<div align="center">

Promoting Competition in AI
The Department of Justice and Stanford Graduate School of Business

Submission of David Lowery

May 30, 2024

</div>

I am David Lowery, a mathematician, writer, musician, producer and serial entrepreneur based in Richmond, VA and Athens, GA. I was a founding member of the critically acclaimed ensemble Camper Van Beethoven and then joined the ensemble Cracker. I am a full-time faculty member at the University of Georgia and a frequent commentor on music policy at TheTrichordist.com. My full bio/CV is attached as an appendix to this submission.

Thank you for inviting me to participate in this forum on Promoting Competition in AI.

Policymakers and enforcers are right to be taking a hard look at concentration and potential anticompetitive behaviors of AI companies, where one chip maker and a handful of the most dominant Big Tech companies are already lapping the field and establishing huge early market share, backed up but unimaginably vast cash hordes and years of experience expanding into new markets and using their resources to block remaining paths of entry and pull up the competitive ladder behind them. I strongly support a robust mix of *ex ante* regulations and *ex post* enforcement of antitrust laws to check any such behaviors for AI.

But one key part of the anti-monopoly mix that too often is overlooked is strong protection for copyright (and intellectual property rights more broadly). Copyright is a natural brake on monopoly that encourages innovation, risk taking, new approaches, and competition overall. Markets with weak copyright or extensive copyright exceptions, by contrast, typically end up with little competition and lowest common denominator undifferentiated products.

That idea might be counterintuitive to those audiences who have been bombarded with the red herring that the "exclusive" rights granted to copyright owners somehow limit competition and that granting exceptions to those rights gives smaller players the ability to compete with large, well-resourced interests. That's, to be polite, rich in irony.

Because that's certainly what the tech giants seeking to dominate AI want you to think. In a recent [submission] to the US Copyright Office's AI review, Microsoft argued:

> *Any requirement to obtain consent for accessible works to be used for training would chill AI innovation [and] impede innovation from start-ups and entrants who don't have the resources to obtain licenses, leaving AI development to a small set of companies with the resources to run large-scale licensing programs . . .*

The fact that Microsoft is making this argument should tell us all we need to know – obviously, the godfather of tech monopolists doesn't actually care about the "start-ups" and under-resourced "entrants" invoked here. The entire argument is a smokescreen for the fact that licensing requirements are actually the only way to rein in giants like Microsoft/OpenAI and Google and put all competitors on an even footing.

So how does that work?

As University of Southern California Torrey H. Webb Professor of Law Jonathan Barnett has observed, strong intellectual property protections check potential monopolists and drive new investment and innovation in several ways.

In a series of books and articles including *Copyright without Creators* (2014), *Why Big Tech Likes Weak IP* (2021), and *Innovators, Firms, and Markets: The Organizational Logic of Intellectual Property* (2021), Professor Barnett explains how strong IP laws create a framework in which individuals and firms with game-changing ideas and creations can put them to meaningful use without fear that Big Tech firms will just recreate or replicate or their breakthrough. In the patent context, the risk is that once an innovator reveals their idea, a bigger firm will steal and scale it up, swamping the original creator who has no way to protect their invention. In the copyright context, it means that once an artist releases their work into the world, the bigger firm again will scrape, copy, and distribute it, cutting out the artist (or filmmaker or photographer) and their chosen publisher/distributors altogether.[1]

Respecting intellectual property rights including copyright addresses these risks in several ways and ensure that creators get the benefit of their work, incentivizing more investment, innovation, and entry in a virtuous cycle.

First, if inclusion in AI data sets becomes a lucrative new use for copyrighted music, potentially displacing other existing income streams, requiring these training uses to be

---

[1] In legalese, Professor Barnett argues:

> "Even in digitized content markets, robust copyright enables intermediaries to select from the full range of transactional structures for most efficiently bearing the costs and risks of screening, packaging, distributing and marketing content. Weak or zero copyright skews the market's selection of organizational forms by compelling the use of intermediation structures that bundle unprotected content with excludable complementary goods." (Copyright Without Creators).

