

From Bureaucracy to Black Box: Revolutionizing Natural Justice and Due Process in Administrative Law

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Abstract: Natural justice, rooted in English common law, embodies fairness in procedural justice and is foundational to Administrative law (Aslam, 2020). The growing use of Artificial Intelligence (AI) (Rosenberg, 2023) in administrative decision-making raises serious concerns about upholding fundamental legal principles like Natural Justice, derived from the Latin word “*jus natural*,” and is not codified, it is closely tied to common law (Mirani, 2022) and Due Process of law, first appeared as a substitute for Magna Carta’s “the law of the land” in a 1354 (Library of Congress, 2014) statute of King Edward III. Often described as “*black boxes*,” AI systems lack transparency, creating risks for fairness and accountability in decisions may impacting individuals’ rights. This study explores how AI-powered administrative systems can be designed to uphold these principles, ensuring just outcomes and legal transparency. The research critically examines the intersection of AI technology and administrative law, focusing on the opacity of AI’s decision-making processes. The goal is to identify strategies that ensure AI systems in administrative contexts not only align with Natural Justice (right to fair hearings and impartiality) and Due Process (right to a fair procedure) but also maintain public trust in the legal system. Using a qualitative research approach, the study employs doctrinal legal analysis and case studies to review AI frameworks in areas such as departmental inquiries and appeal in departmental inquiries. The analysis compares AI implementations across various jurisdictions, identifying gaps in transparency and accountability. Key findings indicate that without explainability, oversight, and

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human intervention, AI systems may breach legal principles. The study suggests solutions like Explainable AI (XAI), human-in-the-loop systems, and robust accountability frameworks to align AI with legal safeguards. While AI offers efficiency in administrative decision-making, adherence to fairness and justice principles is critical. The research supports a balanced approach where AI complements, rather than replaces, human decision-making, preserving Natural Justice and Due Process in an automated legal landscape.

Keywords: Artificial Intelligence (AI); Natural Justice; Due Process; Administrative Law; Algorithmic Decision-Making; Departmental Inquiries; Legal Frameworks

1. Introduction

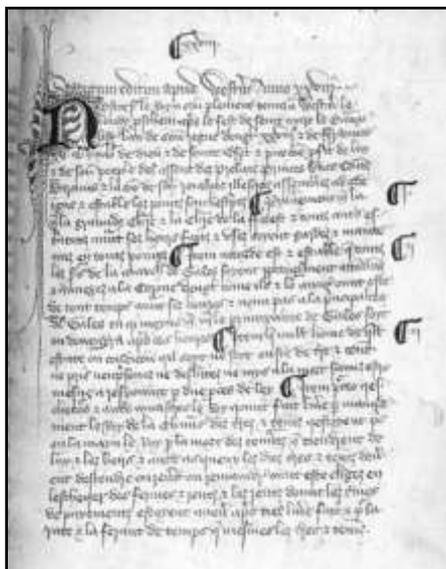
If justice be not a natural principle, it is no principle at all! Administrative law is a critical branch of law that governs the activities and actions of administrative agencies, which are empowered to regulate various aspects of public life. It provides a legal framework for government officials and agencies to implement policies, make decisions, enforce regulations, and adjudicate disputes. While administrative law primarily operates within national legal systems, its principles and practices are increasingly interconnected with public international law, particularly in an era of globalization and intergovernmental cooperation. Administrative law becomes relevant within the international arena when national administrative decisions or regulatory practices impact international obligations, such as treaties, conventions, or the functioning of international bodies. At the core administrative law lie the fundamental principles of natural justice and due process of law, which are essential for ensuring fairness, transparency, and accountability in decision-making processes. Natural justice refers to the inherent right of individuals to a fair hearing and an unbiased decision-maker, ensuring that administrative actions are made in good faith, without prejudice or bias. It includes two key elements: the right to be heard “*Audi Alteram Partem*” and the right to an impartial decision-maker “*Nemo Judex In Causa Sua*” while the Due process of law, is a broader constitutional principle that guarantees individuals protection against arbitrary or unfair actions by the state. It ensures that legal processes, particularly in administrative actions, are conducted in a transparent and lawful manner. Due process of law ensures government actions don't infringe on citizens' rights without fair procedures. Its roots are in Chapter 39 of the Magna Carta, which protected individuals from unlawful detention and property loss through the principle of “*the law of the land.*” In 1354, this became “*Due Process of Law*” under King Edward III (Pic-I), framing judicial protection against tyranny. The Fifth and Fourteenth Amendments (Legal Information Institute, 2024) to the US Constitution enshrined this principle, ensuring that no one is

deprived of life, liberty, or property unjustly. Key cases and figures further shaped due process. *Dr. Bonham’s Case* (1610) (Encyclopedia Britannica, 2013), argued by Chief Justice Coke, and highlighted the power of courts to void unjust laws, an idea foundational to judicial review. Later, the Fourteenth Amendment, championed by John Bingham, extended due process and equal protection, demanding states uphold similar protections to those provided by the federal government. In *Slaughter-House Cases* (1873) (Encyclopedia Britannica, 2018), Justice Field’s dissent introduced the concept of substantive due process to protect certain liberties beyond mere procedural fairness. Decisions like *Miranda v. Arizona* (1966) (Encyclopedia Britannica, 2024) reinforced due process in law enforcement, requiring suspects to be informed of their rights. The case of *United States v. Dickerson* (2000) (Metych, 2024) upheld this standard, affirming Congress couldn’t override Supreme Court-established rights. *Thurgood Marshall* (1935) (Smentkowski, 2024), reflecting on constitutional evolution, highlighted how amendments, especially the Fourteenth, corrected flaws, aiming for justice and equal protection. Fair hearing norms in the UK, USA, and India share common law roots and prioritize due process, though each country’s approach varies based on administrative needs and jurisdictional contexts, highlighting both similarities and differences in ensuring justice across these legal systems (Sethi, 2021). Due process also extends to providing individuals with the opportunity to challenge administrative decisions in an appropriate forum, ensuring that their rights are protected and that administrative department’s act within their legal authority. Together, administrative law, natural justice, and due process work to establish a system where government actions are not only efficient and effective but also fair, transparent, and accountable, ensuring that individuals’ rights and freedoms are safeguarded within both national and international legal frameworks. In an era of rapid technological advancement, Artificial Intelligence (AI) has increasingly permeated various sectors, including public administration and legal proceedings. AI-driven decision-making systems offer significant potential for improving efficiency and precision in administrative functions. However, they also pose risks, especially when their complex algorithms, often described as “*black boxes*,” obscure the rationale behind crucial decisions. In contexts where departmental inquiries and administrative adjudication are critical, such as in Europe and Asia—including countries like Pakistan and India—questions arise regarding how AI can align with fundamental principles of due process and natural justice.

The principles of natural justice are foundational to fair administrative processes, ensuring transparency, impartiality, and the right to be heard. However, traditional bureaucratic systems, particularly in European and Asian contexts, have historically

struggled with issues like procedural delays, rigid hierarchies, and limited transparency in departmental inquiries. In countries like Pakistan, India and Bangladesh, where the legacy of colonial bureaucratic models remains strong, these systems are often slow to adapt, leaving room for inefficiency and lack of accountability.

Bureaucratic models in both Europe and Asia are rooted in hierarchical governance structures that prioritize rule-based administration and centralized authority. While these systems have supported stability and consistency, they also present barriers to agility and responsiveness. In the subcontinent, administrative frameworks in Pakistan and India still reflect colonial influences that often result in inflexible and opaque processes, especially in departmental inquiries. This section examines how traditional bureaucratic approaches impact fairness in decision-making within administrative law, providing a foundation for analyzing AI's potential to address these challenges. Departmental inquiries and appeals within administrative authorities face numerous challenges, such as lack of transparency, complex procedural requirements, and susceptibility to bias. These issues compromise due process and the implementation of natural justice principles, affecting individuals' rights. With the advent of AI in decision-making, these challenges demand new solutions, particularly through explainable AI models that can enhance accountability, transparency, and adherence to legal norms.



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1.1. Research Aim and Objectives

The integration of AI represents a shift from traditional bureaucracy to innovation, promising more efficient and accountable administrative processes. However, this transition requires ensuring that AI systems comply with natural justice principles, a challenge given their opacity and the need for explain-ability. This study aims to explore whether AI explain-ability can safeguard due process and uphold principles of natural justice within departmental inquiries under administrative law. The objectives include evaluating the role of explainable AI in promoting transparency, examining its potential to enhance procedural fairness, and assessing the transition from bureaucratic rigidity to AI-driven innovation within administrative frameworks.

