

Streamlining Copyright Protection: Leveraging Algorithmic Justice in Administrative and Civil Systems

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Abstract. As social media platforms generate unprecedented volumes of user content, accelerated by the rise of generative artificial intelligence (AI), ensuring efficient and fair copyright enforcement has become a pressing global challenge. This paper explores how algorithmic justice can be leveraged to streamline both administrative and civil systems for copyright protection. In Europe and the US, enforcement follows a tiered approach, ranging from notice and takedown legal procedures to litigation, while China complements civil remedies with a more rapid administrative enforcement process led by the National Copyright Administration. Though faster and less burdensome in evidentiary terms, China's approach raises questions of consistency and fairness. With AI increasingly deployed in content moderation and dispute resolution, this paper argues that robust data governance is essential to ensure that algorithmic enforcement mechanisms remain transparent, accountable, and interoperable across jurisdictions. Key requirements include model transparency, explainability of decisions, and detailed audit trails to enable oversight and contestation. Through comparative analysis of copyright enforcement regimes in China, Europe, and the US, this paper identifies best practices for integrating algorithmic tools into administrative and civil frameworks, with the goal of streamlining enforcement while safeguarding user rights and legal integrity in the age of AI.

1 Introduction

Social media platforms have become central hubs for user-generated content and video monetisation. Increasingly, artificial intelligence (AI) technologies are being employed to support various aspects of dispute resolution, including internal content claim systems, notice and takedown procedures, and online dispute resolution (ODR) services. AI is also being integrated into both civil and criminal enforcement mechanisms to implement blocking injunctions and support alternative administrative enforcement processes. Despite these advancements, significant concerns remain regarding the reliability, transparency, and legal certainty of AI-powered content moderation tools within these procedures.

In Europe and the United States (US), content owners addressing copyright infringement typically begin by utilising social media platforms' internal content claim mechanisms. If the issue remains unresolved, they may proceed to initiate a formal notice-and-takedown procedure, engage in alternative or online dispute resolution (ADR/ODR), or, as a final measure, pursue civil litigation, criminal prosecution, or both. In most jurisdictions, service providers bear the responsibility for administering notice and takedown processes, acting as intermediaries between rights holders and alleged infringers.

In China, rights holders also have access to an additional enforcement pathway through administrative mechanisms overseen by the National Copyright

Administration of China (NCAC) and its regional branches.² This administrative system is often more assessable and time efficient than civil litigation, as it typically involves lower evidentiary thresholds and fewer documentation requirements for complainants.³ A key limitation of China's administrative enforcement system lies in its procedural inconsistencies across provinces, which can result in varying outcomes.⁴ For highly complex cases or when complainants are seeking damages, court litigation remains the only route, as administrative enforcement can only provide infringement findings, cease-and-desist orders, or fines.⁵

In contrast to China, the UK, EU and US don't have an administrative enforcement system within their respective copyright offices. In the United Kingdom (UK), there is general academic interest in establishing an 'administrative justice' framework for disputes between individuals and the state⁶ within the context of the modern administrative system.⁷ Similar debates occur in the US over granting administrative adjudicative authority to copyright offices for resolving online video-sharing disputes,⁸ as administrative agencies' expertise could enhance copyright enforcement. In the EU, while the Copyright Directive 2019 in its Recital (66) acknowledges the role of administrative authorities in issuing injunctions under national law, it primarily focuses on liability mechanisms for content-sharing service providers rather than users uploading content.⁹

This paper explores how algorithmic justice can be leveraged to streamline both administrative and civil

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systems for copyright protection. In Europe and the US, enforcement follows a tiered approach, ranging from notice and takedown legal procedures to litigation, while China complements civil remedies with a more rapid administrative enforcement process led by the National Copyright Administration. Though faster and less burdensome in evidentiary terms, China's approach raises questions of consistency and fairness. With AI increasingly deployed in content moderation and dispute resolution, this paper argues that robust data governance is essential to ensure that algorithmic enforcement mechanisms remain transparent, accountable, and interoperable across jurisdictions. Key requirements include model transparency, explainability of decisions, and detailed audit trails to enable oversight and contestation. Through comparative analysis of copyright enforcement regimes in China, Europe, and the US, this paper identifies best practices for integrating algorithmic tools into administrative and civil frameworks, with the goal of streamlining enforcement while safeguarding user rights and legal integrity in the age of AI.

