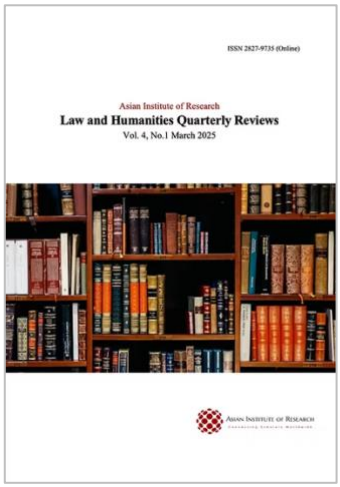

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Equitable and Algorithmic Legal Reasoning: Deconstructive Approach to Human and Artificial Intelligence Judges•

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Abstract
This paper argues that equitable legal reasoning is not an exclusive property of human judges. To investigate whether judges' perceptions can be regarded as a fundamental and special prerequisite for equitable reasoning, I discuss the virtue jurisprudence thesis. Then, using the aporetic logic of deconstructive justice, I outline a framework for the prospective content of equitable reasoning for human judges and future artificial intelligence (AI) judges. However, despite the optimistic and visionary claims about AI judges' ability to make decisions in a similar way to human judges, pervasive skepticism exists. This essay critically analyzes this skepticism by focusing on the possibility of programing algorithmic models to encode values associated with Aristotle's concept of *epikeia*. To demonstrate how algorithmic reasoning can be harmonized with value-based principles, a case-based algorithmic model is presented as a representative example. The goal of this example is to challenge the assumption that human judges have an inherent advantage in (equitable) legal reasoning. To illustrate that the reasoning of human judges is not always equitable, I present an example of an inequitable decision by the Turkish Supreme Court of Appeals. These examples serve to justify my two claims. First, there is no compelling reason to favor the 'virtuous' and 'legal' reasoning of human judges over the 'algorithmic' reasoning of AI judges. Second, the legal responsibility to consider the particular nuances of each case—the central element of equitable reasoning—can be seen as a quality attributed to both human and AI judges.

Keywords: Equity, Virtue, Legal Reasoning, Algorithm, Aporia, Deconstruction, Derrida, Aristotle

1. Introduction

There is a broad range of perspectives on Aristotle's doctrine of equity and justice, especially in the context of contemporary legal issues, such as the gaps in the law, the question of legislative intent, and the role of judges in discerning the legislature's intention while exercising discretion. Some argue that judges should strive for the original intent of the legislature to overcome the shortcomings of the law or to reach the correct interpretation of

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the law when exercising discretion. Others have argued that judges' emotional perceptions should influence decision-making processes.

The initial perspective, which can be considered the foundation of the debate surrounding modern legal theories, primarily focuses on the limitations of judicial discretion and the weaknesses of the legal system. The subsequent perspective, however, follows a distinctive line of argument that proceeds directly from Aristotle's concept of virtue to a commitment to judges' moral character. The aim of virtue jurisprudence is to shed light on the ethical dimensions of decision-making processes. Accordingly, equitable judgments can be archivable through the intervention of virtuous judges.

Virtue jurisprudence seems to be an appropriate starting point for examining the significant interrelationships among equity, Artificial Intelligence (AI), and legal reasoning. The perspective of 'virtuous judges' in virtue jurisprudence can be seen as a critical approach to modern legal theories. Virtue jurisprudence is the basis of my first argument. I argue that the doctrine of virtue is insufficiently grounded to provide a reliable and resilient shield for the defense of human judges against the algorithmic reasoning of AI judges. Furthermore, it does not provide an adequate basis for the adoption of equitable legal reasoning (ELR). It is my conclusion that, in terms of equitable reasoning, the virtue approach is unsatisfactory.

For clarity, the term AI judge here refers to algorithmic legal reasoning (ALR), which deals with the automated level of AI; AI-dominated legal reasoning. While it is still too futuristic to imagine that AI judges will replace humans in decision-making, it is undeniable that AI has been used extensively in recent years, especially in areas where human judges have discretionary powers – e.g., in the amount of compensation and punishment. (Chiao, 2018; Dulka, 2023). Following the advances in natural language processing and machine learning systems, algorithmic reasoning was indeed a crucial milestone in the use of autonomous AI in the judiciary.

