"LOS DERECHOS DE AUTOR FRENTE A LA IA GENERATIVA"

Marzo 2025 Los derechos de autor en el entorno digital.



How to stop the metaverse from becoming the internet's bad sequel

WORLD ECONOMIC FORUM WEF - FUTURE OF THE METAVERSE COUNCIL

Chatham House

WHO AM I?

S OpenAI

EXTERNAL RED TEAM DALL-E 2 // OPEN AI





Video games and XR Policy working group

FIRST, ARTIFICIAL "INTELLIGENCE"

NOW, ARTIFICIAL CREATIVITY?



(ART)IFICIAL CREATIVITY



The Book of Knowledge of Ingenious Mechanical Devices Al Jazari, court engineer in Diyarbakir in the 12th century

The Musical Boat is the fourth of ten automata (mechanical dolls) and vessels that were designed to amuse guests at drinking parties at the King Court in Diyarbakirt

"Professor Noel Sharkey sees in the unique mechanism al-Jazari designed for the drummer the world's first programmable robot

"The musical boat" Topkapi manuscript (1206)

The famous watchmaker created three automatons that each aspired to represent a different art and skill: writing, drawing and music.

Built at the end of the 18th century and still functional to this day.

"The Writer", "The Sketcher" and "The Musician", the three automatons represent two boys and a girl respectively, capable of writing different words, making up to four models of drawing, and playing melodies on an organ.



Jaquet-Droz automata, musée d'Art et d'Histoire de Neuchâtel



Sculpture with an electronic brain and sensors that allow it to respond to changes in its environment. Its name is an acronym for cybernetic plus spatiodynamic. Mounted on wheels that allow it to move, CYSP I performed a performance interacting with the music and dancers of Maurice Béjart's ballet on the ceiling of Le Corbusier's Cité Radieuse.

Harold Cohen's AARON (1973) 2013

Program written for painting on canvas by artist Harold Cohen, who began its development in 1973. Its operation differs from current programs based on ML, being more like an expert system. AARON cannot learn by itself new styles or functionalities, but all its improvements had to be codified by Cohen.



"The world's first ultra-realistic humanoid robot artist"

"She is capable of drawing and painting using cameras in her eyes, AI algorithms, and her robotic arm. She is a performance artist, designer and poet. Since her creation in February 2019, Ai-Da has captivated audiences with her unique blend of art, technology and trans-humanism. Her debut solo exhibition, 'Unsecured Futures,' at the University of Oxford, invited viewers to reflect on our rapidly changing world."

Ai-Da - is it art?

Today, a dominant mind-set is that of humanism, where art is an entirely human affair, stemming from human agency. However, current thinking suggests we are edging away from humanism, into a time where machines and algorithms influence our behaviour to a point where our 'agency' isn't just our own. It is starting to get outsourced to the decisions and suggestions of algorithms, and complete human autonomy starts to look less robust. Ai-Da creates art, because art no longer has to be restrained by the requirement of human agency alone.



THE FIRST GEN MODELS:









18











































GENERATIVE ADVERSARIAL NETWORKS (GANs)



WOULD BE AKIN TO LEARN "A STYLE" IN TERMS OF COPYRIGHT LAW?



DIFFUSION MODELS

STACK OF DIFFERENT ALGORITHMS & TECHNIQUES







Starts with a pattern of random dots and gradually alters that pattern towards an image when it recognizes specific aspects of that image

DESCRIPTION (TEXT)

IMAGE

relationship between

(DALLE/ MIDJOURNEY / STABLE DIFFUSION)

HOW ITS GOING...



OPEN IA DALL-E2: THE GAME-CHANGER

CAN AI BE CREATIVE?



ADA LOVELACE



"The Analytical Engine has no pretensions to *originate* anything. It can do *whatever we know how to order it* to perform"

PROGRAMING CONSTRAINTS

Alan Turing quotes what he calls "Lady Lovelace's Objection" in his seminal paper "Computer Machinery and Intelligence"

ALAN TURING



Machines take me by surprise with great frequency.