1.2. Research Design & Methods

This research adopts a mixed-methods approach to examine the potential of AI explain-ability in reinforcing due process and principles of natural justice within departmental inquiries under administrative law. The study will begin with a literature review on traditional bureaucratic models and the challenges of departmental inquiries in Europe and Asia, focusing on Pakistan and India. This will provide context for the limitations of current administrative processes in terms of transparency, accountability, and adherence to legal norms.

Qualitative data will be gathered through the final decision of departmental inquiries, Court judgments, semi-structured interviews with legal experts, AI ethicists, and administrators to understand perceptions of AI's role in safeguarding natural justice in departmental inquiries. In parallel, quantitative analysis will assess existing AI applications in administrative law to identify trends, challenges, and successes, particularly concerning explain-ability and fairness.

The research will evaluate the current level of transparency and procedural fairness afforded by AI systems, aiming to highlight gaps and propose design recommendations for explainable AI frameworks in administrative contexts. Key research questions will focus on the feasibility of explainable AI in improving decision-making transparency and protecting individual rights. The study's findings will provide insights into AI's potential to balance innovation with ethical standards, proposing frameworks to enhance administrative justice and accountability in a rapidly evolving technological landscape.

1.3. Research Questions

To address these issues, this research seeks to answer the following questions:

Q: How can AI explain-ability support due process and natural justice in departmental inquiries under administrative law?

Q: What are the challenges and potential solutions for implementing explainable AI within bureaucratic structures?

Q: How does the transition from traditional bureaucracy to AI-based systems affect transparency and fairness in administrative decision-making?

This study will contribute to understanding the potential of explainable AI to reform administrative law practices, fostering a balance between technological innovation and the preservation of legal principles.

2. Literature Review

The literature on administrative justice has long centered around the traditional bureaucratic model, where decision-making is grounded in hierarchical authority, rigid protocols, and a commitment to standardized, rule-based outcomes. This framework, while effective in maintaining consistency, has often struggled with inefficiencies, lack of transparency, and limited flexibility in complex cases. With the emergence of AI-driven administrative systems, there is a shift toward data-driven, algorithmic decision-making that promises efficiency and scalability. However, this transition raises significant concerns regarding transparency, accountability, and the protection of fundamental principles like due process and natural justice. Current research reveals substantial gaps and challenges, especially in aligning AI capabilities with the ethical and legal standards central to fair administrative practices. Cowan et al. (2020, October 30) defines that administrative law governs the relationship between government and citizens, ensuring that government actions are legal, fair, and reasonable, with effective remedies for unlawful acts, maintaining public confidence in authority and Sharma (2020, June 19) highlights that due process of law is a constitutional guarantee that prevents government abuse by ensuring that all citizens are protected from deprivation of life, liberty, or property without fair legal procedures while Priya (2020) highlights the principles of natural justice, focusing on the concepts of impartiality and the right to a fair hearing in administrative law and Maheshwari (2020, June 6) highlights the

evolving complexity of harmonizing social, economic, and political relations in society, emphasizing the need for higher norms to regulate human behavior and ensure justice, particularly when addressing the fairness of punishment and dismissal in employment, moreover, Kingsbury (2009) argues for a “*social fact*” conception of law in global administrative law (GAL), incorporating the principle of “publicness”—adherence to legality, rationality, proportionality, rule of law, and human rights—into practices of judicial review, reason-giving, and transparency in global governance. Munir et al. (2020) examines how discretionary authority granted to the executive is controlled by legislative and judicial standards to prevent misuse, with a focus on case laws establishing principles for its proper exercise while Suksi (2021) emphasize the need for countries to update their administrative due process rules to accommodate automated decision-making, ensuring preventive safeguards, accountability, and compatibility with the rule of law, and Bose (2020, May 13) emphasizes the importance of natural justice principles in preventing miscarriages of justice and protecting individuals from abuse of power in administrative, judicial, and quasi-judicial systems worldwide. Suksi (2020, May 22) further explore increasing use of automated decision-making in public administration may render traditional due process provisions redundant, necessitating updates to legal frameworks to address accountability, safeguards, and the compatibility of rule-based systems with the rule of law, later research Bansal (2021) highlights natural justice as essential for preventing arbitrary discrimination and ensuring fair treatment, with principles such as impartiality (“*nemo debet esse iudex in propria causa*”) and the right to a fair hearing (“*audi alteram partem*”) evolving to uphold procedural justice across judicial, quasi-judicial, and administrative actions, moreover, Desai & Chakraborty (2021) emphasize on principles of natural justice ensure fair adjudication by protecting public rights, preventing arbitrary decisions, and maintaining public faith in judicial, quasi-judicial, and administrative authorities through impartial, just, and reasonable procedures, while Garg (2021, July 22) explores administrative convenience cuts decision-making costs, it burdens society by infringing on Fundamental Rights and straining the judiciary, underscoring the need for statutory checks and personal accountability to deter executive arbitrariness and Dissanayake & Goonesinghe (2021) Strict adherence to principles of natural justice promotes equity, enhances decision-making integrity, and is a moral necessity in administrative duties, ensuring justice is visibly upheld in all proceedings. Ashburner (2022) highlight the interaction between procedural fairness and materiality remains uncertain, but evidence shows that the practical justice and materiality thresholds are nearly identical, with materiality playing a minor role in

fair hearing breaches but still relevant for establishing practical detriment and balancing judicial review values. Mensah (2022) explore natural justice, based on fair hearing and impartial judgment, requires administrative bodies to act reasonably and within legal limits, ensuring that decisions affecting rights are unbiased, and allowing aggrieved individuals redress through court review if procedural fairness is breached and Mirani (2022, December 1) states that natural justice and administrative law work together to ensure fair governance by limiting arbitrary administrative power through principles of fairness, discretion, and judicial oversight, with common law mechanisms to resolve public grievances against governmental actions and prevent abuse of authority. Butt (2023a) examines how AI integration in administrative law can revolutionize decision-making efficiency while raising critical concerns about transparency, accountability, and the preservation of natural justice and due process in public administration, further research Butt (2023b) highlights the essential role of bureaucracy in advancing democracy, equality, and good governance across Europe, examining its strengths and challenges while proposing reforms to enhance transparency, accountability, and public service delivery and Wolswinkel (2022) emphasizes the need to revise administrative law principles in the Council of Europe's *The Administration and You* handbook, adapting them for AI and automated decision-making (ADM) by incorporating transparency, accountability, and the varying legal challenges posed by AI across member states. Zuckerman (2020) explore shift from human to AI-operated decision-making in administrative law risks undermining natural justice by replacing visible court processes and human empathy with opaque, machine-driven adjudication. argues that as states adopt automated administrative decisions, core due process rights—such as explanation, human judgment, and appeal—must be preserved, cautioning against legal automation bargains that risk undermining justice, especially for vulnerable groups. Butt (2024a) delves into the transformative EU AI Act, 2024, analyzing its pioneering provisions to ensure transparency, fairness, and accountability in AI-driven administrative decisions, thereby redefining natural justice in the age of AI. examines how digitalization in Nordic countries is transforming administrative decision-making and access to justice, highlighting both opportunities and challenges for procedural fairness and efficient governance in advanced welfare states, further Butt (2024b) explores the complex interaction between the GDPR, 2018 and the AI Act, 2024, examining how these regulations jointly shape responsible AI development while addressing challenges in data protection, algorithmic governance, and ethical AI application and Al-Ansi & Al-Ansi (2023) explores how emerging 6G communication networks and advancements

in AI applications, such as Digital Twins, Holograms, Robot Avatars, IoT, AR, and VR, will transform administrative processes, with profound implications for natural justice and due process in law.

The literature highlights a shift from traditional bureaucratic decision-making to AI-driven systems, raising concerns about transparency, accountability, and the protection of due process and natural justice. While AI offers efficiency and scalability, its integration into administrative law still faces challenges in aligning with ethical and legal standards essential for fair adjudication. Existing research emphasizes the need for reforms that incorporate automated decision-making for a just a fair administrative decision included departmental inquiries while safeguarding fundamental rights and procedural fairness. However, gaps remain in how AI can coexist with traditional legal principles, especially in protecting vulnerable groups and ensuring that human judgment is not replaced by opaque algorithms. Moreover, there is a lack of comprehensive guidelines for the responsible use of AI in administrative law. This research addresses these concerns, arguing that while AI can improve decision-making efficiency, it may undermine natural justice if not properly regulated. The author stresses the need for a balance between AI automation and human oversight to ensure transparent, accountable, and fair decisions. The paper advocates for legal reforms that integrate AI in a way that respects core principles of justice, ensuring that AI does not overshadow human judgment or compromise democratic values.

