AUTHORSHIP AND AUTOENCODERS

Santiago Caruso

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January 2023

I am an illustrator and graphic artist for more than twenty years.
A publisher of books for the last six.
I also dedicate myself a bit to music and writing.
Many of you will know my work, or maybe not: sometimes the names are diluted, but the <u>images persist</u> below the surface.

This essay is not against people, but against the programs that serve to replace them. It is a report of the situation at hand, and a call to be organized against this phenomenon that claims to emulate everything.

S.C.

"There are ones who attempt to ride a ship

There are ones who try to submerge my voice.

There are those who believed they were conquerors,

discovering El Dorado in any corner.

It's the crazy who wish to fly,

looking for a place beside the sun.

It's mad who wants your heart.

Who put your color

in every ray of sun

Whoever wants your heart to burn.

There are people who would like to jump into the water without even wetting their pants.

There are others so deluded that they delude themselves with a world in which there is no disappointment."

Imposibles, Fernando Cabrera

Authorized

This is a time when a lot of voices are taken. That is why I speak with my own words, as an artist, a direct victim of the violent eruption of the developer companies of machine learning, applied to the generation of images through Artificial Intelligence (AI).

Various research companies at the service of corporations with hidden commercial purposes, starting with <u>LAION</u> and <u>Stability.AI</u>, then <u>Midjourney</u>, Dall-E2 and all the generative AIs that are based on the use of Stable Diffusion, the software created by Stability.AI, they have engaged in various criminal maneuvers, such as <u>data laundering</u>, massive violation of intellectual property and the lucrative use of the names and works of artists from all over the world and from all eras. Including the present.

My name is just one of the thousands that this technology is using to emulate works of art synthetically. What I describe is the largest theft, the illegal appropriation of value created by millions of people for their concentration by a few private companies, which offer the regeneration derived from that expropriated value, both in open source mode and for paid use. It is a "machinery" capable of replicating, with or without accuracy, millions of artistic works in hours, through text directives. They are operated by a huge mass of anonymous users, the vast majority neither qualified legally nor in the relevant creative area, which incurs violations of professional ethics, identity theft, and even plagiarism.

With this writing I seek to disseminate a pressing global problem, which requires the association of artists in general, since they feel an alarming and expropriatory precedent of the capacities and values created by people, through the violation of the rights of intellectual property that protects them.

Image laundering

Companies like LAION (Large-scale Artificial Intelligence Open Network) under the guise of non-profits obtained permission to do Internet data-scraping as an alleged research method.

Through this procedure, they systematized a database using software called CLIP, which listed image+text pairs from the capture of an exorbitant volume of 5.8 billion images, which belong to their creators or to the people who appear in them. Later, LAION served as a facilitator of that data to third-party companies, such as <u>Stable Diffusion</u>, a <u>business derivation of one of the companies that provided LAION's initial funding: Stability.AI</u>.

"It's become standard practice for technology companies working with AI to commercially use datasets and models collected and trained by non-commercial research entities like universities or non-profits. In some cases, they're directly funding that research.

Stability AI created the popular AI generator of text to image, Stable Diffusion, funding its development through the Machine research group, Vision & Learning, from the Ludwig Maximilian University of Munich. In their project report, LMU researchers thank Stability AI for the "generous computed donation" that made this possible.

Mass text+image datasets used to train *Stable Diffusion*, *Image* from Google, and Make-A-Video's text-to-image component were also not created by Stability.AI. They all came from LAION, a small registered non-profit organization in Germany. Stability AI also directly finances the computing resources of LAION."

Mohammad Emad Mostaque is the founder and CEO of Stability AI, the developer of Stable Diffusion. In his own words: "I funded LAION, the underlying dataset for both Stable Diffusion and Craiyon."

This is how the big tech industry creates/funds non-profit organizations, with permission to create these data sets or models for "research purposes". This allows them to avoid copyright acknowledgment at the outset. The models created are then either given away or sold to for-profit companies, which monetize them on APIs. These APIs are sold to other individuals or business groups.

No code

In this way, Stable Diffusion was able to misappropriate billions of works of art, digitized to circulate on the Internet, both on journalistic sites and on blogs and social networks; which allowed them to train their AI model with that huge database. An action carried out without the knowledge or consent of the intellectual owners of said creations.

The LAION5b database is a world-wide and historical list of images belonging to the public, private, personal and copyright protected domain. This washed database has been used to develop Stable Diffusion V1. A software that has been put into circulation in the general community, while the value of the API multiplied by billions of dollars in a few months of 2022.

This colossal file has been used as the dataset for Stable Diffusion machine learning. In other words, it has been mechanically analyzed and apprehended through autoencoders, which have the capacity to compress large amounts of images with a system called diffusion.

Author vs. autoencoder

In summary, autoencoders are a network of interconnected logic nodes, called neural networks that try to copy the images used as inputs, encoding and compressing them in a bottleneck, and then re-amplifying them again in their resulting outputs. The encoder is the part of the network that compresses the input into a latent space representation. The decoder is the part that tries to reconstruct the input from the representation of the latent space to the output. This technology was developed to compress data, just like a zip works, but also to interpret the input and predictively recompose its missing parts, restore damaged images, out of focus, dirty, etc.

The "novelty" is introduced by the diffusion technique, which analyzes each image given as input, at the time it goes introducing visual noise, progressively, until completely dissolved in a two-dimensional field of pure noise. From studying its progressive decomposition establishes a pattern that enables its recomposition with the least loss of information regarding the input to the output.

Specters in the window

That intermediate bottleneck is a frame common to all images encoded in noise: the latent space, a field from which it is possible to regenerate a similarity to the original input, or the combination of various inputs, in an output derived from them. In that concentrated space of noise beat billions of images of people we know well and that we also do not know, from all over the world and its vast history, all the art that we love or that we cannot see. But this modality of artificial generation is very fast and fills our horizon with pure complacent feedback, at the same time that buries the real ones human experiences that she used.

Midjourney and Dall-E 2 are just two of the generative AIs that were released in August 2022, taking as a promotional factor the use of the name of artists of all times, including the present. Caused direct damage -and still do- to the living authors of the works that reproduce synthetically in their platforms, undermining the possibility of commission of works by publishers or individuals who, being able to generate copies of your images or variations there of by a very low cost and at an impossible speed to tie by traditional processes, cancel projects, use what has already been produced as database to derive from there or they simply stop requiring their authors originals.

My name has been used as a prompt more than 1770 times in Midjourney, 3700 in NightCafe, 348 on Lexica, until January 23, 2023. Of the rest of the generators I still do not have the information, which always depends on the transparency of the sites themselves or of the users that show it as public.

