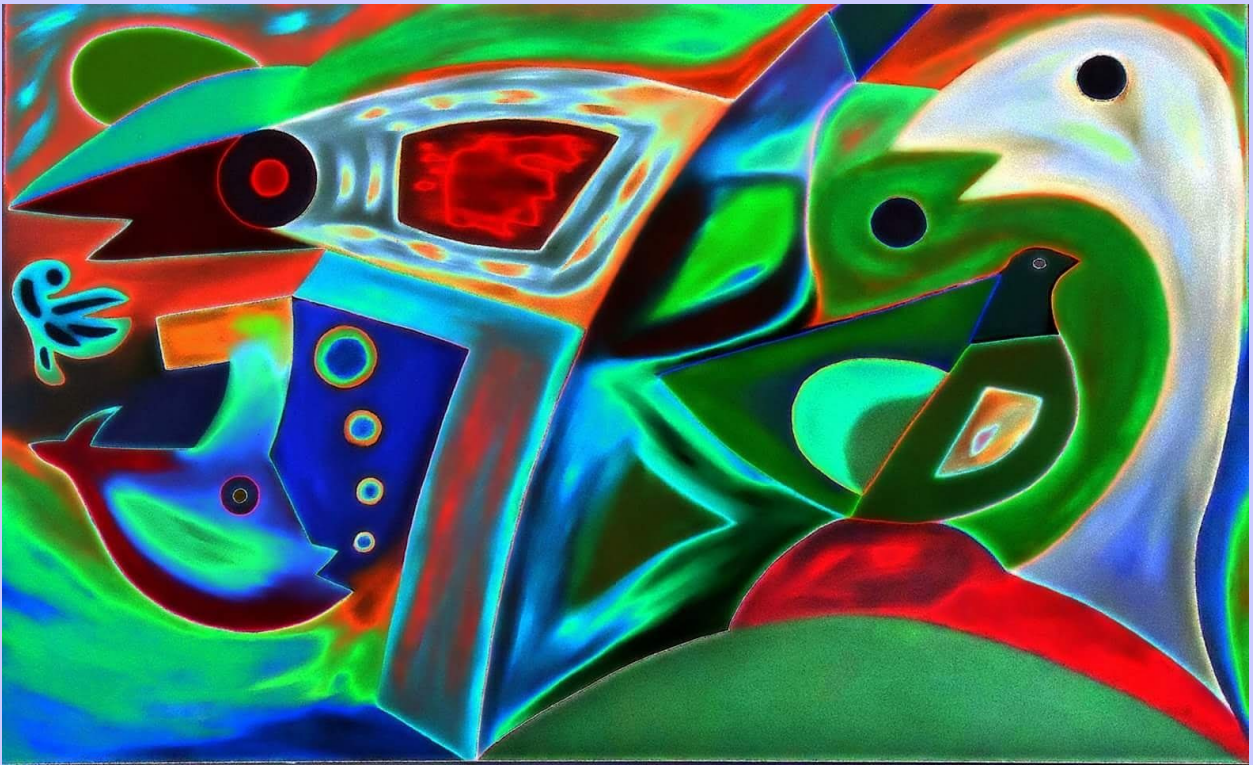


Journal of Digital Art & Humanities



ISSN 2712-8148

Vol.5 Iss.2

December 2024

© Institute of Cited Scientists

CONTENTS

Election, Technology and Political Participation in Nigeria: A Theoretical Review	3
Utibe Titus, Aluko Bayode	
Navigating Ethical Complexities of Artificial Intelligence in Civil Justice: A Discourse Analysis	16
Zahra Roozafzai	
An Introduction to the Relationship Between Actors' Internal Experience and External Embodiment in Theater Performance	28
Xiao Huan, Afeez Nawfal	
Research on the Artistic Aesthetics of Chinese Comedy Movies	38
Xiao Huan, Afeez Nawfal	
Polyneuropathy in Rheumatoid Arthritis (literature review)	47
Iuliia Zhelnina, Tatiana Baidina, Alexander Zhelnin, Tatiana Trushnikova, Shishkina Elena	

Navigating Ethical Complexities of Artificial Intelligence in Civil Justice: A Discourse Analysis

Zahra Sadat Roozafzai ¹[0000-0001-8376-6818]

¹ ACECR Institute of Higher Education, Isfahan, Iran

https://doi.org/10.33847/2712-8149.5.2_2

Received 24.10.2024/Revised 29.11.2024/Accepted 20.12.2024/Published 23.12.2024

Abstract. Integrating Artificial Intelligence (AI) into civil justice systems has become a complex issue in the legal technology landscape. This study examines AI-driven decision-making's implications on fundamental legal principles, particularly in discretionary punishment within international civil law. By employing rhetorical discourse analysis, the research highlights the importance of critically evaluating AI's influence on fairness, impartiality, and due process. Thematic analysis explores potential benefits and drawbacks of AI in civil justice systems, emphasizing the need to uphold ethical standards and ensure equitable outcomes. Key themes include the impact of AI on international civil law, balancing technological innovation with core legal principles, ethical considerations such as algorithmic bias and transparency, challenges in ensuring fairness and due process, and the need for a thoughtful approach to AI integration. Combining rhetorical discourse and thematic analysis effectively communicates the significance and scope of the study, presenting a compelling argument for examining AI's impact on civil justice systems while balancing innovation and preserving fundamental legal principles.