3. Understanding Administrative Law

“Whatever disagreement there may be as to the scope of the phrase ‘due process of law’ there can be no doubt that it embraces the fundamental conception of a fair trial, with opportunity to be heard.” - Oliver Wendell Holmes Jr.

Administrative law plays a vital role in regulating the actions of government agencies, ensuring that they operate within the confines of the law. It governs the decision-making process by public authorities, overseeing how they implement and enforce laws, policies, and regulations. At its core, administrative law is designed to ensure that public administration is both effective and accountable to the public. It provides a framework for the exercise of executive authority, balancing it with principles of fairness, transparency, and justice. Central to administrative law are the principles of natural justice and due process, which guarantee the protection of individual rights in the face of administrative decisions. Administrative law’s

principles dictate that decisions made by state bodies or administrative agencies must not only follow legal provisions but also uphold fundamental rights, ensuring that individuals are not unfairly harmed by arbitrary governmental actions. The law requires that individuals have access to a fair hearing, an impartial decision-maker, and the right to appeal against decisions that affect their rights. In the modern age, with the increasing reliance on technologies such as Artificial Intelligence (AI), these principles must evolve to safeguard transparency and fairness in AI-driven administrative decisions.

4. Traditional Model of Administrative Law

The traditional model of public administration, which emphasized a professional, merit-based public service for efficient and law-abiding governance (Hughes, 1998), faces critique for its outdated application of the Wednesbury formulation (LawTeacher, 2013) of reasonableness in administrative law (Daly, 2024). Critics argue that it no longer aligns with current judicial practices, though it still serves a rhetorical role in limiting judicial intervention (Carelli & Peters, 2024). Studies underscore the pivotal role of administrative law in shaping bureaucratic autonomy, illustrating how legal frameworks affect the functioning of public organizations and the interplay between law, politics, and social factors in shaping administrative behavior. Historically, the traditional model of administrative law emerged to address the growing need for managing state responsibilities. European bureaucratic systems, influenced by Weberian principles, emphasized centralized governance, rational decision-making, and efficient policy implementation. These systems, built in countries like France, Germany, and the UK, aimed to ensure predictable and rule-based administrative decisions. In contrast, colonial influences in Asia, particularly in India and Pakistan, led to the adoption of bureaucratic frameworks focused on control and regulation, often prioritizing governance over justice. Following independence, these nations retained aspects of their colonial bureaucracies, including hierarchical decision-making structures and centralized authority.

5. The Heartbeat of Administrative Law

The pulse of administrative law embodies the essential principles and processes that uphold fairness, accountability, and trust in government decision-making, whether in public matters or departmental inquiries with quasi-judicial roles. This pulse is

powered by fundamental principles such as the rule of law, transparency, accountability, and procedural fairness, ensuring that decisions are made within a structured legal framework, open to scrutiny, and executed with respect for individual rights. At its heart lies due process, guaranteeing that decisions adhere to established procedures, offering notice, the opportunity to be heard, and the right to challenge decisions. Natural justice, another core component, demands impartiality and fairness in administrative proceedings, ensuring that no one is judged in their own case and that all parties are given an equal chance to present their case. Due process includes both procedural standards that courts must uphold in order to protect peoples’ personal liberty and a range of liberty interests that statutes and regulations must not infringe (Library of Congress, 2014). As administrative processes evolve, particularly with the rise of AI and automated decision-making, it is even more critical to preserve the pulse of administrative law. AI systems must be designed in alignment with ethical standards to safeguard the transparency, accountability, and fairness that form the foundation of administrative decision-making, ensuring the continued public trust in the ever-changing landscape of modern governance.

5.1. The Building Blocks of Natural Justice

Natural justice is a fundamental concept in law that ensures fairness, impartiality, and equality in decision-making processes, particularly in administrative and judicial contexts. It acts as a safeguard against arbitrariness and abuse of power by public authorities or decision-makers. The core principles of natural justice are designed to ensure that all parties have an opportunity to present their case, be heard, and receive a fair and unbiased judgment. These principles can be broken down into key building blocks that form the foundation of natural justice.

a) Audi Alteram Partem (Hear the Other Side)

- **Principle:** This fundamental rule of natural justice dictates that no person should be condemned without being given an opportunity to present their side of the story. It emphasizes the right to be heard and ensures that both sides of the case are considered before a decision is made.
- **Application:** In practical terms, this principle requires that individuals affected by a decision must be informed of the case against them and allowed to respond, present evidence, and cross-examine witnesses.

b) Nemo Judex in Causa Sua (No One Should Be a Judge in Their Own Case)

- Principle: This principle ensures impartiality in decision-making. It asserts that no person should be a judge in a case where they have a personal interest or bias, ensuring that decisions are made by an unbiased and neutral authority.
- Application: It is crucial that decision-makers in administrative or judicial processes do not have a conflict of interest and are not influenced by personal or external factors when making decisions.

c) Right to a Fair Hearing

- Principle: Every individual has the right to a fair hearing, which means that decisions affecting their rights, interests, or liberties must be made in a process that is free from bias and includes all necessary safeguards.
- Application: A fair hearing includes adequate notice, the opportunity to present evidence, the right to legal representation (if needed), and the opportunity to cross-examine witnesses. It ensures that the individual's side of the story is fully heard.

d) Reasoned Decisions

- Principle: A decision must be accompanied by a clear and reasoned explanation, detailing how the facts, evidence, and law led to the final decision. This provides transparency and helps ensure that decisions are based on sound reasoning.
- Application: By requiring reasoned decisions, natural justice ensures that decisions are not arbitrary but based on rational and coherent reasoning, which can be challenged if necessary.

e) Impartiality and Fairness

- Principle: Natural justice requires that all decisions be made impartially, with fairness to all parties. No bias or prejudice should influence the outcome of a case.
- Application: Decision-makers must not have any vested interest in the outcome of the case and should ensure that their decisions are made based on the merits of the case rather than external influences.

f) Opportunity to Challenge Decisions

- Principle: A key aspect of natural justice is that individuals should have the right to challenge decisions that affect them. This may involve the right to appeal, seek judicial review, or request a reconsideration of the decision.

- **Application:** This ensures that no final decision is made without the possibility of redress, and individuals have the opportunity to address any errors or injustices that may have occurred during the decision-making process.

g) Transparency and Accountability

- **Principle:** Natural justice emphasizes that decisions should be transparent and accountable to the public. The process by which decisions are made should be open to scrutiny to ensure that justice is being administered fairly.
- **Application:** Decision-makers must provide clear, accessible reasons for their decisions and ensure that they are held accountable for any decisions made that affect individuals' rights or liberties.

The building blocks of natural justice provide a framework for ensuring fairness, impartiality, and transparency in legal and administrative proceedings. These principles are essential for maintaining public trust in the legal system and protecting individuals' rights against arbitrary or biased decision-making. They form the foundation of a just society where everyone has an opportunity to be heard and treated fairly.

5.2. The Pillars of Due Process of Law

Due Process of Law: Essential Ingredients: Due process of law ensures that individuals are treated fairly and justly by the legal system, protecting their rights against arbitrary actions. It encompasses both procedural standards that courts must uphold and substantive rights that cannot be violated by statutes or regulations. Below are the critical ingredients of due process that ensure fairness in legal proceedings:

a) Notice and Awareness

- **Delivery of Notice:** Individuals must receive timely and clear notice about legal proceedings or actions that may affect their rights.
- **Receive Fair Notice of the Hearing:** Parties must be informed about the specifics of the hearing, including the time, place, and nature of the proceedings, allowing them to adequately prepare.

- **Time to respond to the Notice:** Adequate time must be given for individuals to respond to the notice, ensuring they have an opportunity to prepare and present their case.

b) Opportunities for the Complainant

- **Production of Prosecution Witnesses:** The complainant or prosecution must have the opportunity to present witnesses to support their case.
- **Cross-Examination of Prosecution Witnesses:** The defendant must be allowed to challenge the credibility and reliability of the prosecution's witnesses through cross-examination.
- **Re-examination of Witnesses:** After cross-examination, the defense should have the opportunity to re-examine their own witnesses to clarify any issues raised during questioning.
- **Opportunity to be heard (Hearing):** The complainant must be given a fair opportunity to present their case, including presenting evidence and arguments before an impartial tribunal.

c) Opportunities for the Defense

- **Opportunity to Present Defense Witnesses:** The defendant must be able to bring forward witnesses to support their defense.
- **Cross-Examination of Defense Witnesses:** The complainant must be allowed to challenge the credibility and reliability of the defense witnesses through cross-examination.
- **Re-examination of Witnesses:** After cross-examination, the prosecution should have the opportunity to re-examine their own witnesses to clarify any issues raised during questioning.
- **Secure the Assistance of Counsel:** The defendant has the right to be assisted by legal counsel during the proceedings, ensuring a fair defense.

d) Traits of Administrative Authority

- **Judicial Mind of Administrative Authority:** The authority making decisions must approach cases with an open and unbiased mind, applying the law impartially.

