AI-GENERATED CONTENT AND COPYRIGHT LAW: A COMPARATIVE ANALYSIS OF THE U.S.A. AND UZBEKISTAN

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Abstract. This article examines the evolving challenges that artificial intelligence (AI) poses to traditional copyright frameworks, focusing specifically on AI-generated content. It begins by defining AI-generated works and exploring why these outputs disrupt long-standing legal principles, such as human authorship, originality, and creative expression. The article then conducts a comparative legal analysis between the United States and Uzbekistan—two jurisdictions with markedly different levels of technological development and legal infrastructure.

In the U.S., copyright protection is explicitly reserved for human creators, as reinforced by recent case law and the U.S. Copyright Office's guidance. Conversely, Uzbekistan's legal framework does not yet address AI-generated content, offering both challenges due to legal uncertainty and opportunities for progressive reform. The article highlights the lack of legal precedent in Uzbekistan and underscores the importance of establishing a coherent IP policy that balances innovation and legal protection.

Through this comparative approach, the article aims to inform policymakers, scholars, and practitioners on how different jurisdictions can adapt or reform copyright law in response to AI advancements. It concludes by advocating for flexible, forward-looking legal strategies that accommodate technological change while upholding the fundamental principles of intellectual property.

Keywords: Artificial Intelligence (AI), AI-generated content, copyright law, intellectual property, authorship, originality, United States law, Uzbekistan law, comparative legal analysis, machine-generated works, legal reform, copyright protection, U.S. Copyright Office, Thaler v. Perlmutter, fair use, digital creativity, AI and law, copyright challenges, emerging technologies, legal frameworks.

Introduction: Defining AI-Generated Content and Its Challenge to Traditional Copyright Frameworks

The advent of artificial intelligence (AI) has transformed numerous industries, from healthcare and finance to transportation and education. Among the most intriguing—and legally complex—applications of AI is its capacity to generate creative content. Text, music, images, and even software code can now be autonomously produced by sophisticated AI systems such as ChatGPT, DALL·E, Midjourney, and MusicLM. These works often resemble human-created content in quality and creativity, raising urgent questions within the realm of intellectual property (IP) law—particularly copyright.

AI-generated content refers to works created, in whole or in part, by artificial intelligence without direct human authorship. This may include an AI writing a poem, generating a digital artwork, composing music, or producing computer code.

The degree of human involvement may vary: some outputs are guided by human prompts and edited afterward, while others are autonomously created by machines trained on massive datasets.¹

Traditionally, copyright law has operated on a foundational assumption: **authorship is a human endeavor.** It is a legal doctrine based on the idea that creative works are the result of human intellect and personal expression. This assumption is enshrined in most international treaties and national laws governing copyright, including the Berne Convention, which defines an "author" implicitly as a natural person. AI-generated works fundamentally challenge this principle by introducing content created by machines that lack consciousness, creativity in the human sense, or legal personhood.

Why AI-Generated Content Challenges Traditional Copyright1.Absence of Human Authorship

The primary challenge posed by AI-generated works is the **lack of a human author**—a core requirement for copyright protection in most jurisdictions. For example, in the United States, the Copyright Act does not define "author," but case law and regulatory guidance have consistently interpreted it to mean a human being. The U.S. Copyright Office has explicitly rejected registrations for works created solely by AI, stating that copyright only protects "the fruits of intellectual labor that are founded in the creative powers of the [human] mind." This principle was reaffirmed in *Thaler v. Perlmutter*, where the federal court upheld the U.S. Copyright Office's denial of copyright to a piece of art generated entirely by an AI system without human input.²

AI challenges this requirement by creating works that are often indistinguishable from human-made creations, yet lack a definable human author. If no human can be identified as the creator, then the work may fall outside the scope of copyright protection, leaving it in the public domain or legally unprotected.

2. Questions of Ownership and Liability

In situations where AI is used collaboratively or as a tool—such as a designer using Midjourney to create illustrations or an author using ChatGPT to co-write a story—the question becomes: **who owns the output?** Is it the programmer of the AI? The user who gave the prompt? The company that developed the model?

Traditional copyright law is ill-equipped to resolve these questions. Unlike works for hire, AI lacks intent or legal standing, so assigning ownership becomes legally uncertain. This opens the door to disputes over rights, revenue, licensing, and infringement liability, especially when AI-generated content is commercialized.

3. Lack of Originality and Human Expression

Another foundational requirement for copyright is **originality**, which implies some minimal degree of creativity. In most jurisdictions, originality must stem from a human author's independent expression. Courts have historically rejected copyright protection for works created

¹ U.S. Copyright Office, *Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence* (Mar. 2023), available at <u>https://www.copyright.gov/ai</u>.

