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A Compliance Society: Social Form and Legal Form of Future

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Algorithm-based technologies are promoting the arrival of legal singularity—a time node when the transformation of legal form happens. Frontier researches have demonstrated that artificial intelligence and big data technology will drive the reform of legal system. This article puts forward a new academic model "the compliance society", which can be defined as a society where all legal subjects abide by the law proactively. The concept is a novel vision of the society of future based on the maximum utilization of modern legal technology. We first explore the feasibility of constructing a compliance society, and then use cost-benefit analysis to assess the possible socio-economic effects.

Keywords: transformation of legal form, compliance society, technology law, socio-economic analysis

Introduction

Scholars and lawmakers have been searching for a path to maximize the value of law since the birth of law. In an ideal state, lawmakers can adjust the rules and eliminate the uncertainty before disputes take place in order to make the law adapt to any circumstances. Due to the information asymmetry between legislators and society, it is viewed as the inherence of law that legislation always lags behind social realistic demands. But this catch-22 dilemma is likely to be broken in the near future by sciential and technological advances, making the ideal of legal research a reality. Predictive legal analytics is an assemblage of techniques that analyze the massive stored legal data based on machine learning algorithms and predict the future behaviors of specific subjects (Weber, 2020). Increasing computing power promotes the growth spurt of intellectualized legal services, including crime prevention systems, automatic legal reasoning systems, and so on. As the quantitative changes in these subdivided legal fields will possibly lead to a qualitative change, the legal form is likely to transform from rules and standards to "microdirective"—which means lawmakers can use predictive and communication technologies to give legal subjects adaptive and personalized legal directives for compliance (Casey & Niblett, 2017).

This article puts forward a new concept "compliance society", to describe a possible future and development trend of law. Compliance means doing what you are required or expected to do by the law, and the law is delicately designed to use various legal tools to secure compliance (Herzog, 2017). From the perspective of legal economics, if the cost of compliance is higher than breaking the law, people are apt to behave illegally. Just as Fuller (1964, p. 162) has argued that the law should not require those subjected to it to do, or refrain from doing, the impossible. Admittedly, enforceability is the primary consideration during the legislative activities currently, but many seemingly perfect laws are mothballed due to the lack of social

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information and prediction. In a compliance society, the transformation of legal form shapes the law more adaptive and personalized, making it costless for everyone to comply with the law. Constructing a compliance society does not mean eliminating illegal actions, but in such a society rational people will choose to abide by the law after analyzing the cost-effectiveness.

Legal practice of corporate compliance has been carried out for more than half a century. However, it remains controversial whether the effectiveness of such an expensive corporate compliance program is commensurate with its costs (Baer, 2009). If we view the whole society as a big company and the artificial legal intelligence as compliance lawyers, will we come to the same conclusion that constructing a compliance society does not necessarily match the principle of cost-benefit and promote the upgrading of social governance system?

The article proceeds as follows: Part I introduces the concept of a compliance society and outlines the main features of a compliance society, with further spelling out the feasibility. Part II will analyze the socio-economic cost and benefit of the transformation of legal form respectively and compares the result of the analysis. Part III discusses the implications and effects of the arrival of an automatic and humanized compliance society. The conclusion is the last section and it summarizes the whole article.

The Concept and Feasibility of Compliance Society

In this part, we set out the future panorama of social legal governance. The traditional form of law may disappear with the arrival of legal singularities, which will eventually promote the construction of a divergent society. We first briefly describe what is the compliance society like and its fundamental operational framework of it. Afterward, we analyze the feasibility and prepare for the cost-benefit analysis.

Concept

Compliance is a complex concept across many disciplines such as jurisprudence, management, and sociology. Per *Oxford Dictionary*, there are three definitions of this noun form term, which are “the action or fact of complying with a wish or command”; “a disposition or tendency to yield to the will of others”; “the state or fact of according with or meeting rules or standards” (Ramakrishna, 1964, pp. 53-55). From the lens of semantics, compliance emphasizes subjective willingness to obedience, although the regulated are in an unequal position with the state apparatus (Li, 2022). Generally, the concept “compliance” can be summarized into two layers of meanings: (1) Legislators promulgate enforceable law; (2) Legal subjects obey the law willingly. For example, Compliance Program has been widely used by enterprises since the adoption of the *U.S. Sentencing Commission’s Sentencing Guidelines for Organizations in 1991*. The compliance departments and positions, such as Chief Compliance Officer (CCO), have emerged in many firms (Griffith, 2016). Enterprises are more proactive in seeking compliance, interacting benignly with the government and third-party organizations, and help establish the networked governance and decentred regulation system (Williams, 2006).