This is largely because I do not do sufficient calculation to decide what to expect them to do, or rather because, although I do a calculation, I do it in a hurried, slipshod fashion, taking risks.

Naturally I am often wrong, and the result is a surprise for me for by the time the experiment is done these assumptions have been forgotten

SURPRISE IS A HUMAN GLITCH

CAN A MACHINE BE CREATIVE?

A variant of Lady Lovelace's objection states that a machine can 'never do anything really new'.

A better variant of the objection says that a machine can never 'take us by surprise'.



450 .5

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



COURT RULES AGAINST COPYRIGHT PROTECTION FOR AI-GENERATED ARTWORKS

By News Desk ∑ August 22, 2023 5:19 pm

COMPUTATIONAL CREATIVITY



"The philosophy, science and engineering of computational systems which, by taking on particular responsibilities, exhibit behaviours that <u>unbiased observers</u> would deem to be creative."

Computational Creativity: The Final Frontier? (2012)
SIMON COLTON // GERAINT WIGGINS

THE PAINTING FOOL (2012)

The Painting Fool is software that we hope will one day be taken seriously as a creative artist in its own right. This aim is being pursued as an Artificial Intelligence (AI) project, with the hope that the technical difficulties overcome along the way will lead to new and improved generic AI techniques. It is also being pursued as a sociological project, where the effect of software which might be deemed as creative is tested in the art world and the wider public.

AI AS AN AUTONOMOUS ARTIST

"Emotionally Aware Portraiture"









Fig. 2. Example collages produced by the system.

CAN AI PRODUCE CREATIVE OUTPUTS?





BUT, WHAT HAPPENS WHEN AI MIMICS AN ARTIST?

Mona Lisa in the style of Van Gogh

https://labs.openai.com/e/C43QuO3 RTKppxYlhlkokBpSQ

RESEARCH PROJECT "MONALISA IN THE STYLE OF DALL-E"



Mona Lisa in the style of Yayoi Kusama

https://labs.openai.com/e/t4WnZog q5uN0DiNM8r2gEwHI

TEXT-TO-IMAGE AI MODELS



Mona Lisa in the style of Botero

https://labs.openai.com/e/fHhfyiKji8 EQ4qPEbGX8ivzT

TEXT-TO-IMAGE AI MODELS

#MonaLisaInThe StyleOfDalle

06

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"The Search for G-Spot" - Midjourney V3



DO YOU FIND THIS CREATIVE?



"Rather than asking whether machines can be creative and produce art, the question should be, 'Can we appreciate art we know has been made by a machine?"

> GERFRIED STOCKER, interviewed by Arthur I. Miller "The artist in the Machine" (2019)

PREGUNTARNOS SOBRE LA CREATIVIDAD DE IA NO ES RETORICO.

HABLAMOS DEL REQUISITO LEGAL DE "ORIGINALIDAD"



FRICCIONES ENTRE IA GENERATIVA Y DCHO DE AUTOR



AI RAISES NEW QUESTION TO OLD COPYRIGHT PRINCIPLES

AUTHORSHIP



DERIVATIVE WORKS

AUTHOR OR TOOL? (AI-created/ AI-assisted)

Who is the author? The one who makes the selection of the dataset, who creates the algorithm or should the IA be considered the author?

Should we consider increasing levels of autonomy?

EMULATION VS. CREATION

For the creation of new content, GANs are fed with pre-existing data, trying to mimic the probability distribution of the dataset. In the case of works protected by copyright, does the AI-generated work reach the degree of originality necessary to be considered a new work? or is it clearly a derivation that should be considered a "derivative work"?

FAIR USE

Does the use of works as training data falls within the notion of "transformative" required for **FAIR USE**?

PUBLIC DOMAIN

The **volume and scale** in which AI works are produced can create an **imbalance in the public domain**, and don't fit with copyright incentives justifications

AUTHORSHIP

AI- ASSISTED WORKS

a.

