UNIVERSITY OF SZEGED

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Synopsis of PhD Dissertation

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Reforming Intermediary Copyright Liability in China:

A Comparative Analysis of the U.S., EU, and China

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1. Background of the dissertation

1.1 Identification of research tasks

The research tasks of this dissertation are centered on a comparative legal analysis of intermediary copyright liability in China, the U.S., and the EU, with a focus on examining regulatory approaches, liability frameworks, enforcement mechanisms, and policy debates shaping the future of intermediary responsibility. The first research task involves identifying the legal and policy rationales behind intermediary liability frameworks, particularly how safe harbor provisions, liability exemptions, and monitoring obligations have evolved in response to changes in technology, markets, and enforcement challenges. This requires an assessment of the historical development and underlying principles of the DMCA, ECD, DSMD, DSA, and China's intermediary liability regime, evaluating whether these frameworks remain effective and balanced in light of contemporary copyright enforcement concerns.

The second research task is to critically analyze the shift from *reactive* to *proactive* intermediary liability models, examining statutory obligations, judicial interpretations, and private ordering mechanisms that require intermediaries to engage in content moderation, automated filtering, and copyright enforcement. Special attention is given to Art.17 DSMD, the DSA, and China's increasing imposition of duty-of-care standards, assessing how these developments reshape the legal landscape for intermediaries.

The third research task examines the impacts of intermediary liability on digital rights, innovation, and market competition, evaluating how copyright enforcement obligations interact with fundamental rights such as freedom of expression, due process, and access to information. Given the rise of AI-driven content moderation and algorithmic

3. The list of the candidate's publications written within the topic of the dissertation

I have published the following papers within the topic of the dissertation

1.	Baiyang Xiao, 'Making the Private Public: Regulating Content Moderation under Chinese Law' 51 (2023) Computer Law & Security Review 1.
2.	Baiyang Xiao, 'Copyright Law and Non-Fungible Tokens: Experience from China' (2022) 30 International Journal of Law and Information Technology 444.
3.	Baiyang Xiao, 'Looking Backward, Moving Forward: Copyright Administrative Enforcement in China' (2024) 55 IIC-International Review of Intellectual Property and Competition Law 1437.
4.	Baiyang Xiao, 'Enthusiastic Claimants, Reluctant Courts: The Empirical and Critical Analysis of Punitive Damages in Chinese Intellectual Property Law' (2024) 27 The Journal of World Intellectual Property 175.

clear counter-notice protections. (2) Medium-Term Reforms: Establishing a co-regulatory framework, setting liability thresholds for intermediaries, and enhancing procedural fairness in content moderation. (3) Long-Term Reforms: Transitioning toward a proportional liability model that aligns copyright enforcement with human rights safeguards and competition policy. By aligning China's intermediary liability rules with global best practices, this structured reform roadmap provides clear policy directions for future legal developments.

This dissertation makes a significant impact by bridging the fields of comparative law, AI governance, and regulatory theory, providing a comprehensive framework for future intermediary liability reforms. Its findings have direct policy implications for China's evolving digital governance, while also contributing to broader theoretical debates on intermediary responsibility, AI-driven enforcement, and administrative copyright governance. By offering a nuanced understanding of contemporary regulatory shifts, this research provides a critical foundation for policymakers, scholars, and legal practitioners seeking to develop effective, proportionate, and forward-looking copyright policies in the digital age. The study not only advances legal theory but also serves as a practical guide for shaping future copyright enforcement strategies, ensuring a balance between copyright protection, platform accountability, and fundamental rights in the rapidly evolving digital landscape.

enforcement, this research investigates how intermediaries navigate legal uncertainty, avoid over-enforcement, and address risks of algorithmic bias.

The final research task is to derive policy recommendations for China's intermediary liability framework, drawing insights from the U.S. and EU experiences while ensuring that legal reforms are adapted to China's unique regulatory environment. This research ultimately aims to offer a balanced, future-oriented regulatory model that addresses online copyright infringements while safeguarding fundamental rights and promoting innovation.

