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The Pros and Cons of Artificial Intelligence in the Legal Field

Authors: Shi Yaqi

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Abstract

With the accelerating pace of technological innovation and the rapid advancement of neural networks, emerging technologies such as artificial intelligence (AI), big data, and cloud computing have developed swiftly, becoming a crucial technological driving force for a new round of AI science and technology industrial revolution and industrial structural transformation. Various sectors of society also hold a positive and receptive attitude toward artificial intelligence technology, with 19 provinces having already published AI industry development plans. Whether it is the emerging driverless vehicles on the streets or the ubiquitous facial recognition technology, artificial intelligence has already permeated our daily lives imperceptibly. As an indispensable component of social life, the legal industry will inevitably be impacted by AI in areas such as professional forms, job quantities, and relevant ethical standards, giving rise to a series of reflections and discussions: the reduction of human positions in the AI era has triggered urgency and confusion among legal practitioners; the issue of responsibility attribution for AI adjudication outcomes has once become the core controversy in discussions about AI subjectivity; the moral impact of AI entering the legal field on human subjectivity has engendered a widespread sense of crisis among human subjects. Therefore, how to correctly understand the advantages and disadvantages brought by AI entering the legal field and effectively circumvent its drawbacks through the collaboration between humans and AI will become a hot topic of controversy in the legal profession in the AI era. Achieving more efficient and precise judicial practice results with the assistance of AI is also the common expectation of society's citizens.

Full Text

The Pros and Cons of Artificial Intelligence in the Legal Field

As technological innovation accelerates and neural networks advance by leaps and bounds, emerging technologies such as artificial intelligence, big data, and cloud computing have developed rapidly, becoming crucial technological drivers of a new round of AI-driven industrial revolution and structural transformation. Various sectors of society have also embraced AI technology with a positive attitude, with 19 provinces already publishing AI industry development plans. Whether it is the emerging driverless vehicles on the streets or the ubiquitous facial recognition technology, AI has permeated our daily lives imperceptibly. As an indispensable component of social life, the legal profession will inevitably be affected by AI in areas such as professional forms, job positions, and relevant ethical norms, giving rise to a series of reflections and discussions: the reduction of human positions in the AI era has triggered urgency and confusion among legal practitioners; the attribution of responsibility for AI adjudication results has become a core controversy in discussions of AI agency; and the moral impact of AI's entry into the legal field on human subjectivity has generated a widespread sense of social crisis. Therefore, how to correctly understand the advantages and disadvantages brought by AI's entry into the legal field and effectively avoid its drawbacks through human-AI coordination will become a hot topic of controversy in the legal profession in the AI era. Achieving more efficient and accurate judicial practice results with AI's assistance is also the common expectation of citizens.

1. Introduction to AI in the Legal Profession

Since the 1956 Dartmouth College summer conference, artificial intelligence has entered the public consciousness as a new form of technology. After the 1990s, with the rapid advancement of cognitive science and neural networks, AI has made its mark in multiple fields including law, finance, and services, repeatedly garnering attention. The gradual entry of AI into social science fields such as law represents a necessary path in AI development. According to Professor Guo Rui's summary, the development of AI in the legal profession can be roughly divided into four stages: first, the court translation and stenography stage, where AI only needed to select appropriate characters from a font library code without understanding language content; second, the summary assistant and fact-finding assistant stage, where AI required preliminary comprehension abilities to summarize and analyze case facts but did not involve specific legal content; third, the legal application assistant and AI arbitrator stage, whose implementation represents a leap forward for AI in the judicial field, marking the point at which AI can correspond abstract legal provisions with specific facts and compare case details with laws in databases to conduct basic element determination, though it still cannot understand legislative principles such as legal interest protection

and, although it can reach adjudication results, does not understand why; and fourth, the AI judge stage capable of actively creating law, where AI already possesses independent thinking abilities, can fully comprehend jurisprudential considerations and legislative principles behind legal provisions, and establish new laws in combination with real-world circumstances [1]. These four stages progress layer by layer, with AI's comprehension abilities and legal knowledge gradually increasing. The author believes that China's legal AI is currently in the early period of the third stage, where AI can conduct some basic arbitration and mediation and draft foundational legal documents, can hold certain legal professional positions, and while being helpful to existing legal professions, still has considerable room for development and improvement.

