**IP Laws and AI-Generated Content**

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**On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.**

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## Introduction

Artificial Intelligence has advanced rapidly in recent years, leading to unprecedented developments that blur the lines between reality and artificial creation. AI is an outstanding technology that can be utilized for numerous beneficial purposes, including criminal activities. An example of this is the use of deepfakes, which enabled fraudsters to steal € 220,000 from the CEO of a major company (Stupp, 2019). Following similar incidents, it's clear that AI has revolutionized audio and visual media, drastically reshaping how content is produced and consumed. Deepfake video generators and AI voice synthesizers enable users to create convincing, realistic audiovisual content without requiring significant technical or creative expertise. While these tools facilitate easy access to innovative capabilities, they also raise ethical concerns regarding authenticity, originality, and intellectual property rights, posing substantial risks to traditional content creators and the economic structure of the creative industry (Donelli, 2023).

While researching this topic, I became interested in the complex relationship between technological innovation and the existing legal frameworks. My goal is to gain a deep understanding of the laws surrounding intellectual property, ownership, and creative content creation, and assess their effectiveness in addressing this rapidly evolving technology. There are obvious ethical issues to using AI in these processes, taking the artstyle of creators and using that to create more work feels like it would breech IP guidelines but AI-generated content blurs the distinctions between artificial and human creations, reevaluating and refining existing legal

frameworks has become crucial to ensuring fairness and accountability in this rapidly evolving landscape.

This paper begins by examining AI audio and visual generation technologies in detail, outlining their capabilities and applications. It then analyzes existing legal frameworks in depth, highlighting gaps and ambiguities related to intellectual property rights and AI-generated content. The discussion also incorporates case studies of recent legal disputes involving AI-generated works, illustrating the practical conflicts and ethical dilemmas that arise. Ultimately, the paper presents actionable legal recommendations and regulatory frameworks that effectively address these emerging challenges.

## Background and Context

### *What is Gen AI?*

Generative artificial intelligence (GenAI) refers to a category of AI technologies specifically designed to produce new content, such as text, images, audio, or video, rather than simply analyzing or classifying existing data. These systems operate by learning complex patterns and structures within large datasets, allowing them to create outputs that can mimic human creativity. Unlike earlier AI models, which primarily recognized patterns or made predictions based on inputs, generative models actively synthesize new material, often resembling the original training data's style, tone, or structure (Goodfellow et al., 2014). The emergence of generative AI represents a fundamental shift in how machines interact with human culture, introducing both immense opportunities and significant challenges for intellectual property frameworks.

*How does Gen AI work?*

Generative AI systems operate through a training process that involves feeding massive datasets into machine learning algorithms to detect and internalize complex patterns. For instance, visual models like Stable Diffusion use diffusion processes to create detailed images from text prompts, while language models like GPT-4 use transformer-based architectures to predict and generate human-like text (Rombach et al., 2022; OpenAI, 2023). What we focus on in this process is the fact that many of these works are publicly available online content, but not necessarily from the public domain, meaning they can also be copyrighted works. The amount of data used in making these models is enormous, reaching up to 570 Gigabytes of data at times. Although these models don't produce one-to-one replicas of the sources, the generated works can mimic the style of the originals, creating pieces that can be seen as copies of the originals. This is the part that raises legal and ethical questions on the matter.

*Generative AI technologies today*

The rapid development of general AI has led to the creation of platforms that utilize the ability to write creatively, generate images, and even produce never-heard-before audio. In the visual arts section, models like Midjourney and Stable Diffusion enable users to create images based on their prompts, even replicating recognizable styles (Rombach et al., 2022). In the audio domain, companies like ElevenLabs and Respeecher offer cloning services that enable the mimicry of a person's cadence and vocal tone using minimal voice samples. (Harwell, 2023)

*Why Generative AI Challenged Current Intellectual Property Laws*

AI technologies' current capabilities challenge the foundation of traditional intellectual property laws. Intellectual property law assumes that creative works that originate from identifiable human authors are protected. The U.S. Copyright Office reemphasized in 2023 that works created without significant human involvement are ineligible for copyright protection, underscoring the necessity of human creativity for legal ownership (U.S. Copyright Office, 2023). GenAI also blurs the line between original creation and unauthorized derivative work. These models often feature thousands of artists, and it's impossible to pinpoint exactly which one these works typically come from. This legal gray area places artists, writers, and performers at a significant disadvantage, as machines can appropriate their styles, voices, and ideas without acknowledgement or compensation (Pasquale & Sun, 2024). This legal system that's meant to protect humans from each other now finds itself trying to manage an entity that is not human and therefore outside the jurisdiction of the law.