1.2. Research Goals and Research Questions

The urgency of online copyright infringements and the unresolved theoretical contradictions in Chinese legal scholarship on intermediary liability necessitate a reassessment of its foundational principles. Without a coherent legal framework, regulatory responses risk becoming fragmented, reactive, and doctrinally inconsistent, undermining the effectiveness of copyright enforcement. Over two decades after the enactment of the CDA, DMCA, ECD, and China's safe harbor rules, initially designed to balance competing interests, these frameworks must now be re-evaluated in light of technological and legal developments. The traditional safe harbor model, which has long provided a liability shield for intermediaries, is facing increasing scrutiny as policymakers introduce proactive enforcement obligations, such as Art.17 DSMD in the EU and China's broadening duty of care requirements. These developments reflect a

global shift in intermediary liability regimes, moving away from knowledge-based reactive models toward AI-driven content moderation and automated filtering mandates.

This transition raises fundamental concerns about the balance between copyright protection, fundamental rights, and platform accountability. The increasing privatization of enforcement mechanisms, where platforms autonomously regulate content, has blurred the distinction between legal compliance and corporate discretion, amplifying risks of excessive enforcement, algorithmic bias, and rights violations. As AI-powered moderation becomes central to intermediary liability enforcement, legal uncertainties persist regarding its effectiveness, fairness, and proportionality. The ongoing debates in the U.S. and EU highlight enduring tensions between intermediary liability, user rights, and regulatory intervention, yet much of this discourse remains unresolved in China. Chinese policymakers face critical questions regarding whether to maintain a safe harbor-based framework, introduce broader proactive filtering obligations, or develop a hybrid model that balances copyright enforcement with digital rights safeguards.

Against this backdrop, this dissertation conducts a comparative analysis of intermediary copyright liability across the U.S., EU, and China, assessing how different jurisdictions approach platform responsibility, regulatory oversight, and enforcement mechanisms. The selection of these jurisdictions is deliberate: while the U.S. model prioritizes limited

this study demonstrates that both models increasingly rely on public-private cooperation, where state actors and private intermediaries collaborate to enforce copyright law.

By introducing a novel classification of administrative enforcement tools, this research helps Chinese policymakers refine their regulatory strategies by balancing deterrence, due process, and enforcement efficiency. It also provides insights for U.S. and EU regulators, particularly in understanding how China's administrative enforcement model—characterized by regulatory talks, compliance-driven enforcement, and digital gatekeeping obligations—operates in practice. Furthermore, the study presents a comparative framework that can be used to design co-regulatory models, where public enforcement agencies collaborate with private sector actors to enhance copyright governance.

2.4. A Three-Tiered Reform Strategy for China's Intermediary Liability Framework

Beyond theoretical contributions, this dissertation moves beyond abstract legal critiques by proposing a structured, three-tiered reform strategy for China's intermediary liability framework, integrating insights from the U.S. and EU while ensuring adaptability to China's unique regulatory environment.

The reform strategy consists of: (1) Short-Term Reforms: Strengthening notice-and-takedown safeguards, improving transparency in automated filtering, and introducing

This research provides practical recommendations for regulating algorithmic copyright enforcement, emphasizing the need for transparency, accountability, and human oversight in automated takedown and filtering systems. Given the increasing reliance on AI-based enforcement tools—including YouTube's Content ID, Facebook's Rights Manager, and Chinese platforms' real-time filtering mechanisms—this research offers a compliance framework that allows policymakers to monitor automated enforcement mechanisms without placing excessive burdens on digital platforms.

The study also examines the economic and competition-related consequences of AI-driven copyright filtering, particularly in terms of market concentration. Since only a handful of large intermediaries can afford the technological infrastructure required to comply with proactive filtering obligations, smaller intermediaries face higher compliance costs, potentially leading to market consolidation and reduced competition. These insights provide valuable policy guidance for ensuring regulatory interventions do not create unintended barriers to market entry.