² Thaler v. Perlmutter, No. 1:22-cv-01564 (D.D.C. Aug. 18, 2023).

without sufficient human creative input, such as the infamous *monkey selfie* case (*Naruto v. Slater*), where the court ruled that animals cannot hold copyrights.³

AI-generated content may produce impressive results, but those results are ultimately the product of algorithms and training data—not human expression. Even when a user inputs a prompt into an AI model, the argument remains whether that input constitutes sufficient creative control to warrant authorship. If originality and authorship must stem from a human source, then works created autonomously by AI may not qualify for protection under traditional copyright systems.

4. Training Data and Fair Use Concerns

Beyond the authorship of outputs, there are also significant **copyright issues with AI's inputs**. AI models like ChatGPT and Stable Diffusion are trained on enormous datasets, many of which contain copyrighted materials such as books, images, or music scraped from the internet. Content creators have raised concerns that their copyrighted works were used without consent or compensation, potentially violating copyright law.

The key legal question here is whether using such works in training datasets constitutes **fair use** or infringement. In the U.S., courts have not yet issued definitive rulings, but multiple lawsuits are pending. In other jurisdictions, including Uzbekistan, the legal framework to address this issue is still underdeveloped or silent.

Moral Rights and AI

A more philosophical, yet still legally relevant, challenge concerns **moral rights** particularly the right of attribution and integrity, which are recognized in many legal systems. If an AI generates a work, can anyone be attributed as its author? Should the person who trained or prompted the AI receive recognition, or is that fundamentally misaligned with the idea of personal expression?

Moreover, when a user modifies AI-generated content, does it constitute a violation of any moral rights? These are new legal questions that traditional frameworks struggle to address, especially as AI content is widely shared, remixed, and repurposed across the internet.⁴

Why Comparative Analysis is Essential

As AI becomes more pervasive globally, it is crucial to understand how different jurisdictions are responding to these challenges. The United States, with its advanced tech sector and robust legal precedents, offers an active but cautious approach—rejecting copyright for AI works, yet dealing with emerging cases in real time. On the other hand, Uzbekistan is at an earlier stage in both AI development and IP law reform, creating a unique opportunity to craft forward-looking legal frameworks that address AI authorship from the outset.

By comparing these two legal systems, this article seeks to explore both the gaps and potential paths forward in adapting copyright law to the realities of AI-generated content.

As artificial intelligence (AI) becomes increasingly capable of generating creative outputs, copyright law is being tested in unprecedented ways. While the challenges AI poses to traditional copyright frameworks are global, national legal systems vary significantly in how

³ Naruto v. Slater, 888 F.3d 418 (9th Cir. 2018).

⁴ U.S. Copyright Office, *Zarya of the Dawn Registration Decision Letter* (Feb. 21, 2023), denying copyright to images generated by Midjourney due to lack of human authorship.

they respond to these challenges. This article seeks to conduct a comparative legal analysis of two distinct jurisdictions: the **United States**, a highly developed and precedent-driven legal system with a proactive intellectual property (IP) framework, and **Uzbekistan**, an emerging legal jurisdiction undergoing digital and legal transformation.

The purpose of this comparative study is to examine how each country is currently addressing—or failing to address—the issue of **AI-generated works and their copyright status**. By comparing the legislative language, case law, regulatory guidance, and legal interpretations in the U.S. and Uzbekistan, the study aims to:

• Identify key similarities and differences in legal treatment of AI-generated content,

• Evaluate how each system defines authorship and originality in the context of AI,

• Assess the degree of preparedness and adaptability in each jurisdiction's copyright law, and

• Propose recommendations for policymakers, especially in developing countries like Uzbekistan, on how to create more AI-inclusive IP frameworks.

The U.S. Copyright Act does not explicitly mention AI, but the term "author" has been consistently interpreted to refer to **natural persons**. The U.S. Copyright Office reaffirmed this interpretation in its 2023 guidance, stating that "only works created by human beings are eligible for copyright." It further clarified that content generated by AI without substantial human creative input does not qualify for protection.

The landmark case of *Thaler v. Perlmutter* (2023) reinforced the human authorship requirement. Stephen Thaler, an AI researcher, attempted to register a piece of visual art created by his AI system "Creativity Machine." The court upheld the Copyright Office's denial, ruling that authorship must originate from a human mind.

Additionally, *Naruto v. Slater*, though not directly involving AI, is often cited as precedent.