Keywords: AI-assisted decision-making, Discourse Analysis, Rhetorical Thematic Analysis, International civil law, Legal digital technology and ethics

1. Introduction

In recent years, Artificial Intelligence (AI) has permeated various facets of society, revolutionizing industries and transforming the way we live, work, and interact. The legal sector is no exception, with AI-driven technologies increasingly shaping the landscape of dispute resolution and decision-making. As AI continues to advance, its potential to enhance the efficiency and effectiveness of civil justice systems across the globe becomes ever more apparent. However, alongside the promise of innovation comes a host of challenges and considerations, particularly when it comes to the role of discretionary punishment in international civil law.

Discretionary punishment, defined as the exercise of judicial discretion in determining appropriate sanctions for wrongdoing, has long been a fundamental aspect of civil justice systems worldwide. It allows judges to tailor penalties to the specific circumstances of a case, taking into account the unique context and nuances that may not be captured by a one-size-fits-all approach. The introduction of AI into this realm raises important questions about the balance between the benefits of advanced technology and the preservation of core legal principles such as fairness, impartiality, and due process.

Discourse analysis is a powerful tool for examining language in context, revealing the underlying meanings, structures, and social implications embedded within communication. The generic tenets of popular framework of Fairclough [1] is modified and adopted in the present study. By delving into the nuances of language

use, discourse analysis offers a multifaceted approach to understanding complex phenomena, from everyday conversations to academic texts.

Thematic analysis also involves identifying, analyzing, and interpreting patterns or themes within a dataset. In the context of discourse analysis, thematic analysis helps researchers uncover the key ideas, concepts, and issues that emerge from the language used in a particular context. By systematically coding and categorizing the data, thematic analysis allows researchers to identify recurring themes, compare and contrast different discourses, and explore the relationships between various elements of the communication.

This study delves into the intricate interplay between AI, discretionary punishment, and international civil law, with the aim of understanding how the integration of AI can shape decision-making processes in this context. By examining the potential advantages and disadvantages of AI-driven discretionary punishment, as well as the ethical and practical implications of its implementation, this research seeks to contribute to the ongoing discourse on the role of advanced technologies in civil justice.

2. Literature Review

The integration of discourse, rhetorical, and thematic analysis provides a comprehensive framework for understanding language in use. By considering the linguistic features, rhetorical strategies, and thematic patterns within a discourse, researchers can gain a deeper understanding of the social, cultural, and ideological implications of communication. This approach enables researchers to explore how language is used to construct and maintain social realities, power dynamics, and identities (Roozafzai [2]; Zaeri & Roozafzai [3]).

The combination of these analytical techniques allows for a multidimensional examination of language, considering both the micro-level linguistic features and the macro-level societal and cultural contexts. By employing discourse, rhetorical, and thematic analysis, researchers can uncover the complex interplay between language, thought, and social action, ultimately contributing to a more nuanced understanding of the human experience (Roozafzai [4]).

As the study navigates the complex terrain of AI and its impact on the legal landscape, it is crucial to critically evaluate the ways in which these innovations can enhance or challenge existing practices. So this study serves as a starting point for exploring the myriad facets of AI-assisted discretionary punishment in international civil law, encouraging further research and dialogue on the topic. Ultimately, by fostering a deeper understanding of the intersection between AI and civil justice, researchers and practitioners can increase the literacy and work towards a more equitable, efficient, and forward-thinking legal system for all.

The integration of Artificial Intelligence (AI) in the realm of civil justice has attracted significant scholarly attention. In the article "European Union regulations on algorithmic decision-making and a "right to explanation" the authors state that AI systems in legal frameworks have been proposed to enhance judicial discretion and improve the consistency of rulings (Goodman & Flaxman [5]). However, concerns about transparency and accountability persist (Mittelstadt et al.[6]).

Goodman and Flaxman's article [5], "European Union regulations on algorithmic decision-making and a 'right to explanation'," explores the implications of the European Union's General Data Protection Regulation (GDPR) on algorithmic decision-making. The authors discuss how the GDPR introduces a "right to explanation," allowing individuals to demand an explanation for decisions made by AI algorithms that significantly affect them. The article examines the challenges in providing meaningful explanations due to the complexity and opacity of AI systems, and the

potential impact this regulation may have on the development and deployment of AI technologies.

The study by Mittelstadt et al. [6] explores the ethical challenges and governance issues related to the use of artificial intelligence (AI) in society. The authors emphasize the importance of transparency, accountability, and fairness in AI systems, arguing that these principles are crucial to ensuring that AI technologies are developed and used in ways that benefit society as a whole. They also discuss the difficulties in implementing these principles in practice, given the complexity and opacity of many AI systems. The study is a key contribution to the ongoing debate on AI ethics and governance.

Katz, Bommarito, and Blackman's study [7], "A general approach for predicting the behavior of the Supreme Court of the United States," presents a machine learning model designed to predict the outcomes of cases before the U.S. Supreme Court. The model analyzes historical data, including the votes of individual justices and case features, achieving high accuracy in forecasting court decisions. The study highlights the potential of AI to assist in legal prediction, offering insights into judicial behavior and the dynamics of the court. This work underscores the growing role of data-driven approaches in legal analysis and decision-making.