2.3. Redefining Administrative Copyright Enforcement and the Role of Public-Private Cooperation

A third major contribution of this dissertation is its redefinition of administrative copyright enforcement mechanisms, particularly through a comparative analysis of China's state-led model and the EU's judicial-driven approach. Conventional literature often treats judicial and administrative enforcement as separate legal mechanisms, but

liability and industry self-regulation, the EU has increasingly imposed proactive obligations, and China continues to refine its state-driven approach to intermediary responsibility. This comparative examination is particularly relevant as China undergoes significant legal reforms, making it crucial to draw lessons from global developments while ensuring contextual adaptability to China's unique legal, economic, and political environment. By critically analyzing how recent legal reforms interact with established liability doctrines, this research not only evaluates emerging regulatory frameworks but also identifies persistent challenges, offering practical recommendations for shaping China's future intermediary liability regime.

1.3. Aims of the Research

The primary aim of this research is to critically analyze the evolving legal frameworks of intermediary copyright liability in the U.S., the EU, and China, with a particular focus on identifying key regulatory trends, legal tensions, and policy considerations shaping the future of digital copyright enforcement. Through a comparative legal approach, the study seeks to assess how different jurisdictions balance copyright enforcement with intermediary responsibilities, user rights, and innovation, and whether these frameworks remain effective in addressing contemporary challenges in online copyright governance. Given the increasingly proactive role of intermediaries in content moderation, this

research aims to explore the legal, technological, and economic implications of shifting from reactive liability models toward proactive obligations, such as automated copyright filtering and monitoring duties imposed by regulatory authorities.

By situating intermediary liability within broader platform governance debates, the research also aims to evaluate the effectiveness of voluntary and state-enforced copyright moderation mechanisms in mitigating online infringements while safeguarding freedom of expression, due process, and market competition. Particular attention is paid to China's evolving regulatory landscape, where legal uncertainties remain regarding the extent of intermediary duties and the implications of expanding state-led enforcement measures. The study thus aims to provide policy recommendations tailored to China's legal system, drawing insights from the U.S. and EU regulatory models to propose a balanced, adaptive approach that upholds copyright protection without undermining fundamental rights and digital innovation. By integrating comparative legal analysis, doctrinal research, and empirical insights, this research ultimately contributes to a broader understanding of intermediary liability as a critical component of modern digital governance, informing legal scholarship, regulatory decision-making, and future legislative reforms.

For policymakers, this framework offers a valuable tool to assess the proportionality of regulatory interventions. As intermediaries are expected to take on a greater role in copyright enforcement, there is a need for a balanced approach that ensures copyright protection while preserving competition, safeguarding user rights, and avoiding excessive overreach. By identifying intermediary liability as a dynamic and evolving concept, this research challenges static categorizations and instead encourages a more flexible, context-specific regulatory response.

2.2. Reconceptualization of the Role of AI and Algorithmic Enforcement in Copyright Governance

A second major scientific contribution of this study is its critical analysis of AI-driven copyright enforcement, focusing on how automated content moderation, algorithmic decision-making, and privatized enforcement mechanisms have fundamentally reshaped copyright governance. Traditional scholarship on intermediary liability has largely focused on statutory and case law developments, while relatively little attention has been paid to the technological underpinnings of enforcement mechanisms. This study integrates AI governance, copyright law, and fundamental rights law, offering a comprehensive analysis of how intermediaries are shaping digital copyright enforcement through automated systems.

2.1. Reassessment of Intermediary Liability Models and the Shift from Reactive to Proactive Enforcement

One of the key scientific contributions of this dissertation is the systematic comparative analysis of intermediary liability frameworks in the U.S., EU, and China, identifying an ongoing shift from reactive safe harbors to proactive content moderation obligations. Unlike earlier studies that treat intermediary liability as a binary choice—between safe harbor immunity and strict liability models—this research introduces a continuum model of liability, where legal frameworks evolve along a spectrum, ranging from passive exemptions to active enforcement obligations. This nuanced approach provides a more accurate representation of contemporary regulatory trends, which do not fit neatly into pre-existing liability categories.

The continuum model is particularly relevant in explaining recent regulatory shifts, such as Art.17 DSMD, which mandates proactive filtering obligations for platforms, and China's expanding duty of care standard, which are increasingly being enforced through judicial interpretations and administrative measures. Moreover, this model provides a theoretical basis for assessing future liability reforms in jurisdictions considering a transition toward proactive enforcement models.