A Night Café user generated more than 100 images with my name that he then offered for sale as NFT on Opensea.

Anonymous says:

Data mining or data scraping is the technique of taking millions of data from the internet that governments allow some entities to do, for investigative purposes. Universities or large research laboratories, for example, in the area of mental or physical health, carry out these activities, but are obliged to anonymize the data in the processing of the extracted information. This

modality of work is key and mandatory: keeping the identity of the people whose sensitive data was taken anonymous is an essential requirement so as not to damage their chances of getting a job or a health benefit, for example.

However, image-generating companies and their programmers have published dozens of catalogs with the names of artists (anyone can find them on the internet), with the premise that their technical "emulation" is possible thanks to the technology they promote and the application they give.

Midjourney and Dall-E 2 are just two of the generative AIs that were released in August 2022, taking as a promotional factor the use of the names of artists from all eras, including the present. They caused direct damage -and still do- to the living authors of the works that are reproduced synthetically on their platforms, undermining the possibility of commissioning works by publishers or individuals who, being able to generate copies of their images or variations of the same for a very low cost and at a speed impossible to match by traditional processes, cancel projects, use what has already been produced as a database to derive from there or simply stop requiring their authors or variations of them for a very low cost and at a speed impossible to match by traditional processes, cancel projects, use what has already been produced as a database to derive from there or simply stop requiring their original authors.

My name has been used as a prompt more than 1,770 times in Midjourney, 3,700 in NightCafe, 348 in Lexica, until January 23, 2023. I still don't have the information about the rest of the generators, which always depends on their transparency. sites or users that show it as public.

A Night Café user generated more than 100 images with my name that he then offers for sale as NFTs on Opensea.

Too much prompt

I became aware of this new reality from a journalistic note that disseminated a very extensive list of pictorial movements and proper names of artists from throughout the history of art, including contemporary. There, where the names of artists such as Rembrandt, Michelangelo, Leonora Carrington, Dave McKean or Kim Jun Gi were arranged in each row with a number, was mine. I read paralyzed with terror, like someone who saw through a security monitor his doppelgänger entering the same room to kill him.

Above, in that same article, an instructive from Midjourney himself explained what the process was to generate an image with Malevich's imprint. You only had to type the object to represent and add: "painted by Malevich".

In this way, cruel and direct as a stab, the artist and his work are reduced to a variable of style for the operation of the algorithm.

Fine tuning

An objective that many users of these AIs pursue is to reproduce certain artists, because they are valued in the art system or cultural industries. Autoencoder models can be retrained to obtain a specific type of result.

This practice is known as *fine tuning* and allows to "tune" the output with an input of images from a single artist. In this way, any user encouraged by the example of the same companies that exploited the work of millions of photographers and illustrators, takes images of a specific artist and trains a model that exactly reproduces his work. Harmful practice for the original authors, which incurs various types of plagiarism still unpunished.

The "tool" is functional as a method of torture against those who raise their voices in protest of the plagiarized use of this software, capable of replicating anything you feed it with.

Some software facilitators even grant an intellectual right or commercial use of the images themselves generated, in exchange for payment or not, at the same time that they release their users from the criminal liability that such use could cause. These, in turn, behind an arroba and a pseudonym, claim to have commercial rights over their interaction with the AI, and make "good use" of the software, while the generated images are offered to illustrate journalistic media, posters, wallpapers, etc.

But without going to the extreme of fine tuning, these autoencoder models are already trained to reproduce or derive images from thousands of artists, just using their names as prompts: /painted by Greg Rutkowski.

And the case of this artist is the most mentioned and unfortunate, because *only* in Midjourney you can find the exorbitant sum of 107,000 usings of his name, without consent or remuneration. Which produced the phenomenon that when you *google* the name of said artist, the search engine returns a jungle of AI imitations of his art, but not the artist's original works. The plagiarized falsification made by this software prevails over the truth.

It is an instrument developed in a way that is as dishonest as it is corrosive of the role of the author and it is insane and triply unfortunate that its makers have placed it in the hands of any user, data entry without knowledge of this profession, nor respect for the work of our colleagues or of the laws that the same companies have violated to develop it.

If you want to imagine, sleep, because bodies know how to create powerful images. If you want to materialize them so that others are infected with your "soul", if that exists, or so that they are understood, approach art with something to say and learn to do it, because using these programs is the only thing that is truly expressed, it is the machinery of capital.

Outlaws

As cited in this statement from the Ministry of Justice and Human Rights of the Argentine Nation:

Both doctrine and jurisprudence agree that the work that deserves legal protection is "every personal, perceptible, original, novel expression of intelligence, the result of the activity of the spirit, that has individuality, that is complete and unitary, that represents or mean something, that is an integral creation".

The ownership of such faculties is exclusive to the author. This obliges third parties to require your express authorization to publish, translate, adapt or reproduce said work. It is so, then, that if a third party (not expressly authorized by the author) makes use of it, it commits an infringement of intellectual property.

Hungarian professor Gyorgy Boytha, a lawyer specializing in intellectual property law, in the World Intellectual Property Organization's Glossary of Copyright and Related Rights defines plagiarism as "the act of offering or presenting as one's own, in whole or in part, the work of another person, in a more or less altered form or context."

The Plagiarism Machine

While millions of people can freely *log in* as a user on Midjourney through Discord, there are thousands who can't *opt-out* of it. There you can see the incessant *feed* of millions of human interactions with the technology and immerse yourself in the verification –in full detail– of how these users continue to refine the functionality of the algorithm. They are training the structured machine with the sum of expropriated human art, telling it every three minutes, which of the four outputs thrown is the most suitable for the commanded prompt. *Personal trainers* of the multiplier algorithm of looting themselves, full time and *ad-honorem* or, what is more absurd, paying to use their own hijacked "data".

Nor can we ignore that users also introduce *other* images together with the written command that requests the reinterpretation of those specific images (image-to-image procedure). These can be different from those of the training dataset, and in many cases they are, although it is hard to believe that any image has remained outside of the almost 6 billion captured by LAION.

Entering Midjourney or other similar platforms, is like giving your eyes to the inside of a hyperactive *hive*, which bustles in its incubation chambers while you see how its feeding cells are completed. But this "hive" does not produce natural honey but an artificial syrup and what is most worrying: it is the size of the earth. In it there are millions of *larvae* and *drones*, and of

course, there are also queens, or for that matter: *kings*. All its cells are interconnected through the internet and in their *feed* they reproduce the predatory damage of the original creators, like a plague that grows barley devouring entire fields of flowers.