*Origins and Purpose of Copyright/IP Laws*

Current U.S. copyright law, particularly the Copyright Act of 1976 (17 U.S.C. §101), defines authorship in terms that assume human creators. This foundational requirement of human authorship has been reaffirmed in recent rulings from the U.S. Copyright Office, including a 2023 statement that works created entirely by artificial intelligence, without significant human input, cannot qualify for copyright protection (U.S. Copyright Office, 2023). Additionally, Section 107 of the Act—the fair use doctrine—has become a point of contention, especially as AI systems utilize large volumes of existing copyrighted works to train models without explicit permission. While fair use was initially intended to support commentary, education, and

transformative purposes, scholars argue that mass data scraping for commercial machine learning stretches the doctrine far beyond its intended boundaries (U.S. Copyright Office, 2023).

*Voice Actors and the Rise of AI Voice Cloning*

Voice actors have been among the first groups to experience the disruptive effects of generative AI technologies, particularly with the emergence of AI-driven voice cloning services. Companies like ElevenLabs have developed tools that can replicate a person's vocal tone, cadence, and style using just a few minutes of recorded speech (Harwell, 2023). While these technologies offer exciting new possibilities for media production, they have also raised serious ethical and legal concerns. In early 2023, reports surfaced of unauthorized voice clones used to create fraudulent and offensive content, often without the original speaker's knowledge or consent (Harwell, 2023). Voice actors, many of whom rely on their unique vocal identity for their livelihoods, now face the possibility of losing control over their professional reputations and economic opportunities. The difficulty of distinguishing between genuine and AI-generated voices threatens individual careers and destabilizes trust in industries such as entertainment, advertising, and even political communication. These early controversies highlight a critical gap in current legal protections, which were never designed to handle the replication of personal identity through machine learning.

Visual artists have also faced significant challenges as generative AI technologies like Stable Diffusion and Midjourney have gained popularity. These models are often trained on massive datasets that include copyrighted artworks scraped from the internet without the creators' consent, allowing users to generate images that mimic the distinctive styles of living artists

(Rombach et al., 2022). As a result, many artists have found themselves competing with AI-generated imitations of their work, created by individuals who may have no formal artistic training or connection to the original creator. Legal action has already begun: in Andersen v. Stability AI, artists filed a class-action lawsuit alleging that their copyrighted works were unlawfully used to train AI models without permission, resulting in derivative outputs that undercut their market value and violate their intellectual property rights (Andersen v. Stability AI, 2023). Beyond economic harm, artists argue that the unauthorized use of their styles dilutes their creative identities, blurring the line between authentic human artistry and machine-generated imitation. These conflicts underscore the pressing need to reassess how copyright law addresses full reproductions and the extraction and replication of artistic styles by AI systems.

*Public Backlash and Creator Activism Against AI Training*

In addition to the professional harm experienced by voice actors and visual artists, the rise of generative AI has triggered widespread public backlash from creative communities across digital platforms. Artists and creators have mobilized on social media sites like Twitter, Reddit, and DeviantArt forums to protest the unauthorized use of their work in AI training datasets. Movements such as the “Do Not Train” initiative and tools like Spawning’s Do Not Train Registry have emerged, offering artists a way to signal that they do not consent to having their creations used in AI development (Spawning, 2023). Despite these grassroots efforts, many creators have found it challenging to enforce their wishes, as most current AI developers operate under broad interpretations of "fair use" and indiscriminately scrape content. Ethical debates have flourished online, centering on consent, attribution, and the devaluation of human creativity. These public discussions highlight growing societal concern that generative AI is

eroding traditional creative labor markets and undermining long-standing norms of artistic ownership. The scale and intensity of the backlash suggest that creators are not merely facing isolated incidents of harm but are confronting a systemic failure of existing legal protections in the face of rapid technological change.

The tension between rapidly advancing generative AI technologies and outdated legal frameworks has led to a series of clashes, ranging from individual lawsuits to shifts in copyright policies. However, these responses remain fragmented and largely reactive, failing to provide a cohesive strategy for addressing AI's broader challenges to intellectual property law. As a result, creators continue to face economic, ethical, and professional risks without clear legal protection. To better understand the dynamics at play and explore pathways for reform, this paper now analyzes how generative AI is reshaping traditional notions of authorship and ownership, and how legal frameworks must evolve to meet this new reality.

**Methods and Analysis**

This research draws on primary, secondary, and discourse-based sources to examine the evolving relationship between generative AI technologies, creative professionals, and legal systems. Primary sources included official policy documents and rulings from the U.S. Copyright Office, which provided critical insights into regulatory interpretations surrounding AI-generated content. Communications from industry organizations such as SAG-AFTRA were also analyzed to understand collective advocacy efforts and proposed regulatory reforms from the perspective of creative workers. To capture broader stakeholder views, an online discourse analysis was conducted using public forums such as Twitter and Reddit, where artists, developers, and

platform users debated AI's ethical and legal implications. Secondary sources—including scholarly articles, industry reports, and significant news coverage—were thematically analyzed to identify key patterns in emerging academic and public debates regarding generative AI's economic, ethical, and legal impacts.