To this end, the key questions this project sought to investigate through comparative legal analysis are:

1. How do the U.S., the EU, and China regulate intermediary copyright liability, and what key differences and similarities exist in their legal frameworks?

2. What are the underlying rationales and the potential impacts of the emerging trend toward shifting from reactive to proactive intermediary liability in the U.S., the EU, and China, and what legal, technological, and policy factors drive this transformation?

3. How does proactive intermediary liability, particularly in the context of content filtering obligations, impact users' fundamental rights, market competition, and innovation, and what risks emerge from intermediaries' implementation of private copyright content moderation under existing liability regimes?

4. How do state actors intervene and cooperate with intermediaries to combat online copyright infringements through administrative enforcement?

5. What lessons can China draw from the U.S. and EU's approaches to intermediary copyright liability to better balance the interests of copyright owners, users, and intermediaries within its own legal framework?

1.4. Data Collection

The data collection for this thesis is based on a multifaceted legal research approach, integrating primary legal texts, judicial decisions, policy documents, and empirical studies to ensure a comprehensive analysis of intermediary copyright liability across the U.S., the EU, and China. Primary legal sources include statutory provisions, case law, administrative regulations, and international treaties that govern intermediary liability, with a focus on key legal instruments such as the DMCA, the ECD, the DSA, the DSMD, and China's E-Commerce Law, Civil Code, and Copyright Law. Judicial decisions from U.S. federal courts, the CJEU, and Chinese courts are examined to assess how liability rules are interpreted and enforced in practice.

Additionally, regulatory reports from institutions such as the U.S. Copyright Office, the European Commission, the Chinese National Copyright Administration, and industry stakeholders provide insight into enforcement trends, compliance mechanisms, and policy debates. To complement this legal analysis, the study also incorporates academic literature, think tank reports, and empirical studies on platform governance, algorithmic enforcement, and the economic impact of intermediary liability. By combining doctrinal research with empirical insights, this data collection strategy ensures that the findings are both theoretically grounded and reflective of real-world legal applications, allowing for a robust assessment of how different liability regimes function in practice and what lessons can be drawn for future reforms.

1.5. Applied Methods

This dissertation employs a comprehensive and interdisciplinary methodology to analyze intermediary copyright liability across the U.S., the EU, and China. Given the complex and evolving nature of platform regulation, a comparative legal approach is

Chapter VII concludes the thesis, summarizing the arguments presented in the previous chapters and addressing the research questions formulated in Chapter I. This final chapter also outlines the recommendations, highlights the intellectual contributions, and discusses the social implications of the research.

2. New scientific results and their application to practical and theoretical problem solving (the core section of the synopsis).

This dissertation presents significant contributions to the study of intermediary copyright liability, offering new theoretical perspectives and practical solutions to ongoing regulatory challenges. By focusing on the evolving legal frameworks in China, the U.S., and the EU, this study provides a comparative legal analysis of intermediary liability regimes and proposes policy recommendations for a more balanced and adaptive regulatory model. The research is particularly relevant given the increasing pressure on online intermediaries to engage in copyright enforcement and the rapid evolution of AI-driven content moderation mechanisms. These contributions can be categorized into four key areas: the reassessment of intermediary liability models, the reconceptualization of AI and algorithmic enforcement, the redefinition of administrative copyright enforcement, and a structured reform strategy for China's intermediary liability framework.

campaigns, all aimed at addressing copyright infringements through intermediaries. The strengths and drawbacks of these administrative measures are also discussed.