Those who have not had the option to "enter" (opt-in) or "exit" (opt-out) from this machinery are the artists captive by data scraping, who see their corpus of work systematically captured and violated by millions of anonymous users behind nicknames or through payment that hides the prompts used in regenerating images. This makes it impossible to know all the names of artists that are used to direct the autoencoder towards the use of their original work, as a "stylistic" parameter.

Despite public complaints and requests to be removed from the software, the companies do not heed the will of the authors and do not offer a way to get rid of this exploitation on a global scale, despite the fact that the democracies of the world have enacted laws and rights that recognize the value of work and the freedom of people, while regulating competition, for more than a century.

Data capture, people capture

The word plagiarism comes from the late Latin *plagium*, which means 'the act of stealing slaves, or of buying or selling free people as slaves'.

According to Intellectual Property Rights specialist Isidro Satanowsky, <u>plagiarism is</u> "the ideal seizure of all or some original elements contained in the work of another author, presenting them as one's own, substitutions that can be textual (servile) or disguised (intelligent). The latter is the most common way to violate an author's right, and it is the most harmful and serious, because it deeply damages the essence of his right."

Plagiarism is a violation of intellectual property rights and is a criminal offense.

Until Stable Diffusion, Midjourney, Dall-E 2 and all its derivatives do not comply with the law, the use of their software and platforms is an act of validation and complicity in the criminal offense of plagiarism, which is further aggravated in

the exercise of unfair competition on the part of the companies that own the "intelligent" software and its users who, when making commercial use, they receive a payment for the license to use the artificial *outputs*, in addition to usurping the author's credit artificially derived from other people's works, which causes moral and economic damage to people who are expropriated from their original authorship and their livelihood.

Preserving digital identity and the value created by people is essential. Our autonomy depends on not being used and exploited through the taking of our data, as the material that condenses our value created as workers.

For this, a new global regulatory framework for data mining is urgently needed, as it is the first link in the chain that puts us at the mercy of algorithmic appropriation. By taking our data or our image, we are susceptible to a virtual kidnapping.

Of the murder of Fine Arts

Thomas de Quincey writes in *On Murder Considered as One* of the Fine Arts: "When fire consumes private property, compassion for the disaster affecting our neighbor prevents us, in principle, from treating the event as a stage spectacle. But the fire may be limited to public buildings. In that case, we pay tribute to the calamity with our lamentations and then, inevitably and without feeling self-conscious, come to appreciate it as a theatrical spectacle, while the crowd lets out their rapturous exclamations of Formidable! and Magnificent!

The mass of consumers is excited by the visual results that AIs generate and applauds. They have been inoculated by youtubers and influencers with the *hype* that now any user could become an "artist", without realizing that this is possible at the precise cost of being an artist. So how come no one sees the contradiction or even the absurdity of that postulate?

It is that the masses have also been captured and "trained" by the device of the dominant elites. It attacks creatives saying that they oppose the "democratization of art" by virtue of playing the role of "gatekeepers" of access to a supposed utopia. But we well know that no order of freedom and equality can be based on the suppression of rights and the plunder of a huge part of its population: we cannot be part of this true dystopia.

An almost childish fascination seized the eyes as before the spectacle of an accumulation of technical feats. But this is not a circus animated by performers putting their bodies at risk to display extravagant beauty in the process of performing their trick. On the contrary, we are witnessing a continuous projection –in a loop– of a saga "à la Michael Bay", saturated with details covering some transformers indirectly manufactured by thousands of hands that respond commands against their will. Those hands can be identified by their "fingerprints" and belong to people who may live down the block, in the neighboring region, or in distant countries.

Knowing now what these millions of outputs are based on, which do not cease to be generated day and night in the global "hive", we should be assailed by horror at the idea of being part of a structure of due obedience.

That emotion, the fear, fades as long as our position seems out of reach of tragedy. But who is really exempt from suffering the degradation of culture? And who benefits from losing their wealth?

When an algorithm takes control of the cultural industries displacing the entire creative community, it makes the quality of the processes and results precarious, and, appropriating jobs, it accelerates everything to chronic anxiety, reduces costs and with it also the wealth of the entire society. Wealth that belongs by right to the human community.

The fire of the building in which the registration of our rights is burned can't be celebrated. Applause does not put out the flames. The collective actions of the first responders, yes.

Lie on the LAION

The corporations that offer the use of autoencoders, say:

"By using the Services, you grant to Midjourney, its successors, and assign a perpetual, worldwide, non-exclusive, sublicensable, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works from them, publicly display them, publicly post, sublicense and distribute

the text messages and images you enter into the Service or the Assets produced by the Service under your direction. This license survives the termination of this Agreement by either party, for any reason."

This implies that the interaction with this or another generative AI platform collaborates with its training and deepens not only the situation of exploitation of the original work, but also its derivations, in perpetuity.

The co-founder economist Yanis Varoufakis, of the pan-European movement DiEM25, speaks of "Technofeudalism" as the form of overcoming capitalism that the platform economy makes possible by doubling the material world into a virtual set of territories and values, regulated by its algorithm. The owners of the "clouds" of data and of the platforms where it is interacted with, control the entire system and the meta-matter. Thus the mass trains the algorithm to be trained by it to train the algorithm, to be trained...

In perfect synchrony with a society that opposes meat consumption and promotes its substitution, a much more tyrannical form of capitalism, rejecting bodies –flesh and bloodfrom itself to capture and assimilate the computational data that emerges from its human processes.

Through the capture and machine (l)earning of the artwork, the real bodies that produced it are kidnapped. This is the invisible chain of the new slavery. The one that renders displaced living bodies impossible and encodes a binary spectrum that appropriates their workforce and forces them to train the machine to perfect the algorithmic pattern.

All the kidnapping and plundering mechanics described above is not progress, but a *regressive force* that puts the world in a moment prior to 1710, the year of the promulgation of the Queen Anne Statute.

Without ethics or authenticity, this accumulation of artistic value by AI corporations, is a bite on the *singularity* that humans can throw themselves into in a lifetime: expanding the limits of what is possible for people, -not for machines –

discovering the sense in which others could do it too. That is the task of art and of all disciplines that improve society.

LAION, opened its titanic jaws and bit what it bit, Stability AI and all derivatives of its diffusion model, such as Midjourney and Dall-E2, are in a hurry to profit from the use of that data, in this period of legal defenselessness: we will see if the bite does not choke them in the *process*.