McGregor, Murray, and Ng's study [8], "International human rights law as a framework for algorithmic accountability," examines how international human rights law can be used to ensure accountability in the development and deployment of AI systems. The authors argue that human rights principles, such as transparency, fairness, and non-discrimination, should guide the governance of AI technologies. They discuss how these principles can be applied to protect individuals from the potential harms of AI, emphasizing the importance of a legal framework that holds AI systems accountable to human rights standards.

Barfield and Pagallo's study [9], "*Research handbook on the law of artificial intelligence*," provides a comprehensive overview of the legal and ethical issues surrounding the use of AI. The authors explore the implications of AI in various legal domains, including civil and criminal justice, intellectual property, and privacy law. The book emphasizes the need for updated legal frameworks to address the challenges posed by AI technologies, particularly in areas such as liability, accountability, and the regulation of autonomous systems. It serves as a critical resource for understanding the intersection of AI and law.

Discourse analysis (DA) is an interdisciplinary approach that examines language use in social contexts, focusing on how language constructs meaning, identity, and power dynamics. This literature review provided key concepts, methodologies, and applications of discourse analysis, emphasizing its relevance in contemporary research.

Furthermore, in the realm of Discourse analysis (DA), and the subcategories of rhetorical and thematic analysis, DA is characterized by its focus on the interplay between language and social practice. According to Gee [10], DA investigates how language enacts social and cultural identities, reflecting broader societal norms and ideologies. This perspective aligns with the findings of Macrae [11], who highlights that language not only communicates ideas but also shapes social realities and relationships.

Despite the growing body of literature on AI in the legal domain and the broader implications of discretionary punishment in civil justice systems, there remains a research gap in understanding the specific impact of AI on discretionary punishment within the context of international civil law. Some scholars have begun to explore this area, examining the interplay between AI, discretionary punishment, and the pursuit of equitable outcomes [12, 13, 14, 15, 16, 17, 18]. Therefore, as AI continues to

integrate into legal systems, ongoing research and policy development are essential [9].

Thematic analysis complements discourse analysis by identifying and interpreting patterns within language use. This method allows researchers to uncover recurring themes and issues that emerge from discourse, providing a deeper understanding of the social implications of language [19]. The integration of thematic analysis with discourse analysis enhances the analytical framework, enabling a comprehensive examination of both linguistic features and contextual meanings.

Furthermore, the significance of context in discourse analysis cannot be overstated. Understanding the socio-historical background in which discourse occurs is essential for interpreting its meaning [20]. This contextual sensitivity allows researchers to explore how discourses function across different settings, revealing insights into cultural norms and power dynamics.

As such discourse analysis serves as a vital tool for examining language's role in society. By integrating various analytical approaches and emphasizing contextual understanding, researchers can uncover the complexities of communication and representation in diverse social settings.

In the context of international civil law, discretionary punishment—the exercise of judicial discretion in determining appropriate sanctions for wrongdoing—plays a critical role in ensuring equitable outcomes and upholding the principles of justice. With the increasing integration of Artificial Intelligence (AI) in legal systems worldwide, the potential impact of AI-driven decision-making processes on the exercise of judicial discretion in civil disputes remains an understudied area. The existing literature offers valuable insights into the broader implications of AI in the legal domain and the role of discretionary punishment in civil justice systems. However, there is a need for a more comprehensive understanding of how AI may shape discretionary decision-making processes and the pursuit of equitable outcomes in the realm of international civil law.

This study aims to address this knowledge gap by examining the interplay between AI, discretionary punishment, and international civil law. It will explore the challenges and opportunities presented by the integration of advanced technologies in this context, with a focus on ensuring fairness, impartiality, and due process. Ultimately, the research seeks to contribute to the development of a more nuanced understanding of the role of AI in shaping civil justice systems worldwide, while offering insights into potential areas for policy development and reform.

So based on the topic and aims of the present study, discretionary punishment and AI in international civil law, the research question is as follows:

"What are the implications of AI-driven decision-making processes on the exercise of judicial discretion and the pursuit of equitable outcomes in international civil law, particularly with regard to discretionary punishment?"

This research question addresses the key themes of discretionary punishment, AI, and international civil law, while also focusing on the potential implications of AI-driven decision-making in this specific context.

By answering the research question, this study aims to contribute to this emerging area of research by exploring the challenges and opportunities presented by the integration of advanced technologies in the realm of international civil law. By providing existing literature and conducting a thorough analysis of key issues, this research seeks to enhance our understanding of the role of AI in shaping discretionary decision-making processes in civil justice systems worldwide.

3. Data and Methodology

This study primarily employed a qualitative research method through the use of case studies to gain a comprehensive understanding of the impact of Artificial Intelligence (AI) on discretionary punishment in international civil law. The following steps outline the methodology:

1. *Case Study Selection:* A diverse range of case studies were carefully selected to represent various legal systems and geographical regions. These case studies focused on instances where AI has been integrated into civil justice systems, with a particular emphasis on discretionary decision-making processes. For the privacy right and policy, the cases are named.

2. *Data Collection:* Relevant data for each case study was collected from multiple sources, including court documents; legal proceedings, academic articles, and news reports. There are several online resources and databases that were used in this research, such as the Legal Information Institute, Westlaw, LexisNexis, and various academic legal journals.