> "[R]obust IP protections enable innovation ecosystems that support a variety of more- and less-integrated structures for funding and extracting value from R&D investments. That, in turn, multiplies the viable points of entry and promotes the formation of licensing and other secondary markets in intangible assets." (Why Big Tech Likes Weak IP).

Submission of David Lowery

licensed is critical to keep in the place the same positive incentives that encourage creation and recording of new music today. If a major future use becomes un-protected and un-monetizable, music creation itself would become destabilized and decay.

Strong copyright on the data side will also set in motion real competition for access to valuable works for datasets – putting market forces to work to set prices and terms for licensing these works that reward creators and steer rights and access to the developers and innovators who value them the most. Essentially, it puts real innovators and risk taking start-ups on equal footing with tech giants for access to valuable materials to use in creating new AI products – and while Microsoft and its ilk may assume that means the biggest firm will always win, basic economics tells us rights should end up with the bidder who has the best idea and highest value use.

Barnett describes this diversity of data options and approaches as key to competition in AI product markets, with competition and variety on the front end leading to differentiation and efficiency on the back end. Today, he observes, "[d]evelopers can obtain data through open-access and closed-access sources (subject in the latter case to payment of a licensing fee), and entrants can choose to invest in constructing, purchasing, or licensing proprietary databases for particular applications." (*The Case Against Preemptive Antitrust in the Generative AI Ecosystem*, forthcoming.) For Barnett, this variety of options ranging from free access to public domain materials to paid access to protected (including) copyrighted works justifies his view that, so far, generative AI has not been monopolized by any one firm requiring immediate intervention. But replacing this diversity of options and licensing choices with a one-size-fits-all rule that all data is free would degrade and diminish product differentiation and variety over time.

Second, copyright further levels the playing field by requiring AI firms to pay the full value of inputs to their products, ensuring their growth is rational and tied to the market worth of the services and tools they offer and isn't artificially inflated by strip mining creative works in the way that piracy-powered tech giants have been able to accelerate their growth by failing to pay for music they used. Licensing adds depth and balance to the AI ecosystem by requiring other players beyond consumer facing developers be paid for their contributions so they can serve as checks on incumbents and potential future competitors as markets grow, evolve, and reshape.

The notion that free access to creative work is needed for competition in AI markets is utterly illogical and at odds with common sense. No one would ever argue Big Tech firms need free and unimpeded access to other proprietary or protected potential sources of information like consumer credit reports, health records, or commercial datasets like Dun & Bradstreet business records. An AI developer seeking access to such material would obviously need to pay for it. AI is just another potential use for information that must be subject to the same rules of the road and protections as every other potential technology, application, or activity.

Submission of David Lowery

These insights – and the falsity of the conventional wisdom idea that copyright exceptions are needed to support competition – are borne out by numerous markets and real-world examples.

In the creative industries, for example, it's well recognized that markets burdened by compulsory license exceptions to creators' exclusive rights are less competitive, less vibrant, and more likely to be dominated by a small number of dominant platforms, and consequently less lucrative for creators with fewer options for audiences, consumers, and fans.

US music streaming for example, where services benefit from a compulsory publishing mechanicals license, is dominated by a single firm (YouTube) with a market share of greater than 50% , Spotify at 30% and then a handful of competitors lagging far behind at about 13%. In music radio (or "non-interactive" services), also governed by a compulsory federal license, concentration is even worse with just one single satellite radio option available to consumers and digital options largely limited to iHeartMedia streams and Pandora.

Cable television which also benefits from a federal statutory licensing regime and other invasions of copyright giving them access to existing over the air broadcast programming on a privileged basis is of course one of the most non-competitive industries in the country, basically the poster child for high prices, slow or non-existent innovation, bad customer service, and lack of consumer options or choice.

And more broadly the weak-tea DMCA whack a mole regime that puts all the burden on artists and rightsholder to police online piracy has radically distorted markets, undermined competition, and allowed digital platforms to leverage copyright infringement on their networks to lowball payments and leave artists with a no-win choice – get paid pennies on the dollar or don't get paid at all.