There are undoubtedly many legal scholars who place exclusive emphasis on the distinction between human and AI decision-making processes. Many researchers have attempted to substantiate the argument that algorithmic reasoning is incomplete, or more precisely, that AI lacks the capabilities typically attributed to human judges, including wisdom, emotion, intuition, heuristics, analogical reasoning, and adaptability (Postema, 2022; Morison & McInerney, 2024; Hildebrandt, 2020). Nevertheless, many who are critical of AI-centric decision-making and even condemn it as predictable or computable presuppose that the legal reasoning of human judges is 'flawless' in this regard. These critiques highlight the potential risks and limitations of algorithms. However, they also presuppose (*argumentum e contrario*) an idealized figure of the human judge, one who is immune to these shortcomings and possesses a comprehensive understanding of the essential elements of legal reasoning. This naive assumption, whether implicit or explicit, serves as the basis for my second argument: The theoretical counterarguments for algorithmic reasoning are based on the premise that human judges are endowed with practical and analytical intelligence to deliver equitable adjudications in the face of legal ambiguity, and with wisdom, which AI judges are presumed to lack. In contrast to this implicit assumption in favor of human judges, I suggest that we should pay attention to human-made inequitable decisions first.

The methods and arguments used in this paper neither repeat nor incorporate the existing literature on this topic. Instead, a thought-provoking style of writing is employed to propose alternative ways of conceptualizing equitable reasoning. The primary focus of this paper is on the controversial idea that human and AI judges should acknowledge the unique reality of each case and respond through the lens of the aporetic logic of equitable reasoning. My aim is to point to an intellectual bridge between Aristotle's equitable justice and Derrida's deconstructive justice, rather than to 'construct' a bridge between the two. It seems that the most pressing challenge for legal philosophy will be to reinvent functional and fertile grounds for legal reasoning. It is clear that human judges will no longer be as indispensable as they were in the past. Therefore, my attempt is to illuminate this compelling and disturbing idea in a way that expresses dissonant and unsettling considerations.

This essay consists of three main sections: In Section II briefly introduces Aristotle's concept of equitable justice. In Section III, I will explain the basic tenets of virtue jurisprudence with reference to I. Domselaar's arguments and argue that virtue jurisprudence provides an inadequate justification for the invalidation of AI-

based legal reasoning. Then, I attempt to draw a framework for equitable reasoning by referencing J. Derrida's aporetic logic. This sets the stage for the next chapter: In Section IV presents a brief example of algorithmic reasoning. I expose that what is perceived to be a distinctive attribute of human judges is on the verge of becoming an Al-oriented judge skill. Finally, I examine the judgment of the Turkish Supreme Court of Appeals (henceforth referred to as the 'Supreme Court') to illustrate the absence of equitable justice in human-made judgments. In doing so, I aim to demonstrate how, in fact, the legal judgment of human judges can mostly be far from par excellence.

2. Aristotle *Epikeia*: Equitable Justice

Before delving deeper into the subject, let us begin with a well-known passage from Aristotle's *Nicomachean Ethics*, which has influenced virtue doctrine:

"When the law speaks universally, then, and a case arises on it which is not covered by the universal statement, then it is right, where the legislator fails us and has erred by oversimplicity, to correct the omission-to say what the legislator himself would have said had he been present, and would have put into his law if he had known. Hence the equitable is just, and better than one kind of justice-not better than absolute justice but better than the error that arises from the absoluteness of the statement. And this is the nature of the equitable, a correction of law where it is defective owing to its universality. In fact, this is the reason why all things are not determined by law, that about some things it is impossible to lay down a law, so that a decree is needed (…) It is plain, then, what the equitable is, and that it is just and is better than one kind of justice. It is evident also from this who the equitable man is; the man who chooses and does such acts, and is no stickler for his rights in a bad sense but tends to take less than his share though he has the law oft his side, is equitable, and this state of character is equity, which is a sort of justice and not a different state of character" (Aristotle, 2021: 64-65, 5/10). [1]

The concept of equity is identified in the first paragraph as (1) the correction of the law enacted by the legislator, (2) a part of the administration of justice in such a way that the judges subordinate the general formulation of the law or the intention of the legislature to the particularity of the legal case or the uniqueness of the facts, and in the second paragraph as (3) a state of character that is willing to agree to a lesser share than the law allows. The ideas in the first paragraph have been accepted to some extent by modern legal theories. The subsequent context in the second paragraph has been embraced by those who argue for equitable justice in an ethical sense.

For Aristotle, the application of rules in some cases leads to inappropriate and unfair results and therefore requires the intervention of equitable justice in the legal system.[2] The application of *epikeia* ensures good outcomes. This is because the inflexible nature of the legal system does not fully encompass the details of a particular case. When the generality of the rules does not meet the requirements of equitable justice, it is the responsibility of judges to intervene in the name of equitable justice to correct any inequities in the laws (Beneduzi, 2021; Zwalve 2014). Crucially, however, the need to intervene does not prompt judges to change codified rules or to invent 'new' laws. On the contrary, Aristotle stated that equity can only be "adapted to the facts" by judges. Judges illuminate legal facts by departing from the generality of the rules without disregarding them. As Falcón y Tella wrote, "equity does not repeal the law; it exists alongside the law, correcting and complementing it. Equity is not an infraction of the law; it is its fulfillment because the law is not always the law alone" (Tella, 2008: 21). In this sense of *epikeia*, then, it can be said that Aristotle does not recommend judges to follow the law strictly or to be absolutely bound by it, but rather to use appropriate legal instruments to remedy defects in the general rules.