The concept of compliance society is simple: a society where all legal subjects abide by the law proactively. This is not simply the promotion of the compliance program to the whole society, because for individuals, the benefits of breaking the law far outweigh the costs in current technological background, no matter what kinds of guidelines come into effect (Wortley, 2011, pp. 174-180). A compliance society is based two main features: (1) The law is adaptive and personalized; (2) Violations are easily detected. According to the theories of Psychology and Economics, reasonable individuals will “automatically” comply with the law

when illegal costs outweigh benefits (Wortley, 2011, pp. 174-180). It may look like a utopian fantasy, but we are much closer to achieve this vision with the help of algorithm-based modern technologies than ever before.

Feasibility

In this part, we will explore the feasibility of this novel concept. The feasibility of constructing a compliance society can be divided into two parts: technical feasibility and legal feasibility. First, we need to make out whether the legal form will be affected and eventually transformed by frontier technologies. Second, even if these technologies have taken shape and are about to appear, the transformation of legal form can destabilize law's basic principles and conflict with the legislative framework, leading to the bankruptcy of this envisaged future. Hence, we are supposed to evaluate the probability of connecting the new legal form with existing legal framework on the basis of constitutionality.

Technical feasibility. Technology is constantly reshaping the legal system. The figure below is based on the keyword analysis of approximately 6,000 legal papers, whose titles include the term "law" and "technology"[1].

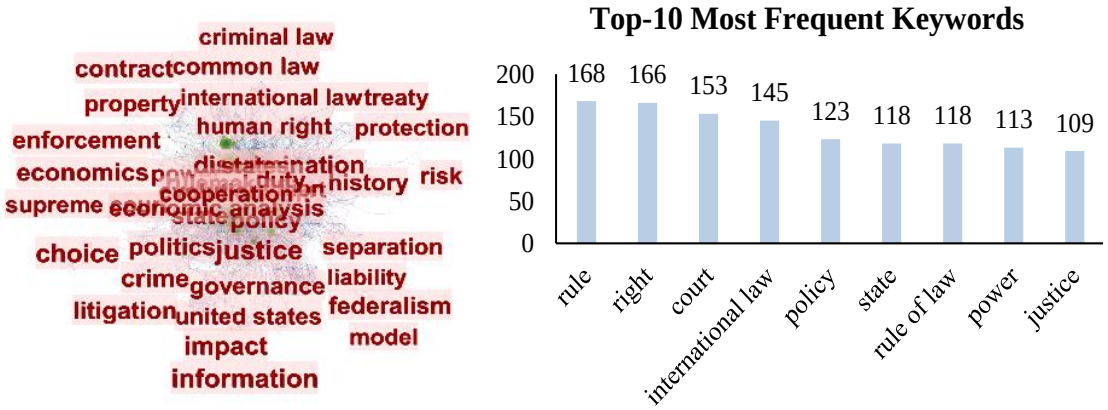

Figure 1. Top-10 most frequent keywords.

As it shows, most fields of legal theory research, like criminal law and international law, cannot be immune from the effects of technology. Meanwhile, "rule", "right", and "justice" are among the top-10 frequent keywords, indicating the extensive exploration on the possible comprehensive reform of legal system resulting from the impact of technology. Many studies have a common conclusion that the legal system will turn to an evidence-based and algorithm-based approach, giving rise to the transformation of legal form from uniform law to personalized law (Devins, Felin, Kauffman, & Koppl, 2017; Casey & Niblett, 2019).

Essentially, the law as a system of regulatory directions takes effect on ex ante behaviors instead of ex post actions in a compliance society. Some scholars divide the required technologies into two parts, which are predictive technologies and communication technologies, according to the conduction process of law in society (Casey & Niblett, 2017). This article holds that there are two determining technical factors: computing power and predictive algorithm, since long-distance communication technology has been mature and widely used.

In 1965, Gordon Moore, who is the Former President of Intel, puts forward the famous Moore's Law. It made an astoundingly prescient prediction that the performance of semiconductor chips doubles every couple year (Robison, 2012). Moore's Law has been in effect for the past few decades, despite continuous skeptical voices about its applicability on technical bottlenecks such as semiconductor microlithography and physical

[1] The data source is Web of Science, and the date of articles are screened from 1st January 2002 to 1st May 2022.

limits of silicon atoms. A recent concern about the future of Moore's Law is that the process node of chips is approaching 3 nm (nanometer), which is asserted by some experts as the ceiling of semiconductor chips and the end of Moore's Law. In recent years, innovative packaging architectures enable chips to double their performance in the same process, proving that Moore's Law will continue to be valid for decades (He, 2021). According to this rule, the computing power of a smart machine will continue to grow exponentially in the foreseeable future. But the continuous growth of chip performance does not necessarily mean that the computing power demand of legal form transformation can be met. If a smart machine's computing power can exceed a certain threshold, it can be asserted that the arrival of legal singularity has a technical foundation.