It's an old school protection racket, where users flood the platform with unlicensed works while the weak DMCA law largely immunizes YouTube and creators get generally less than 1/10th per stream as they do from Spotify, itself a below market, walking violation of our competition laws. All putting independent artists and songwriters at a double disadvantage – on the one hand exploited by DMCA-protected platforms like YouTube and on the other unable to match the resources big labels and publishing houses invest to navigate the industrial scale notice-and-takedown system and protect their own (and only their own) rights.

Meanwhile, songwriters and publishing have for years struggled to escape decades old consent decrees weakening their exclusive rights as copyright owners and compelling them to license their work at court-set prices, which routinely lag far behind market rate prices set in other segments of the industry where stronger copyright protections empower rightsholders to negotiate themselves.

On the other side of the coin, while music competition and markets struggle under the weight of copyright exemptions and forced licensing, in peer video streaming markets unburdened by these limits on creators' rights to negotiate and set terms for the use and distribution of their work we see a totally different picture. Robust competition with routine entry, a huge menu of diverse options and choices, and incredibly widely-recognized consumer value and choice. Longstanding industry pioneer and presumed incumbent Netflix has already been caught by the competition and the market is highly differentiated, vital, and strong, with 7 out of 10 consumers valuing the service they receive.

No one doubts the long-term commercial and scientific value of AI. But AI systems built on shortcuts and exceptions won't serve anyone well or fulfill their promise and possibility. And indiscriminate ingestion of data without vetting, sourcing, and quality control – whether to prevent copyright infringement, identify bias or other flaws and limits, or to prevent manipulation or other frauds – is already doing great harm.

A wide range of AI tools are already failing – with the shortcomings usually tied back to training flaws. Air Canada recently had to pay a grieving passenger damages after a customer service chatbot gave him inaccurate information, with a small claims court ruling the airline failed to take "reasonable care to ensure its chatbot was accurate." Financial losses due to defects in Zillow's AI-powered "Zestimate" recently forced the company to take a $304 million write-down leading the company to cut 25% of its staff.

Health care algorithms and AI prediction tool have been revealed to suffer from massive blind spots and racial bias due to shortcomings in the underlying data. A review of AI's performance during the COVID pandemic found it "landed with a thud" largely due to "incomplete and poor-quality data" that made "the AI decision tools unreliable and untrustworthy."

And the risks get greater as the stakes rise, with even the most heavily vetted and rigorously created AI tools used for national security and cybersecurity at risk of front-end shortcomings and flaws. US cybersecurity teams routinely find that harmful interactions between AI and human user flow from problematic data fed into the machine during training. "[S]ome AI training data – such as websites with inaccurate information or undesirable interactions with the public – may not be trustworthy and could cause AI systems to perform in an unintended manner." Defense experts warn that biases in AI training data "can affect crucial functions, from command, control, communications, computers, intelligence, surveillance and reconnaissance activities to threat identification and mission planning."

The answer to virtually all of these risks is more rigor, more verification and testing, and above all more care and quality control with data copied into AI models. One engineering professor sees promise in the shift towards greater care in developing AI models for defense purposes: "So instead of grabbing everything you can on the internet and just

Submission of David Lowery

dropping every subreddit you can throw on there, they're being much more careful about it . . ."

And that's the right approach for copyright too – instead of arguing for vast exceptions and built in shortcuts to accelerate training, developers can and must build more robust, careful tools that vet data for authenticity, reliability, bias, as well as rights. Indeed, by ensuring developers apply basic "know your data" principles to the information they copy and use in these powerful machines, copyright will serve as a key plank in a more robust, healthy, effective, and competitive AI ecosystem.

These high-equity uses where data quality is paramount and up-front vetting is worthwhile and cost-effective stand in stark contrast to the low-value, corrosive applications that depend on mass infringement of IP and similar rights to be profitable.