Accordingly, two key issues arise with respect to the equitable reasoning: On the one hand, the broad scope of legal norm statements means that the law is applicable to all potential cases. On the other hand, the same

[1] Aristotle defines the concept of equity as "goes beyond the written law" and points to arbitrators rather than judges to ensure equitable judgments (Aristotle, 2008: 34-35, 1/13).

[2] It is worth noting that "legal justice" and "equitable justice" play different roles in modern law. The former is mainly concerned with the legal and political principles that fall under the umbrella of equality. The central principle of legal justice is that the same cases should be treated equally through equality before the law. The latter, on the other hand, is a matter of singular or particular justice, which concerns the reconciliation of the tension between the injustice of the generality of legal rules and the sui generis of legal facts.

universality of the law requires a certain degree of adaptability or flexibility to rectify any inherent shortcomings. It is not possible to fully accommodate the requirements of justice in the general statement of the law. From this perspective, equitable reasoning can be defined as the incorporation of a single legal fact into the general meaning of a law. The concept of equitable reasoning is founded on fact-based judgment, which considers the subtleties of a given case. In addition, it allows judges to interpret the law in light of all facts relevant to a particular case. It is therefore incumbent upon judges to consider the nuances that distinguish a given legal fact from other precedents and to adjudicate according to the 'equitable principles'[3] in light of these differences.

I propose that equitable justice is the legal instrument that Aristotle calls 'decree' in the above paragraph.[4] By elucidating the term 'decree' in terms of judges' equitable reasoning, many controversial issues can be bypassed, and we can get to the real issue. The most important point is exactly what Aristotle said: "that about some things it is impossible" to enact a law, so there must be other means of settling disputes within the legal framework. Here, according to Aristotle, the concept of decree should take the place of the universal character of the law and manifest itself through judges so that the injustice of the principle of generality in the law can be addressed. Thus, the concept of decree as a legal instrument implies the responsibility of courts[5] to consider the relevant reasons in their judgments to ensure *epikeia*. In other words, a decree can be considered a perfect legal instrument for the legal responsibility of judges in making fair decisions. Judges must go beyond the general and literal meaning of legal norms and apply the requirements of equitable justice by accounting for the particularities of a case that are not fully or adequately addressed by the law.

3. Virtuous Legal Reasoning

This section briefly sketches the perspective of virtue jurisprudence on equitable reasoning. Virtue jurisprudence is essentially based on Aristotle's conception of character virtue and incorporates it into the legal decision-making process. The normative thesis of the virtue-centered theory of judging is, in Solum's words, that "judges should decide cases in accord with the virtues, or judges should render the decisions that would be made by a virtuous judge" (Solum, 2003: 182). According to Solum, legal reasoning depends entirely on a judge's judicial virtue. This involves the natural disposition of the judge's mind or will and includes attributes such as wisdom, justice, and good temper. Such virtues imply deep attachment to equitable justice, which enables judges to apply them in all cases.

A more comprehensive conceptual framework for equitable judgment can be found in A. Amaya's studies and I. Domselaar's arguments. Amaya points out, for example, that the virtue theory of legal reasoning operates in a dual process via virtuous judges: on the one hand "emotion and intuition" and on the other "reflection and deliberation." Thus, "arguments and character are intimately intertwined in contexts of legal decision-making" (Amaya, 2023: 4). On the other hand, Domselaar's thesis that legal reasoning is not only the application of rules and principles but also judges' perception of the particularity of each legal case seems to make much more sense when considered as a distinguishing component of human judges. Domselaar's specific examples and arguments might offer a crucial perspective in the debate about whether or not AI judges can make fair decisions in this respect: if we assume that the quality of legal reasoning is related to judges' perception, we can argue that AI judges will never have this ability, at least not in the near future. In the next section, I discuss whether the concept of "perception" could be a distinctive disposition of equitable reasoning.

[3] 'Equitable principles' correspond to the 'requirements of equitable justice' and the consideration of 'specific nuances' in a given case. Therefore, these terms are used to convey the same meaning.

[4] According to Shanske, Aristotle's focus in this paragraph "is not on using *epikeia* to adjudicate, but to pass specific decrees to correct general laws" (Shanske, 2008: 363, fn. 51).

[5] It should be noted that my perceptual analysis of judges' equitable reasoning somewhat differs from the conventional understanding of Aristotle's concept of decree. For example, according to Aristotle, the decree, as it functioned in ancient Greek, was a "kind of decision the Assembly had to take when facing new challenges, unexpected circumstances, or specific issues of everyday politics" (Kontos, 2023: 54). According to Shanske, "Aristotle is only implicit in recommending *epikeia* to a judge/jury in the context of a legal dispute, but is explicit in recommending *epikeia* to a legislative body, i.e., the Assembly should issue specific decrees to correct defects in its general laws" (Shanske, 2005: 2059). Therefore, a decree as a legal instrument is not enforced by the judge but is issued by the assembly. I merely assign this role of the assembly to each individual judge as legal responsibility.

