DEALBOOK NEWSLETTER

Who Owns a Song Created by A.I.?

Lawmakers are beginning to contemplate questions about authorship and ownership around creative machines. The stakes for creative businesses are high.

By Ephrat Livni, Lauren Hirsch and Sarah Kessler

Published April 15, 2023 Updated April 17, 2023 7 MIN READ

Artificial intelligence tools that generate text, images and music are moving art into new territory — and that's raising tricky questions for the business of creativity.

For early adopters like Insider, the publication that this week announced an experiment with A.I.-aided articles, the new tools promise more efficient content creation. But for many artists, and the businesses that own their work, generative A.I. is a double threat. These systems can produce copycats of human works that dilute the market, and they use artists' production, without their permission, as training data.

Some see that as stealing intellectual property: Universal Music Group recently told music streaming platforms, including Spotify and Apple, to block A.I. systems from scraping its music. (The company is in early discussions to license its songs to generative A.I. companies, DealBook hears.)

Lawmakers have begun to contemplate new rules around authorship and ownership in connection with creative machines, and the stakes are huge for both the businesses that depend on creative work and the investors who poured billions into new A.I. tools. So far, there are three major debates.

What is owed to the creators of the original material? In January, a group of artists sued London-based Stability AI, a maker of image-generating software, arguing that it infringed on their copyrights by using their work in training data and creating derivative works. The cartoonist Sarah Anderson, who is part of the lawsuit, told The New York Times that she believed artists should opt in to having their work included in such data, and should be compensated for it. Getty Images is also suing Stability AI in Britain and the United States for what it calls "brazen infringement" of millions of photos. Getty argued that the theft is particularly offensive because it has agreements to license data for machine learning. Stability AI has not yet responded to the complaints.

Does "fair use" apply? Copyrighted works can be used without permission for commentary, criticism or other "transformative" purposes, and robots have traditionally been exempt from liability. But "courts in the future won't be so sympathetic to machine copying," wrote Mark Lemley, the director of a Stanford Law School program that focuses on science and technology, in the Texas Law Review with a former colleague, Bryan Casey. Lemley is calling for a new "fair learning" standard for using copyrighted material in machine learning. It would include the question: What is the purpose of the copying? If it's to learn only, that may be permitted, but if the intent is to reproduce the work, it will not be. Not every machine learning data set would qualify for the protection. New tools also raise questions about who has liability for infringement — the user prompting the machine, the company that programmed the tool or both?

Who owns the output of generative A.I.? For now, only a human's work can be copyrighted, but what about work that partly relies on generative A.I.? Some tool developers have said they won't assert copyright over content generated by their machines. In February, the Copyright Office rejected a copyright for A.I.-generated images in a graphic novel, though the writer argued that she had made the images via "a creative, iterative process" that involved "composition, selection, arrangement, cropping and editing for each image." The government compared use of the A.I. tool to hiring an artist. But the lines may blur as the use of such tools becomes more common. Like the tools, the intellectual property issues are a work in progress that will only get more complex. — *Ephrat Livni*

IN CASE YOU MISSED IT

Griffin Giving. Ken Griffin, the founder of hedge fund Citadel, donated $300 million to Harvard. The gift is his biggest ever to his alma mater, which will rename its Graduate School of Arts and Sciences after him, and brings his total donations to the school to almost half a billion dollars. Not everyone was happy about it.

Abortion pill pullback. A Texas judge ruled that mifepristone, an abortion pill, should be pulled from shelves more than two decades after the Food and Drug Administration approved it. The Justice Department challenged the decision, and the pharmaceutical industry condemned it, saying it could upend the business of drug making by retroactively changing the rules and politicizing the approval process.

Banks boom. JPMorgan Chase, Wells Fargo and Citigroup opened the bank earnings season with a bang yesterday, beating expectations despite the turmoil that has ripped through small and midsize banks in recent weeks. Each raked in deposits as customers shifted money from regional lenders, such as the now collapsed Silicon Valley Bank. But they also warned that the economy was fragile, with JPMorgan's Jamie Dimon saying, "We are going to eventually have a recession, but that may be pushed off a bit."

R(EV)olution. The Biden administration unveiled the most far-reaching U.S. climate regulations ever in a bid to ensure that two-thirds of new cars and a quarter of new heavy trucks sold in the country are all-electric by 2032. The decision is the latest in a string of big industrial policy moves undertaken under President Biden, who has pledged billions of dollars to reshape the economy.