Chapter VI offers recommendations for future Chinese rulemaking on intermediary copyright liability, advocating for a copyright system that combines the advantages of an 'open' strategy and deterrent effect of a 'block' strategy. The open strategy provides users with multiple authorized channels for legal content consumption. Once the administrative copyright enforcement mechanism is effectively implemented, the copyright system can focus on improving online legal offerings, encouraging lawful consumption, and providing copyright-related services. Moreover, Chapter VI suggests improving the current Chinese intermediary copyright liability regime by drawing on lessons from the U.S. and the EU counterparts. Specifically, it recommends maintaining the knowledge-based liability regime while rejecting the strict liability model, the all-inclusive duty of care test, and general monitoring obligations, as these could undermine users' fundamental rights, stifle innovation, and hinder competition. Additionally, it proposes introducing targeted legislative interventions to enhance transparency of intermediaries' copyright content moderation practices, thus further protecting vulnerable users.

necessary to systematically assess how different jurisdictions address the same underlying challenges of intermediary liability while identifying regulatory trends and policy innovations that may inform China's evolving framework. The selection of the U.S., the EU, and China is based on their significance in shaping global digital copyright governance, as they each offer distinct regulatory models: the U.S. pioneered the safe harbor system under the DMCA, the EU has gradually imposed more obligations on intermediaries through the ECD, the DAS, and the DSMD, while China represents a state-driven approach with extensive obligations under its E-Commerce Law, Civil Code, and Copyright Law. The comparative study of these jurisdictions allows for a deeper understanding of the tensions between intermediary responsibility and fundamental rights, as well as the economic and policy justifications for different regulatory approaches.

To ensure a structured and meaningful comparison, this research integrates both functional and contextual comparative law. The functional approach assumes that legal systems, despite their doctrinal differences, ultimately aim to solve similar legal problems, and therefore, legal mechanisms should be analyzed based on their function rather than their formal classification. By adopting this perspective, the study systematically compares intermediary liability frameworks based on their role in copyright enforcement, distinguishing between knowledge-based liability models,

proactive monitoring obligations, and state-driven enforcement strategies. However, functionalism alone cannot fully capture the broader socio-legal dynamics that influence intermediary liability regimes, which is why a contextual approach is also applied. The contextual method highlights the historical, political, and economic factors that shape legal developments, recognizing that legal institutions operate within specific regulatory traditions. This dual methodological approach ensures that the analysis is both neutral in comparing legal solutions and sensitive to jurisdictional particularities, providing a nuanced understanding of how intermediary liability has evolved in different regulatory environments.

Further refining the comparative framework, the study distinguishes between micro- and macro-comparative legal analysis. Micro-comparison focuses on the examination of specific statutory provisions, judicial interpretations, and enforcement mechanisms, providing a detailed analysis of how intermediary liability rules are applied in practice. This is particularly relevant for assessing the operation of safe harbors, the scope of monitoring obligations, and the implementation of copyright filtering systems across jurisdictions. Meanwhile, macro-comparison takes a broader perspective, analyzing overarching liability frameworks, institutional enforcement models, and regulatory trends that shape the governance of digital platforms. By integrating both levels of analysis, the study ensures that intermediary liability is examined not only in terms of

intermediaries to prevent copyright infringements. While copyright filtering obligations faced strong opposition in the U.S., they were finalized by the EU regulators through Art.17 DSMD, shifting the regime from an ex post, knowledge-reactive model to one imposing an ex ante, proactive duty on intermediaries. Meanwhile, the DSA introduced additional gatekeeper obligations to improve the supervision of content moderation practices. In China, courts imposed substantial monitoring and filtering obligations on certain intermediaries through broad interpretations of the duty of care and necessary measures. Consequently, a significant divergence has emerged between the U.S., the EU, and Chinese legal frameworks regarding intermediaries hosting UGC. Additionally, Chapter IV further examines how privatized content moderation practices in these jurisdictions affect users' fundamental rights.

Chapter V uses a contextual comparative approach to explore how administrative authorities in different jurisdictions enforce copyright in cooperation with intermediaries. It examines two enforcement tools, graduated response and website blocking, as examples of administrative copyright enforcement in the EU, providing a detailed analysis of these methods. In contrast, Chinese copyright administrations have broader authority in online enforcement, utilizing various tools, including administrative dispute resolution and extra-judicial measures such as regulatory talks (*yuetan*) and

frameworks and statutory provisions in each jurisdiction. The chapter also examines the rationale behind the growing trend of intermediary copyright liability and reviews the legislative framework, including liability rules, exemptions, and monitoring obligations. Additionally, it considers the intersection of intermediary liability with the fundamental rights of users, rightsholders, and intermediaries.