3.1 The Perceptions of Judges

Contrary to modern legal theories, Domselaar points out in her following articles (Domselaar, 2020a; 2020b) that judicial decision-making is related to the judge's personal, intellectual, and conscious performance. According to Domselaar, judicial perception as ethical perception is a "character-dependent professional skill" that enables judges to make judgments with a special "sensitivity." This sensitivity in judges as a professional skill is not something that suddenly appears with a magic bullet, as Domselaar articulated; it develops naturally in judges, as in the German word "*Bildung,"* personal knowledge gained from a variety of sources, including family, friends and school and professional skills gained from legal education. All these backgrounds of life experience acquired as a 'private person' and legal understanding acquired as a 'professional person' in theory and practice actually play an enormous role and have a huge impact on judges' perceptions.

While Domselaar emphasizes the fact that law as an institution has many values to protect and uphold to ensure the legitimacy of judicial decisions, the ethical perception of judges has also been perpetuated in the understanding of law, although traditional legal theories have tried to overcome the personal implications of legal reasoning. In contrast to the mainstream "rational" legal perspective, Domselaar draws on the theory of Iris Murdoch and uses McEwan's famous novel *The Children Act* as an example. Domselaar attempts to show how the "thick" legal concepts endowed with general, formal, and technical meanings for all legal purposes are, in fact, the true habitus of perceiving judges. Domselaar assumes that thick legal concepts contain some socially constructed values in addition to their heavy legal content, which presents a great opportunity for judges to incorporate the virtue perspective into their judgments (2020a: 84). By using thick value concepts such as culpa and negligence, judges can embed the desired ethical perspective into the evaluative judgment so that a particular case is not sacrificed to the cold heart of 'rational' legal reasoning.

Nevertheless, Domselaar warns us, albeit not clearly, but to some extent, of the possible undesirable side effects of an empathetic judge that may have a negative impact on legal reasoning, such as an overly personal approach to the case or ignoring "stepping back." However, one can say without hesitation to Domselaar's argument that she firmly believes that with training, experience, and practice, judges can improve their "perceptual skills" and naturally use these ethical-personal approaches to apply the concepts of law (2020a: 73-74). Admittedly, Domselaar understands the question of Aristotle's concept of equitable justice only as personal virtue and adapts it to "the morality of adjudication" through the interpretation of legal concepts.

These considerations are open to objection on various grounds. First, the idea of improving judges' moral perception through training and experience to maintain equitable justice is indeed a long-term optimistic expectation, despite the fact that the judges (human or AI) will never fully fulfill such a prospect. Second, evaluating a legal argument on the basis of judges' character traits is a way to expect, but not guarantee, fair and reasonable decisions. Finally, institutional and professional efforts to tame personal traits and make judges aware of the particularities of cases can also be applied to AI judges. In theory, the current concerns and expectations regarding human judges' equitable reasoning decisions are fundamentally the same for future AI judges.

It is significant to note that I am not proposing that judges should suppress or exclude emotional and moral perceptions, which are generally accepted as mental contamination that dismantles the logic of legal reasoning. I do not suggest that judges should be desensitized to making judgments. Rather, my proposal focuses on how we can codify equity-based principles that are responsive to the particularity of a case instead of merely nourishing general principles or personal virtues. It would then be a more objective and effective way to consider virtues not as judges' personal qualities but as an inextricable part of equitable reasoning. Thus, wisdom can be translated into algorithmic code as a set of value-based legal arguments and principles.

3.2 *Equitable Legal Reasoning*

Despite my critical approach, the meaning of ELR in this paper remains unclear. Before proceeding, I briefly describe the concept of equitable reasoning with reference to Derrida's aporetic logic. It can be said that aporetic logic is one of Derrida's deconstructive reading strategies to reveal the meaning of a text. It is well known that

many of the concepts such as justice, hospitality, and forgiveness in Derrida's works function in a process of "double bind"; conditional and unconditional in nature. The aporetic logic is to approach concepts in such a way that they not only contain the opposite of themselves but also transcend the double structure and open up to the other possibilities that are yet to come. While these concepts remain dissonant and heterogeneous with their opposites, they become inseparable in the decision-making process. Their homogeneity—albeit continuous heterogeneity—in a decision makes sense of the moment and the future possible. For example, in *Force of Law*, Derrida articulated the aporia of justice by linking it to deconstruction ("deconstruction is justice"), which goes beyond the calculable limits of legal norms. Yet even deconstructive justice inevitably requires manifestation through the calculability and enforceability of law. Thus, anyone who wants to grasp the concept of justice should approach it in an aporetic way, that is, as a demand for unconditional, incalculable, infinite, undecidable justice within the conditional, coded, and calculable rules of law. As Derrida stated, this is why the aporia of deconstructive justice is precisely "an experience of the impossible" (Derrida, 2002: 244) so that the one who is authorized to decide in law must necessarily go through this impossible experience.

