool gimmick
- Developed a Turing test but for creativity: Google's Magenta creates novel music, IBM's Chef Watson makes creative recipes
 - Magenta uses GANs that listen to human-made music, then creates novel music from the training
 - IBM's Watson models how humans experience taste, then remixes recipes to make new ones
- Margaret Boden says that humans with deep domain knowledge can work in conjunction with creative computational machines to "enhance innovation"
 - Machines also can't perfectly imitate human experience, so humans need to provide input here
 - → how it relates to Studio Ghibli issue: the machine isn't being creative, so IP is irrelevant. It's just copying an existing art style, so the trend can't be compared to Magenta/Watson
- Intellectual Property
 - "Intellectual property regimes seek to foster innovation by stimulating discovery and by fostering the dissemination and use of creative artifacts. "Use" implies not simply employing an artifact for some purpose, but also the creative reuse of artifacts in cumulatively developing more creative products, such as the transformation of artistic creations (e.g., remixing in visual art and music) and the cumulative development of new technologies (e.g., inventions that build on prior ones). IP protections give innovators a private incentive to develop new creations but at the social costs of monopoly, since they grant innovators exclusive rights to their creations for some defined period.
 - Creative machines operate fully autonomously or semi-autonomously → how to navigate inventor rights?
 - Copyright, design rights, utility models

- US patent law requires that each patent application names the inventor
- This paper argues that "The issue, at least for the foreseeable future, is not that AI deserves some kind of moral personhood. Instead, the question is how one assigns ownership over AI-created (or cocreated) artifacts in such a way as to strike the right balance in IP policy between private innovation incentives and social knowledge recombination"

Al and Art

- Defines AI as "a domain of computer science devoted to the exploration of the limits and the methods of using digital computers to perform functions carried out by human brains, such as understanding natural languages and information obtained through the senses and solving complex problems"
- Notes that the intersection of computers and art can be used to make mathematically complex visualizations that can't be made by hand/humans → Studio Ghibli trend is copying a hand-drawn style

Generative AI technical details:

https://guides.library.utoronto.ca/c.php?g=735513&p=5297039 UofT

There are two main types of models dominating Gen Image AI— Diffusion and GANs models. Diffusion models take images and diffuse it, and the image becomes TV static. Then, the model learns how to reverse this process and create images from static in a process called reverse diffusion. They utilize the randomness of generated static to create new images each time, even with the same prompt.

"Generative Adversarial Networks are a model that pits two sub-models, a Generator and a Discriminator against each other in order to train the Generator to produce images that can pass as originals from the training dataset. The Discriminator identifies if an image is an original or a generated image. If it identifies correctly that the image is generated, the process undergoes a feedback loop that allows the Generator to improve on its outputs, until the Generator is outputting imagery that is as convincing as the originals. This can suffer from image diversity problems. The generation of specific images/prompts uses text encoders to map text to vectors containing the meaning of prompts.

https://news.mit.edu/2023/explained-generative-ai-1109 https://www.pbs.org/newshour/science/how-ai-makes-images-based-on-a-few-words

GANs can only generate images based on the source images it has access to, so if you want a realistic person with a cat, it may not be able to do this unless it has been trained on this data. Newer models usually use diffusion techniques.

Ethical issues surrounding Al art:

Harvard Gazette:

https://news.harvard.edu/gazette/story/2023/08/is-art-generated-by-artificial-intelligence-real-art/

As AI tools like DALL·E, Midjourney, and others gain popularity in generating images and creative content, questions arise about whether AI-generated works can truly be considered art. Harvard faculty from diverse artistic disciplines — writing, music, animation, architecture, and mixed media — share their views on AI's potential, limitations, and implications for creativity. Key perspectives:

- Daphne Kalotay (Writer): Al can mimic style and structure but lacks the originality and emotional depth that come from lived human experience. Commercial genres are most at risk of being replaced.
- Yosvany Terry (Musician): Al can't replicate the emotional expressiveness or real-time improvisation essential to live music, especially jazz. Still, it's reshaping how music is distributed and discovered.
- Ruth Lingford (Animator): All can assist in animation and reflect a "collective unconscious," but true artistry still comes from human intention. There's growing appreciation for analog, hand-drawn work in response to digital uniformity.
- Matt Saunders (Mixed-media artist): New technologies have always disrupted art. Al
 can be a collaborator, but meaning in art comes from human interaction and
 interpretation.
- Moshe Safdie (Architect): All is a powerful tool for design optimization but lacks the intuition and emotional resonance needed for truly creative architectural visions. He sees All as analytical, not yet independently imaginative.

Conclusion: While AI can be a helpful tool or collaborator, most agree it currently lacks the emotional depth, spontaneity, and consciousness necessary to produce truly original or transformative art. The human touch remains central to what we define as art.

https://www.corralldesign.com/writing/ai-harm-hypocrisy

- "Training a model requires a vast amount of 'data,' and also comes at a not insignificant cost in terms or energy, carbon emissions and human labour. All that 'data' has so far mostly been scraped from the internet taken in secret from people who didn't know and didn't consent to handing it over."
- "Generative A.I. art is vampirical feasting on past generations of artwork even as it sucks the lifeblood from living artists. Over time, this will impoverish our visual culture."
 Molly Crabapple
- "Only because this has never happened at such scale and speed before, has the law been slow to respond, and the AI companies so far have got away with it. Much like Uber, it seems they knew that if they moved fast and broke things, they could make their money and be established before the law caught up with them whilst claiming to disrupt and innovate for the common good. It seems some in Silicon Valley have claimed the right to appropriate artists' work in order to mechanically process it, and sell it back to us.