Actor-Network Theory (ANT) was specifically utilized as the guiding analytical framework. ANT facilitated structured identification and categorization of actors (artists, voice actors, customers, AI generators, U.S. government, and international governments), their relational dynamics, and significant points of contention or collaboration. By employing ANT, the research systematically examined how these diverse stakeholders influenced one another, creating a cohesive understanding of the intertwined social and technological processes shaping generative AI practices.

This analysis focuses on five interconnected groups of actors that shape and reshape the creative network under the pressure of generative AI. Traditional creators, including visual artists and voice actors, form the original creative economy's foundation but are increasingly destabilized by technological actors, such as AI models (Midjourney, ElevenLabs), that automate and replicate creative processes. Platforms like Etsy and Twitter serve as amplifiers within the network, rapidly distributing AI-generated content and further shifting public perceptions of creativity and market value. Regulatory actors, including the U.S. Copyright Office and federal courts, intervene as reactive forces, attempting to mediate emerging conflicts and maintain traditional frameworks of intellectual property protection. Meanwhile, resistance actors—such as

Spawning's Do Not Train registry and advocacy groups like the Authors Alliance—seek to stabilize the network from the grassroots level by restoring agency and protections to human creators. These actors illustrate the dynamic negotiation and contestation of creative power, economic opportunity, and cultural legitimacy that define the evolving sociotechnical landscape surrounding generative AI.

## Results and Discussion

The exploration of this topic reveals a wealth of information about the situation. A preliminary investigation into this topic shows that copyright laws alone cannot resolve this issue; a comprehensive set of restrictions from various angles would be necessary to balance AI models and creative industry workers. Key cases, such as Andersen v. Stability AI, and legislative developments, like Tennessee's ELVIS Act, indicate some improvements in this area. Still, they never reach the point of implementing comprehensive restrictions on the use and spread of AI-generated content.

### *Why Traditional Copyright and IP Laws Fail to Address AI*

Traditional IP frameworks falter against generative AI because they are built on assumptions that no longer hold: that authorship is human, originality is distinct, and copying is a discrete, traceable act. AI disrupts these foundations by producing works algorithmically, often mimicking style without copying any original (Crawford & Schultz, 2024). Current copyright law fails to protect AI-only outputs and struggles to define infringement when AI recombines billions of micro-examples from training data (U.S. Copyright Office, 2023). Fair use defenses, initially intended for transformative human uses such as commentary, are being stretched by tech

companies to cover the mass ingestion of copyrighted works (Pasquale & Sun, 2024). Meanwhile, the opacity of AI models prevents attribution or consent, leaving human creators uncompensated and unrecognized.

*International Approaches to AI and Copyright*

International responses vary dramatically. The European Union's 2019 Copyright Directive permits text and data mining unless rightsholders opt out, striking a balance between innovation and rights, but risks fragmented datasets if creators widely object (European Parliament, 2019). Japan, by contrast, permits nearly unrestricted data mining for AI development, prioritizing technological progress over copyright enforcement (Warren & Grasser, 2024). China adopts a heavy regulatory model, mandating lawful data sourcing for AI training and compulsory labeling of AI outputs (MMLC Group, 2023). These international differences underscore the absence of global standards and the risks of regulatory arbitrage, where AI companies may exploit less stringent jurisdictions to train models that violate copyright norms elsewhere.

*Challenges Governments Face Regulating AI Creativity*

Regulating AI presents unique challenges: technological development far outpaces traditional legislative processes, leaving new laws obsolete almost as soon as they're passed (Brookings Institution, 2023). Defining the scope of regulation is challenging because AI encompasses multiple content types and applications. Jurisdictional issues arise as AI operates globally while legal authority remains national. Enforcement itself is complex, given the opacity of AI and difficulty tracing training data or output lineage. Regulators must also balance the protection of

human creators with fostering AI innovation, navigating intense political and industry pressures without precise empirical data on the long-term consequences of their decisions.

*Possible Areas to Target for Reform*

Scholars and policymakers propose several reforms to bridge the gaps. Consent mechanisms, such as opt-out registries or flags, could empower creators to prevent unauthorized AI training on their works (Pasquale & Sun, 2024). Collective licensing or blanket levies on AI developers could redistribute economic benefits without paralyzing AI innovation (U.S. Copyright Office, 2023). Transparency requirements—mandating disclosure of training datasets and labeling AI outputs—would improve accountability and empower creators to seek remedies (European Parliament, 2024). Some suggest redefining or extending authorship rules to account for human-AI collaboration, while others propose creating sui generis rights for AI-generated content (Ginsburg, 2024).

## Conclusion

Moving forward, it is clear that piecemeal adaptation of existing laws will be insufficient. Sustainable solutions will require a hybrid approach that combines new licensing structures, transparency mandates, clarified human authorship standards, and consent mechanisms to restore agency to creators while preserving AI's potential for innovation. Without comprehensive reform, the legal system will continue to lag behind technological development, leaving human creators vulnerable in an era increasingly shaped by machine-generated culture. Addressing these

gaps is not merely a legal necessity but a cultural imperative, ensuring that human and artificial creativity can flourish under a fair and balanced framework.

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