2 Leveraging Algorithmic Justice for Copyright Protection

2.1 Distinct Dispute Resolution Pathways

Unlike the EU, UK and US, China supplements its civil litigation system with a formal administrative enforcement mechanism for copyright protection. This administrative pathway offers more accessible and less procedurally burdensome options for rights holders, particularly in cases involving low-value or high-frequency infringements. The Chinese administrative enforcement system may facilitate more efficient oversight, enhancing public accountability and institutional responsiveness, while offering accessible and pragmatic alternatives to court-based dispute resolution.

For example, in China, the National Copyright Administration (NCAC) provides administrative regulations and dispute resolution services for copyright infringement. When rights holders submit complaints to the National Copyright Administration of China (NCAC) by post or through its online platform, they are encouraged to include samples of the allegedly infringed material and its sources. Once a complaint is accepted, the NCAC investigates the alleged infringement and may either dismiss the case, impose administrative penalties if the infringement is not minor, or refer the matter to judicial authorities if criminal activity is suspected. Administrative penalties may include orders to cease the infringing activity, confiscation of illegal profits or infringing copies, fines, and, in serious cases, seizure of materials, tools, or equipment used in the production of infringing content, as well as other sanctions permitted by law.¹⁰

This offers a pragmatic alternative to judicial proceedings for rights holders seeking redress. By allowing users to initiate complaints through accessible

online or postal channels, and requiring only basic evidentiary materials, the system significantly lowers the barriers to access to justice. This approach reduces the need for costly legal representation and avoids the procedural complexities and emotional burden associated with litigation. In many cases, it also facilitates swifter resolution, enhancing users' ability to defend their rights effectively and economically.

Introducing an administrative enforcement mechanism for copyright protection in the UK, EU, and US, drawing on the Chinese model, could complement existing judicial processes by enhancing access to justice and improving procedural efficiency. Such a system would offer rights holders, particularly individuals and small entities, a more accessible and cost-effective means of addressing low-value or high-frequency infringements, which are often impractical to pursue through litigation due to resource constraints on both courts and weaker parties. By diverting routine cases from the judiciary, administrative enforcement could reduce the burden on courts while delivering authoritative and timely resolutions. This, in turn, may strengthen public accountability and provide a more responsive framework for copyright protection in the digital environment.

2.2 Structural Challenges in Implementation

While China's administrative enforcement model provides notable efficiencies, it is not without limitations. The system's effectiveness is tempered by structural inconsistencies in implementation across jurisdictions, which risk undermining its reliability and user confidence. Variability in interpretation and application across national, regional and local enforcement bodies may lead to inconsistent outcomes. These disparities underscore the need for greater standardisation and oversight to ensure fairness and predictability in administrative copyright adjudication.

To fully realise the potential of administrative enforcement in enhancing access to justice, it is essential to address existing regional disparities through the establishment of clearer standards and improved institutional coherence. One proposed solution is to adopt transparent regulatory frameworks and promote a shift toward a platform-oriented, co-regulatory model for administrative copyright enforcement.¹¹ However, this approach may introduce new challenges, particularly in contexts where platforms and government agencies are vulnerable to corruption. For administrative justice to be effective, administrative bodies must not only offer dispute resolution services to users but also play a supervisory role in overseeing platform-led self-regulation and enforcement efforts.

2.3 Role of AI in Streamlining Administrative and Civil Justice

AI has the potential to significantly enhance the efficiency, consistency and accessibility of copyright enforcement by streamlining both administrative and civil justice systems. By adopting harmonised, pre-

defined algorithmic standards grounded in high-quality data and ethical design, AI can reduce procedural fragmentation and promote coherence across enforcement mechanisms. For example, an AI-enhanced platform could streamline the enforcement process by incorporating pre-defined algorithmic standards—such as standardised thresholds for detecting substantial similarity—while also taking into account licensing history and general usage context from relevant databases. Such a system would be particularly effective in addressing mass or repeated infringements by supporting automated triage and preliminary assessment of claims. It could flag likely outcomes based on precedent, thereby reducing the burden on human assessors and improving efficiency across the enforcement process.