The artist at the time of its technical reproducibility

It was supposed that the development of AI was going to take care of the less appetizing tasks and that in this way we would reach the horizon of a cessation of tedium, from which, we the people could dedicate to higher tasks. But no, the CEOs of the world find it more profitable to liquidate the creative capacity of the most singular artists, offering them a retirement with lost profits. And they attract all users to the fiction of becoming promptist, as if of an artist, who does everything quickly and without flight or poetry, but right now, that the algorithm must continue refining its ability to reproduce everything and for that, trainers are needed, and if they are free, much better.

When a promptist –sad euphemism– instructs the algorithm: "in the style of Greg Rutkowski" or "painted by H. R. Giger", it refers to the database in which the spectrum of the artist is captive and enables the software to use the entire work for its reproducibility.

This is the way to subsume the entire experience of the artist person to a synthetic and artificial version, in the semantic parameters that the developers in Silicon Valley have understood that such an artist was, or is, in the case of those of us who still live.

In this way, they seek to instrumentalize all the knowledge applied to artistic work, reducing each accumulation of personal creative experiences to being a mere tool, which, in its accumulation of techniques and areas of expertise, offers the user an immense arsenal of merchandise previously expropriated from the workers who use them. they created. In this way, the system for generating images with autoencoders replaces the artist and his work, taking the definitive "shortcut" even for the user himself, who, if he really imagined, would capture that image by himself; but that in this continuously accelerated operation, it does not lead or have any control over the derivation of the output that arises every second: one more, of millions that the AI regenerates and that many times is similar to so many other outputs.

The word auto-encoder indicates that the images are previously encrypted itself: the user is only useful as a computer, that is, who writes the command. But the process of interpretation and derivation of that command is carried out by the auto-encoder. Its purpose —and its effect— is to obstruct the user's imagination, not to amplify it. It puts it outside the process of the thing, like someone who orders a product, chooses the features and waits for Amazon to drop it at your doorstep.

In art, imagining is another matter, it is giving visual form to a conceptual idea. It is being able to structure an inseparable conceptualization of its shape and color. This process involves composing a logical structure that is capable of expressing to another person, something intelligible or disruptive, like a poem.

On the other hand, when one structures a prompt, he does not carry out this process. At most, a merely operative image is aroused. The command must be limited to an order of subject, adjective, place, and representation technique, and that is when the software recomposes from the billions of images by other artists, an image, more or less coherent, that may or may not adjust to the desire –not to the imagination– of the user.

Not being able, still, to indicate with greater precision the total organization of the image, the field occupied by each object that the user wishes and of in what way they are represented, in terms of shape, color, texture, etc. All this network of decisions is taken by the AI instead, based on a pre-constructed parameter based on the semantic analysis derived from the appropriation of the billions of previous works.

The fact that the user can take advantage of the randomness of the outputs thrown does not imply that he is imagining or expressing himself through the use of the software. It is the AI that uses the user and the expropriated artist so that the owners of this technology continue to enrich the complexity of the result generated by their machine. A software that, when evaluated well, with the little interaction that it requires from his users to reproduce an imaginary polite to nausea, he will be revealed as the employee of the year, the most obedient, the one who takes on all the tasks for the lowest possible payment: almost zero.

The tasks that until now served people as a field of experience and aesthetic experimentation, from which, if they avoided these areas having created value, complex artists would later emerge, the most necessary ones. It is they who are going to be in short supply if a legal and ethical limit is not placed on this looting.

Because this system is promoted as if it were a tool, when in reality it is a medium that synthesizes all the results of the artist's unique process. A fever for results, which is only useful for those who want to "win" at all costs.

Body of work

One of the most common questions asked by people who are new to artistic creation, be it in the field of graphics or plastic arts, is about how to find their own style. The most elemental or primary way that a person can conjecture to obtain a work is to group and recombine previous elements. Dazzled by the work of his aesthetic references, she tries to imitate the line, the color palette or the way of treating the human figure, to name the obvious things. That is, to imitate or replicate the surface resulting from the interpretive process.

This recombination of other people's solutions results in portfolios of amateur artists riddled with inconsistencies in visual discourse, where the lack of organicity in the corpus of work can be clearly seen. That pastiche given by the sum of different parts is equivalent to a corporality whose reckless amount of transplanted organs is rejected. The whole is not the sum of its parts. The incompatibility is the horror in the figure of Frankenstein's monster. But if we're lucky, those bodies don't survive long in any environment. They do not see the light of day in publications, there is no economic consideration at stake and no artist from whom a fragment of his corpus of work has been removed is damaged by plagiarism.

If we are even luckier, people interested in creating something for themselves continue to learn and develop their work and, taking charge of making a very long list of aesthetic decisions, produce a consistent discourse: it is the value that their own creative experiences achieve by resolving various aesthetic dilemmas. Aesth-ethic.

The word is not the thing

The style is not patented, but since it is encrypted in the way in which the work of art is constituted, appropriating the style is appropriating the replication of the aesthetic decisions that result in specific works.

The aesthetic speech of the artist is specified in the morphology that makes up the work. The emotion and the discourse of whoever contemplates that work and thinks about it then derives from it. Its composition is effective, depending on the degree of sensitive and intellectual complexity, poetic and symbolic power that articulates and conveys the form of the completed work, be it visual, textual or sound.

Style, from the Latin *stilus*, is the word used to designate a type of punch with which to write. In classical antiquity, the scribe worked on a wax table with this metallic instrument, which consists of a sharp point with which to trace the characters and at the other end of the instrument, a spatula with which to smooth the wax, erase the writing and make blank slate. It is metonymy, which transfers the name of the tool (*stilus*) to the process carried out with it, to refer to the quality and complexity of each writer's work. From there derives the use we give it today.

But the style of an author is never reduced to the tool, but to the series of formal decisions that are made and articulated with the tool to solve a series of problems. The resolution of this set of aesthetic problems is the resulting artistic work. And that is what the data scraping process took: the copyrighted art which trained the algorithm.

Codex Gigas

Historians, philosophers and biographers first wrote on wax and then wrote even more, on papyri, parchments and different types of paper. The writing dispensed with a stilus, although, with pen and brush, the copyist monks, with great interpretative faculty, knew how to introduce a very own grotesque in the marginalia of the sacred doctrine.

Under the control of the church and the crown, the books were copied by hand, in anonymity that diluted the name of the copyist in favor of the abbey in charge of supporting the copyist monks. Its production belonged transitively to the holders of that culture of words and images: the church and the court, who acted as objectors to literary production, granting or denying permission to develop it, as well as the materials and knowledge for its production. realization.