Today, the internet is awash in a flood of AI-powered digital replicas, voice clones, and deepfakes, that are built on the unlicensed copying and use of copyrighted images and recordings. Many are simply poor quality knock offs and rip offs posing as "new recordings," others are "sound alike" tools that can be used to make recordings in the voice of professional performers. And others are even more corrosive such as the mass of unconsented pornography – of artists, politicians, students, and virtually anyone else (although almost always victimizing women and girls). But they all have one thing in common – they depend on copyright infringement for source material and could never be licensed. It's no wonder that nearly 300 artists actors and more recently banded together behind the Human Artistry Campaign's "Your Voice, Your Face" campaign opposing unlicensed deepfakes.[2]

The same is true of huge categories of online disinformation, which scrape copyrighted newscasts, videos, and written information from the internet and then alter and manipulate them to create AI powered propaganda. Much plagiarism and academic dishonesty too also starts with unauthorized misuse of copyrighted works as source material and to present the appearance of scholarship and credibility.

These are all market harms driven by failure to fully respect and enforce copyright and that make 100% clear that if we care about healthy, competitive, efficient markets for products and services generated by AI we need to build in strong copyright as a governing principle up front. The real risk to competition on the long-term development of AI is too little respect and protection for copyright, not too much.

---

[2] Many of these harms also implicate the victims' rights to their likeness and voice ("NIL" or "publicity" rights in different states), an area where state legislatures and the US Congress are working to expand protections in laws or proposals like Tennessee's ELVIS Act and the federal No AI FRAUD and NO FAKES proposals. But they separately implicate copyright during the front end copying of images and recordings into the models that are used to create these invasive digital replicas. Enforcing copyright against unlicensed training uses can be a powerful tool against deepfakes.

Submission of David Lowery

Yet instead of partnering to license and respect copyright, virtually all of the large AI platforms and developers instead have shoved all their chips to the center on the highly dubious proposition that their industrial scale copying of complete creative works in order to generate new products that compete with the original somehow qualify as fair use under US copyright law.

It's a terrible argument. The Supreme Court just last year rejected the idea that copying an entire work to make new versions that compete directly in the market with the original could be fair use, even in a case where the "new" work contained major new creative elements and messages. And the Copyright Act itself makes clear that fair use is unlikely to exist where the copying directly harms the market for the original creative work (17 USC §107(4)).

That is unambiguously the case with AI generated music and other works, which compete for "listens" in the exact same streaming and other markets as the original works that were copied to create them.

Empirically, the market is already flooded with examples. Graphic artists forced to compete against AI image generators trained on their own work to create art in their own style. Voice actors whose work is cloned and used to put them out of the job the next time around.

In a recent exposé on AI in Hollywood, one executive acknowledged the widespread loss of jobs to generative AI works that are competing directly against the original creations in violation of any notion of fair use: "Producers, writers, everyone is using AI, but they are scared to admit it publicly," he said. The piece continued:

> *"There are tons of people who are using AI, but they can't admit it publicly because you still need artists for a lot of work and they're going to turn against you. . . The displacement of labor by lower-level workers in Hollywood likely plays a part in which AI uses are seen as acceptable, and which are beyond the pale. . . . Some sectors of the industry are already threatened with extinction."*

For musicians and artists, the unfair infringement-fueled competition can be even more insidious, as digital services and platforms are flooded with AI recordings that can be streamed without paying royalties. Algorithms that steer users away from human artists and their work could send music creation into a death spiral, putting royalty payments on a race to the bottom and draining our culture of human freshness, innovation, and vitality. I was proud to join over 200 artists in an Artist Rights Alliance open letter opposing this kind of manipulation and demanding strong copyright and licensing for AI

Ultimately, if AI services are allowed to perform infringing unlicensed AI recordings, it will drive down the value of human-created music and eventually the same dynamic will infect markets all kinds of creative work. In the early days of filesharing and digital piracy, we

Submission of David Lowery

failed to effectively shut down only piracy and Napster and similar services cut the value of the recorded music economy in half. That's not a future we can – or need to – accept for AI.

* * *

America's global leadership including our military superiority, economic might, and cultural dominance is built on robust competition.

Our mostly competitive approach to defense and technology during the Cold War drove innovation and technological developments that delivered a qualitative edge the Soviet Union could never match, even as it fielded larger and larger armies and built more tanks and missiles than we ever could.

Our highly open and competitive film, book and music businesses, built atop the twin pillars of First Amendment expressive freedom and Copyright protected licensing and creator's rights, has allowed us to wield enormous soft power and cultural influence, while countries that rely on state monopolies or government dictated cultural sectors in the East or West have little.