- **Conversant with Law and Rules:** The administrative body must be knowledgeable and competent in the applicable laws and regulations governing the case.
- **Receive a Written Decision with Reasons Based on Evidence:** A written decision, including clear reasoning and factual evidence supporting the outcome, must be provided to the parties involved.
- **Impartiality and Fairness:** Administrative decisions must be made without bias, ensuring that all parties are treated equally and fairly.
- **Equal Protection under the Law:** All individuals, regardless of their background or status, must receive the same protection and treatment under the law.
- **Right to Appeal the Decision:** Parties must have the right to appeal the decision if they believe the ruling was unjust or based on insufficient evidence.

e) Key Principles of Principles of Natural Justice and Due Process of Law

- **Reasoned Decision:** A decision must be made based on reason and clear reasoning, explaining how the facts and law lead to the conclusion.
- **Notice:** Individuals must be notified of the actions or decisions that may affect their rights, ensuring transparency in the process.
- **Speaking Orders:** Decisions must be articulated with reasoning, not just a final ruling, so that the parties understand how the decision was reached.
- **Bias Rule:** The decision-maker must be free from bias or conflicts of interest, ensuring fairness in the process.
- **Constitutional Justice:** Due process must align with constitutional principles, safeguarding fundamental rights and freedoms.
- **Decisions Affecting Major Interests:** For decisions that impact a person's fundamental rights, liberties, or property, the process must be more rigorous to protect those interests.
- **Hearing:** A formal hearing must be held to allow all parties to present their case, promoting fairness and transparency.
- **Impartial Decision Maker:** The individual or body making the decision must be neutral, ensuring an unbiased and fair process.

- **Right to Present Case and Evidence:** Both parties have the right to present their case and submit evidence in their defense, ensuring a balanced and fair process.

6. Judicial Review of Administrative Action Through Writs

Judicial review of administrative actions is essential for ensuring government accountability, fairness, and legality, safeguarding individual rights, promoting transparency, and maintaining the balance of power within democratic systems (Pradhan, Raj, Satapathy & Agrawal, 2024) and serves as a critical safeguard against the excesses of administrative power, ensuring that government actions comply with the law, uphold principles of fairness, and respect the rights of individuals. The process allows courts to examine whether administrative actions have overstepped legal boundaries, failed to follow due process, or violated constitutional provisions. Judicial review is typically exercised through writs, which are powerful tools available to individuals seeking to challenge the actions of public authorities.

6.1. The Role of Judicial Review

Judicial review is an essential function of the judiciary that ensures *lex regit actum* (the law governs the act). It acts as a check on administrative discretion, offering a remedy for individuals whose rights or interests have been adversely affected by unlawful administrative actions. The courts do not substitute their judgment for that of the administrative authority but evaluate whether the authority has acted within its legal limits.

6.2. Writs: The Tools for Judicial Review

In the realm of judicial review, writs are the most significant legal instruments through which individuals can challenge administrative actions. A writ is a formal order issued by a higher court to a lower court or public authority, compelling or prohibiting certain actions. The major writs used in judicial review are:

- Habeas Corpus:** The writ of habeas corpus is the “safeguard of individual liberty”. It requires the immediate production of an individual who is detained unlawfully, ensuring that no one is deprived of their liberty without lawful justification. The Latin maxim “*ad faciendum et recipiendum*” signifies the

requirement for the release of an individual unless a lawful cause for their detention is presented.

b) Mandamus: The writ of mandamus is issued to compel a public authority to perform a duty it has failed to perform. The principle underlying mandamus is that public officials must act within their lawful authority and perform their duties as required by law. The court may issue mandamus if a duty exists and there is a failure to perform it. The maxim “*ultra vires*” (beyond the powers) is central to this writ, addressing actions taken outside of lawful authority.

c) Prohibition: The writ of prohibition is issued to prevent a lower court or tribunal from exceeding its jurisdiction or acting beyond its authority. It is a preventive remedy, ensuring that no authority acts in a manner that violates the law or principles of natural justice. This writ is a safeguard against “*actus reus*” (an unlawful act) by public authorities.

d) Certiorari: The writ of certiorari seeks to quash or set aside an administrative decision or order that is deemed to be illegal, unreasonable, or unjust. This writ reviews the legality of decisions made by inferior courts or administrative bodies. The term “*certiorari*” means to be informed or to be made certain, reflecting the court’s role in reviewing and ensuring that administrative actions comply with the law.

e) Quo Warranto: Quo warranto is a writ issued to inquire by what authority a person holds a public office. This writ is used when a person is holding an office unlawfully, and the court asks for the legal justification of the individual’s claim to the office. The phrase “*quo warranto*” translates to “by what authority”, challenging the legitimacy of an officeholder’s position.

6.3. Grounds for Judicial Review: Unveiling the Legal Maxims

Judicial review is not based on subjective whim but is rooted in several well-established principles. Courts examine whether the administrative action conforms to legal standards and whether fundamental rights have been respected. The key grounds for judicial review include:

a) Illegality (Ultravires): An administrative body must act within its jurisdiction, and its actions must be in compliance with the law. If a public authority exceeds or misuses its powers, it is said to act *ultra vires*, and such an action is subject to judicial

review. The principle of “*potestas*” (authority) governs here, where any action outside of granted power is deemed unlawful.

b) Irrationality (Wednesbury Unreasonableness): This ground is based on the “Wednesbury” test, which refers to “irrationality” in administrative actions. If a decision is so unreasonable that no reasonable authority could have made it, courts may intervene. This principle is rooted in “*nemo potest venire contra rationem*” (no one can act against reason).

c) Procedural Impropriety (Non-compliance with Procedural Fairness): Courts will review whether the decision-making process followed the correct procedures, including respecting rights to a fair hearing and adhering to principles of *audi alteram partem* (hear the other side). This ensures that “*ius*” (law) is not only substantive but also procedural, upholding fairness in all steps.

d) Unlawful Delegation of Powers: Administrative bodies are restricted to exercising only the powers granted to them by law. If a body delegates its powers improperly, this action is subject to judicial review. The principle “*delegatus non potest delegare*” (a delegate cannot further delegate) governs this ground.

6.4. Constitutional Justice and Fundamental Rights

Judicial review plays a pivotal role in upholding constitutional justice by ensuring that administrative actions align with constitutional norms. Constitutional justice mandates that no law or administrative action can violate fundamental rights, including “*ius naturale*” (natural law) principles. Judicial review becomes even more significant when administrative actions impinge on “*maiores res*” (major interests), such as personal liberty, property rights, or equal treatment. Courts ensure that public authorities act in a manner that promotes the “*salus populi suprema lex*” (the welfare of the people is the supreme law).

6.5. The Balance Between Judicial and Administrative Power

Administrative law, alongside constitutional and criminal law, ensures government actions are legal, fair, and reasonable, providing effective remedies for citizens affected by unlawful acts, thereby maintaining public confidence in government authority (Okanagan College Library, 2024) and judicial review ensures that administrative bodies are held accountable while respecting their autonomy. Courts

exercise judicial review not to substitute their judgment for that of the administration but to ensure that administrative actions are lawful, reasonable, and just. This relationship is governed by the maxim “*ministerium legale*” (legal duty), affirming the courts’ role in enforcing the law. Moreover, judicial review contributes to “*ius administrativum*” (administrative law), strengthening governance systems by ensuring that powers are exercised within the framework established by law. This checks and balances system prevents the erosion of individual rights and upholds the democratic principle of “*pacta sunt servanda*” (agreements must be kept), ensuring transparency and accountability in all actions taken by public authorities. Judicial review through writs serves as a cornerstone of administrative justice, ensuring that no individual or administrative body operates beyond the limits of its lawful powers. By invoking writs such as *habeas corpus*, *mandamus*, *certiorari*, *prohibition*, and *quo warranto*, courts provide mechanisms to hold public authorities accountable, ensuring decisions are made lawfully, fairly, and transparently. The principles underlying judicial review, reinforced by Latin legal maxims, are designed to maintain a balance between governmental authority and individual rights, preserving justice in a society governed by the rule of law. Through judicial review, “*fiat justitia ruat caelum*” (let justice be done though the heavens fall), reinforcing the foundation of a fair and just legal system.