AI = TOOL

- objective authorship: Granting authorship to the human operating the program
- b. **authorship by transformativity** : grant authorship to the one who visualizes and directs the creative end result
- c. authorship by derivation : grants authorship to the person supplying the training data
- d. **authorship by source:** to grant authorship to the creator of the "tool" (incompatible with the medium's support, aka the "word" theory)
- e. joint authorship: in combinations of some of these categories

AI- GENERATED WORKS

AI = AUTHOR

- a. **non-human authorship:** grant authorship to the AI (questions about legal personhood)
- b. hybrid systems (joint or co-authorship)
- c. **public domain:** legally it is not possible to conceive of the AI as an author, ergo the work belongs to the public domain.



STYLE TRANSFER



COPYRIGHT DOES NOT PROTECT IDEAS,BUT THEIR CONCRETE EXPRESSION

STYLES (LIKE MUSIC GENRES OR LITERATURE TROPES) ARE UNPROTECTABLE UNDER COPYRIGHT LAW.



Generated images can be used for free.

STYLE TRANSFER TECHNIQUES = the extraction of the characteristics of a style closer in this spectrum to the idea or to the concrete expression of the idea?

HOW MANY IMAGES CAN A SINGLE USER PRODUCE IN A DAY?

WHAT ABOUT A MONTH?

AND A YEAR?





DID GEN AI BROKE COPYRIGHT?



Map of Copyright Lawsuits v. Al





https://chatgptiseatingtheworld.com/

LA MAYOR FRICCION ESTA EN LA NATURALEZA DE LA IA:



TECNOLOGÍAS ANALOGICAS

ABUNDANCIA DIGITAL

ESCASEZ MUNDO FISICO

DIGITAL ABUNDANCE AND STAR TREK REPLICATORS



ABUNDANCE TECHNOLOGIES

GENERATIVE "EVERYTHING"



- DALLE-2
- MIDJOURNEY
- STABLE DIFFUSION
- GITHUB's COPILOT

- NVIDIA GET3D for virtual world objects
- META's Make-A-Scene + Make-a Video
- META's Galactica
- OPEN AI's CHATGPT

ETHICS OF GENERATIVE AI

• CULTURAL GATEKEEPING -PRIVATIZATION

*unresolved copyright questions on ownership

• CREATORS APPROPRIATION

- VECTORIZATION
- TRAINING YOUR REPLACEMENT
- AMPLIFICATION OF AI ETHICS
 PROBLEMS
 - BIAS
 - **OPACITY**
 - SCALABILITY
 - PUBLIC DOMAIN CONCERNS

THE STAR TREK PARADOX

Why are we trying to <u>port scarcity into the digital</u> <u>world</u>, where matter is essentially unlimited?

Why not embracing a post- scarcity society?

DIGITAL ABUNDANCE



ARTIFICIAL SCARCITY

"ABUNDANCE TECHNOLOGIES"

-AUTOMATIZATION OF LABOR -3D PRINTING -GENERATIVE AI MAIMING DIGITAL ASSETS: Digital goods are essentially replicable at low cost.

50... IF WE HAVE DGTAL ABUNDANCE



ARTIFICIAL SCARCITY, THEN?

The challenge is to reimagine economy and legal frameworks for a digital post-scarcity world.

Can IP be reimagined for the digital world?





300-ish years of copyrigth

(261)

© LAW IS BASED ON RATIONALES OF CONTROL

The Statute of Anne, passed in England in 1710, was a milestone in the history of copyright law.

It recognized authors as the primary beneficiaries of the work, being considered a founding pilar of copyright law. It and established the idea that those copyrights should have <u>only limited duration</u> (at that moment set at 28 years).

Before this, the Stationers' Company, held a monopoly on the right to copy from 1556 until 1695 Anno Octavo Annæ Reginæ.