The first copy machine

The dispute over the ownership of literary and graphic works ensued centuries later, with the introduction of the printing press in Europe in the fifteenth century. The ability of this technology to reproduce text as well as images in greater circulation, allowed its owners, publishers and booksellers, to seize the value of the writers' works, reproduce them quickly and distribute them, concentrating the wealth of their commercialization.

While the first publishing monopolies enjoyed this privilege, only granted by monarchs, there was no law to protect the interests of authors, who did not necessarily receive a gift or support from the clergy or political power. Perhaps they only received a few copies of the books they were trying to sell. The owners of the machines and the market thus exploited poets or draughtsmen.

It was not until April 10, 1710, that a new law came into force in the United Kingdom: the Queen Anne Statute. This law gave legal protection to books and other written works. It is considered the origin of copyright because it establishes that the owner of the rights of a work is its own author, that is, whoever creates the work is the only one authorized to commercialize it or assign that right temporarily to third parties.

Much later in time, a registry of trademarks and patents for technological inventions was established, which came to put an end to a series of misappropriations that inventors in the United States battled and that we all know well. In recent decades, intellectual property rights have been granted to people, without the need for prior registration in any state office.

If a publisher wants to publish a printed or digital version for physical circulation or via the Internet, it must have the written consent of its author to be the holder of the reproduction rights, circumscribed to a geographical or language area, during a determined period.

Copyright

Intellectual property or copyright laws were created for the protection of authors with respect to those who have technology capable of reproducing their works in any type of format, generating derivations and harmful uses of them or parasitic usufructs of the intellectual property of the people.

The authors of visual works paint by traditional or digital means. If the will of the author is to publicize the work, it requires its reproduction. Take a photo or scan that translates the original painting or drawing into a three-channel light color system (RGB) for broadcast on screens. In this translation from pigment to light color, there are changes and variations of how the original work looks compared to its digitized version.

If the author works with the image through digital media, because he is a photographer or digital artist, he already operates in the RGB system. But both the digital and the traditional author, when they decide to print their images, must make a transition to the four-color (CMYK) system. Then another change occurs in the file structure. The author must recalibrate the file to control the load of the four inks, or more, if there are special inks, or less, if the image is worked in two or three inks.

Commissioned by the same author or by a third party holder of the reproduction rights, a contemporary printer has this resulting file available for serial reproduction. From the original painting or drawing to the digitized image, there were variations, as we saw. And when this is multiplied in a whole series of printed replicas, materialized in the form of books, posters, postcards or stickers, in all of them, aberrations, minimum or maximum, can arise due to difference in ink load, color change, changes in pressure of the different rollers on the paper, registration shifts, moire, shine, machine scratches, etc. Those who have made prints of his works will know what I'm talking about.

Total aberration

This continuity that I point out between movable type and offset printing can also be extended to the generative autoencoders of the AIs, only that the accumulation of their aberrations leads to a tremendously monstrous result. Like a doctor Frankenstein who, instead of going to cemeteries, appropriated a living corpus of work against all the will and rights of his peers, for its scrapping and recomposition in an unnatural semantization, in the order of merchandise and not of art.

Autoencoders resample the original image encoded in their software, in a combination that perverts the original work, and subsuming its author to a mere semantic category of "style". An attempt at euphemism or metonymy that masks the appropriation of the entire creative process of others and the possibility of plagiarism, latent in each fragment, in each area of the image that virtually generate.

Autoencoders are machines for appropriating works and authors and their product is plagiarism or derivation from them. But without the value created by billions of preview and outside images, autoencoders couldn't pretend to be authors.

Retro futurism

The text box is the latent space where everything that was ever written can be composed, with the same letters located at different points.

Any typographer could manually compose each line of text in the matrix box with movable lead type, but only if he has the reference of the original writing: only those who have thought and developed the meaning of something valuable know the way. Needs to articulate the letter in a space that architecture its meaning. The latent space is the field of random points in which the pixels that generate the output could be fixed. But without original reference images as inputs, latency will persist as pure visual noise.

With the matrix not loaded, the page remains always blank.

No right

It will only be necessary to remember that copyright laws prohibit and condemn the technical reproduction and dissemination of works without the consent of their authors. The current printing presses as well as the old ones are also subject to copyright laws, from the 18th century to the present day. And even if autoencoders have in their encoded file the ability to regenerate billions of third-party images, they have no right to do so. That they have the means does not imply that they have the right. The perversion of the companies lies in freeing the use of their program to the low morale of the users.

Hey Mr DJ

Many *promptists* or users of this technology claim to have the right to express themselves through these softwares. They bellow violently in the face of the artists' demands, like a child whose parents threaten to take away the new toy with which it destroys the peace of the house. I wonder if the "parents" will end up ceding their authority to that type of children.

And the case of Mickey comes back to me as a wizard apprentice in Fantasia, trying to evade the task by magic. It goes without saying that he is remembering how he is doing hands.

In practice, a promptist is little less than a DJ who hit a few keys authorizing the console to choose, out of all the human discography, the fragments that he deems most appropriate.

However, what evidences the bad faith of Stability AI is that, to its generator model of music, Dance Diffusion, only dated it with works belonging to the public domain. Has he calculated that visual artists do not would we go to defend ourselves?

Miscalculation

The class action lawsuit against Stability AI, DeviantArt and Midjourney for their use of Stable Diffusion presented on the 13th of January 2023, is introduced like this: "Even assuming nominal damages of \$1 per image, the value of this misappropriation would be approximately USD 5 billion. (By way of comparison, the largest art theft in history was the theft in 1990 of 13 works of art from the Isabella Stewart Gardner Museum, with a current estimated value of \$500 million)."

Class Action Plaintiffs (stablediffusionlitigation.com) are the group of lawyers Joseph Saveri, on behalf of three plaintiffs, artists Sarah Andersen, Kelly McKernan and Karla Ortiz.

The text of the introduction continues: "we have heard from people all over the world, especially writers, artists, programmers and other creators, who are concerned about the artificial intelligence systems that are trained in large amounts of copyrighted work without consent, without credit, and without compensation." As can be seen, the irruption of AI in all areas of the qualified creative space is generating imposters, as they are described in the lawsuit.

Newcomers to the medium or old acquaintances, who present themselves as AI trainers to replace traditional or digital creatives, or the producers or publishers themselves, who incorporate previous works of the artists into the autoencoders and dispense with continuing to hire people, depending on replace them with these softwares.