The case concluded that animals cannot own copyrights, reinforcing the principle that non-human entities (whether a monkey or an AI) cannot be authors.

Beyond outputs, there is also growing legal debate in the U.S. over how copyrighted materials are used to **train AI models**. Companies like OpenAI, Stability AI, and GitHub have been sued for allegedly using copyrighted texts, code, and images in their training data without permission. Whether this constitutes "fair use" remains an open question in U.S. courts, and the outcome will significantly shape the future of AI training practices.⁵

The U.S. approach reflects a conservative interpretation of copyright law, grounded in long-standing principles. While it may limit the ability of AI creators to claim copyright over machine-generated content, it also avoids the legal and ethical complexity of granting legal rights to non-human entities. However, this also risks stifling innovation, as creators and developers may hesitate to invest in AI content if it cannot be legally protected.

Uzbekistan: A Legal System in Transition

⁵ World Intellectual Property Organization (WIPO), *Revised Issues Paper on Intellectual Property Policy and Artificial Intelligence* (May 2020), available at <u>https://www.wipo.int/edocs/pubdocs/en/wipo_pub_450_2020.pdf</u>.

Unlike the U.S., **Uzbekistan does not yet have a clear or explicit position** on AIgenerated content within its copyright law. However, it presents a unique case study of a legal system that is still evolving—offering both opportunities and challenges.

Current Legal Framework Uzbekistan's copyright regime is primarily governed by the **Law on Copyright and Related Rights**, adopted in 1996 and amended in subsequent years. Like many post-Soviet systems, the law emphasizes authorship, originality, and moral rights, but it does not contain language that anticipates the complexities introduced by AI.

The law defines an "author" as a **natural person** who created a work of science, literature, or art, similar to the U.S. framework. However, the absence of case law or regulatory guidance on AI-generated content leaves the issue open to interpretation.

Institutional Capacity and Modernization Efforts

The government of Uzbekistan has recognized the importance of digital innovation and intellectual property. Initiatives such as **"Digital Uzbekistan 2030"** aim to modernize the legal and technological landscape.

Moreover, the **Intellectual Property Agency under the Ministry of Justice** has begun updating IP procedures and raising awareness about the impact of AI on creative sectors.⁶

However, these efforts remain at an early stage. There are no known court cases or official legal opinions in Uzbekistan specifically addressing the copyright status of AI-generated works or the legality of using copyrighted content in training datasets.

Potential Risks and Opportunities The lack of explicit regulation creates legal uncertainty, which can discourage investment and innovation in AI development. At the same time, this legal vacuum offers **a valuable opportunity** for Uzbek lawmakers to proactively shape future legislation by studying global trends and avoiding the pitfalls seen in other jurisdictions.

For instance, Uzbekistan could adopt a flexible model where copyright protection is granted to the **human user who meaningfully contributes** to the creation of AI-generated content, thereby incentivizing creativity without compromising core legal principles.

Issue	United States	Uzbekistan
Definition of Author	Human only	Human only (statutory)
Copyright for AI-Generated	Not eligible without human	No explicit guidance yet
Works	input	
Legal Precedents	Extensive (e.g., Thaler,	None currently
	Naruto)	
AI Training & Fair Use	Active litigation	No cases or official stance
Readiness for AI & IP Law	High (but conservative)	Low to moderate (but open to
Reform		change)

Comparative Observations

⁶ Law of the Republic of Uzbekistan "On Copyright and Related Rights," No. 257-I of July 20, 1996 (as amended), available (in Uzbek) at <u>https://lex.uz/docs/10857</u>.

Conclusion The comparison between the United States and Uzbekistan reveals both divergence and opportunity in how legal systems are responding to the rise of AI-generated content. The U.S. has taken a firm stance that excludes non-human authors from copyright protection, relying on historical doctrine and evolving case law to address emerging disputes. While this approach offers legal clarity, it may also hinder future innovation, especially as AI becomes more integrated into creative industries.

Uzbekistan, by contrast, is in a formative stage. Its copyright laws do not yet address AI, but the nation's commitment to digital transformation and legal modernization positions it to adopt more adaptive and forward-thinking policies. This legal flexibility could allow Uzbekistan to become a model for AI-inclusive copyright regulation in developing countries, particularly by striking a balance between protecting human creativity and encouraging technological progress.

As AI continues to blur the lines between human and machine creativity, it is imperative for countries to revisit traditional legal frameworks and consider whether, how, and to what extent AI-generated works should be protected under copyright law. Through comparative legal analysis, policymakers and scholars can better understand the global landscape and develop coherent strategies that align legal protection with technological realities.

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