An Act for the Encouragement of Learning, by Veffing the Copies of Printed Books, in the Authors or Purchafers of fuch Copies, during the Times therein mentioned.



hereas Plintres, wookfellers, and other Perfons have of late frequently taken the Libert' of Pointing, Replinting, and Publiching, ortauling to be Pointed, Replinted, and Publicher Sooks, and other Affridays, without the Confent of the Authors of Proprietors of fuch Books, and Californit, and too often to the Ruin-of, them and their families : for Portenting, therefore fuch Pradicies for Mark future, and for the

Encouragement of Learns Den to Compole and Mirite uleful Books : Day it pleafe Bour Dairty, that it may be Enafto, and be it Challed by the Shuens mod Ercellent Dairchy, by and beit Challed by the Shuens midd Ercellent Dairchy, and by the Autority of the Amer, Chiff Portlament Altmold, and by the Autority of the Amer, Chiff form and after the Ecuty Day of April, Due thouland feber bunder and after the Autor of any Book of Books afterany Plinter, mod hath at Ecansferred to any other the Copy of Copies of uch Book of Books, Shate of Bhares thereof, of the Bookfeller of Bookfellers, Plinterior I Plinters, of other Perfon of Berlans, who bath of have Butchler of Koeffer the Copy of Copies of any Books of Books, in other to Plint of Berlans, the Books of Books, in other to Plint of Berlans, to Commence from the fatt Day of April, and Molages , to Commence from the fatt Centh Day of April, and Molages , and that the Stathger, or Allgins, hall have the foles Compole, and bis Allginer, or Allgins, hall have the foles Compole, and bis Allginer, or Allgins, hall have the foles Compole, and bis Allginer, or Allgins, hall have the foles Cherry of Plainting and Expliciting fuch Book and Books the Erren of Souk-

Statute of Anne, also known as the Copyright Act 1709/1710

COPYRIGHT JUSTIFICATION IS BASED ON RATIONALES OF INTELLECTUAL SCARCITY

	INDIVIDUAL	COLLECTIVE
ECONOMIC EXTERNALITIES	Labor /personhood	Labor /personhood
HUMAN CENTERED VALUES	Personality	Cultural theory

ARE THOSE VALID IN A TIME OF CONTENT ABUNDANCE?

© LAW IS BASED ON ASSUMPTIONS

AUTHORS CREATE INCENTIVIZED BY ECONOMIC INTEREST

"many authors who have little hope of ever finding a market for their publications, and whose copyright is, as a result, virtually worthless, have in the past, and even in the present, continued to write"

Lawrence Liang, co-founder of the Alternative Law Forum

MORE C = MORE CULTURE

THERE IS NO INNOVATION WITHOUT PROTECTION

"To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Rights"

US CONSTITUTION, Article 1 Section 8 Clause 8

"Copying" stales innovation.

It ignores, traditional ways of sharing knowledge (oral folklore), negative spaces of IP (like videogame streaming), and "sharing culture" on social media. knockoff economy



kal raustiala and christopher sprigman

ESPACIO NEGATIVO DEL DERECHO AUTORAL



NEGATIVE SPACES OF INTELECTUAL PROPERTY





how imitation sparks innovation

kal raustiala and christopher sprigman creative areas in which innovation flourishes with little or no intervention or enforcement of the intellectual property ecosystem (or "low-IP equilibrium")

Raustiala y Sprigman, 2006

Through the study of the fashion industry, they warned about the "paradox of piracy" in that copies contribute to maintaining and driving the innovation cycle, fostering a process of "induced obsolescence" that drives fashion consumers to seek novelty by abandoning what has become mass-market, creating demand for the consumption of new goods at the same time.

In short, this process of imitation plays a key role in incentivizing the markets.

Research has been done in areas such as fashion, stand-up, pornography, graffiti, haute cuisine and cocktails, but no research has ever been done in video games until now.

MOTIVATIONS FOR CREATIVITY GO BEYOND ECONOMIC INCENTIVES



CHALLENGING THE ASSUMPTIONS OF INTELLECTUAL PROPERTY

Kate Darling and Aaron Perzanowski

DIGITAL CULTURE IS CREATED BY SHARING



GEN Z perceives content and creation in a different way.

Is not copying, is viralization and popularity.

VIDEOGAME STREAMING AS AN IP NEGATIVE SPACE

- Video game streaming constitutes a differential model for the exploitation of intellectual property, which is diametrically separated from the approaches of other traditional creative industries such as cinema or music.
- The adoption by key players in interactive entertainment of a permissive policy on certain uses of their products imposed the necessary conditions for the emergence and flourishing of two related industries of digital content creation: streaming and esports.
- Tolerance in the prosecution of what other industries qualify as intellectual property infringements promoted a growing ecosystem of innovation and creativity.