Algorithmic justice has the potential to streamline both administrative and civil justice processes in copyright protection. AI-enabled administrative enforcement can offer faster and more cost-effective resolutions for routine disputes, particularly benefiting individual creators and small entities. When aligned with the principles and standards of civil justice, such systems can make decisions that are not only efficient but also legally consistent with judicial reasoning, thereby reducing the risk of conflicting outcomes. Furthermore, AI can enhance coordination between administrative and judicial bodies and promote interoperability across jurisdictions, supporting a more coherent and harmonised enforcement framework.

On the other hand, as in the report of UK House of Lords, without robust safeguards, oversight and clear legal boundaries, the deployment of AI risks undermining fundamental rights and the rule of law.¹² For example, deepfake technology can be used to evade detection by content moderation systems and obscure copyright infringement. Between December 2024 and February 2025, UK conducted a public consultation on Copyright and Artificial Intelligence, seeking opinions whether existing legal frameworks adequately protect individuals from the misuse of their voice, image, or likeness by deepfakes and AI-generated content, and considers the need for further regulatory intervention.¹³

Unsupervised or poorly regulated technologies may erode due process, compromise the fairness of proceedings, and reinforce existing inequalities. While AI holds potential to improve efficiency and effectiveness, its use must remain firmly within the framework of legal and human accountability, ensuring that it supports rather than replaces democratic governance and judicial authority. Ensuring that AI serves justice, not overrides it, requires vigilant supervision and alignment with legal and ethical principles.

2.4 Designing for Trust and Fairness in AI Algorithms

Digitalisation alone does not guarantee lower costs or improved usability, as poor interface design, accessibility issues, and algorithmic bias can hinder fair enforcement. While algorithmic systems may outperform human decision-making in accuracy and

efficiency, their adoption requires a balanced focus on both procedural fairness and substantive outcomes. A user-centred, context-aware approach is essential, alongside strong government oversight and investment in infrastructure, data quality, and expertise to ensure responsible and effective algorithmic administrative enforcement.¹⁴

The deployment of AI in legal and administrative contexts must be grounded in the principles of accessibility, fairness, impartiality, competence, transparency and accountability. To uphold these values, algorithmic tools should be designed to produce clear, comprehensible explanations of their decision-making processes. This enables affected individuals and independent reviewers to understand, challenge and audit outcomes, thereby preserving procedural integrity and reinforcing public trust in both administrative and civil justice systems. The effectiveness of AI in this context also relies on high-quality training data and algorithmic mechanisms capable of generating outcomes that are not only efficient but also explainable and accountable. When these safeguards are implemented, AI can play a meaningful role in creating a more integrated, equitable, and responsive copyright enforcement framework.

3 Conclusion

In an era of rapid digital transformation, copyright enforcement mechanisms are being tested by the volume and complexity of online content—particularly in light of generative AI. The EU, US and China have responded to these pressures in different ways. While China offers a distinctive administrative pathway that is more direct and often more accessible for routine copyright disputes, the EU and US predominantly maintain litigation-based models supplemented by private platform procedures.

These diverse approaches reflect underlying legal cultures and institutional capacities. Yet, a common challenge lies in adapting enforcement mechanisms to an increasingly algorithmic media environment. Across all three systems, the integration of algorithmic tools, particularly in content moderation and dispute resolution, has begun to reshape the procedural landscape. AI-powered systems offer the potential to improve the efficiency, consistency, and scalability of copyright enforcement. However, these benefits hinge on the development of transparent and accountable data governance frameworks. Key to this are explainable algorithmic processes, comprehensive audit trails and mechanisms that allow affected users to contest and appeal automated decisions.

There is value in moving toward a more harmonised approach that incorporates elements of algorithmic justice into both administrative and civil systems. Rather than advocating for the wholesale adoption of one model over another, it highlights the importance of mutual learning and cautious innovation. Drawing lessons from China's administrative innovations and the procedural safeguards emphasised in EU and US frameworks, a model that incorporates algorithmic justice into both administrative and civil systems may provide a feasible

solution. Such a model, grounded in robust legal oversight and technical transparency, can better address the demands of modern copyright governance while maintaining public trust in enforcement outcomes.

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