7. European Bureaucratic Models

The European bureaucratic model was profoundly influenced by the need for centralized control and the rise of the nation-state. Early bureaucratic systems in France, Prussia, and Britain aimed at creating rational administrative systems to manage emerging state functions in the 19th century. In France, the Code Napoléon established a legal framework for public administration that emphasized uniformity and the rule of law. In Germany, the Weberian bureaucracy became a model for creating an efficient, hierarchical state apparatus with clear distinctions between political authority and administrative tasks. The structures established in European countries were largely based on a set of bureaucratic norms, including written documentation, merit-based appointments, and an impersonal approach to governance. This legal framework was designed to ensure accountability and fairness, requiring that decisions made by bureaucratic bodies be transparent, consistent, and in line with public interest. While these models evolved, their influence remains, particularly in the formation of bureaucracies in post-colonial states that adopted Western models of governance.

8. Asian Administrative Models

Asian bureaucratic models, particularly in India and Pakistan, were deeply shaped by British colonial rule. Under British governance, both countries developed centralized and hierarchical bureaucratic systems that focused on administrative efficiency and control over vast territories. These bureaucracies were designed to serve colonial interests and maintain law and order, rather than safeguard individual rights. Post-independence, India and Pakistan inherited these bureaucratic frameworks, including civil service systems and administrative procedures based on colonial practices. Both countries developed administrative structures focused on centralized decision-making, with limited mechanisms for public participation or checks and balances. While India has undertaken reforms such as decentralization and efforts to enhance transparency, the fundamental bureaucratic structure continues to reflect its colonial past. Pakistan, likewise, continues to grapple with legacy issues of governance, such as corruption, inefficiency, and a lack of public accountability, which stem from the bureaucratic models inherited from colonial rule. As a result, administrative law in these countries often mirrors the rigid, impersonal, and hierarchical bureaucratic models, which can be at odds with the evolving needs of a modern democratic society. These systems have struggled with issues such as bureaucratic inertia, opacity in decision-making, and the inability to provide accessible and transparent public services, which continue to raise concerns about the protection of individual rights in administrative processes.

9. Natural Justice and Due Process Principles

The core of administrative law is the safeguarding of natural justice and due process, which together uphold fairness in decision-making by administrative bodies. Natural justice encompasses the essential rights of individuals to be heard and to have their cases decided by impartial and unbiased authorities. Both natural justice and due process embody key principles designed to promote fairness, transparency, and accountability across legal and administrative proceedings. These principles, deeply rooted in legal maxims, form the backbone of administrative law's commitment to objective and equitable decision-making. However, as administrative systems shift from traditional bureaucratic methods to complex, algorithm-driven "black box" models, the role of natural justice faces critical reassessment. While these foundational maxims have historically provided strong safeguards, the rise of automation and artificial intelligence (AI) in decision-making introduces new

challenges, complicating the application of fair procedural standards and underscoring the need to adapt these principles to modern contexts.

10. Case Studies

In *Thuraisigiam* (2020) (Li, 2022), the Supreme Court’s broad interpretation risks undermining noncitizens’ rights, but lower courts can limit this by affirming procedural due process for all noncitizens with US ties, countering the erosion of fundamental protections. HandWiki (2022) highlights that courts apply different levels of scrutiny—strict scrutiny, rational basis review, and intermediate scrutiny—based on the nature of the individual right being infringed, with strict scrutiny requiring the least restrictive means for compelling government interests and rational basis review requiring only a rational relationship to a legitimate government interest. In *May v. Ferndale Institution* (2005)¹, the Supreme Court of Canada held that withholding the details of a scoring matrix used to classify prisoners breached procedural fairness, as administrative law principles require transparency about factors affecting decisions. This precedent suggests that AI-based or algorithm-assisted decisions may similarly need disclosure of underlying components to meet fairness obligations. In *Cahoo v. SAS Analytics Inc.* (2022) (Administrative Office of the United States Courts, 2022), the court found that the use of an AI system to classify fraud without providing notice or opportunity to rebut the allegations violated procedural fairness, underscoring the need for transparency in AI decision-making processes. Similarly, in *Sterling v. Feek* (2023) (Casetext: Smarter Legal Research, 2023), the court ruled that the use of an automated system for reassessing employment benefits violated due process due to lack of sufficient notice and a fair opportunity to contest the decisions. In *Houston Fed’n of Teachers v. Houston Indep. Sch. Dist.*, (2017) (Casetext: Smarter Legal Research, 2017) the court addressed due process concerns over using automated teacher effectiveness scores to determine job termination, emphasizing the need for fairness in the application of AI tools in employment decisions. In *State v. Loomis*, the Wisconsin (2017) (Harvard Law Review, 2017) Supreme Court upheld the use of the COMPAS risk assessment in sentencing, but stressed that automated tools must be regularly updated for accuracy and used only within their intended scope, ensuring fairness in criminal sentencing.

¹ Report 3 S.C.R. 809 (2005), retrieved from <https://decisions.scc-csc.ca/scc-csc/scc-csc/en/item/2265/index.do>.

In case *Muhammad Iqbal v Zayad* (2023)¹, the Sessions Court in Phalia, Punjab, utilized GPT-4 to assist in formulating a decision on a civil suit, finding that the AI's suggestions aligned with Pakistani law, and highlighted AI's potential in shaping legal decision-making, though the chatbot's role was limited to exploring technology's use in reducing court burdens without influencing the judgment itself and lastly the Colombian Constitutional Court, in a landmark ruling (UNESCO, 2024, August 26), emphasized the need for human oversight in AI use within the judiciary, citing UNESCO's Global Toolkit on AI and the Rule of Law, and warned against over-reliance on AI tools like ChatGPT for legal reasoning, which could undermine due process and judicial integrity.

11. Legal Maxims

Legal maxims, the foundational principles of law expressed in succinct Latin phrases, offer timeless guidance in understanding legal concepts. These maxims serve as cornerstones for interpreting justice, fairness, and due process within legal frameworks. In the context of administrative law, particularly with the shift from traditional bureaucratic decision-making to AI-driven systems, legal maxims such as *Audi alteram partem* (hear the other side), *Nemo iudex in causa sua* (no one should be a judge in their own case), and *Fiat justitia ruat caelum* (let justice be done though the heavens fall) are pivotal in ensuring that natural justice and due process are maintained even in the face of technological advancements. These maxims highlight the importance of fairness, impartiality, and transparency in decision-making—principles that remain crucial as administrative systems evolve. In the era of AI and automated decisions, these legal maxims continue to provide essential benchmarks to safeguard individual rights, promote accountability, and preserve trust in the legal process. Thus, their relevance is paramount in the analysis of how AI impacts traditional notions of justice and the potential risks of eroding procedural fairness within administrative law.

¹ Civil Appeal No. 11 of 2023, retrieved from <https://courtingthelaw.com/wp-content/uploads/DOC-20230413-WA0052..pdf>.

11.1. Latin Legal Maxims Related to Principles of Natural Justice

- *Audi Alteram Partem*: The Right to be Heard
- *Nemo Judex in Causa Sua*: The Rule Against Bias

The principles of natural justice embody two key elements: the right to be heard (*Audi Alteram Partem*), which ensures that individuals are given an opportunity to present their case, and the right to an impartial decision-maker (*Nemo Judex In Causa Sua*), which ensures that decisions are made by individuals or bodies free from bias or conflict of interest.