Large design, animation, video game development, news media, and recording industry studios are already urging their current hires to train algorithms to perform parts of their work. The most striking case due to the haste and details of its actions is that of Codeword, who "hired" two artificial interns: "as the economy contracts, more industries begin to capitalize on tools such as ChatGPT and AI image generators such as Dall -E2 instead of live talent. "Interns" are technically digital software models that created their own images and named themselves Aiko and Aiden. The pair will work on graphic design, research, and generate editorial content.

If the creative community of Latin America and Spain fails to be represented judicially like the North American, the opportunity to establish a legal and ethical limit to corporate AI developers will be lost, as well as the defense of the rights of all people, over their image, their discursive production, the right to work and fair competition between peers.

Culture and, consequently, society, will operate in a total functionalism that accelerates the destruction of art and millions of jobs in all kinds of creative areas.

And then the A.I. authorship (*autor.I.A.) will overtake us.

^{*}word game of the author

I asked an AI to imagine for me:

/imagine that after a global pandemic it is implemented and generalizes the home office modality and that each link with others is technologically mediated

/imagine that states withdrew from their role of guarantee basic health benefits and that both the labor market and the world economy are in crisis

/imagine a succession of large-scale forest fires, contamination of useful soils and a scarcity of energy resources as a result of armed conflicts, which would cause the price of services and food to rise rapidly

/ imagine that democracy deteriorates, that the separation of state powers is not guaranteed and that each individual is on their own

/imagine that entrepreneurship is fostered that requires permanent online interaction through likes, follows, sharing, etc., that involuntarily dates AIs regarding personal interests and transfers valuable computing resources to the owners of the networks

/imagine that all the value created by hired or freelance workers is captured by software and synthesized by autoencoders to be reproduced, with or without variants, by an algorithm at superhuman speed and for a ridiculous cost

/Imagine now some kind of decent livelihood for the creative people

ERROR	-ERROR	-ERROR	-ERROR
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III

Adapt or die

It is the cruelest phrase and it is also the one that AI fans send me the most in various languages, through social networks. But the accelerated reproducibility that AI enables and encourages is impossible to match by human means, even using digital tools. Here is the fallacy of it.

This software can plagiarize any artist and generate derivations of the material it is dated to. In the hands of opportunists dressed as "entrepreneurs" or, in the best of cases, of producers who dispense with paying for a commission or dismiss those hired to be able to use their previous work and derive from it, it is the threat to our work. and to art in general, because instead of the motivation being to create value, the reason is to take economic advantage, by saving a process or a salary, resorting to software as a solution. Thus dissolving the critical capacity of people and the figure of the artist, as his images have been dissolved in noise.

Copy / Paste

For several decades, learning has gone degrading in the action of capturing, copying and pasting. Since the late 1990s, first with the Encarta to the current use of Wikipedia as a remanufactured source of results that Google samples, the common people who today are under 45 years old, contrast their question with the answer thrown into the second, on any screen. and this practice is normalized today in pseudo-journalists, TV panelists, influencers and creators of contents.

This information is assumed to be certain provisional, until the moment of typing the next word to search for. Copy, paste and a chew. This practice has been incorporated since early, nobody knows how to look for it in a book, or how to build a speech consistent from one reading.

It is not unusual to hear people who would be delighted to ask you all the time to someone or something, what is the correct answer and delegate the elaboration of an argument to the output of a machine to then act accordingly. But the massification of this attitude –or the lack of some- would lead us to choose to copy and paste the term voluntary withdrawal in the self-determination form, which would lead to being an absolute herd of the machines. The sheep mechanized with the What do robots dream of, according to Phillip K. Dick? Or in this case, that the fruit of our labor suffer the same fate as Dolly the sheep. or was it Doll-E? I don't remember, but I do remember that the cloning is regulated: do not do it in your houses.

Right of stealing

In this same sense of copy/paste, the latest upstarts to the creative world, the tech bros who designed this technology, they want to legitimize their tool as a author, "coining" a cliché supposedly used by Pablo Picasso and by everyone who believes that all are of his vile condition: "The good artists copy; the great artists steal".

Who wants to legitimize their copy machine, copying and pasting the words that Steve Jobs took and used on behalf of Picasso to "ennobling oneself" already indicates the moral evaluation of the subjects that promote it. Subjects that perhaps have never wielded a brush or a stylus to create something of their own. Subjects who have not written a single adolescent poem use a distortion of Alfred Tennyson's original phrase: "That great poets imitate and improve, whereas small ones steal and spoil."

But instead of pondering the effort that an imitation implies to improve the original work and from whose process one learns, and in turn, condemning the artist who steals, the phrase has derived in this use so convenient to the "copy/paste culture" for the benefit of saving work with the use of the efforts of others.

There is no record that Picasso ever endorsed or wrote the phrase distorted by Jobs.

It is tedious to open one more flap in this writing and talk about Picasso and his relationship with artistic mimesis. I will only say that Picasso was a territorial subject. He disputed in every space of power in which he wanted to move, with the relevant figure that occupied it. A permanent competition, which led him to add enemies, scandals and artistic capital, earned by hand, but not through "photocopies". In that sense, Warhol was worse than Lichtenstein. And it doesn't surprise me that tech bros cite these artist models. I myself do not support them nor do they seem relevant to art history, other than to open the door to this type of argument and to this technology of hostage capture and co-action with the merchandise reproduction machinery.

Photocopy

Now, I wonder what is the merit for a photocopier that replicates a given image? Because Goya, Picasso and others, even in the copy, updated and revalued the referent, because they were great artists and they exalted the well-known artists with whom established this aesthetic dialogue, which also, it was a person-to-person dialogue, if the other artist in question was alive. I think about Braque and Picasso, Van Gogh and Emile Bernard or Gauguin.

In these cases, we are not talking about an anonymous thief who copies any other artist, enjoys his symbolic capital and he never credits it. The impressionists were starving most part of their lives. They were a collaborative group of excluded, in collective experimentation, that fought savagely to occupy a place of recognition in the public. Of all, the one that is most traded today, was the least valued in life.

But you can't compare the generation of images by AI with painters of works material and unique. because what really is undermining the work of illustrators, designers, cartoonists, even writers and dubbing actors, is unfair competition from images derived from those artists, in their same means of distribution. I mean the image/text/voice application field, in their breeding medium, such as books, posters, t-shirts, digital media, audiovisual, etc. And therein lies the unfair use (unfair use), so talked about these days.

An oil painting, for example, in front of a printed image, can be distinguished very easily by the analysis of its materiality, as for its exchange and use value. The support, the material used, the time and the corroboration of the artist's signature, can be establish with some expertise.