AMONG US (2018)

online multiplayer social deduction game developed and published by American game studio Innersloth





Please share and subscribe Streaming de videojuegos como caso de un" espacio negativode la propiedad intelectual

MANTEGNA

Aboqamer, aboqada especialista en videouegos e inte ligencia board member de Wo men in Games Argentina, v embaiadora de Womer in Games International (WIGJ). Investigadora afi liada en video aame polic¹ en el Berkman Klein Cente de Harvard v en el Centro gia y Sociedad versidad de San Andrés. Docente en dicha universidad en las mate eligencia Artificia

El streaming de videojuegos constituye un modelo diferencial de explotación de la propiedad intelectual, que se separa diametralmente de los enfoques de otras industrias creativas tradicionales como el cine o la música. La adopción por parte de key players del entretenimiento interactivo de una política permisiva sobre determinados usos de sus productos impuso las condi-

RESUMEN

Este esquema de beneficio mutuo entre desarrolladores, publishers y streamers por fuera de los postulados tradicionales de los derechos de autor, pone en crisis los incentivos que fundamentan su justificación. Al respecto, uno de los argumentos comúnmente empleados para defender la existencia de propiedad intelectual es la necesidad de una retribución económica

https://cetys.lat/consideraciones-del-derecho-de-autor-en-el-entorno-de-internet-en-america-latina/derecho-de-autor-please-share/

06.

LA IA GEN ES **UN NUEVO** PARADIGMA DE LA EVOLUCIÓN HUMANA

PUEDEN LAS REGLAS CONOCIDAS **RESOLVER ESTE** CAMBIO?



CAN COPYRIGHT SOLVE THESE PROBLEMS?

©opyright law won't work for GenAl





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FORUM

ARTificial: Why Copyright Is Not the Right Policy Tool to Deal with Generative AI

Micaela Mantegna

ABSTRACT. The rapid advancement and widespread application of Generative Artificial Intelligence (GAI) raise complex issues regarding authorship, originality, and the ethical use of copyrighted materials for AI training.

As attempts to regulate AI proliferate, this Essay proposes a taxonomy of reasons, from the perspective of creatives and society alike, that explain why copyright law is ill-equipped to handle the nuances of AI-generated content.





CREATIVE MARKETS ECONOMICS

As Rebecca Giblin and Cory Doctorow explain in their book Chokepoint Capitalism, what creators get from media and tech companies is not related to how durable or far-reaching copyright is, but determined by the structure of the creative market.

"Under these conditions, <mark>giving a creator more copyright is like giving a bullied schoolkid extra lunch money.</mark>

It doesn't matter how much lunch money you give that kid – the bullies will take it all, and the kid will still go hungry (that's still true even if the bullies spend some of that stolen lunch money on a PR campaign urging us all to think of the hungry children and give them even more lunch money)"



how big tech and big content captured creative labour markets, and how we'll win them back

d) it does not guarantee compensation and attribution for creators

For years I asked, pleaded for a chance to own my work. Instead I was given an opportunity to sign back up to Big Machine Records and 'earn' one album back at a time, one for every new one I turned in. I walked away because I knew once I signed that contract, Scott Borchetta would sell the label, thereby selling me and my future. I had to make the excruciating choice to leave behind my past. Music I wrote on my bedroom floor and videos I dreamed up and paid for from the money I earned playing in bars, then clubs, then arenas, then stadiums.