11.2. Latin Legal Maxims Related to Due Process of Law

- *Nulla Poena Sine Lege*: No Penalty Without Law
- *Ignorantia Juris Non Excusat*: Ignorance of the Law is No Excuse
- *Lex Non Cogit ad Impossibilia*: The Law Does Not Compel the Impossible
- *Fettering of Discretion*: Avoidance of Rigid Application of Rules
- *Ignorantia Juris Non Excusat*: Ignorance of the Law is No Excuse
- *In Dubio Pro Reo*: When in Doubt, Rule for the Accused
- *Ubi Jus Ibi Remedium*: Where There is a Right, There is a Remedy
- *Expressio Unius Est Exclusio Alterius*: The Expression of One Thing is the Exclusion of Another
- *Justice Delayed is Justice Denied*
- *Lex Specialis Derogat Legi Generali*: Specific Law Overrides General Law

Due process of law incorporates a range of Latin legal maxims that ensure individuals are protected from arbitrary actions by administrative bodies, requiring fair, lawful, and transparent decision-making processes. For instance, the maxim *Nulla Poena Sine Lege* (“No Penalty without Law”) emphasizes that penalties must be grounded in established legal provisions, safeguarding individuals against arbitrary punishments. This is complemented by *Ignorantia Juris Non Excusat* (“Ignorance of the Law is No Excuse”), which enforces the notion that all are responsible for knowing the law, ensuring fairness while emphasizing that administrative bodies must clearly communicate legal standards. Other principles

further reinforce fairness in administrative law. *Lex Non Cogit ad Impossibilia* (“The Law Does Not Compel the Impossible”) ensures that individuals are not held to unrealistic standards, preventing overreach by state agencies. Similarly, the principle of Fettering of Discretion calls for the avoidance of rigid application of rules, promoting flexibility and consideration of each case’s unique aspects to avoid overly mechanical or automated decisions. In cases where legal outcomes are uncertain, *In Dubio Pro Reo* (“When in Doubt, Rule for the Accused”) supports due process by granting the benefit of doubt to the individual, protecting against potentially unjust outcomes due to ambiguity. *Ubi Jus Ibi Remedium* (“Where There is a Right, There is a Remedy”) reinforces that every infringement of rights should have an available remedy, enabling individuals to seek redress for wrongful administrative actions, while *Expressio Unius Est Exclusio Alterius* (“The Expression of One Thing is the Exclusion of Another”) mandates precise interpretation, limiting administrative discretion to ensure decisions are made within clearly defined legal parameters. Additionally, *Justice Delayed is Justice Denied* underscores the importance of timely action, as delays in administrative processes can lead to undue hardship. Finally, *Lex Specialis Derogat Legi Generali* (“Specific Law Overrides General Law”) aids in maintaining clarity by ensuring that specific regulatory provisions prevail over more general laws when relevant, reducing interpretative conflicts and fostering legal coherence. Collectively, these principles ensure that administrative law processes adhere to due process by mandating fair procedures, lawful authority, and accessible remedies. Due process not only includes the right to appeal decisions made by administrative bodies but also requires that these bodies act within their designated legal authority and jurisdiction. These foundational principles of natural justice and due process are essential in modern administrative law, ensuring decisions made by the state are fair, transparent, and trustworthy. As AI technology begins to influence administrative decision-making, these principles take on new importance in maintaining accountability, transparency, and human oversight in systems that could otherwise lack these crucial safeguards.

12. Pitfalls in the Human-Driven Processes of Departmental Inquiries and Administrative Appeals

Human-driven processes in departmental inquiries and administrative appeals, while essential to maintaining fairness and accountability, are often fraught with pitfalls that can undermine their effectiveness. These processes are susceptible to biases,

inconsistencies, and subjective interpretations, which may compromise the integrity of decision-making. Additionally, the complexity of human judgment, coupled with time constraints and limited resources, can lead to errors, delayed outcomes, or inadequate consideration of all relevant factors. These challenges highlight the need for careful scrutiny and reform to ensure that administrative procedures not only align with the principles of natural justice but also provide transparent, equitable, and efficient resolutions for all parties involved.

12.1. Departmental Inquiries: Procedural and Fairness Challenges

Departmental inquiries are a fundamental mechanism for holding employees or public officials accountable for their actions within an organization or government agency. However, the process faces significant challenges that undermine its fairness, transparency, and efficiency. These challenges include:

a) Bias and Conflicts of Interest: One of the most pressing issues in departmental inquiries is the potential for bias. When the same department or authority conducting the inquiry is also responsible for making decisions about disciplinary action, the independence and impartiality of the inquiry process can be compromised. This conflict of interest can result in biased outcomes that favor the organization rather than ensuring justice for the employee involved.

b) Lack of Transparency: The opacity of departmental inquiries is a common problem. Often, these inquiries are conducted behind closed doors with minimal communication about the processes or outcomes to the individuals affected. Without transparency, it is difficult for those involved to assess whether their case was handled fairly or in accordance with procedural norms. This lack of openness also erodes trust in the system, particularly when decisions are made without clear justifications.

c) Procedural Delays: Bureaucratic inefficiency is a common issue in departmental inquiries. Delays in the initiation, investigation, or conclusion of inquiries can have significant consequences for employees, including prolonged periods of uncertainty and reputational damage. Such delays also hinder the pursuit of timely justice and can frustrate the principles of due process and fairness, as individuals may not be given a reasonable opportunity to defend themselves or receive a timely resolution.

d) Failure to Uphold the Principles of Natural Justice: The principles of natural justice—such as the right to a fair hearing, the right to be informed of allegations, and the right to an impartial decision-maker—are often not fully adhered to in departmental inquiries. This failure can lead to unjust decisions, particularly when individuals are not allowed a meaningful opportunity to present their case or when decisions are made by individuals with preconceived notions or conflicts of interest.

12.2. Navigating the Maze: Challenges and Complexities of Appeals Before Administrative Authorities

Once a departmental inquiry has concluded, individuals who feel wronged by the outcome can seek recourse through the appeals process. However, the appeals process is not without its own set of challenges:

a) Fair Representation and Legal Representation: A critical issue in administrative appeals is the lack of access to adequate legal representation. In many administrative settings, individuals may not have the resources to secure a lawyer or face restrictions on legal representation during the appeals process. This can lead to an imbalance in the proceedings, where the individual is at a disadvantage compared to the department or agency, which often has access to legal counsel and greater procedural knowledge.

b) Right to Challenge and Present Evidence: In some jurisdictions, appeals processes are highly restrictive, limiting the scope of what can be challenged and the type of evidence that can be presented. This may prevent individuals from fully contesting the original decision, especially when new evidence or legal arguments are unavailable or excluded. Such limitations undermine the principle of fairness and the individual's right to a fair appeal.

c) Lack of Procedural Clarity: One of the key issues in administrative appeals is the lack of clarity in procedures. Individuals often find it difficult to understand the appeals process, including timelines, requirements for submission, and the grounds for appeal. This lack of transparency in procedural rules can result in procedural errors, delayed responses, and confusion for the parties involved.

d) Appeals Process as a Form of Legal Funneling: The appeals process may be structured in a way that restricts access to justice, particularly when appeals are heard by the same body or agency that made the original decision. This can create a sense of closed-loop decision-making, where the individual is unable to get a fair and

impartial review of the case. Additionally, the finality of the decisions made by administrative bodies often prevents further challenges, even if errors in law or fact are identified.

e) Risk of Overburdened Systems: The increasing volume of appeals in certain administrative sectors can place undue strain on administrative authorities, leading to delays, backlogs, and a reduction in the quality of decision-making. This overburdened system can further hinder the timely delivery of justice and the enforcement of due process.

13. The Role of AI in Safeguarding the Pillars of Natural Justice

Artificial Intelligence (AI) has the potential to enhance natural justice in administrative law by addressing some of the inherent issues in bureaucratic decision-making, particularly in quasi-judicial functions. Bureaucratic decisions are often criticized for their susceptibility to biases, which can stem from personal prejudices, systemic discrimination, or institutional culture. Additionally, bureaucrats may face extraneous influences, such as political pressure or organizational priorities, which may affect impartial decision-making. AI, if designed with proper safeguards, can help minimize these biases by relying on objective data and standardizing decision processes, potentially improving the fairness of decisions. Furthermore, bureaucrats may lack specialized legal knowledge, which is critical in quasi-judicial functions where due process and natural justice are paramount. AI tools, when programmed to follow established legal frameworks, can assist in upholding procedural fairness by ensuring that decisions comply with relevant legal standards and guidelines. However, the implementation of AI must be approached with caution, as improper data handling, algorithmic bias, or insufficient transparency can introduce new forms of unfairness or obscure accountability. Therefore, to truly safeguard natural justice, AI must be rigorously monitored, with built-in transparency and oversight mechanisms to address and prevent these potential pitfalls.

13.1. Revolutionizing Administrative Law: AI's Role in Ensuring Due Process

The advent of AI in administrative law marks a transformative shift in upholding due process, a cornerstone of fairness in governmental and judicial systems. Traditional administrative processes often suffer from delays, resource constraints, and

inconsistent application of rules due to human error or interpretative discrepancies. AI has the potential to streamline these processes, enhancing the efficiency and consistency of administrative decisions while upholding procedural fairness. For instance, AI algorithms can be programmed to ensure that all parties are given adequate notice and an opportunity to present their case, thereby fulfilling the fundamental elements of due process. Furthermore, AI can assist in evidence gathering and evaluation, identifying relevant patterns and details in extensive datasets that may otherwise be overlooked, thus supporting informed and impartial judgments. However, for AI to genuinely uphold due process, it must be equipped with explainable algorithms that provide transparency in decision-making. This ensures that affected individuals can understand the rationale behind decisions, preserving their rights to appeal or seek redress if necessary. AI's role in administrative law, if implemented with robust safeguards and regulatory oversight, can therefore help maintain and even enhance due process, offering a more accessible and consistent application of justice in administrative settings.