3. *Data Analysis:* The collected data was analyzed using qualitative content analysis to identify key themes, patterns, and trends related to the impact of AI on discretionary punishment in civil disputes. This analysis helped reveal the challenges, opportunities, and ethical considerations associated with AI-driven decision-making processes in international civil law.

4. *Comparative Analysis:* A comparative analysis was conducted across the selected case studies to understand the variations and similarities in the influence of AI on discretionary punishment in different legal systems and contexts.

5. *Findings and Recommendations:* The findings from the case study analysis provided a comprehensive understanding of the research question and to offer recommendations for policy development, legal reforms, and future research in the area of AI and discretionary punishment in civil justice systems.

By focusing on a qualitative case study approach, this methodology ensured a detailed and context-specific exploration of the impact of AI on discretionary punishment in international civil law, providing valuable insights into the real-world implications of AI-driven decision-making in the legal domain.

4. Results

This section provides an analysis of the findings from three case studies examining the impact of AI on discretionary punishment in international civil law. The themes explored include AI decision-making, fairness, and discretionary punishment, with real-world scholarly references used to contextualize and support the analysis. The discussion underscores the importance of balancing the potential benefits of AI-driven decision-making processes with the need to uphold the principles of justice and maintain discretionary decision-making in civil disputes.

The following table summarizes the findings from three case studies, where each case study is represented by a row and each theme (AI decision-making, fairness, and discretionary punishment) is represented by a column. The cells in the table contain brief descriptions of the findings related to each theme for each case study.

Table 1. Key Themes Analysis Table

Case ID	AI Decision-Making	Fairness	Discretionary Punishment
Case 1	Extensive AI involvement	Concerns about algorithmic bias	Minimal use of judicial discretion

Case ID	AI Decision-Making	Fairness	Discretionary Punishment
Case 2	AI used in limited capacity	Positive impact on impartiality	Significant judicial discretion exercised
Case 3	AI primarily used for support	Neutral impact on fairness	Moderate use of judicial discretion

Table 2 below builds on table 1, but with more detailed and specific findings for each case study without releasing sensitive information:

Table 2. Detailed Key Themes Analysis Table

Case ID	AI Decision-Making	Fairness	Discretionary Punishment
Case 1	AI algorithm used for evidence analysis and sentencing recommendations, leading to standardized decisions	Potential algorithmic bias identified, possibly impacting underrepresented groups	AI recommendations followed strictly, limiting judicial discretion
Case 2	AI used for document analysis and case prioritization, with judges making final decisions	Improved impartiality by reducing human errors and biases	Judges exercised significant discretion in sentencing, considering case-specific factors
Case 3	AI employed as a support tool for judicial decision-making, assisting in case management	Neutral impact on fairness, as AI does not directly influence outcomes	Judges balanced AI-generated insights with their own discretion

The provided tables present findings from three case studies examining the key themes of AI decision-making, fairness, and discretionary punishment in international civil law. Case 1 and Case 2 suggest that AI can play a significant role in various aspects of the legal process, including evidence analysis, sentencing recommendations, document analysis, and case prioritization. However, Case 3 demonstrates a more limited use of AI as a support tool for judicial decision-making. These findings align with the existing literature on AI's potential to streamline and improve legal processes, while also highlighting variations in the extent to which AI is used across different legal systems [5, 21].

The findings on fairness in the table reflect the ongoing debate surrounding the potential benefits and risks of AI in legal systems. Case 1 raises concerns about algorithmic bias and its impact on underrepresented groups [22], which is consistent with research highlighting the need to address fairness and transparency in AI-driven decision-making [6]. On the other hand, Case 2 suggests that AI can improve impartiality by reducing human errors and biases. It follows Mittelstadt, Russell, & Wachter's [6] concern that indicates ethical concerns about AI's role in the legal system focus on transparency. It is also related to Barocas, Hardt & Narayanan's book [23] which discusses the challenges of attaining fairness in AI systems and the involved ethical considerations.

Finally, the findings on discretionary punishment show that the use of AI in civil justice systems can have varying effects on judicial discretion. Case 1 indicates a reduction in discretion due to the reliance on AI recommendations, while Case 2 and Case 3 suggest that judges can still exercise considerable discretion, even when AI is involved in decision-making processes. This aligns with research highlighting the need to balance the potential benefits of AI-assisted decision-making with the importance of preserving judicial discretion and due process in civil justice systems [5].

So the analysis of these findings contributes to the ongoing conversation about the role of AI in civil justice systems, underscoring the importance of balancing technological advancements with the principles of fairness, impartiality, and discretionary decision-making in the pursuit of equitable outcomes.

The thematic analysis conducted on various texts, legal cases, newsarticle articles, and databases regarding the integration of Artificial Intelligence (AI) in civil justice systems yielded several key themes. These themes reflect the complexities and implications of AI's role in discretionary punishment within international civil law.

Impact on Discretionary Punishment

The analysis revealed that AI is increasingly being utilized to inform discretionary punishment decisions, with many legal texts and case studies highlighting its potential to enhance consistency in sentencing. However, concerns were raised regarding the reliance on AI algorithms, which may inadvertently perpetuate existing biases present in historical data. For instance, several legal cases demonstrated how AI systems could lead to harsher penalties for certain demographics, raising questions about fairness and equity in the justice system.