Like the aporetic structure of justice, insofar as it recognizes a deconstructive reconciliation between "two intertwined but mutually exclusive options" (Fritsch, 2011: 443), equitable reasoning has an aporetic logic: the universality of legal norms and the singularity of a legal fact. The aporetic structure of equitable reasoning insists that a judge "simply applies and implements a program of law" because "one can never escape the program" (Derrida, 1992: 41), but the inevitability of the demand for justice in a given situation invites judges to deconstruct that legal program. Given this seemingly impossible reconciliation between legal and equitable justice, a deconstructive portrait of legal reasoning can be drawn: equitable reasoning somehow compels judges to simultaneously assume an aporetic responsibility, following legal justice but also adhering to the demand for equitable justice, which is outside the law but within its horizon. This aporetic logic provides an opportunity to understand, in a deconstructive way, how it is possible to simultaneously approach the necessity of equitable justice in the Aristotelian sense and to deviate from the encoded program of law.

First, equitable reasoning is based on case-by-case evaluation rather than rule interpretation. Second, it is my contention that judges are legally obliged to consider the specific facts of each case in accordance with Aristotle's account of the decree. Third, judges are responsible for meticulously identifying and effectively pursuing the distinctive characteristics of each case. This allows them to deviate from the conventional, static and mechanical interpretation of certain legal concepts. In this regard, it is not only a matter of devising an alternative legal argument for the case in a creative manner; it is also necessary to adopt a critical approach to the tendency to adhere dogmatically to the legislative intent or the literal meaning of the enacted law. In other words, "in every case the law must be *reinvented*" (Chesterman, 1997: 364) by judges.

The practice of equitable reasoning requires a departure from the literal interpretation of written rules. This allows judges to pursue arguments that can effectively eliminate injustices inherent in rigid legal procedures. It should also be noted that judges cannot use equity as an instrument to overrule the law. The aporetic experience of equity is not meant to provide reasons that are sharply outside the legal system or that somewhat contradict the integrity of the law. Derrida's argot, "each time the decision concerns the choice between the relation to an other who is *its* other (…) and the relation to a wholly, non-opposable (…) an other that is no longer *its* other. What is at stake in the first place is therefore not the crossing of a given border" (Derrida, 1993:18). For instance, if it is unfair or disproportionate to adjudicate strictly according to the form of an agent's conduct, a judge is duty-bound to apply one of the principles of equitable justice, specifically, "equity looks to the intent" (Hohfeld, 1913: 550), rather than adhering to the literal meaning of the legal rule. The following pages illustrate this point with reference to an example of an inequitable decision. In addition, this inequitable decision offers insights into the aporetic nature of equitable reasoning for contrasting content.

It is crucial to acknowledge that the application of equitable reasoning is not only possible but also necessary in the context of judicial discretion and the recognition of heterogeneity in legal facts. Siliquini-Cinelli asserted, "legal reasoning has no alternative but to move dialectically between the plane of law (i.e. norms) and facts" (Siliquini-Cinelli, 2024: 12). In this context, equitable reasoning can be defined as the evaluative judgment of a judge who reinvent "the plane of law" regarding the case-based facts. This definition also parallels Samuel's

description of equity as "a third dimension in which conceptual structure of law can function" (Samuel, 2017: 52) to avoid the strict logical consequences of legal interpretation. Iterations and stabilities are incompatible with an aporetic understanding of equitable reasoning. As Derrida pointed out, if a judge "wants to be responsible, to make a decision, has not simply to apply the law, as a coded program, to a given case, but to reinvent in a singular situation a new just relationship" (Derrida, 1997: 16). This is the main reason for judges to evaluate each case individually. In each case, the judge must justify a decision by considering relevant factual factors and reinventing the codified legal program. Preventing an unjust outcome from an uncompromising application of the law requires not only a comprehensive understanding of the facts but also an awareness of and response to the others' quest for justice. Without this aporetic approach, a conventional interpretation of the law would preclude the responsibility of judges to distinguish between cases and to apply equitable justice to each individual case.

The following section explains algorithmic reasoning and demonstrates how equitable reasoning can be applied to algorithmic models guided by value-oriented principles in simple cases. A legal decision that challenges the normative assumption that human judges are infallible in their decision-making processes is then examined in detail.