This article introduces a new concept—social complexity, to quantify the computing power threshold. The term "social complexity" originates from a biology evolutionary hypothesis, which is used to describe social cognition and compare social intelligence among species. Social complexity can be analyzed quantitatively by measuring the group size, interaction frequency, and differentiated relationship (Bergman & Beehner, 2015). Law regulates the activities of individuals in human society, and individuals are the basic units of atomized society. It can be easily concluded that the higher the social complexity, the more complicated the law, thus the more computing power is needed to construct a compliance society. In human society, social complexity is also positively correlated with population scale, interaction frequency, and differentiation degree. From mathematics angel, social complexity can be defined as a function of population scale, interaction frequency, and differentiation degree. Because the population size, interaction frequency, and differentiation degree of humanity are increasing, the first derivative of social complexity is positive, and the function can be fitted as a rising curve in the coordinate axis. Based on this model, the following function image roughly describes how a machine's computing power and the computing power needed change over time.

Despite lack of precise sociological data to calculate the derivatives, there are three possible situations as the picture shown: (1) The development of technology will meet the computing power demand at some time node in the future; (2) the development of technology will meet the computing power demand for a period of time in the future; (3) the development of technology will never meet the computing power demand. Intuitively, the growth rate of computing power is possibly higher than demand, just as the first picture. But more sociological empire researches are needed to demonstrate this conclusion, especially to improve the social complexity model to quantitatively estimate the required computing power resources, which is meaningful for further theoretical research and technological innovation.

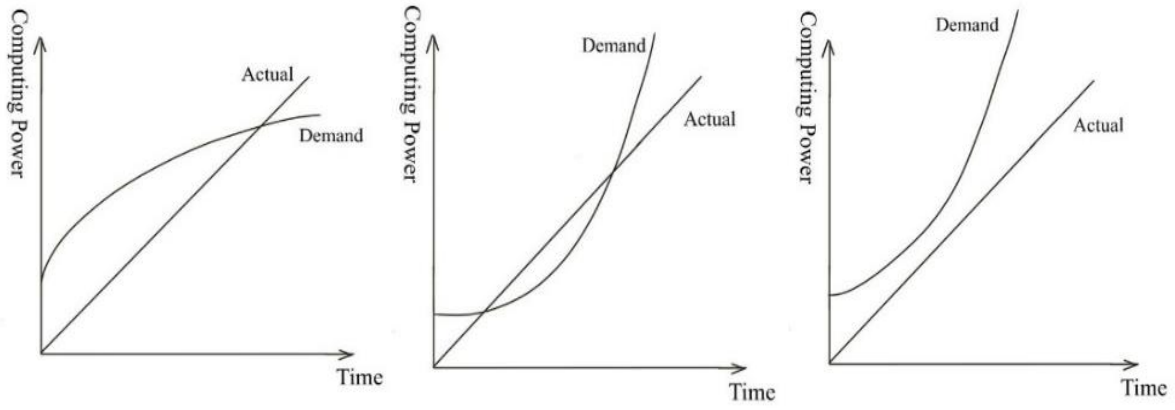

Figure 2. Computing power changes with time.

A science-fiction TV series called Person of Interest imagined an artificial intelligence machine that can predict all the criminal activities in New York. In the real world, law enforcement agencies in the United States are exploring the approaches to adopt predictive analytics to predict and prevent crime before it happens (Ferguson, 2017, pp. 1113-1114). Additionally, authorities are developing predictive analytics which can be used to forecast risks and protect specific people (Glaberson, 2019). During the COVID-19 pandemic, predictive tools are widely used by disease control departments to predict citizens' movement and provide guidance for formulating COVID-related policies (Solomon et al., 2021; Liang, 2020). Develop an artificial intelligence software to detect, analyze, and predict all kinds of human behaviors is possible, since they follow certain patterns (this statement is controversial and will be discussed in detail next paragraph). The law starts and ends with human behaviors (Kuklin, 2004), so it is theoretically feasible to promote the automation and personalization of law through prediction algorithm. The following flow figure is a simple demonstration of how the predictive algorithm offers legal instructions to legal subjects before taking action and helps them comply with the law.