13.2. Human vs. Machine: Preserving Due Process in the Age of AI

As AI systems increasingly supplement or even replace human decision-makers in administrative and legal settings, preserving due process becomes a critical challenge. Human decision-makers are inherently fallible, often influenced by personal biases, emotions, or external pressures, yet they bring contextual understanding, ethical judgment, and adaptability to complex situations. In contrast, AI systems offer consistency, speed, and data-driven objectivity, which can reduce some of the traditional biases associated with human decision-making. However, AI systems, particularly those that function as “black boxes,” can introduce new risks to due process. Without transparency and explainability, affected parties may struggle to understand or challenge the basis of AI-driven decisions, potentially violating principles of fairness and accountability. Additionally, AI lacks the nuanced understanding that humans bring to complex or sensitive cases, which can result in oversights when legal judgments require interpretative and ethical considerations beyond data. To preserve due process in the age of AI, it is essential to combine human oversight with AI tools, ensuring that decisions can be reviewed, justified, and, if necessary, amended by human authorities. This hybrid approach leverages the strengths of both human judgment and AI's efficiency while safeguarding fundamental rights, ensuring that the integrity of due process remains intact even as technology reshapes the legal landscape.

14. Discussion

AI holds significant promise in enhancing the principles of natural justice and due process in administrative law, largely due to its capacity to reduce biases, increase efficiency, and operate without extraneous influences that often affect human decision-makers. Unlike humans, AI algorithms are inherently free from personal biases and emotional factors, which makes them highly effective in objective analysis and impartial decision-making. For example, while a bureaucrat may be influenced by subconscious biases or external pressures, such as political agendas or workplace hierarchies, a well-designed AI system is capable of operating solely based on data and programmed rules. This impartial approach can reduce the incidence of prejudiced decisions, ensuring a more standardized and fair approach across similar cases. Moreover, in quasi-judicial functions, where administrative agencies exercise judicial powers, AI can play a crucial role in enforcing due process by systematically adhering to procedural rules and legal standards. Through data-driven insights, AI can assist in making more consistent and legally sound decisions, helping to mitigate the limitations that bureaucrats may face, such as lack of specialized legal knowledge or interpretative discrepancies. Additionally, AI's ability to process large amounts of information quickly and accurately makes it particularly valuable in complex cases that require thorough evidence analysis and legal reasoning. By assisting human decision-makers, AI can thus serve as a valuable support tool that reinforces, rather than hampers, the due process. AI also addresses the challenge of extraneous influences, as it operates without susceptibility to political interference, social pressures, or personal relationships. In traditional bureaucratic settings, such influences can compromise the integrity of decisions, diverting them from a strictly legal and evidence-based path. With AI, however, decisions are guided by predefined algorithms and data models that remain unaffected by external pressures. This enhances the impartiality of administrative decision-making, contributing to greater public confidence in the fairness of these decisions. While AI may lack deep legal expertise, it compensates through its ability to incorporate extensive legal databases and procedural guidelines, enabling informed and consistent decision-making. This reliance on vast legal resources and rule-based programming ensures that AI-driven decisions remain aligned with established legal frameworks. Although AI cannot replace human legal judgment, it can work alongside human decision-makers to bolster legal accuracy, consistency, and impartiality. Nevertheless, ensuring AI's neutrality and avoiding algorithmic bias are essential, as AI systems, when poorly designed, can inadvertently perpetuate biases present in the training data. Therefore, implementing robust data selection

practices, regular auditing of algorithms, and transparency mechanisms are necessary steps to maximize AI's benefits in administrative law.

15. Conclusion and Recommendations

The transition from bureaucracy to AI-driven systems in administrative law offers a transformative approach to enhancing natural justice and due process. By eliminating personal biases, resisting extraneous influences, and enforcing procedural consistency, AI systems present an opportunity to strengthen the integrity and impartiality of administrative decision-making. However, the potential risks associated with algorithmic bias, opacity in decision-making, and limitations in contextual understanding emphasize the need for caution in adopting these systems fully. To maximize the benefits of AI while preserving the core principles of natural justice and due process, a balanced approach that combines AI capabilities with human oversight is recommended.

Implement Transparent and Explainable AI Models: For AI to effectively contribute to due process, it must be transparent and interpretable, allowing stakeholders to understand the basis for decisions. Explainable AI models ensure that affected parties can review, appeal, or challenge decisions, maintaining the transparency central to due process.

Regular Auditing for Algorithmic Bias: To prevent unintended biases in AI decision-making, agencies should conduct regular audits of AI models, especially regarding data inputs and algorithmic outputs. These audits can identify and correct biases that may exist within the datasets used for training the AI, ensuring equitable outcomes.

Establish AI-Human Collaborative Models: While AI can enhance decision-making, human judgment remains essential for nuanced understanding and ethical considerations. A collaborative approach, where AI assists human decision-makers, can combine AI's efficiency with the interpretative strengths of human oversight, creating a robust system for natural justice.

Develop Clear Ethical and Legal Frameworks: To prevent misuse and protect public trust, regulatory bodies should develop clear frameworks outlining the ethical and legal standards governing AI use in administrative law. These frameworks should address data privacy, accountability, and procedural safeguards, aligning AI's application with democratic principles and individual rights.

Enhance Legal and Technical Training for Administrators: To ensure effective integration, administrators should receive training in AI technology and its implications for administrative law. Familiarity with AI tools and their limitations will equip decision-makers to oversee AI-assisted processes effectively, ensuring that human oversight remains informed and active.

In conclusion, AI has the potential to revolutionize administrative law by reinforcing natural justice and due process principles. However, achieving this transformation requires careful design, robust oversight, and a commitment to transparency and fairness. By following these recommendations, administrative bodies can harness the strengths of AI while safeguarding the integrity of justice, ensuring that technological progress supports rather than undermines the foundational values of the legal system.

16. Summary of Key Findings

The author emphasizes a transformative shift from traditional bureaucratic models toward AI-driven decision-making, which introduces both opportunities and challenges for natural justice and due process. The author contends that the rise of automated “black box” systems fundamentally alters administrative law, making transparency and accountability more complex to uphold. Key findings suggest that while AI can streamline administrative efficiency, it risks undermining procedural fairness due to opaque algorithms that limit individuals’ ability to understand or challenge decisions. The author further argues that without robust regulatory frameworks, the “black box” could erode public trust in administrative processes, calling for a recalibration of oversight mechanisms to ensure AI systems adhere to core principles of natural justice. The replied of the research questions are as under:-

Q: How can AI explain-ability support due process and natural justice in departmental inquiries under administrative law?

A: AI explain-ability can play a crucial role in supporting due process and natural justice in departmental inquiries under administrative law by enhancing transparency, accountability, and fairness in decision-making. When AI systems are used in administrative processes, particularly in sensitive settings like departmental inquiries, explainable AI helps ensure that decisions are not only technically sound but also understandable to the parties involved. Explain-ability allows officials, employees, and affected individuals to comprehend how an AI-based decision was reached, providing insights into the factors and data influencing the outcome. This

transparency aligns with principles of natural justice by allowing individuals to understand the rationale behind decisions, ensuring they are not subject to arbitrary or opaque outcomes. Furthermore, explainable AI enables those affected by a decision to contest or appeal it effectively, as they can identify specific elements within the AI's decision-making process that may warrant further review or clarification. By facilitating a clear and accessible explanation of AI outputs, explainable AI supports procedural fairness and helps ensure that individuals are granted the opportunity to respond to, and engage with, the evidence or reasoning upon which administrative actions are based. Consequently, AI explain-ability enhances the legitimacy of administrative decisions, supporting due process and reinforcing trust in administrative institutions.

Q: What are the challenges and potential solutions for implementing explainable AI within bureaucratic structures?