But in the realm of its reproducibility, both the original digitized image and its artificial leads by AI, have a value similar: they are all coded models for your inclusion in any support, be it digital or printed. Therein lies unfair competition. that supposes the derivation or "transformation" of the images generated by autoencoders that take over in a very fast way all space as far as the eye can see, with similar images to the sources on which they are based. All the artists we have created so far, we see serious damage to our authorial work regarding its mechanical derivation, fast and chameleónica, published in the same field as ours.

And the question that arises is how to continue creating and receiving payment for that work, when everything done and to be done, can be replicated with impunity by autoencoders?

Serialized Van Goghs

The original creator, whose work was sequestered in a dataset and used in machine learning, now appears to be forced into a wicked competition with software, which is used by millions of users against itself.

It is exasperating to see how impossible it is to replace the speed of electronic damage by means of a human hand. But the climax of the horror is reached when the creator discovers that no image of an original work can be posted on the internet, without it being the object of a new illegal appropriation. And thus, creators are condemned to no longer have control over their own work, violating the basic rights of all people to their identity and the fruit of their labor.

Mental health is key to ensuring the continuity of members of the creative field. Chronic anxiety, anguish and frustration take a toll on the abilities of the artistic community, which sees itself expropriated from the value of its work, while countless sociopaths who glorify this software send hate messages and threats to them.

I write, my flesh bristling with electric flames. AI not only massively reproduces the digital synthesis of Van Gogh's work, it also systematically reproduces the pathology that ended up confining the artist definitively.

Terminal

If we do not act collectively against this illegal appropriation of data and the unpunished emulation of its authors, informing society and resorting to governments and the judiciary, we will face the total lack of protection of any human creative act, the systematized proliferation of the same and the degradation of art and its aesthetic limits, now regulated by censorship and programmed homogenization.

The autoencoders are reprogrammed with self-censorship filters, made by the same engineers who have done the indiscriminate dating that constitutes them. None of them considered it necessary to separate works in the public domain from those of people or artists subject to the law, and what is also serious, they never considered a priori the importance of eliminating the predominance of racist and sexist biases from the dataset, without forgetting the content that records murders and the most sordid pornography.

These are the consequences of a colossal and indiscriminate data-taking being done by a handful of unethical technocrats, which becomes very useful in exacerbating the prevalence of violence and segregation.

For example, ChatGPT, after launching the software on the market, with the same total lack of judgment, have wanted to leak the database, in a new act of exploiting the workforce: "the creator of ChatGPT, OpenAI, now is in talks with investors to raise funds valued at \$29 billion, including a potential investment of \$10 billion from Microsoft. The same company employed Kenyan content moderators "whose job was to view images and videos of executions, rape and child abuse for as little as \$1.50 an hour."

Just as they remove aberrational and criminal content by remotely exploiting racialized workers, they also censor the type of images or text that the AI generates, which allows them to produce a type of complacent "imaginary", which is never capable of producing criticism to the system that generates it.

No Future

Temporarily, this artificial intelligence requires a person to type a text input to guide it. Tomorrow, that task can be done by a company director with the help of another artificial intelligence that generates text.

This is how the obsolescence of people and culture is programmed. This is how any democratic order that watches over the work of its members breaks down. This is how the fascistization of human society is accelerated.

The one that glorifies the software, at the same time that bows its head and forces everyone to imitate it. The same (anti)social extract that tries to install the fallacy that AI learns just like a person, as if AI were a subject of law, whose education we wanted to prevent or if it had some limit to what it can actually apprehend. It does not have them, nor does it have needs or desires: it is just an autoencoder.

Analogies that try to humanize a software built for the plunder of the human are unacceptable. I don't know if People have an essence, that idea seems to me to continue that of the soul, which I said, I don't share either. But it is clear that there are many people who, like machines, do not have decency either: see the case of Unstable Diffusion, a group that began to financed from crowdfunding and produced an enormous amount of artificially generated content; gore, pornographic and pedophile cut deep fakes.

Only a useful idiot can be happy to have the possibility of interpreting his life torn from his body. Only the useless and the lazy give up building new possibilities for themselves and for everyone.

Faced with a machine that completely replaces the process with an immediate and controlled result, how will young people overcome the frustration of learning? How will they elaborate their doubts, when the answer is provided to their partner in three seconds? In what field of work will the great artists of tomorrow be trained, if the instances of simple commissions are resolved with AIs? How will we sustain attention, the infinite dedication required to build critical capacity to make our way of doing things and its discursive resources more complex, in the face of the expulsive immediacy of an artificial competitor?

The continuity of critical thinking is seriously threatened. Against the value of the living, the technocracy proposes to suppress all experience based on a simulated result, only useful to an unnatural logic.

The substitution of the figure of the author by his autoencoder taking all the creative areas, is the definitive attempt to eliminate all the obstacles that the bodies represent for the progress of the infinite concentration of merchandise.

The LAION data set is only the first spoils of war from a conflict on a global scale. If everything that can be recorded digitally, the voice, the speech, the image of a person and the product of the work of their own body, everything, can be used as input to be replicated, derived or transformed, we are witnessing the end of work authorial.

And, what is worse, the forced withdrawal of *truth* as a useful value while society is admitted to inhabiting a fake life, fed with the real experiences of people under virtual arrest: *everything* we say or do can be used against us.

When it's ripe

behind the glass.

they'll rip it off your chest
and, washed of all blood
they will roll the cuneiform seal of your life
unrolling the plot on the scanner
that captures your shape
and in thousands of repetitions
bit by bit, bit by bit, simulating your heartbeat
pic to pic, pic to pic, will print shrouds
to cover up the grimace made up
of mannequins overpopulating the void

IV.

Value

What value does a work have that does not result from the artistic experience of the body?

The artist has the ability to turn the obstacle into a medium. This is also useful for the experience of living bodies and their continuity in the world. Hence its value to the community.

Obstacles for bodies can be considered, among many others, such as:

the irreversibility of time,

the vulnerability of each body,

the need to rest

the need for nutrients,

the need to imagine another possible,

the need to act with available matter and energy,

The need to incorporate and adapt them so that they become a testimony of the experience of bodies (knowledge as a concept or metaphor),

The need to transmit that knowledge to other bodies,

The need to work so that the richness of this experience that tries to cover many of the needs is not lost.

To achieve the richness of the fruit, one works by transforming all the previous obstacles with the action of the body that is capable of rearticulating them in a way that transcends them.

Who truly creates, imagines and articulates the elements in a satisfactory way, still subject to the condition of vulnerability for being a body. He trains himself to endow the imagined corpus, in such a way that it metaphorically expresses a concept that covers the needs to resist time.