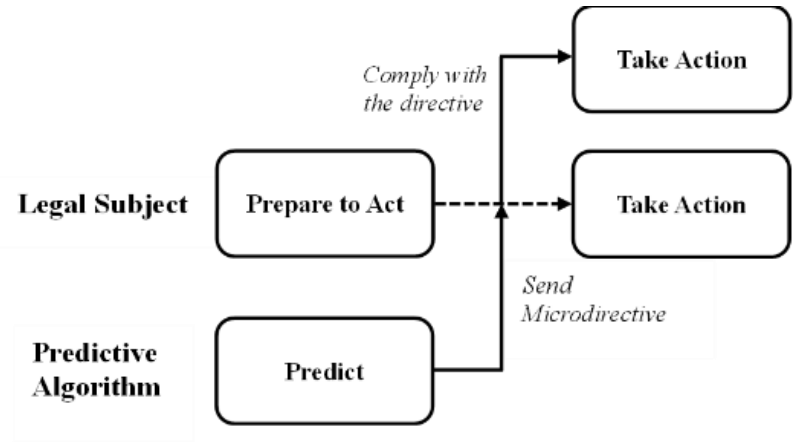

Figure 3. Operational framework of predictive algorithms.

Certainly, the conclusion is based on a basic hypothesis that human behaviors are predictable. Some may question the correctness of this proposition. This question will drag us back to the philosophy and science debate about free will which has lasted for decades. Since the Age of Enlightenment, free will theory has been battling determinism. Free will theory believes that free will exists and it shapes who we are, just as Rene Descartes said, "I think therefore I am". The existence and presence of free will is the theoretical basis of the current legal imputation principle (Hart, 1968). Meanwhile, determinists assert that external influences dominate an individual's decision-making process (Simon, 1978). In recent decades, advances in neuroscience and genetics have changed the balance of the number of supporters on both sides, and scientific research discoveries are fortifying the prospective that our behaviors are just the product of nerve impulses (Tancredi, 2007). There are three dominant theoretical models of determinism, which are biological determinism, environmental determinism, and reciprocal determinism. The representative of biological determinism is Cesare Lombroso's "born criminal" theory, which demonstrates that criminal actions are determined by perpetrators' biological factors and are inevitable (Lombroso, 1876). Modern biological determinists believe that genes determine our behavior patterns. Environmental determinism believes that humans are no different from other species and they all follow the stimulus-response model. In 1938, Burrhus Frederic Skinner

conducted the epoch-making "Skinner Box" operant conditioning experiment and found out that animal behaviors can be altered and controlled by the stimulation of external environment. Skinner (1971) further proposed that human behaviors can also be regulated by operant conditioning, and we can adopt "effective behavior technologies" to improve the conditions of human society. Reciprocal determinism is considered a more reasonable and eclectic theory, which was first put forward by Albert Bandura. He believes that behavior, environment, and biological features interact with each other in this ternary structure (Wortley, 2011, pp. 139-145). The next figure elaborates how human beings behave under the ternary structure of reciprocal determinism theory. To predict whether a legal subject's activity will conform to legal norms, the predictive algorithm is required to combat the chaos and complexity of both human society and individual behavior. Researches in complexity science have indicated that inherent rules under certain scales can be found even in chaotic systems like the weather system and human society (West, 2018, pp. 35-78). Hence, providing that the most advanced predictive algorithm is unable to predict an individual's behavior precisely, it can still predict group activities and provide compliance guidance for them.

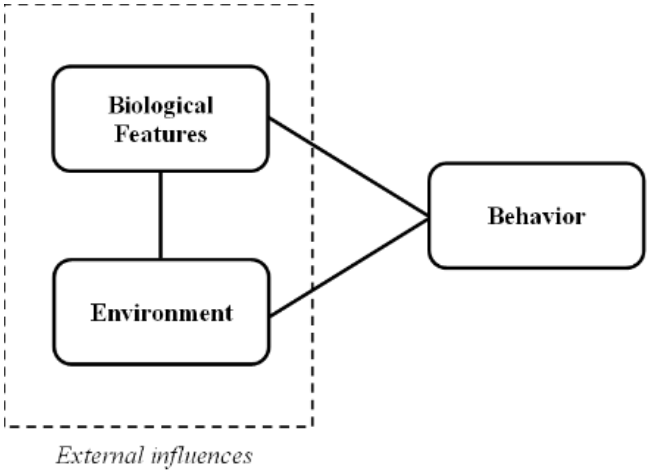

Figure 4. Ternary structure of reciprocal determinism theory.