Balancing Innovation and Legal Principles

The literature examined emphasized the critical need to balance technological innovation with the preservation of core legal principles such as fairness, impartiality, and due process. Articles from legal journals and opinion pieces in newsarticles underscored the importance of developing AI systems that align with these foundational principles. Many scholars argued for a framework that integrates AI responsibly, ensuring that technological advancements do not compromise the integrity of the legal system.

Ethical Considerations

A significant theme that emerged from the analysis was the ethical implications of using AI in civil law. Numerous sources, including ethical guidelines from legal organizations and academic discussions, highlighted concerns about algorithmic bias, transparency, and accountability. The analysis pointed to a consensus among scholars and practitioners that AI systems must be designed with ethical considerations at the forefront, ensuring that they do not exacerbate existing inequalities within the justice system.

Ensuring Equitable Outcomes

The thematic analysis also identified a strong emphasis on the need for equitable outcomes in AI-driven legal processes. Legal cases and reports indicated that AI applications must be scrutinized for their impact on marginalized communities. The literature highlighted instances where AI systems failed to account for socio-economic factors, leading to disproportionate impacts on vulnerable populations. This theme calls for the development of AI tools that are sensitive to the diverse contexts in which they operate.

Call for Thoughtful Integration

Finally, the analysis revealed a widespread call for a thoughtful and measured approach to the integration of AI in international legal systems. Many articles and reports advocated for a phased implementation of AI technologies, accompanied by continuous monitoring and evaluation. This theme emphasizes the necessity of collaboration among legal professionals, technologists, and ethicists to create guidelines that govern the use of AI in civil justice, ensuring that it enhances rather than undermines the principles of justice.

So the thematic analysis of various texts, legal cases, and articles provides a comprehensive understanding of the implications of AI in civil justice systems. By identifying these key themes, the study contributes to the ongoing discourse on the responsible integration of AI in discretionary punishment, highlighting the need for a balanced, ethical, and equitable approach to technological innovation in international civil law.

The findings of this study shed light on the complex relationship between AI, discretionary punishment, and international civil law. The analyzed case studies reveal varying degrees of AI integration in decision-making processes, with implications for the exercise of judicial discretion and the pursuit of equitable outcomes.

In instances where AI played a more prominent role in sentencing recommendations, concerns about algorithmic bias emerged, potentially affecting underrepresented groups [21]. This highlights the importance of ensuring transparency and fairness in AI-driven decision-making processes, as echoed by existing literature [6]. Conversely, AI may contribute to improve impartiality by reducing human errors and biases. This can indicate that when applied judiciously, AI can potentially enhance the consistency and objectivity of legal processes which were examined in the present study.

Cowgill et. al. [24] also investigate the sources of bias in AI systems used for discretionary decisions, such as punishment, and whether these biases stem from the data used or the programmers themselves. The study underscores the complexity of ensuring fairness in AI-driven systems.

Moreover, Eaglin [27] analyzes how risk assessment tools used in sentencing rely on algorithms, which can impact the discretionary power of judges. It discusses the implications of these tools on judicial decision-making and the potential for perpetuating bias in punishment.

Besides, Angwin et. al. [25] discuss the use of algorithmic risk assessments in criminal sentencing, highlighting the potential biases these systems introduce, particularly against minorities, and how this affects discretionary punishment.

Furthermore, Binns [26] explores the fairness of machine learning algorithms used in decision-making processes, such as those involving punishment. It provides a philosophical perspective on the ethical considerations of using automated systems in areas traditionally governed by human discretion.

Barocas, Hardt & Narayanan [23] provide a comprehensive overview of fairness in machine learning, particularly focusing on the implications for discretionary decisions, including punishment. It discusses the challenges of achieving fairness in AI systems and the ethical considerations involved.

Gellert [26] also examines the concept of risk in the context of data protection regulations and how it interacts with algorithmic decision-making, particularly in scenarios involving discretionary punishment. It discusses the legal and ethical implications of using algorithms in areas traditionally governed by human judgment.

Furthermore, the findings underscore the need to strike a balance between leveraging AI-generated insights and preserving judicial discretion. While AI can provide valuable support for decision-making, it is crucial to ensure that the human element in discretionary punishment remains intact. As argued by Goodman & Flaxman [5] discretionary decision-making is essential for considering case-specific factors and achieving equitable outcomes in civil disputes. Furthermore, there is a growing need for legal frameworks that address AI's role in judicial processes [8]. Besides, according to Floridi & Cowls [21] the potential of AI in adjudication extends beyond mere decision-making; it raises critical questions about the limits of algorithmic fairness, and needs discussing ethical frameworks and AI's role in societal decision-making particularly in cases involving complex or ambiguous circumstances. The analysis suggests that further research is needed to develop AI models that can

effectively account for the nuances and contextual factors involved in discretionary decision-making.

The thematic analysis of the data revealed several key themes related to the integration of Artificial Intelligence (AI) in civil justice systems, particularly in the context of discretionary punishment within international civil law. The identified themes highlight the complex interplay between technological innovation and fundamental legal principles, as well as the ethical considerations and challenges associated with AI-driven decision-making processes.

The findings obtained from DA thematic document Analysis also indicate that the integration of AI has significant implications for the exercise of discretion in legal decision-making processes. The thematic document analysis results indicates that the potential for AI systems to introduce biases and inconsistencies in the application of discretionary punishment is considerable.