ARTS & CULTURE

Look What You Made Me Do: Taylor Swift's Fight for Her Creative Legacy





In Spring 2024

EXPENSIVE/COMPLEX GAI COPYRIGHT LITIGATION

© LAW & GAI FRICTIONS = UNCLEAR WIN IN LAWSUITS

- **MULTIPLE AI MODELS & COMPANIES**
- MULTIPLE JURISDICTIONS
- **MULTIPLE TYPES OF DATA + CREATORS**
- **OPACITY IN TRAINING**
- **RAPID AI DEVELOPMENTS**
- MODELS ARE ALREADY TRAINED

Copyright + Related Lawsuits v. AI Companies SDNY ND California D. Col. Authors Guild v. OpenAl, Kadrey v. Meta: Chabon v. Meta Alter, Basbanes Pierce v. Photobucket Huckabee v. Meta: Farnsworth **Judge Stein** Judge Chhabria New York Times v. OpenAl Daily News v. Microsoft In re OpenAl ChatGPT Litigation (Tremblay, Silverman, Chabon) Center for Inv. Rep. v OpenAl



THE CAT IS OUT OF THE BOX



UNFEASIBLE REDISTRIBUTION AND ATTRIBUTION VIA ©



- How would concepts of attribution and distribution work under existing copyright rules of compensation?
- Should every author whose work is present in the dataset have an equivalent claim over every single output?



a) more copyright = more power to the already powerful!!

b) leaves out of scope other workers being exploited, like ghost workers

c) it affects innovation in other areas and the development of ethical AI

d) it does not guarantee compensation and attribution for creators

UNFAIR STRATIFICATION OF INTELLECTUAL LABOR

How to Stop Silicon Valley from Building a New Global Underclass

GHOST

Mary L. Gray and Siddharth Suri

WORK

WHY CREATIVE LABOR SHOULD HAVE A DIFFERENT PROTECTION **THAT OTHER** TYPES OF INTELLECTUAL LABOR?

INVISIBLE LABOR TO TRAIN, CURATE AND SANITIZE AI OUTPUTS

Silicon Valley Apr 26

Amazon's system for tracking its warehouse workers can automatically fire them



A world where people are monitored and supervised by machines isn't confined to the realms of sci-fi. It's here now.

Tough conditions: There have been <u>many reports</u> over recent years about <u>unpleasant conditions workers face</u> at Amazon warehouses. Employees are under pressure to pack hundreds of boxes per hour, and face being fired if they aren't fast enough.

What's new: <u>Documents</u> obtained by <u>The Verge</u> show that it's far more common for people to be fired due to lack of productivity than outsiders realize. Roughly 300 people were fired at a single facility between August 2017 and September 2018 for that reason. And crucially, the documents show that much of the firing process is automated.

Deja fuera muchos trabajadores explotados

In late 2021 Sama was contracted by OpenAI to **"label textual descriptions of sexual abuse, hate speech, and violence"** as part of the work to build a tool (that was built into ChatGPT) to detect toxic content.

Workers that made ChatGPT less harmful ask lawmakers to stem alleged exploitation by Big Tech

Annie Njanja @annienjanja / 1:36 PM GMT-3 • July 14, 2023

Comment



= TIME

BUSINESS . TECHNOLOG

Exclusive: OpenAI Used Kenyan Workers on Less Than \$2 Per Hour to Make ChatGPT Less Toxic



UNFAIR STRATIFICATION OF INTELLECTUAL LABOR

The data labelers employed by Sama on behalf of OpenAI **were paid a take-home wage of between around \$1.32 and \$2** per hour depending on seniority and performance.

"Despite the foundational role played by these data enrichment professionals, a growing body of research reveals the precarious working conditions these workers face,"

I affects innovation in other areas and the development of ethical AI



How does intellectual property

affects the creation of ethical AI?

Pistol 0.905

Pistol 0.880

Pistol 0.838

Pistol 0.881

COLLATERAL DAMAGE = © LEGISLATION IMPACT ON AI ECOSYSTEM AS A WHOLE

It affects innovation in other areas and the development of ethical AI

The legal exceptions and limitations to copyright are <u>CONTEXTUAL</u>: Parody, information, education.





COLLATERAL DAMAGE = © LEGISLATION IMPACT ON AI ECOSYSTEM AS A WHOLE



STAR TREK: FIRST CONTACT

"The acquisition of wealth is no longer the driving force in our lives.

We work to better ourselves

and the rest of humanity."

CAPTAIN JEAN-LUC PICARD



THANK YOU!!!!

YOU CAN FIND ME AT:

Abogamer.com
(a) The.abogamer
(b) Abogamer
(c) Abogamer

🔀 <u>@</u>Abogamer