Chapter III employs the black letter law and functional comparative law approaches to highlight key differences in the structural features of the statutory regimes in the U.S., the EU, and China, and their judicial interpretations. It explains how these differences have influenced intermediary liability rules in each jurisdiction. While the three statutory safe harbor regimes share similarities, offering intermediaries liability protection in the absence of actual or constructive knowledge of copyright infringement, they also require the removal of infringing material upon notification. Recent judicial interpretations have led to differences in the scope of protection. As law, technology, and markets shape intermediary liability, there is increasing pressure to hold intermediaries accountable for moderating illegal online content, including copyright infringement.

Chapter IV provides a critical and contextual comparative analysis of how the U.S., the EU, and China have sought to impose proactive monitoring and filtering obligations on

black-letter law but also in its practical and institutional context, capturing both doctrinal consistencies and divergences.

In addition to comparative law methodologies, this research employs doctrinal analysis to systematically examine legal texts, including national statutes, case law, and regulatory guidelines, thereby providing a foundation for understanding the legal reasoning underlying intermediary liability rules. However, recognizing that law is not merely a set of formal rules but a system that interacts with market and technological realities, the study also incorporates an empirical dimension, drawing on policy reports, enforcement data, and industry studies to assess how liability regimes function in practice. This empirical aspect ensures that the legal analysis is grounded in real-world applications, revealing the extent to which intermediary liability laws achieve their intended objectives or produce unintended consequences. Moreover, this dissertation applies a law and economics approach to evaluate the regulatory efficiency of different liability frameworks. By assessing the cost-benefit implications of safe harbors, proactive monitoring obligations, and administrative enforcement measures, the study examines how liability rules incentivize or discourage certain behaviors among platforms, rightsholders, and users. This approach is particularly useful for analyzing the economic rationale behind intermediary liability exemptions, market-based enforcement mechanisms such as automated content filtering, and the broader

competition implications of intermediary liability. By incorporating insights from economic analysis, the dissertation moves beyond formalistic legal comparisons and provides a deeper understanding of how intermediary liability structures influence digital platform governance.

Recognizing that no single methodology can fully capture the complexities of intermediary copyright liability, this research follows a 'toolbox' approach, integrating different methodological perspectives to create a comprehensive analytical framework. The study leverages comparative legal analysis to highlight jurisdictional differences and similarities, doctrinal research to clarify statutory interpretation and judicial reasoning, empirical evidence to assess enforcement effectiveness, and law and economics to evaluate regulatory trade-offs. This methodological integration ensures that the study is not only theoretically rigorous but also policy-relevant, offering insights that can inform both legal scholarship and regulatory decision-making.

1.6. Overall Presentation of the Dissertation

This study discusses how the U.S., the EU and China address online copyright infringements within their intermediary copyright liability frameworks, respectively. This is undertaken from a three-step investigation under the established analytical

framework. First, this study investigates the similarities and differences of implementation of current knowledge-based intermediary copyright liability regime in the three selected jurisdictions. Then it explores the recent legal development regarding intermediary copyright liability in the three selected jurisdictions and offers a detailed analysis of their highlights and shortcomings. Finally, by referring to experiences drawn from the U.S. and the EU rulemaking, this study offers suggestions and recommendations for future Chinese lawmaking and explores the possibility of incorporation of fundamental rights protection into Chinese intermediary liability regime. Below is an outline of the structure of each chapter.

Chapter I serves as the foundation for the entire thesis, outlining the research questions that this thesis aims to address. It also establishes the analytical framework that guides the subsequent chapters. Additionally, it introduces the key terminologies and the comparative methodology employed in this study, encompassing macro and micro comparative law study, functional comparative legal study, and a contextual comparative legal study.

Chapter II explores intermediary copyright liability as a balancing mechanism that prevents copyright harm, protects fundamental rights, and fosters innovation. It analyzes intermediary liability laws in the U.S., the EU, and China, focusing on the legal