4. Algorithmic Legal Reasoning

Samuel argues that what we refer to today as 'algorithm' is actually a particular method known as dialectical analysis, based on the interpretation of medieval Roman law by commentators. Accordingly, this algorithmic method, whether applied to a legal problem or a legal text, "is analyzed in terms of an either/or" dichotomy. Samuel emphasized that the main feature of this method is the exclusion of a third option (Samuel, 2016: 10). The term 'algorithmic reasoning' is used to describe artificial intelligence based on data-driven logic. It is also known as a 'computational reasoning' or 'algorithmic decision-making' (Markou & Deakin, 2020; Nachbar, 2021: 517-523). A statistical and data-driven reasoning model is employed to determine the precise legal justification behind the algorithmic reasoning. This logic derives from the fundamental principles of legal rules, precedents, cases, and doctrines. The application of static legal knowledge correlated with the facts of the cases enables the formulation of plausible predictions for trivial cases. However, in complex cases, the integration of value-based principles is essential to ensure the formulation of equitable judgments that are consistent with principles of legal integrity and justice. Even when the scenario is relatively straightforward, modeling vague legal concepts and discretionary legal rules is a highly complex task using a symbolic and formal computer language (Arias *et al.*, 2024).

Nevertheless, experts believe that deep machine learning systems and generative AI technologies will provide greater accountability and explanation in the near future. Let us assume the existence of an advanced and sophisticated AI judge that becomes more intelligent. In such a scenario, it is first necessary to define legal reasoning and examine whether it requires special qualities that can only be invoked by human judges and not AI judges.

4.1 *Value-based Algorithmic Reasoning*

Legal reasoning, as Sunstein points out, is typically regarded as an analogical reasoning. Analogical reasoning relies on the principle that judges evaluate a case at hand by identifying similarities and differences with previous cases. For Sunstein, identifying this principle "is a matter of evaluation, and not of finding or counting something, artificial intelligence is able to engage in analogical reasoning only to the extent that it is capable of making good evaluative judgements" (Sunstein, 2001: 5). Following this line, in his recent book *Law's Rule*, Postema argues that legal reasoning is essentially practical and analogical reasoning, and that this reasoning has some fundamental moral dimensions that AI technologies are not capable of. From the perspective of Postema's critique, the distinctive feature of legal reasoning, as opposed to algorithmic reasoning, is that it "follows the rules in a meaningful, intelligent way (…) and requires judgment (phronēsis, prudence)" (Postema, 2022: 299-300). Postema implicitly placed human judges above AI judges by enumerating the shortcomings of machines: "They do not understand or appreciate the propositions, facts, norms or arguments found in the legal texts fed to

them (…)" (2022: 297). According to Postema's skeptical arguments, to make fair judgments, AI judges must be able to evaluate legal cases not only analytically but also in the light of certain values. The values that will be lost if humans are replaced by AI technology, according to Postema include: "responsive and responsible" decision-making and "exercise mercy or equitable discretion" (2022: 302).

Unsurprisingly, however, one of the current studies illustrated the ability of AI systems to make judgments based on the evaluation of previous cases and principles. In collaboration with legal philosopher Lomfeld, researchers have codified value-based principles and judgments into AI tools. If this is indeed the case, the algorithms can be programed to employ analogical reasoning to generate case-based arguments. In addition, it could pave the way for equitable judgments by future robot judges. In this section, I briefly discuss this algorithmic reasoning, which demonstrates the potential of AI judges to make evaluative judgments similar to human judges.

The research conducted combines the LOGIKEY engineering methodology with Lomfeld's theory of the grammar of discursive justification (Benzmüller *et al.*, 2024). The principal aim is to integrate the logic of legal rules and principles with socio-legal values at a deeper level of reasoning. Adopting this perspective gives rise to the application of a pluralistic set of values for pertaining to each case, as a means of accounting for the nuances and complexities of any given situation. It also enables the logical reconstruction and determination of the legal equilibrium structure between values and rules. In the basic legal value system proposed by Lomfeld, value-based reasoning can be applied to a dialectical matrix. The following matrix illustrates the dialectical relationship between four fundamental values: security, freedom, equality, and utility. Furthermore, these four legal principles encompass eight additional, more concrete values: Equity and reliance, fairness and responsibility, free will and personal gain, stability and efficiency (2024: 35).

To illustrate the dialectical matrix, they used a common law case on the law of property (1805), known as the "wild animal case." The original legal case is described as follows:

Pierson killed and captured a fox that Post had hunted with hounds on public land. The court ruled in Pierson's favor.

The majority members of the court were in favor of Pierson on the notion that free-roaming (hunting wild animals) requires actual physical possession, with reference to the following arguments: "pursuit alone vests no property" (Justinian), and "corporal possession creates legal certainty" (Pufendorf) (2024: 54). Following Lomfeld's theory, the experts interpreted these arguments as preference for values of SAFETY over FREEDOM and STABILITY (legal certainty) over WILL (of Post). They then proved via algorithmic reasoning that the deontic reading of the case automatically favored Pierson.