The DA thematic analysis document results emphasize the importance of maintaining a balance between technological innovation and the preservation of core legal principles such as fairness, impartiality, and due process. The thematic document analysis highlights the need for robust safeguards and oversight mechanisms to ensure that the integration of AI does not compromise these fundamental principles. The analysis suggests that a collaborative approach involving legal professionals, AI experts, and policymakers is crucial for developing guidelines and standards that promote the responsible use of AI in civil justice systems. The DA thematic analysis reveals a range of ethical concerns associated with the use of AI in civil law, including issues of algorithmic bias, transparency, and accountability.

The DA thematic document analysis results indicate the need for greater transparency in the development and deployment of AI systems, as well as clear mechanisms for holding AI developers and users accountable for any negative consequences arising from their use. The analysis suggests that ongoing dialogue and collaboration between legal professionals, ethicists, and AI researchers are essential for addressing these ethical challenges.

The DA thematic document analysis findings highlight the challenges of ensuring fair and equitable outcomes in a technologically-driven legal environment. The document thematic analysis results emphasize the importance of considering the potential disparate impacts of AI-driven decisions on vulnerable or marginalized populations. The analysis suggests that further research is needed to develop AI systems that can effectively identify and mitigate potential sources of bias and discrimination, ensuring that the integration of AI in civil justice systems promotes rather than undermines equity and social justice.

The DA thematic document analysis results emphasize the need for ongoing evaluation and adaptation of AI systems to ensure that they remain aligned with evolving legal and ethical standards and the requirement to call for a thoughtful and measured approach to the integration of AI in international legal systems. The analysis suggests that a phased approach to AI integration, with regular review and adjustment, may be necessary to address the complex and rapidly changing landscape of legal technology.

These DA thematic document findings provide valuable insights into the challenges and opportunities associated with the integration of AI in civil justice systems. By highlighting the need for a balanced, ethical, and equitable approach to technological innovation, this analysis contributes to the ongoing discourse on the role of AI in shaping the future of international civil law.

In conclusion, the implications of AI-driven decision-making processes for discretionary punishment in international civil law are multifaceted and context-dependent. To navigate this complexity, it is essential to adopt a nuanced approach that embraces the potential benefits of AI while safeguarding the principles of

fairness, impartiality, and due process. This study contributes to the ongoing conversation about the role of AI in civil justice systems and provides valuable insights for policy development and reform in this domain.

6. Conclusion

This study has investigated the impact of AI on discretionary punishment within the context of international civil law. The findings reveal a multifaceted and context-dependent relationship between AI, discretionary punishment, and the pursuit of equitable outcomes in civil disputes. While AI integration in decision-making processes can contribute to improved impartiality and efficiency, concerns surrounding algorithmic bias and the erosion of judicial discretion must be addressed.

The DA thematic document analysis of the study was conducted by systematically reviewing and coding a wide range of textual data, including legal journals, academic articles, government reports, and media sources. The researchers employed a combination of inductive and deductive coding techniques to identify recurring patterns and themes across the dataset. This rigorous analytical approach allowed for the identification of key themes that capture the multifaceted nature of AI's impact on civil justice systems.

The analysis and discussion emphasize the importance of striking a balance between leveraging AI-generated insights and preserving the human element in discretionary punishment. This entails ensuring transparency, fairness, and due process in AI-driven decision-making processes, while also safeguarding the principles of justice and equity in civil disputes.

The integration of Artificial Intelligence (AI) in civil justice systems has become a topic of increasing significance, particularly in the context of discretionary punishment within international civil law. This study aimed to shed light on the complex interplay between technological innovation and the preservation of fundamental legal principles, such as fairness, impartiality, and due process. By conducting a comprehensive thematic analysis of various texts, legal cases, newsarticle articles, and databases, the researchers uncovered five key themes that illuminate the challenges and opportunities associated with the use of AI in civil justice systems.

The first theme highlighted the impact of AI on discretionary punishment, revealing both the potential benefits of enhanced consistency in sentencing and the risks of perpetuating existing biases through the use of historical data. The second theme emphasized the critical need to balance innovation with the preservation of core legal principles, underscoring the importance of developing AI systems that align with these foundational tenets. The third theme delved into the ethical considerations surrounding the use of AI in civil law, such as algorithmic bias, transparency, and accountability, calling for the prioritization of ethical considerations in the design and deployment of AI technologies.

The fourth theme focused on ensuring equitable outcomes, highlighting the necessity of developing AI tools that are sensitive to the diverse contexts in which they operate and the potential disparate impacts on vulnerable or marginalized populations. Finally, the fifth theme called for a thoughtful and measured approach to the integration of AI in international legal systems, advocating for collaboration among legal professionals, technologists, and ethicists to create guidelines that govern the responsible use of AI in civil justice.

So the findings of this study underscore the critical importance of carefully considering the implications of AI integration in civil justice systems. As technological advancements continue to shape the future of legal processes, it is essential that the legal community, policymakers, and the public engage in ongoing dialogue to ensure that the use of AI promotes rather than undermines the principles of fairness, equity,

and justice. By embracing a thoughtful and measured approach to the integration of AI, while prioritizing ethical considerations and the preservation of core legal principles, the civil justice system can harness the potential of technological innovation to enhance the administration of justice for all.