In sum, despite uncertainty of the innovative path of technology, it can still be assumed that constructing a compliance society has technical feasibility. Certainly, as mentioned in the context, more sociology and computer science researches are needed to further prove the conclusion.

Legal feasibility. Constitutionalism believes that all the constitutions worldwide should share the same framework of values—democracy, liberty, and human rights (Backer, 2009). However, concerns about whether the technical approaches are unconstitutional and whether the new legal form will destabilize these universal principles have emerged and sparked debates. Imagine a society where machines issue compliance directions and people have to comply with them completely. It looks like a combination of cyberpunk and totalitarian society. One fact, in particular, needs highlighting: Whether the transformation will shrink or expand our constitutional rights is still undergoing intensive discussion. This article holds the point of view that the legal feasibility of constructing a compliance society depends on that it does not threaten democratic politics and civil rights.

In order to illustrate this part vividly, we set up three scenarios:

Scenario 1: You were walking through a bustling commercial street, and suddenly a notification was pushed to your mobile phone, saying "This is the official notice from the government. Our algorithm has

detected that you have a 90% probability of robbing the jewelry store on your right hand after 1 minute. Please follow our directive immediately and stay away from the store".

Scenario 2: You were signing an important contract with your customer, and suddenly a notification was pushed to your mobile phone, saying "This is the official notice from the government. Our algorithm has detected that the contract is illegal and may create losses. We suggest you follow our directive guidance and do not sign the contract".

Scenario 3: You were driving along the pacific highway, and suddenly a notification was pushed to your head-up display, saying "According to the dynamic traffic law, the speed limit of this section is 67.2 yards. Please slow down. Our law firm will keep providing you with compliance services".

In Scenario 1, you will subconsciously believe that your constitutional rights have been violated because the government limits your liberty without due process, which is the core of the Fourteenth Amendment. However, in the second scenario, the intelligent algorithm only provides compliance suggestions to citizens and is similar to the responsibilities of the Chief Compliance Officer in the company. This approach cleverly avoids possible constitutional disputes and secures our liberty and legal rights, but we still feel shrouded in the predictive surveillance. Predictive surveillance refers to the application of data science technology to monitor and predict citizens' behaviors (Spencer, 2017). The government is likely to abuse the predictive machine beyond the scope of authorization and take control of people's every activity. George Orwell describes a scene in his political satire 1984 in which the government uses devices called "electric current" to monitor people and arrest them if they are found to have violated the law. Placing people in the surveillance network for just purposes is probably the dayspring of a totalitarian society, and it may distort the Fourth Amendment and become a violation of citizens' reasonable expectation of privacy (Spencer, 2017). Some scholars propose to take the "Tyrant Test" to examine if the predictive machine complies with the Fourth Amendment and regulates predictive technology with vigorous legal internal reform (Ferguson, 2021). But even if such risk prevention measures are taken, the power of government and citizens is still unbalanced, and the potential threat of incontrollable government power will persist.

In Scenario 3, the government is no longer the subject of issuing compliance orders, and the predictive algorithm system is completely handed over to market-oriented operation. This decentralized-regulatory framework effectively circumvents the risks of destroying democracy and infringement of civil rights. Legislature, the government, and third-party organizations interact closely under this mechanism: Lawmakers formulate law principles; law firms or other organizations develop predictive algorithms and provide compliance services to their clients; the government regulators verify whether the market system operates healthily and take necessary regulatory measures to stabilize the market. Constructing a co-governance compliance ecology diminishes the risks drastically and increases the possibility of the realization of a compliance society.

Obeying the law is viewed as a prima facie obligation and dominant conventional morality (Mackie, 1981). Is it also a legal obligation to follow the compliance directives sent by third-party organizations—in other words, do the compliance directives have legal effect? With the comprehensive transformation of legal form, this article believes that it is our obligation to comply with the micro directives. That means the directives are not just non-mandatory guidance. If a citizen does not follow the directives, the prosecutor can accuse the citizen of breaking the law. Courts are empowered to review the legitimacy and rationality of compliance directives and make a verdict on whether the defendant needs to bear responsibility. Under such a legal logical

framework, people can also charge third-party organizations for issuing directives that do not coincide with legal principles and seek remedies. The figure below shows the envisaged legal operation mode, and it proves the feasibility of the transformation of legal form.