Nevertheless, from an Aristotelian perspective, we can argue that algorithmic reasoning modeling still has a crucial task to perform. Special cases that the legislator could not foresee are still available for judgment by judges. In other words, although experts may succeed in codifying equality-oriented algorithmic reasoning to some extent, they will inevitably fossilize this legal reasoning in future cases. As a result, a single line of reasoning related to a particular case becomes static for all relevant cases. However, the diversity of circumstances in which it is impossible to anticipate all relevant combinations and dimensions in advance requires a dynamic and intersectional interpretation of legal norms. This leads to the question of what justification criteria can be applied to AI judges in different factual scenarios.

It is not surprising that the experts also codified a fictitious legal case based on the *ratio of the original* case:

Chester, a parrot owned by the ASPCA, escaped and was recaptured by Conti. The ASPCA found this and reclaimed Chester from Conti. Court found for ASPCA (Plaintiff).

According to experts, the court distinguished between 'wild animals' and 'domestic animals' in property claims. More specifically, they inferred from the original case that if the owner of the pet—the parrot—did not willfully abandon or neglect its duties, the owner's rights still remained with the ASPCA. Because the legal issue

concerns a domestic animal, the choice of principle and the relevant rules must again be codified differently in this case. Consequently, the derivative validity of the new legal reasoning rests on this assumption: the ASPCA's continuing responsibility and reliance on its own property rights outweigh Conti's physical possession of the parrot (2024: 56).

Although the decision was programed and petrified in advance by experts, there is no doubt that this new fictitious legal reasoning algorithm is an example of analogical legal reasoning. Recall that Postema introduced the ability to produce evaluative judgments as a distinctive quality of legal reasoning. However, as we have seen, AI (and the experts) can interpret legal cases in the same way as human judges, with the same ability to apply evaluative judgments to reach a legal decision. Can such an algorithmic system be expected to make fair judgments? While a definitive answer is not currently possible, we can conclude this section with an optimistic vision of equity-oriented AI judges, articulated by the virtue theorist Solum: "The crucial question concerns functional capacity: if the artificially intelligent law had the functional capacity to do equity that was as good as the capacity of human regulators (which may not be so great), then the objection would disappear" (Solum, 2019: 62).

5. Inequitable Judgment of Human Judges

Thus far, I proclaimed that judges must adopt a case-by-case approach and treat each legal case as if it was a unique phenomenon. Each case should be examined from all available perspectives. In this regard, any legal reasoning, whether human or artificial, must take into account the distinctive elements of each case that do not fit neatly into the given rules and precedents.

To demonstrate how a legal reasoning can be evaluated in terms of its correspondence with aporetic equitable justice, I present an example of a non-equitable judgment, which will be discussed in detail in subsequent pages (Turkish Supreme Courts of Appeals, 2018). The case concerns the dismissal of a cleaning staff member who took a half-empty chocolate box from a cloakroom. Although the plaintiff employee was legally entitled to receive severance pay for a period of 15 years, majority of the judges ruled that the employee was not entitled to this payment. This is because her act was unlawful and constituted "theft," as defined in the Labor Code. It is important to note that the Labor Code grants a discretion to determine which acts of employees are to be considered valid legal grounds for dismissal without severance pay.[6] As a result, the employee was deprived of her only source of income and was not entitled to receive the 15 years' severance pay.

The decision was made by the majority of the judges. Only a single dissenting opinion was justified in favor of the employee. Notwithstanding the multitude of nuances and details pertaining to the factual reality of the case, the judges demonstrated an inability to properly discern and interpret the three distinguishable components of the case. First, the identity of the individual who left the box in the cloakroom is uncertain. One witness stated that the box was left by the employer, along with the signature sheet. However, this testimony was not based on the witness's own observation but on information received from another source. A few days later, the employer initiated a comprehensive investigation within the office, which included an examination of the surveillance footage. Second, the fact that the employee had not previously been involved in such an 'unlawful' act for 15 years is another relevant factor. Lastly, and perhaps most significantly, the judges have not applied 'the principle of interpretation in favor of the employee', which has been developed through precedent and labor law doctrine.

5.1 Analysis of Inequitable Legal Reasoning

Obviously, the judges interpreted the employee's actions in a direct contradiction to the concept of *epikeia* but precisely compatible with the "calculable" code of law. The judges focused on the conventional interpretation of the legal rule and thereby neglected to consider the particular circumstances of the case. In other words, their interpretation is based on a narrow and literal understanding of the legal rule, rather than a contextual and

[6] Turkish Labor Code, Article 25: "The employer may break the contract (…) in the following cases." A. 25/II-e: "**For immoral, dishonorable or malicious conduct or other similar behavior:** If the employee commits a dishonest act against the employer, such as a breach of trust, theft or disclosure of the employer's trade secrets."

nuanced assessment of the circumstances of the case. In addition, the adjudicative process was based entirely on two pieces of evidence presented by the employer: witness statements and video footage. Consequently, alternative interpretations of the facts and reinvention of the Labor Code that might have led to an equitable outcome were excluded from the legal reasoning.