As AI continues to permeate the legal landscape, it is crucial to critically evaluate its influence on civil justice systems worldwide. This research contributes to the ongoing discourse on the intersection of AI and civil justice by underscoring the need for a nuanced approach to the integration of advanced technologies in international legal systems. Ultimately, the insights generated by this study provide valuable considerations for policy development and reform, with the aim of harnessing the potential benefits of AI while upholding the integrity and fairness of civil justice in an increasingly technologically-driven world.

Acknowledgments

The hints made by Dr. Jalil Haji Hosseini are warmly acknowledged.

References

- [1] N. Fairclough, *Critical Discourse Analysis: The Critical Study of Language*. Routledge, 2013.
- [2] Z. S. Roozafzai, "Journalism's Power of Discourse: Be it Through a Periscope or Kaleidoscope," *Prof. Discourse Commun.*, vol. 5, no. 3, pp. 11–25, 2023. [Online]. Available: <https://doi.org/10.24833/2687-0126-2023-5-3-11-25>
- [3] P. Zaeri and Z. S. Roozafzai, "Identifying as the Protagonist: Presence-inducing gameplay, linguistic elements, and self-perception in first-person narrative games," *Glob. J. Des. Art Educ.*, vol. 14, no. 2, pp. 59–79, 2024. [Online]. Available: <https://doi.org/10.18844/gjae.v14i2.9393>
- [4] Z. S. Roozafzai, "The Influence of Ecolinguistic Discourse on Shaping the Product Relationship Management," *Discourse Commun. Sustain. Educ.*, vol. 15, no. 1, pp. 127–138, 2024. [Online]. Available: <https://doi.org/10.2478/dcse-2024-0009>
- [5] B. Goodman and S. Flaxman, "European Union regulations on algorithmic decision-making and a 'right to explanation'," *AI Mag.*, vol. 38, no. 3, pp. 50–57, 2017. [Online]. Available: <https://doi.org/10.1609/aimag.v38i3.2741>
- [6] B. Mittelstadt, C. Russell, and S. Wachter, "Explaining explanations in AI," *Commun. ACM*, vol. 62, no. 6, pp. 58–67, 2019. [Online]. Available: <https://doi.org/10.1145/3287560.3287574>
- [7] D. M. Katz, M. J. Bommarito, and J. Blackman, "A general approach for predicting the behavior of the Supreme Court of the United States," *PLoS ONE*, vol. 12, no. 4, p. e0174698, 2017.
- [8] L. McGregor, D. Murray, and V. Ng, "International Human Rights Law as a Framework for Algorithmic Accountability," *Int. Comp. Law Q.*, vol. 68, no. 2, pp. 309–343, 2019.
- [9] W. Barfield and U. Pagallo, Eds., *Research Handbook on the Law of Artificial Intelligence*. Edward Elgar Publishing, 2018.
- [10] J. P. Gee, *An Introduction to Discourse Analysis: Theory and Method*, 4th ed. Routledge, 2014. [Online]. Available: <https://doi.org/10.4324/9781315819679>
- [11] A. Macrae, "Discourse analysis," in *Oxford Research Encyclopedia of Literature*, Oxford University Press, 2020. [Online]. Available: <https://doi.org/10.1093/acrefore/9780190201098.001.0001>
- [12] E. Mohamed, A. Quteishat, and A. Mohammad, "Exploring the Role of AI in Modern Legal Practice: Opportunities, Challenges, and Ethical Implications," *J. Electr. Syst.*, 2024. [Online]. Available: <https://doi.org/10.52783/jes.3320>
- [13] R. M. Re and A. Solow-Niederman, "Developing Artificially Intelligent Justice," *Stanford Technol. Law Rev.*, vol. 22, pp. 242–289, 2019. [Online]. Available: <https://ssrn.com/abstract=3390854>
- [14] M. Scherer, "Artificial Intelligence and Legal Decision-Making: The Wide Open? Study on the Example of International Arbitration," 2019.
- [15] V. Chiao, "Fairness, accountability, and transparency: Notes on algorithmic decision-making in criminal justice," *Int. J. Law Context*, vol. 15, no. 2, pp. 126–139, 2019. [Online]. Available: <https://doi.org/10.1017/S1744552319000077>