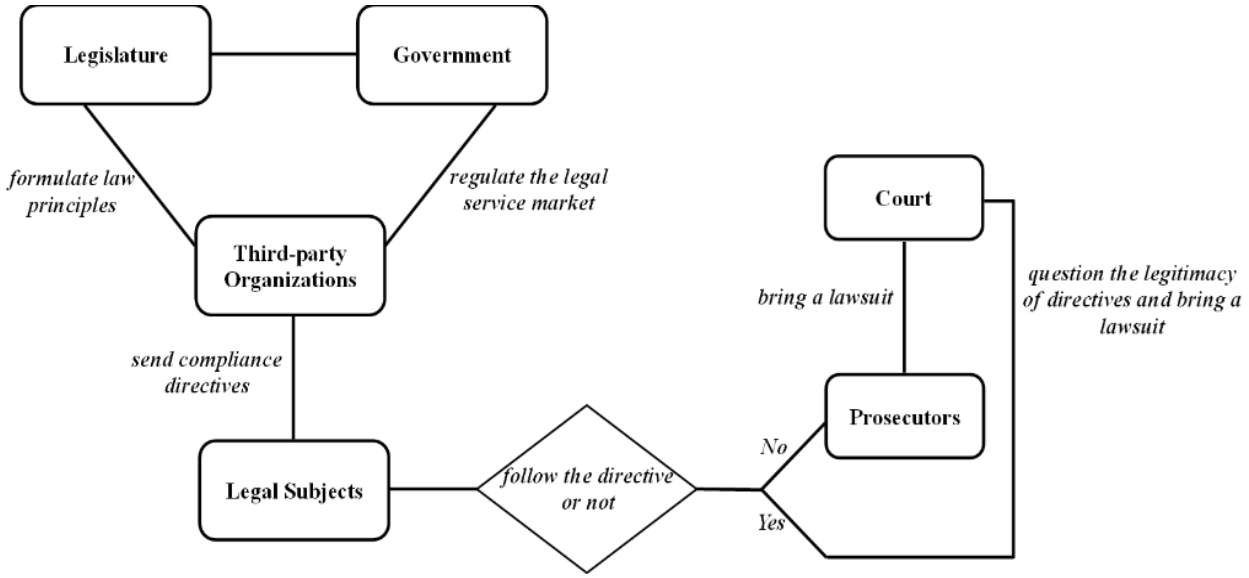

Figure 5. A possible market-oriented legal framework.

Another concern is that the evidence system in the compliance society may conflict with the existing evidence rule. However, we believe that although intelligent evidence replaces the traditional evidence and the legal procedure is altered in the compliance society, the judicial proof rule can be amended to fit in with the new situation. According to the structure of the compliance society, litigation will occur in the following two circumstances basically: (1) A legal subject or legal subjects refuse to follow the compliance directives, and the prosecutors or plaintiffs bring a lawsuit; (2) a legal subject or legal subjects follow the compliance directives, but the compliance directives may be improper and cause losses, and the legal subject or legal subjects question the legitimacy of the directives and bring a lawsuit.

In the first situation, the litigation pattern is similar to the conventional one—the prosecutor or the plaintiff accuses the defendant of not following the compliance directive, and the burden of proof is on the plaintiff side. The prosecutor or the plaintiff is required to provide adequate evidence to come forward with a prima facie case, and the intelligent evidence will not be involved unless the defendant questions the legitimacy of the directive and files a counterclaim. If the defendant files a counterclaim or in the second situation, the attribute and cross-examination standard of algorithm-based intelligent evidence remain undiscussed. Before the intelligent machine sends a compliance directive, it collects a set of raw information and analyzes their internal connections, and then the algorithm draws the conclusion that the legal subject's next move has a potential to conflict with the legal codes. Can the raw data and analysis result be regarded as forensic evidence and to what extent do they have probative value?

Academic research has not reached unified opinions on the attribute of algorithm evidence. Some scholars reckon that algorithm evidence is close to electronic evidence (Ma, 2021). Other opinions regard algorithm-based intelligent evidence as testimony, expert testimony, or measurement report (Grimm, Grossman, & Cormack, 2021). In this article, we believe that the raw data and algorithm analysis result have different

attributes and should be considered separately. The raw data consist of digital records of the legal subject's behaviors and surrounding environment in form of videos, audios, and other types. In essence, the raw data are no different from electronic evidence. It is knottier to identify the evidence attribute of algorithm analysis result. The algorithm finds the internal relations among raw data and summarizes the behavior patterns to predict whether the legal subject's following action has illegal risk. It has the following features: (1) Algorithm analysis is based on sufficient raw data; (2) the analysis adopts causal model of data science; (3) the analysis technology exceeds common people's human cognitive ability (Grimm et al., 2021). The algorithm analysis report, by definition, is more in accord with the concept of expert testimony.[2] Algorithm analysis can be distinguished from mechanical measurement (such as DNA-test), because algorithm is inclined to predict results while conventional mechanical measurements focus on confirming facts. In sum, intelligent evidence is the unification of electronic evidence attribute and expert testimony attribute in the compliance society.