Europe's China schism. President Emmanuel Macron of France traveled to China with the aim of establishing more cordial relations with Beijing than the United States and some of its other allies have — and with a number of executives in tow, commercial links were a crucial part of the exercise. But Macron caused a bigger stir on his flight home, telling Politico and some French media outlets that Europe should become a "third superpower" and not merely "followers" of Washington.

How Twitter could be breaking even

Elon Musk this week gave one of his most extensive interviews since taking Twitter private, musing on everything from the pain of owning the company to sleeping at the office. But one claim in particular in his chat with the BBC caught DealBook's eye: that the company is breaking even, and on its way to being cash positive.

When Musk bought Twitter in October, it had lost money in eight of the previous 10 years — and that was before he loaded it with debt. In its last quarter as a public company, its net loss was $270 million, though that included some one-time payments as uncertainty over the deal effectively froze business. Is Musk's claim that it's on the brink of profitability feasible? Drew Pascarella, a senior lecturer of finance at Cornell University, told DealBook that it was. Here's why.

Musk has cut Twitter's expenses to $1.5 billion, he has said, down from roughly $4.5 billion a year before he took over (excluding noncash expenditures, like stock-based employee compensation). Much of the reduction comes from laying off about 6,300 employees, which Pascarella and a private equity investor, who asked not to be named because he did not want to publicly speculate, both said could save around $1.3 billion. Other sources of savings: renegotiated cloud and software spending, the closing of a data center and less traditional cost cuts, like janitorial services.

While ad revenue has dropped, cuts to spending may have compensated. Musk said in December that revenue, nearly all of which Twitter makes through advertising, had plummeted to $3 billion annually, down from roughly $5.2 billion before the acquisition. With $1.5 billion in expenses, and another $1.5 billion in interest payments on the debt that Musk took to buy Twitter, $3 billion in revenue would be about break-even, before capital expenditures.

Break-even may be possible, but it's not the end game. Analysts expect Twitter's shift to subscriptions to bring in minimal revenue. Musk has said he wants to push further into payments and other sectors as he turns Twitter into an "everything app." That's hard to do without investing heavily — and Twitter's business most likely generates little cash. As Pascarella put it: "Is $1.5 billion annual cash spend enough to run the business in the intermediate term, or have the cuts been so deep that there will be decay from here?"

$50 billion

— The banking crisis was no crisis at all for JPMorgan Chase, the nation's biggest bank. Jeremy Barnum, JPMorgan's C.F.O., told analysts yesterday that the bank recorded "significant new account-opening activity" last quarter, particularly after the fall of Silicon Valley Bank. "We estimate that we have retained approximately $50 billion of these deposit inflows at quarter end," he added.

Logan Roy or Rupert Murdoch?

In the same week that the HBO drama "Succession" took a pivotal plot twist (DealBook won't spoil it by revealing what happened here), Vanity Fair published a revealing article about Rupert Murdoch, the nonagenarian media mogul whose family drama inspired the show. The article highlights uncanny similarities between the fictional patriarch Logan Roy and Murdoch — and includes the detail that the real-life mogul's divorce settlement with his fourth wife, Jerry Hall, prohibited her from giving story ideas to the writers behind the program.

Can you tell which of these anecdotes is about Roy, played by Brian Cox, and which is about Murdoch, according to Vanity Fair?

1. After surviving a health scare, this man declared, “I’m now convinced of my own immortality.”

2. This man asked his wife to take online courses in winemaking as part of a scheme to write off $3 million of vineyard expenses.

3. This man threw away a specially prepared steak and lobster buffet because it had sat in a house that stank.

4. This man met with all of the top divorce lawyers in New York to create a conflict of interest for them to accept his wife as a client.

5. This man got word to his son that it would mean a lot if the son attended his birthday party. But his son still didn’t go.

6. This man ended one of his marriages with an email that read: “We have certainly had some good times, but I have much to do. … My New York lawyer will be contacting yours immediately.”

Find the answers at the bottom of this newsletter.

Quiz answers: 1, 2 and 6: Rupert Murdoch. 3 and 4: Logan Roy. 5: Both.

Thanks for reading! We’ll see you Monday.

We’d like your feedback. Please email thoughts and suggestions to dealbook@nytimes.com.