2. Benefits of AI in the Legal Field

Since AI entered the legal field, its characteristics of high efficiency and long working hours have helped alleviate pressure for lawyers, judges, and other legal professionals while also providing important impetus for social development. First, AI's entry into the legal field has facilitated the emergence of numerous AI mediators, adapting to the needs of mediation and "non-litigation" and promoting peaceful resolution of disputes while conserving human resources in the legal profession. On the one hand, the non-litigation philosophy represents the general trend in contemporary judicial practice and legal thinking, because regardless of the means employed to resolve problems, the essence is to find a balance of interests and achieve win-win outcomes. In the adversarial environment of traditional litigation, parties inevitably become opposed to each other, 执着于分对错、争输赢, 难以相互理解、和谐共商. The non-litigation philosophy, however, advocates that both parties jointly confront disputes and problems as opposing forces, and in a non-adversarial environment of friendly communication, common interests are more easily discovered and collective wisdom more readily finds optimal solutions. The Shanghai Free Trade Zone Court introduced ADR mediation organizations in commercial disputes, achieving a success rate as high as 64% and saving countless cooperation cases on the brink of failure, realizing mutual benefit [2]. On the other hand, as judicial pressure mounts daily, mediation mechanisms are more conducive to reducing judges' burdens and implementing problem resolution. The purpose of justice is undoubtedly to resolve disputes and uphold fairness. However, if litigation procedures are employed exclusively, the judicial system becomes overburdened, 反而阻碍纠纷解决, 与法治的初衷背道而驰. Within 14 years, the number of cases in China increased threefold, yet the quota system caused the number of judges to decrease rather than increase, forcing judges to work overtime with average monthly overtime increasing from 3 hours in 1991 to 50 hours in 2018 [3]. Despite such intensive work, case backlogs and quality deterioration remained difficult to avoid due to the surge in litigation cases. However, research by the Shandong Provincial Procuratorate found that 95% of cases in Yiyuan County could be resolved through mediation [4]. Therefore, we urgently need to resolve conflicts at the grassroots level through mediation and other means to achieve case diversion, reduce ju-

dicial pressure, and make dispute resolution more timely and comprehensive. In this context, the emergence of AI mediators not only effectively alleviates the current situation of insufficient judge numbers and high work pressure but also satisfies the need to mediate case disputes, safeguard the interests of both parties, and foster a harmonious social environment. From the AI mediator of Shouqi Yueche that handles tens of thousands of disputes daily to the AI mediation rooms added by smart courts, AI has made tremendous contributions to reducing the work pressure on legal professionals and maintaining the objectives of the legal profession.

Second, compared with humans, AI does not experience fatigue or burnout periods and does not require rest, enabling it to complete more work and providing important auxiliary support to the legal profession. On the one hand, AI's involvement shares the workload of legal workers, reduces human working hours, and because AI can work 24 hours a day, the overall efficiency of the legal profession 反而得以提高. In 2019, the Beijing Internet Court generated up to 100,000 legal documents through AI one-click generation [5], effectively saving time and reducing work pressure. On the other hand, delegating the generation of formatted legal documents to AI helps legal workers concentrate their energy on issues requiring human thinking and judgment, achieving a reasonable division of labor between humans and AI and improving work efficiency.

Finally, AI is more rational and calm and can produce more objective adjudication results. Due to human empathy, human mediators inevitably develop certain biases. For example, female mediators who bear more household work may be more willing to secure more benefits for women when mediating marital disputes; mediators who have been owed money may lean more toward the lender's side when mediating debt disputes. Such emotional biases are not conducive to the emergence of just mediation results and reduce people's acceptance of and trust in mediation. Furthermore, at stages when judicial procedures were underdeveloped, there have been cases of miscarriage of justice where judges ignored evidence and rushed to pronounce judgments in order to close cases quickly. Since AI possesses stronger comprehensive analysis capabilities and is not manipulated by psychological factors, it is better able to make rational judgments.

3. Drawbacks of AI in the Legal Profession

The entry of AI into the legal profession will have adverse effects on practitioners' work. On the one hand, it will increase the difficulty of employment in the legal profession and damage people's enthusiasm for legal studies. China's legal profession has long been in a state of near saturation, with law having been a red-card major for employment for five consecutive years [6]. AI's high efficiency can easily fill positions such as court clerks and document drafting, reducing employment opportunities and making the already difficult employment situation in the legal profession even worse. Moreover, AI's involvement will also cause students to develop apprehension, because an important part of legal

education is memorizing legal provisions and judicial interpretations, and AI's memory capabilities far exceed those of humans. This may cause students to believe they are at a natural disadvantage when choosing their major and lose enthusiasm for law. On the other hand, AI's participation in judicial processes will cause a shift in the focus of incumbent practitioners' work. In traditional courtrooms, the prosecution and defense must question and debate factual evidence to obtain an objective fact restoration as close to the truth as possible, with judges delivering verdicts based on relevant legal provisions. However, if the judge delivering the result is replaced by AI, the prosecution and defense will question whether the algorithm AI employs is correct and whether errors occurred in the process of deriving the algorithm, gradually transforming debates over evidence into debates over AI algorithms. To resolve disputes over algorithms, our legislation must allow parties to challenge algorithms and request testing of case-adjudicating AI, as well as require the algorithm's engineers to submit to cross-examination and questioning [7]. However, because AI errors are probabilistic, such disputes are difficult to resolve and 反而给司法过程引入了更多变量, 使法律职业的从业者逐渐偏离自己的司法职责, 沦陷于“算法黑洞”的博弈。