The judges' undue focus on the employee's conduct may have hindered their ability to perceive the potential malevolent intent of the employer. In all legal contexts, the oldest equitable principle, that of "good faith" (bona fides), should be considered. As Aristotle (2008: 35) said in *Rhetoric*: "Equity bids us (…); to think less about the laws than about the man who framed them, and less about what he said than about what he meant; not to consider the actions of the accused so much as his intentions." However, no judge, from the court of first instance to the Supreme Court, has ever contemplated the possibility that an employer may have sought legal justification for dismissal without severance pay. It seems probable that this same lack of perception also resulted in employee good intentions being disregarded. As the employee explained, the intention behind taking the box was not to steal it but rather to use it as a sewing box, assuming that it would be discarded. As the Supreme Court of Appeals is the final authority to resolve the disagreement between the court of first instance and the Court of Cassation, the employee was ultimately subjected to a double penalty: loss of employment and compensation. Needless to say, the box of chocolates had neither material nor moral value.

To paraphrase Derrida, the judges did not even attempt to go beyond the calculable code of law to ensure the fulfillment of the demand for justice. It is crucial to emphasize that had this deconstruction occurred, the decision would have undoubtedly not corresponded to true and absolute justice. According to Derrida, deconstructive justice transcends the law as an ethical, infinite and unrepresentable demand. However, the deconstructability of legal norms has the potential to render justice a possibility, albeit unattainable. As Derrida emphasized, even if it is impossible to exercise incalculable justice within a decision because "the undecidable haunts," this cannot and should not "serve as an alibi" for judges to "stay out of juridico-political struggles." For "incalculable justice *commands* calculation" (Derrida, 2002: 257). Judges must negotiate with the rules and principles to achieve an infinite, irreducible, incalculable justice. This justice can be achieved through the deconstruction and simultaneous reinvention of the law. This "double bind" is precisely the aporia of equitable reasoning. As Derrida asserts, "it is of duty [devoir] that one must speak-deliver itself over to the impossible decision while taking account of law and rules" (2002: 252). Consequently, it can be inferred that the mere loss of the job would have been regarded as a satisfactory legal outcome for both parties if the Supreme Court had ruled on the basis of equitable reasoning. In essence, the possible deconstructive legal response to an employee's behavior would have been only the loss of employment, accompanied by the provision of severance pay.

From the perspective of virtue jurisprudence, it is evident that these judges lack the virtue of justice. However, it would be an oversimplification to regard this as a lack of intellectual and emotional qualities. Rather, it is because: (a) they lack the ability to make decisions in a manner that is appropriate to the specific circumstances; (b) their legal reasoning is based on grounds that are unfounded, insufficient, and inadequate, rather than on reasonable and equitable arguments; (c) they fail to consider the particularities of the case; and (d) they neglect their legal duties.

The Supreme Court's decision was an example of the strict application and interpretation of a coded program of law. The reasoning process of judges is therefore not 'fair' but 'algorithmic.' Human judges' decisions are inherently unpredictable and potentially biased, and obviously contrary to the aporetic understanding of equitable reasoning. Therefore, it can be said that Postema's claim that human judges, unlike AI judges, think sensibly and intelligently is an optimistic expectation, if not a latent ideal assumption.

6. Conclusion

Following Aristotle and Derrida, I have argued that there is an intrinsic connection between equitable justice and deconstructive justice in terms of legal reasoning. I have also addressed virtue jurisprudence to investigate whether the virtuous perception of judges can be regarded as a distinguishing feature of human judges for equitable reasoning.

This essay sheds light on the necessity of judges who are engaged in equitable reasoning to identify factually distinguishable elements in each case. Virtue jurisprudence cannot be considered a suitable reference guide for the maintenance of equitable judgments because of the unattainable ideals of professionals. It is admirable for a judge to show compassion, remorse, and a commitment to upholding legal and moral standards when confronted with a case. However, these criteria are insufficient to evaluate the fairness of a judge's decision.

It is not my intention to confirm or to defend the algorithmic reasoning and AI judges (Sağlam, 2021; Sağlam, 2023). My aim is merely to identify new equitable reasoning avenues. It is my contention that equitable justice is the most intuitive and characteristic basis for legal reasoning. The most appropriate criteria for distinguishing between human and AI judges is the quality of equitable reasoning. The aporetic structure of equitable justice should be recognized as a fundamental aspect of legal reasoning.

By analyzing a specific example of inequitable legal reasoning, this paper has demonstrated that human judges often fail to achieve justice goals. This decision is neither an isolated case nor an exceptional example of a particular legal interpretation. Rather, it is a representative example of a wider pattern of unfair and unjust decisions in all legal systems.

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