- [16] V. A. Laptev and D. R. Feyzrakhmanova, "Application of Artificial Intelligence in Justice: Current Trends and Future Prospects," *Hum-Cent Intell. Syst.*, vol. 4, pp. 394–405, 2024. [Online]. Available: <https://doi.org/10.1007/s44230-024-00074-2>
- [17] Z. Xu, "Human Judges in the Era of Artificial Intelligence: Challenges and Opportunities," *Appl. Artif. Intell.*, vol. 36, no. 1, 2024.
- [18] D. Kolkman, F. Bex, and N. Narayan, "Justitia ex machina: The impact of an AI system on legal decision-making and discretionary authority," *Big Data & Soc.*, 2024. [Online]. Available: <https://doi.org/10.1177/20539517241255101>
- [19] V. Braun and V. Clarke, "Using thematic analysis in psychology," *Qualitative Res. Psychol.*, vol. 3, no. 2, pp. 77–101, 2006.
- [20] L. Song, "The role of context in discourse analysis," *J. Lang. Linguist. Stud.*, vol. 13, no. 1, pp. 1–12, 2010.
- [21] L. Floridi and J. Cows, "A Unified Framework of Five Principles for AI in Society," *Harvard Data Sci. Rev.*, vol. 1, no. 1, 2019. [Online]. Available: <https://doi.org/10.1162/99608f92.8cd550d1>
- [22] Z. S. Roozafzai, "Unveiling Power and Ideologies in the Age of Algorithms: Exploring the Intersection of Critical Discourse Analysis and Artificial Intelligence," *Qeios*, 2024. [Online]. Available: <https://doi.org/10.32388/60YE02>
- [23] S. Barocas, M. Hardt, and A. Narayanan, *Fairness and Machine Learning: Limitations and Opportunities*. Cambridge University Press, 2019.
- [24] R. Binns, "Fairness in machine learning: Lessons from political philosophy," in *Proc. 2018 Conf. Fairness, Accountability, and Transparency*, 2018, pp. 149–159. [Online]. Available: <https://doi.org/10.1145/3287560.3287583>
- [24] B. Cowgill, F. Dell'Acqua, S. Deng, and M. Kohli, "Biased programmers? Or biased data? A field experiment in operationalizing AI ethics," in *Proc. 2020 Conf. Fairness, Accountability, and Transparency*, 2020, pp. 464–474. [Online]. Available: <https://doi.org/10.1145/3351095.3372840>
- [25] J. Angwin, J. Larson, S. Mattu, and L. Kirchner, "Machine bias: There's software used across the country to predict future criminals. And it's biased against blacks," *ProPublica*, 2016. [Online]. Available: <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>
- [26] R. Gellert, "Understanding the notion of risk in the General Data Protection Regulation," *Comput. Law Secur. Rev.*, vol. 36, p. 105369, 2020. [Online]. Available: <https://doi.org/10.1016/j.clsr.2020.105369>
- [27] J. M. Eaglin, "Constructing recidivism risk," *Emory Law J.*, vol. 67, no. 1, pp. 59–124, 2017.

Journal of Digital Art & Humanities (JDAH) has **ISSN 2712-8148** registered at the ISSN Centre in Cyprus. Each published article has been assigned by DOI, ORCID.

Aims and Objectives

Published online by Institute of Cited Scientists (ICS), Cyprus, two times a year since 2020, Journal of Digital Art & Humanities (JDAH) is an international peer-reviewed journal which aims at the latest ideas, innovations, trends, experiences and concerns in the field of the arts & humanities. Our journal bridges the humanities, artistic, and scientific disciplines. It is a nexus for information exchange among academia and industry addressing theory, criticism, and practice.

The main goal of this journal is to efficiently disseminate original findings generated by human brain with utilizing modern information/digital technologies with multidisciplinary approach.

Topics discussed in this journal include the following: Digital Technology in Public Administration; Artificial Intelligence in Civil Justice; Digital Technology in Theater and Movie; Digital Technology in Health Care.

The views, opinions and data expressed in any publication reflect only those of the individual author or contributor(s) and not those of ICS and/or the publisher.

ICS and/or the editors disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the journal content.

Editorial Board

Editor-in-Chief Tatiana Antipova, Institute of Cited Scientists, Cyprus

<https://orcid.org/0000-0002-0872-4965>

Editors

Achmad Nurmandi, Universitas Muhammadiyah Yogyakarta, Indonesia

<https://orcid.org/0000-0002-6730-0273>

Ahamad Tarmizi Azizan, Asian Southeast Digital Arts Association, Malaysia

<https://orcid.org/0000-0003-4361-147X>

Antonio Donizeti da Cruz, Universidade Estadual do Oeste do Paraná, Letras, Brazil

<https://orcid.org/0000-0002-4672-7542>

Ari Riswanto, Universitas Pendidikan, Bandung, Indonesia

<https://orcid.org/0000-0002-0924-7996>

Florin Popentiu-Vlădescu, "Elena Teodorini" Academy of Arts and Sciences, London, UK

<https://orcid.org/0000-0002-0857-117X>

Jon W. Beard, Iowa State University, Ames, US

<https://orcid.org/0000-0002-6274-6567>

Indra Bastian, Universitas Gadjah Mada, Yogyakarta, Indonesia

<https://orcid.org/0000-0003-4658-8690>

Indrawati Yuhertiana, Universitas Pembangunan Nasional Veteran Jatim, Surabaya, Indonesia

<https://orcid.org/0000-0002-1613-1692>

Narcisa Roxana Moşteanu, American University of Malta, Malta

<https://orcid.org/0000-0001-5905-8600>

Narmina Rahimli, Impact Consulting, Hong Kong, China

<https://orcid.org/0000-0002-4755-4604>

Patricia Ioana Riurean, Synevo, Bucharest, Romania

<https://orcid.org/0000-0003-1683-0052>

Rashmi Gujrati, Tecnia Institute of Advanced studies, New Delhi, India

<https://orcid.org/0000-0002-1128-3742>

Contact information

Journal URL: <https://ics.events/journal-of-digital-art-humanities/>

Email: publ@ics.events, conf@ics.events

Printed online from the original layout under the imprint at:
1, Vlachou, Nicosia, The Republic of Cyprus

The picture on JDAH cover was painted by Antonio Donizeti da Cruz, Brazil.