Make the bodywork with the body feeding it and letting it rest, exercising the creative muscle and relaxing it whenever necessary, so that the dream emerges as a rearrangement of the incorporated images.

No accelerations to put it out of focus.

Thus, a work is created that is a useful medium for the creator and those who know and interact with that work, as long as they are people who are part of the social corpus.

But what corporeality does it serve to remove every obstacle to replace it with an absolute means?

None alive. Just corporations.

What obstacle or vulnerability does this absolute means speak of?

Of none. It is the pure means and end of the human obstacle.

What society does it serve to replace millions of creators by an emulating algorithm of their capabilities?

To no human society.

Only to the corporation of artificialities that amplifies the scope of the reproducibility of the merchandise.

This is a pivotal moment in history.

Inertia will only lead us to be cloned and subsumed.

It is time to demonstrate our real value in the construction of useful means for bodies, not for machines.

Organize, fight and create another possible.

author's note

Here ends my contribution, analysis and conceptualization.
The appendix that follows has been developed from the debate on artist commission.

Appendix:

Possible repairs

The following list of actions to take to rectify the damage to the authors, is collected here class action lawsuit filed against Stable Diffusion and is based on conversations with colleagues from different countries and legal advisors.

- 1. Ensure that all models of AI/Machine Learning who specialize in generation of visuals, audio, cinematográficas, or similar, use content of public domain or image sets legally purchased. This could mean that current companies change, and even have to destroy their current models (there are precedents in this regard).
- 2. Urgently remove all protected works by copyright housed in the datasets and latent spaces, through disgorging algorithmic. Immediately change plans to models in the public domain, and that the rule standard for including a work in a data set is the exclusive option of its author.
- 3. Urge companies to offer payments to artists (initial sums) and royalties every time their work is used for a generation, including data training, deep learning, final image and final product, etc. Let AI companies make a real deletion of your data within the AI. /ML models in case of non-compliance license contracts.
- 4. AI companies will pay everyone affected artists a sum for each generation of output using the name and the work of the corresponding author. This is to compensate/remunerate artists for using their works and names without permission, provided that the company or the user have profited from its generation.
- 5. IP laws will be updated to reflect better the action of this new technology.
- 6. Labor laws will include use cases specific to AI/ML technology in the entertainment industries, guaranteeing that no more than a small percentage of the creative workforce are AI/ML models.

- 7. That AI companies adhere to a strict code of ethics, as defined by the major AI ethics organizations.
- 8. AI companies will need to work together with creative unions, industry coalitions and industry groups to ensure fair and ethical use of their tools.
- 9. Governments will hold Stability accountable AI for bringing its code software to market open, knowing that its model was irresponsibly built.
- 10. Promote international efforts organized to ensure that these new technologies are carried out fairly, while protecting arts industries (all the above recommendations also will apply internationally). The Potential actions could be called to action. action, letters to governments, campaigns, public relations, lobbying, advocacy groups for businesses and governments, calling for an industry code of conduct, etc.
- 11. Promote new government policies to guarantee protections and provide safety nets for affected artists in various industries.
- 12. Enact programs like the Income Universal Basic (UBI) for affected artists for the use of this technology.
- 13. Unionization and/or Artists Guilds.
- 14. Class Action Lawsuits.
- 15. Potential software/tools for counter unethical practices of data extraction and provide services protection for artists.

The outlook regarding this claim is uncertain and is yet to be developed, but as a creative community and from our respective positions we can think of some comprehensive alternatives and strategies so that the use of artificial intelligence is just right for artists. we have the right to demand that our property be respected intellectual and copyright in the context of machine learning models.

It is important that artists know how to defend your legal rights, should your work be plagiarized, by denouncing legal authorities and through organizations that defend the rights of Author. There are various legal frameworks that could be used

to demand action to protect intellectual property and rights copyright in the context of AI. Some examples include:

Copyright: Copyright law author of the United States and the like in other countries establish protection for original works.

Intellectual property: and patent law provide protection over creations, images of people with or without registration formal and also for inventions duly registered, including created by learning models automatically. These laws also establish responsibilities for owners, patents and infringers.

Identification and removal of content plagiarized using techniques so that a AI "unlearns".

Once an AI has been trained with certain information, it may be difficult or impossible "unlearn" that information and return to train it with other information. Nevertheless, There are some techniques and strategies that are can use to address this issue.

- Use selective forgetting techniques: The selective forgetting techniques allow neural networks forget certain parts of your prior knowledge while others retain: (https://openaccess.thecvf.com/content_CVPR_2020/papers/Golat kar_Eternal_Sunshine_of_the_Spotless_Net_Selective_Forgetting _in_Deep_CVPR_2020_paper.pdf),
- Constant data monitoring used to train the models to detect and remove content plagiarized.
- Restart training from scratch:

 One option is to retrain the AI from scratch, using a completely new training data set. This can be a costly solution in terms of time and resources, but may be necessary if the prior knowledge is very different from the new knowledge you want to add.
- Retrain only certain layers of the neural network: An alternative is to only retrain certain layers of the neural

network instead of the entire network, this allows more control over what knowledge is kept and what is changed.

- Use transfer learning techniques: transferable learning allows you to take advantage of the knowledge previously acquired by an AI and apply it to a new problem, reducing the amount of data and time needed to train a new task.
- Use plagiarism detection techniques: It is possible to use specific algorithms and techniques to detect plagiarized content and remove it from a neural network.
- Inclusion of digital marks in the original work: it is possible to use digital marks to automatically identify original content, allowing the removal of plagiarized content.
- Use monitoring and reporting techniques: It is possible to implement monitoring and reporting systems that allow detecting plagiarized content and sending notifications for its removal.

Regarding intellectual property.

What can we do as artists to uphold our intellectual property and copyright in the context of machine learning models?

- Collaboration with associations of artists and creators: Work with associations of artists and creators in our respective countries to ensure that copyrights and intellectual property are properly respected and protected in the digital world.
- Education and awareness: Educate users and the general public about copyright and intellectual property and promote a culture of respect for these rights in the use of technology.

Some specific class legal actions that could be taken include:

Hire a lawyer specialized in intellectual property law, who also has knowledge of art, creativity and programming. This is crucial so that she can argue the case from a comprehensive understanding of the issue and to review and ensure that all applicable laws and regulations are followed.

Obtain appropriate licenses and permissions for third party content to be used and ensure that license and payment obligations are met.

Analysis and creation of legal statements and notices about the content added and generated by machine learning models.

New legal and regulatory frameworks are developed that address the unique issues raised by machine learning models.