And our pro-competition, light touch commercial approach in the early days of the internet allowed the US to generate enormous efficiencies and wealth other countries have struggled to duplicate. (Although it unleashed unnecessary harms we are just now catching up with and reining in – many of them rooted in the one copyright exception that was established in the early years of cyberspace, the Section 512 DMCA whack-a-mole regime.)

It would be a great shame and a strategic failure if the US in a rush to compete with global adversaries on generative AI ignored this history advocated a shortcuts-first copyright exception approach to AI. While that approach might yield a short term sugar high, the result would be a non-competitive low-innovation AI sector that burns pointless CPU cycles on fake Drake videos, numbs audiences with passable film cues and graphic concept design, offers up a steady stream of increasingly less funny cat videos and "this is fine" memes, and saves most of its sophisticated firepower for deepfake pornography, political propaganda attacks, and sophisticated voice clone phishing scams – all gatekept by two or three household name tech giants whose profits soar higher and higher while our national spirits and ambitions slink lower and lower. It would be an AI "dumb bomb" burying us all in digital friendly fire that offers little of lasting creative, cultural, or economic value.

If we want to build on our existing strategic advantages – military, technological, economic and cultural – this is not the way. Instead, we should double down on what we know works – smart guardrails, a quality-first, you-get-what-you-pay-for approach, and rules-powered-competition and innovation that rejects dubious parochial AI exceptions to copyright or any other laws.

Submission of David Lowery

Dr. David Lowery, EdD

David Lowery is Senior Lecturer, Music Business, at the University of Georgia's Terry College of Business, as well as a mathematician, writer, musician, producer and serial entrepreneur based in Richmond, VA and Athens, GA.

While studying mathematics and computers at the University of California Santa Cruz in the early 1980's, Lowery founded the critically acclaimed ensemble Camper Van Beethoven and associated record label Pitch-a-Tent Records. With these two entities, he helped jump start the Indie Rock movement.

In 1991, Lowery moved on to the ensemble Cracker, which produced three, top ten alternative/rock radio tracks and three platinum albums. During this time, he produced a variety of albums, including albums for critically acclaimed and commercially successful artists, such as The Counting Crows, LP and Sparklehorse. Lowery also founded Sound of Music Studios with John Morand. This long-running endeavor has recorded tracks for a wide range of artists from D'angelo to Lamb of God. The studio later spun off Shockoe Noise LLC, which specialized in custom music for commercials, film, and TV.

In 2007, Lowery was appointed as an advisor to the collective action website www.ThePoint.com. This later evolved into the social deals site www.Groupon.com. One of the earliest Groupon-like efforts involved selling tickets for the Cracker/Camper Van Beethoven Campout music festival in 2007. Groupon went public in 2011.Lowery is also a seed investor in the popular music gear marketplace Reverb.com (Alexa rank 287 US).

Lowery began teaching the economics and finance of the music business at the University of Georgia in 2011, and is now-full time faculty. In 2018, Lowery received his doctorate in Higher Education. His dissertation focused on the network protocols designed to stop copyright infringement on university campuses.

In 2012 Lowery started writing for www.thetrichordist.com. This blog examines Artists' Rights in the digital age. He has become an outspoken critic of Silicon Valley and its aggressive attacks on artists and other content creators. Three of Lowery's pieces have gone massively viral, Letter to Emily White Intern at NPR All Songs Considered And Meet the New Boss, Worse than the Old Boss? My Song Got Played On Pandora A Million Times And All I Got Was $16.89.

Lowery has testified to Congress twice on behalf of artists. Most recently he penned an op-ed for Politico concerning copyright reform that was entered into the congressional record by Mel Watt D-NC. In 2014 Lowery was named a "Global IP Champion" by the US Chamber of Commerce. In 2015 he launched a pair of class action lawsuits alleging major streaming services had failed to properly license and account to independent songwriters. In 2017 Spotify settled for $112 million.

In 2019 Lowery was named as a candidate for the Unclaimed Funds Committee of the US Music Licensing Collective, a federal agency tasked with the issuing of streaming licenses and collection of songwriter royalties.

Submission of David Lowery