- "The big three image generators claim some noble and lofty goals whilst making their money off of others' work. Midjourney for example, claims to be "expanding the imaginative powers of the human species" whilst StabilityAI say they are "building the foundation to activate humanity's potential." The story sold to us is similar across the board - that art is being 'democratised' - pulled from the clutches of those entitled artists and mechanised - converted into a tool that will instead make everyone an artist.

https://www.forbes.com/sites/danidiplacido/2023/12/30/ai-generated-art-was-a-mistake-and-heres-why/ (op-ed criticizing AI)

- "Using ChatGPT for a playful Q&A session consumes an <u>absurd amount</u> of water; exchanging a mere 20 questions with the text generator is akin to pouring a 500ml bottle of clean freshwater down the drain.
- "Generative AI threatens the livelihood of artists, pitting their labor against the cheap slop
 produced by dead machines. The technology only benefits those who wish to produce
 content as quickly and cheaply as possible, by removing artists from the creative
 process.
- "When we immerse ourselves in art, we experience a touch of the unique perspective that an artist brings to their work, the smeared fingerprints that makes art worth talking about.

Some articles actually perpetuate the trend, showing how anyone can use it and how https://www.forbes.com/sites/danidiplacido/2025/03/27/the-ai-generated-studio-ghibli-trend-explained/

- Shows people like Mike Tyson using generative AI to make his own photos ghibli-ified.
- Originally posted to Twitter, but has been reposted by others onto other platforms such as Facebook and Reddit
- https://www.reddit.com/r/DefendingAlArt/comments/1jlcgxo/mike_tyson_using_chatgpts
 new image recreation/
- https://www.facebook.com/WholesomeEdgelordiness/photos/mike-tyson-shares-a-studio
 -ghibli-style-version-of-himself/1078309254324574/
- Bro is a millionaire bruh

Mimicry of Studio Ghibli

Multiple ways to create Studio Ghibili like artwork -- something that Studio Ghibli's Hayao Miyzaki has spoken out against.

https://economictimes.indiatimes.com/news/international/us/entertainment/studio-ghibli-style-images-heres-free-ai-tools-to-transform-your-photos-into-artwork/articleshow/119808681.cms?from=mdr

Using:

- ChatGPT
- Hugging Face
- Grok
- Fotor

- insMind
- Getimg.ai

Hayao Miyazaki's response

https://www.thestatesman.com/entertainment/hayao-miyazaki-reacts-to-ai-generated-ghibli-art-an-insult-to-life-itself-1503413980.html

Al-generated images mimicking Studio Ghibli's hand-drawn style have gone viral, sparking debate about the role of Al in animation. Director Hayao Miyazaki, known for his opposition to Al art, has previously called such efforts "an insult to life itself." While some view the trend as homage, others see it as undermining the emotional depth and effort of traditional animation. Key Points:

- Al tools like MidJourney, DALL·E, and Stable Diffusion recreate Ghibli-like art.
- Miyazaki has publicly opposed AI in animation since at least 2016.
- Critics argue Al lacks the emotion and craftsmanship of Ghibli's work.
- Supporters see AI art as accessible and creatively liberating.

https://www.forbes.com/sites/danidiplacido/2025/03/27/the-ai-generated-studio-ghibli-trend-expl ained/

- "Studio Ghibli fans were taken aback by the trend, as the use of AI image generators to copy an artist's personal style goes directly against the ethos of Studio Ghibli and its co-founder Hayao Miyazaki.
- "Many commentators pointed out that the trend was in bad taste, and cheapened the carefully cultivated aesthetics of an animation studio known for its dedication to the craft.
- "Years before generative AI invaded the internet, Miyazaki was shown an AI-generated animation, which he condemned, saying, "I strongly feel that this is an insult to life itself."
- "Many Studio Ghibli films depict the grandeur of nature and stress the importance of living in harmony with the natural world—the irony of using generative AI, a horrendously <u>energy-intensive technology</u>, to replicate the studio's style was noted by many commentators.

https://fortune.com/2025/03/27/chatgpt-studio-ghibli-hayao-miyazaki-openai-altman-copyright-lawsuit/

- OpenAl is facing legal action for copyright infringement unrelated to the case itself https://news.crunchbase.com/ai/intellectual-property-protections-solomon-amplify/
 - All art exploits loopholes, saying that imitation is not a copy
 - This brings up the issue with intellectual property

 $\underline{\text{https://www.abc.net.au/news/2025-04-03/the-controversial-chatgpt-studio-ghibli-trend-explained/} \\ \underline{105125570}$

- OpenAI says that they will not allow it's generative AI to copy the style of individual artists, but allow for a broader style like Ghibli's
- They back their stance by stating fans have shared "truly delightful and inspired original fan creations."