Meanwhile, the accountability mechanism for AI has also become a hotly debated focus. In traditional tool theory, AI cannot exist as a legal subject, and all errors and omissions in its work must be the responsibility of the designers behind it. However, as AI's degree of autonomy continues to increase, tool theory gradually becomes inapplicable. On the one hand, to fully leverage AI's capabilities requires granting them higher degrees of freedom, which means designers' control is reduced. As algorithms become increasingly complex and control increasingly weakens, the relationship between human behavior and behavioral outcomes becomes blurred, and designers cannot control what results their design behaviors may lead to. Therefore, attributing responsibility to designers is clearly unreasonable. On the other hand, because the subject relationships in the legal profession are complex and there are many uncontrollable factors, some people will accept similar mediations while others will feel angry and even complain, making it impossible to demand that designers foresee every situation when writing code. Therefore, tool theory is clearly too harsh. If we want AI to be responsible for its own behavior, in the view of machine ethicist Asaro, two conditions must be met: on the one hand, it needs to have moral identity, and on the other hand, it needs to have independent consciousness and be able to make moral judgments. However, at present, intelligent machines do not yet have moral subject status and merely have a regulatory function [8]. Therefore, as AI's scope of work in the legal profession gradually expands, the contradictions in its accountability mechanisms will also become increasingly apparent. When problems arise but responsibility is difficult to define, contradictions become difficult to reconcile and people's trust in AI and judicial mechanisms is undermined.

Through the above analysis, we can find that people's practical concerns about AI do not mostly stem from concerns about the accuracy of its judgments but rather from its threat to human subjectivity status. This is also why few people

criticize assembly line production machines but many oppose AI's entry into the legal profession, service industries, and other fields. Fundamentally, people believe that machines performing mechanized repetitive labor is not threatening, but when they enter complex and variable environments, undergo thinking processes that seem similar to humans, and provide answers, the uniqueness of human thinking appears to be erased. Producing a legal document manually takes several hours of writing, but AI writing a legal document only requires pressing a button. From the perspective of efficiency and simplicity, AI's blow to humans is a devastating dimensional reduction strike. Under this premise, opponents believe that as AI penetrates deeper into the legal profession, their algorithmic models will infinitely approximate human thinking while their work efficiency far exceeds that of humans, and therefore human society will be subverted by AI and humans will become slaves to tools. Taking a step back, even if AI does not cause such substantial harm and even brings convenience to the legal profession, its violation of human moral subjectivity will still become a reason for some people to oppose AI. AI opponents believe that only humans can be included in the "moral" scale for evaluation in thought and practice. However, when AI undertakes some human work and its consequences cannot be fully the responsibility of designers, AI itself will inevitably receive some moral evaluation, which violates human moral subjectivity and affects the social order that has long been established.

4. Vision for the Future Development of AI in the Legal Field

The progress of technology and the development of AI represent the general trend of contemporary social development. Therefore, amidst various controversies, the author believes that society should view AI objectively, dialectically understand it subjectively, and objectively create conditions for human-AI collaboration in order to promote further development in the legal field.

(1) Subjective: Dialectical Perspective

The legal profession and society as a whole should view AI dialectically, both actively accepting AI's advanced technology and refusing to rest on one's laurels, while also treating AI prudently and refusing to be blindly aggressive. There are three reasons:

First, AI will not subvert humans because they do not yet have the ability to think independently. Although AI appears to have human capabilities, such as speech recognition technology corresponding to human hearing and image recognition technology corresponding to human vision, from the perspective of underlying mechanisms, these technologies merely collect large amounts of data and use algorithmic processes to substitute data and obtain results [9]. This demonstrates that AI does not have the ability to understand law, and the judgments it makes in the legal profession are merely automatically generated results

of algorithms. Human society is not an automatically generated machine; it has uncertainty, and society as a whole continuously plans and adjusts its path through self-reflection, ultimately achieving development. However, current AI does not yet have self-reflective consciousness; they will not ask “who am I.” What AI in the legal profession completes are tasks like court records and document generation—work similar to automatic generation machines—and therefore will not replace humans. The essence of violating moral subjectivity lies in humans creating machines too similar to themselves and, before these machines have human-like intelligence, demanding that they undertake responsibilities and decisions borne by humans, causing humans to feel an imbalance between capability and moral status [10]. Therefore, as long as we maintain the steady development of machine capabilities and allow them to do what is within their capacity, there will not be such a great moral crisis. Taking a step back, AI may indeed offend some people with more sensitive moral subjectivity consciousness, but such offense is not necessarily harmful. Just as in the past, only men could drive in the United States, but with Ford’s technological innovation, automobile production far exceeded the number of drivers, so women also began to drive. This similarly made some male chauvinists feel their moral subjectivity was violated, but objectively speaking, this was not a bad thing and even promoted social development. Therefore, when evaluating AI, we should not use moral status as a natural criterion but should objectively weigh its pros and cons.