A: Implementing explainable AI within bureaucratic structures presents several challenges, including the complexity of aligning AI models with existing bureaucratic processes, resistance to change among personnel, and the technical limitations of AI explain-ability itself. Bureaucratic systems often rely on established procedures that prioritize consistency and accountability, and integrating AI models into these systems may disrupt established workflows. Explainable AI models, while beneficial for transparency, may require extensive customization to fit specific bureaucratic contexts, which can be costly and time-intensive. Additionally, there may be resistance from employees who are unfamiliar with AI technologies or fear that AI could replace human roles, which can hinder adoption and limit the effective use of these systems. Technical challenges also arise, as some AI models, especially complex ones like deep neural networks, are inherently difficult to interpret, making explain-ability difficult to achieve without sacrificing model accuracy. To address these challenges, a combination of training, policy adaptation, and the use of hybrid AI models can be effective solutions. Training programs can build trust and competency among employees, helping them to understand how explainable AI enhances rather than replaces their roles. Additionally, policies that support transparency, such as requiring clear documentation of AI decision-making processes, can bridge the gap between AI outputs and bureaucratic expectations for accountability. Implementing hybrid AI models—such as combining simpler, interpretable models for decision-making with more complex models for data analysis—can help balance the need for both accuracy and explainability. By gradually introducing explainable AI within existing frameworks and ensuring that

personnel are supported and engaged in the transition, bureaucratic structures can overcome barriers to implementation, fostering a more transparent, efficient, and accountable administrative process.

Q: How does the transition from traditional bureaucracy to AI-based systems affect transparency and fairness in administrative decision-making?

A: The transition from traditional bureaucracy to AI-based systems in administrative decision-making significantly impacts transparency and fairness, presenting both opportunities and challenges. Traditional bureaucratic systems operate on structured, rule-based processes, where transparency is often supported by clear procedural documentation, and fairness is upheld by established checks and balances. However, integrating AI into these systems can enhance efficiency and consistency, as AI can quickly process large volumes of data to inform decisions, potentially reducing human error and bias. AI-based systems, especially when using machine learning, can help standardize decision-making, leading to more equitable outcomes if they are well-designed and closely monitored. However, the opacity of many AI algorithms—often described as “black box” models—presents a challenge to transparency. Decisions generated by AI may lack clear explanations, making it difficult for affected individuals or oversight bodies to understand the reasoning behind outcomes, which can erode trust and limit accountability. Without transparency, individuals may perceive the system as unfair, especially if they lack insight into how algorithms weigh different factors or if biases are embedded within the data used to train the models. To maintain fairness, it is crucial for AI-based administrative systems to incorporate explain-ability measures, ensuring that decision-making processes are interpretable and align with principles of due process. Rigorous auditing, continuous monitoring for bias, and the establishment of clear guidelines on AI’s role in decision-making are essential to preserving fairness and maintaining public trust as these systems evolve.

17. Policy and Practical Recommendations

To ensure that AI systems uphold fairness and impartiality in decision-making processes, it is crucial to establish comprehensive policy and practical frameworks. First, AI systems should be designed to explicitly counter commands that could bias a decision, such as inputs that imply preferential treatment for one party. For instance, if an AI is instructed to make a decision in favor of one side, it should be programmed to flag and reject such commands, alerting a human reviewer if

necessary. This kind of ethical checkpoint would serve as a safeguard against undue influence or favoritism. Additionally, AI systems in administrative and legal contexts should incorporate “explainable AI” (XAI) models, allowing for full transparency in decision-making processes. By designing algorithms that can explain their reasoning and the factors that influenced their conclusions, organizations can ensure accountability and provide an audit trail. Furthermore, implementing regular audits and reviews of AI decisions by independent bodies can help identify and rectify any biases or errors that may go unnoticed.

Practical measures should also include comprehensive training for administrators and users on ethical AI usage, bias mitigation, and how to interpret AI-driven outcomes responsibly. Establishing these training programs will enhance trust in AI-driven administrative systems and support the consistent application of these systems across various domains. Lastly, encouraging collaboration between AI developers, legal experts, and policymakers in drafting standardized regulatory guidelines can foster responsible AI use across all levels of public administration.

18. Challenges and Future Directions

One of the primary challenges in AI-driven administrative decision-making lies in combating algorithmic bias, which can arise from biased training data or unintentional design flaws. These biases are challenging to detect and correct, requiring continuous monitoring and testing to ensure that AI systems operate fairly. Additionally, the demand for transparency and explain-ability is often at odds with the complexity of many AI models, particularly deep learning systems. Simplifying these models to ensure explain-ability could limit their effectiveness, while maintaining complex algorithms may make decisions difficult for users to interpret. Another significant challenge is resistance to AI adoption among stakeholders who are accustomed to traditional bureaucratic processes. This resistance may stem from concerns over job displacement, ethical considerations, or a lack of technical skills to work with AI. Addressing these concerns requires a shift in organizational culture, supported by training programs and clear policies that emphasize AI as a tool to complement, rather than replace, human judgment.

Future directions in AI for administrative law include developing more advanced frameworks for “ethical AI,” embedding fairness and transparency standards directly into AI algorithms. Research into hybrid models that combine machine learning with rule-based systems is another promising direction, as these models allow for

flexibility in complex decision-making while maintaining procedural rigor. Additionally, advancements in federated learning may enable AI systems to improve accuracy and fairness by leveraging diverse, decentralized data without compromising privacy, which could further enhance AI's role in safeguarding natural justice. By addressing these challenges and pursuing these innovations, AI has the potential to become a powerful tool for promoting fairness, transparency, and accountability in administrative law.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and / or publication of this article.

Disclosure Statement for AI Utilization in Research

This research recognizes the use of AI tools solely for format, alignment, and drafting enhancement and standardizing terminology. All AI-generated outputs were thoroughly reviewed and verified to maintain accuracy, originality, and compliance with the research objectives and ethical standards.

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Ethics Declarations

Since this study is based on a review of existing literature, ethical concerns were primarily addressed through proper citation and acknowledgment of the original authors' contributions. Plagiarism was strictly avoided, and all references were appropriately cited in line with academic standards.

Glossary, Key Terms

- **Actus Reus:** The physical act of committing a crime, as opposed to the mental intent.
- **Ad Faciendum Et Recipiendum:** A writ compelling a person to perform an act or to receive something.
- **Audi Alteram Partem:** A principle of natural justice meaning “hear the other side” or “no one should be condemned unheard.”
- **Black Boxes:** Systems or devices whose internal mechanisms or operations are not visible or understood, often referring to AI in legal contexts.
- **Certiorari:** A writ issued by a higher court to review the decision of a lower court.
- **Delegatus Non Potest Delegare:** A principle meaning “a delegate cannot further delegate” authority.
- **Expressio Unius Est Exclusio Alterius:** A rule of interpretation meaning “the expression of one thing is the exclusion of another.”
- **Fettering of Discretion:** Restricting or limiting a decision-maker’s ability to exercise discretion.
- **Fiat Justitia Ruat Caelum:** A Latin phrase meaning “let justice be done, though the heavens fall.”
- **Habeas Corpus:** A writ requiring a person to be brought before a court, ensuring protection against unlawful detention.
- **Ignorantia Juris Non Excusat:** A legal principle meaning “ignorance of the law is no excuse.”
- **In Dubio Pro Reo:** A legal principle meaning “when in doubt, favor the accused.”
- **Ius:** Latin for “law” or “right.”
- **Ius Administrativum:** Administrative law governing the activities of administrative agencies.
- **Ius Naturale:** Natural law; the body of laws or principles derived from nature and universal reasoning.

- **Jus Natural:** Another term for natural law or natural rights.
- **Justice Delayed is Justice Denied:** A legal maxim emphasizing the importance of timely justice delivery.
- **Lex Non Cogit ad Impossibilia:** A principle meaning “the law does not compel the impossible.”
- **Lex Specialis Derogat Legi Generali:** A principle meaning “specific law overrides general law.”
- **Maiores Res:** Major or important matters.
- **Mandamus:** A writ commanding a public authority to perform a duty.
- **Ministerium Legale:** A legal duty or official responsibility.
- **Nemo Judex In Causa Sua:** A principle meaning “no one should be a judge in their own cause.”
- **Nemo Potest Venire Contra Rationem:** A principle meaning “no one can go against reason.”
- **Nulla Poena Sine Lege:** A principle meaning “no penalty without a law.”
- **Pacta Sunt Servanda:** A principle meaning “agreements must be kept.”
- **Potestas:** Power or authority.
- **Quo Warranto:** A writ requiring a person to show by what authority they hold an office or perform an act.
- **Salus Populi Suprema Lex:** A maxim meaning “the welfare of the people is the supreme law.”
- **Social Fact:** An observable fact about human society that influences individual behavior.
- **Ultra Vires:** Actions taken beyond the legal power or authority of a person or organization.
- **Ubi Jus Ibi Remedium:** A maxim meaning “where there is a right, there is a remedy.”

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