The examination and judgement on judicial evidence include three aspects—relevance, reliability, and legality (Chen, 2022), and they determine the probative value of evidence. We will discuss the review modes and standards from the three aspects.

If the evidence may decrease or increase the probability of a fact, and the fact determines the action, it can be concluded that the evidence is relevance.[3] Compliance directives are based on the analysis result of predictive algorithm, so the analysis result is relevant in most cases. Minimal scrutiny standard should be applied to examine the relevance of analysis result. Meanwhile, strict scrutiny standard is required to judge whether the raw data are relevant to the case, because not all raw data are used for algorithm analysis and related to the compliance directives. Many raw data of low quality are considered as noise and they are discarded during the predictive analysis to increase the accuracy (Sliver, 2015). Irrelevant evidence identified by the scrutiny procedure is not admissible by the court.

One of the fundamental principles of evidence law is that unreliable evidence should be excluded, for example, hearsay is regarded as unreliable evidence and cannot be accepted by the court. The reliability of evidence depends on its accuracy. Raw data are the unprocessed digital record and they are stored via blockchain. They are not easy to be tampered with, so minimal scrutiny standard should be applied to review the reliability of raw data. Although it is also nearly impossible for the external world to tamper with the analysis results, the accuracy of analysis results cannot support the high reliability. Legal prediction is unable to provide 100% precise predictive results due to systematic error, and it may not conform to general casual logic in some cases (Osbeck, 2018). Common sense is required to review the reliability of analysis results to exclude algorithm operating results that are obvious not in line with law of causality under strict scrutiny standard.

The legitimacy review of intelligent evidence mainly focuses on whether the approaches to obtain the raw data comply with the law. Unauthorized raw data are illegal evidence and will not be accepted by the court. In the era of big data, there are many cases that technology companies break the user agreements to obtain private data for big data analysis. The legitimacy review standard of raw data should be strict scrutiny. It is not necessary to review the legality of the analysis results, because they are the outcome of algorithm processing of

[2] Rule 702 of US Federal Rules of Evidence stipulates an expert witness may testify if (1) the expert's specialized knowledge will help understand the evidence or determine a fact; (2) the testimony is based on sufficient facts or data; (3) the testimony is the product of reliable principles and methods which have been reliably applied.

[3] Rule 401 of US Federal Rules of Evidence stipulates the requirements of relevant evidence.

raw data and illegal risks do not exist. The review of the algorithm itself needs to be regulated by other department laws.

Intelligent evidence should be recognized as a new type of evidence in the compliance society, which is the combination of electronic evidence and expert testimony. The examination mode and standard of intelligent evidence are layered and leveled, which can be summarized in the following figure.

Review Aspects / Evidence Attribute	Relevance	Reliability	Legality
Raw Data	Strict Scrutiny	Minimal Scrutiny	Strict Scrutiny
Analysis Results	Minimal Scrutiny	Strict Scrutiny	Unneeded

Figure 6. Layered and leveled examination model.

In conclusion, the legal systems of the compliance society and the current one can be well integrated, and it can be asserted that constructing a compliance society has technical feasibility.

Cost and Benefit Analysis

In this part, we apply the methods of Law and Economics to analyze the socio-economic cost and benefit of the transformation of legal form. As the concept and implementation scheme of a compliance society are outlined above, the cost and benefit can be roughly calculated. This part first analyzes the cost of constructing a compliance society, then the benefit. Afterward, we compare the results and draw the conclusion.

Cost

The cost of constructing a compliance society can be divided into two parts: technical costs and soft costs. Technical costs include the capital investment and human resources required to build the platform of intelligent legal service; and soft costs include publicity needed to promote reform, resources required to establish corresponding social organizations, and so on.