Second, as a global development wave in contemporary society, we should not resist the trend of social development and return to a state of isolation, nor do we have the ability to contain AI development. Therefore, we must maintain an optimistic and positive attitude toward new things. On the one hand, AI helps improve work efficiency. “Smart courts” use intelligent facilities to systematically preserve multi-faceted data, helping judicial practice better apply to mediation and adjudication. On the other hand, using AI can better ensure procedural rigor and realize justice in judicial processes. Therefore, what we should guard against is not AI in the legal profession itself but rather insufficiently capable AI being blindly misused. We should simultaneously improve AI’s algorithms and algorithm self-inspection mechanisms while filling gaps in the legal field, such as AI accountability mechanisms, allowing AI to do what it should within its capability limits and bear the responsibilities it should bear, thereby contributing to the progress of human legal professions.

(2) Objective: Collaborative Development

In the process of coexistence between AI and humans in the legal field, humans should identify their own and AI’s respective advantages, divide labor and cooperate, and perform their own duties to achieve better judicial outcomes.

On the one hand, we should fully leverage AI’s advantages to reduce human work pressure, understand AI’s current technical limitations, allow it to only undertake responsibilities within its capability scope, and avoid plunging it into moral dilemmas. AI possesses rigor and efficiency and can be used for legal

provision collection and case retrieval, as well as conducting preliminary objective element comparison work. The American Kira system demonstrates that using AI to review legal clauses in contracts can reduce the time required for contract review by 20%-60% [11]. This function can be introduced into more judicial practices to reduce judicial personnel workload while ensuring objective accuracy. Meanwhile, because of AI's rigorous language use and efficient text generation, AI can also perform faster document generation and text organization work, reducing work pressure for legal personnel. Since AI currently does not yet have the ability to make autonomous judgments and its capacity for responsibility and moral subjectivity status are also controversial, legal professionals should be responsible for discretionary work, fully utilizing their own comprehension abilities and subjective creativity rather than being confined to mechanical memorization. Only in this way can AI and humans complement each other.

On the other hand, contemporary legal education should adapt to the needs of the times, rejecting closed-door learning styles and instead being oriented toward creativity, practice, and the future. It should fully leverage characteristics that AI does not possess and 致力于实现 AI 与人相辅相成的效果, 以推动法律完善和社会进步. First, in the student domain, law students should adhere to value-oriented and cutting-edge professional learning, achieving a two-pronged approach of moral education and in-depth knowledge. On the one hand, students should strengthen their ideals and beliefs in law, not forgetting empathy for "people" rather than becoming cold legal provision application machines. Only in this way can they discover exceptions behind principles in legal practice and care about the joys and sorrows of each flesh-and-blood party. At the same time, we must not forget our commitment to justice. The rule of law in society is not cold code; justice is a force with temperature. Only by constantly remembering our original aspirations and direction can we truly make humans masters of the legal profession rather than slaves to machines. On the other hand, rather than rote memorization of legal provisions and mechanical copying of document templates, students should understand the mechanisms behind legislation, comprehend the intentions behind each precedent, and fully exert their subjective initiative through more thinking and self-reflection. Only then can they avoid falling into a stalemate of competing with AI in memorization speed. Second, in the domain of legal workers, learning activities about AI should also be conducted to help them understand AI's working principles and application prospects. On the one hand, this helps them intuitively see AI's advantages, reduces resistance to AI, and enables its full utilization. On the other hand, this helps them objectively evaluate its inevitable disadvantages in legal practice, find directions for improving their own capabilities, and achieve a complementary effect with AI. Moreover, as the group within the legal profession that directly contacts AI, enhanced relevant knowledge is beneficial for them to propose constructive suggestions for AI development directions, thereby promoting AI research toward more practical directions.

In summary, although AI has brought many conveniences and controversies to

the legal field, overall the benefits outweigh the drawbacks, and the development wave of AI represents the general trend. Therefore, the legal industry should view AI objectively, rejecting extreme wholesale acceptance or rejection. Simultaneously, it should adhere to cutting-edge, practice-oriented learning, strengthen involvement in and understanding of the AI field, achieve the goal of skill complementarity and mutual reinforcement with AI, and pave a better prospect for legal development.

Note: Figure translations are in progress. See original paper for figures.

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