In the part of technical feasibility, computing power, predictive algorithm, and long-distance communication technologies are regarded as the necessary components to realize the vision of a compliance society. The personalization and automatization of law rely on a technical-driven legal system. In this system, the third-party organizations as providers of intelligent compliance services first require to be equipped with sufficient high-performance and special-designed computers. The production chain of these special electronical devices, including research, design, development, manufacture, and testing, needs to spend a lot of money to maintain its operation. Additionally, developing predictive algorithms and erecting a long-distance communication network also need large up front capital expenses. The initial technical costs are huge, but most of them are one-time investment. After the operation framework is basically set up, the subsequent cost is mainly to maintain the equipment and satisfy electric power need.

Gigantic social changes often come with soft costs—on the one hand, people tend to state themselves in opposition to change because of the inertia of thinking; on the other hand, vested interests have strong incentives to obstruct reform (Moe, 2015). The resistance of reform needs to be resolved by investment of long-term social resources, such as publicity, campaigns, and debates. Supporters and opponents will

compromise after fierce competition, which will last for years. It's difficult to specify the exact borders of soft costs, but they are relatively evenly distributed over those years from a macro view.

Benefit

The transformation of legal form can bring benefits to the legal system and social system simultaneously. Benefits to the legal system include saving legislative resources and law enforcement resources; and benefits to social system include reducing governance cost and decreasing crime rate.

According to the concept of a compliance society, the law is adaptive and personalized, and people abide by the law proactively in such a world. In the traditional legal framework, legal codes are the combination of rules and standards. Rules are precise and accurate when they are enacted, while standards are imprecise and vague when enacted (Casey & Niblett, 2017). Errors are constantly raised when a law exceeds the reasonable limit—the law is too precise and enlarges the scope of attack, or the law is too vague and unable to regulate the misdeeds (McGinnis & Wasick, 2014, p. 1027). Micro directives can avoid such errors and save a lot of legislative resources and law enforcement resources.

There is no doubt that compared with the traditional social form, the operation efficiency of a compliance society is much higher. The law changes from rigid rules to dynamic directives, which reduces the social governance dilemma caused by fuzziness and lag of law. Additionally, with the help of predictive technology, crime rate can decrease rapidly in a compliance society. Ensuring social order on the premise of respecting individual rights is the most ideal model of social governance, and it can be realized in a compliance society.

Comparative Analysis

Kaldor-Hicks Improvement is an important indicator to measure whether social change will occur in law and economics. The Kaldor-Hicks Improvement theory demonstrates that if the benefits of change outweigh the cost, then from the perspective of the whole society, the social change brings the improvement of the overall welfare of the society, and the change is considered as acceptable (Wei & Zhou, 2017). Hence, we can analyze whether the compliance society will eventually become a reality by examining whether the benefits exceed the costs. The following figure summarizes the costs and benefits of constructing a compliance society.

Costs	Benefits
Manufacturing electronical devices	Avoiding legal errors
Developing predictive algorithms	Saving legislative resources
Erecting the communication network	Saving law enforcement resources
Maintaining the equipment	Reducing social governance dilemma
Satisfying electric power need	Decreasing crime rate
Long-term social resources	Ensuring social order

Figure 7. Cost-Benefit analysis.

As it shows, the costs consist of initial investments and later investments. Initial investments include manufacturing electronical devices, developing predictive algorithms, and erecting the communication network, and their total amount is relatively fixed. The maintaining and operating capital needs to be invested every year in the later stage, but the amount is also relatively fixed per year, and it is only a fraction of the total costs. Apparently, the benefits are mainly the improvements brought to the whole society. The benefits are not easy to be calculated accurately, but they will gradually increase over time from a qualitative perspective.

The overall trend can be outlined as followed: The annual cost remains at a relatively high starting point until the transformation of legal form is completed, and then plummeted to a lower level and keeps stabilized. Meanwhile, the annual benefit curve has a low starting point but is upward overall until it reaches the peak. Hence, it can be inferred that the annual cost exceeds the benefit in the early stage, but the situation turns opposite when entering the next stage. In the final stage, according to the rule of law and economics, their amounts tend to be the similar and reach equilibrium.

In conclusion, because the costs of such change do not unlimitedly soar, and the new legal form has social benefits, constructing a compliance society is acceptable and in line with the general economic rule of social reform.

Conclusion

The influence of advanced technologies is expected to keep spreading widely, and the law and technology will inevitably combine and lead to evolution. In this trend, the arrival of legal singularity and the transformation of legal form seem inexorable. This article puts forward a new concept “compliance society” to describe a possible social vision of future, and then examines the feasibility and conducts the cost-benefit analysis. We believe that constructing a society where all legal subjects abide by the law proactively is feasible and in line with socio-economic benefits. Although this conception is still utopian currently, the value of this article is to elaborate a possibility of the future and trigger further exploration.

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