MINDWELL SCIENCE PRESS SDN. BHD.

Computational Social Dynamics
2026, Vol. 1, No. 10

RESEARCH ARTICLE

The Obscuring of the Fairness Principle in Digital Governance and Its Disenclosing — A Critique of Efficiency-First Digital Governance

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Published: 28 October 2026

Abstract

Digital governance is a new form of social governance produced by the embedding of digital technology in social governance. Digital technology reconstructs the mode of social governance through scientific and instrumental rationality — handling data and information efficiently within governance, optimising and upgrading the governance process, supplying systematised solutions, and realising application across multiple scenarios. The pursuit and intensification of the efficiency-first principle by digital technology place the emergence and direction of digital governance under the control and dominance of a technical logic, and thereby obscure its value core: the principle of fairness. This shows itself in digital technology's "narrowing" of governance data and information, its "de-neutralising" of governance decision-making behaviour, its suppression of the exercise of human agency, and its expansion of the power of government and enterprises. Fairness, as an ethical value and social core embedded within digital governance, is both the ought-to-be objective and the actual pursuit of digital governance. To genuinely "liberate" the "productive forces" of digital governance, it is therefore necessary — by improving governance data and information, regulating the governance decision-making process, promoting the construction of human agency, and restraining the disorderly expansion of power — to pursue the "mutual constitution" of efficiency and fairness in digital governance and so advance the modernisation of social governance.

Keywords: digital governance; fairness principle; efficiency first; obscuring

1 Introduction

Digital technologies whose technical base is big data, blockchain, cloud computing, the Internet of Things and artificial intelligence are profoundly changing human society. The emergence of such new digital forms of social production and social life as the digital economy, the digital humanities, digital labour and digital finance shows that humanity has entered the digital age. As far as social governance is concerned, the widespread practice of such digital technologies as "smart cities", "digital sensing systems", "digital villages" and "digital government" has given rise to a new form of social governance: digital governance. The shaping of social governance by digital technology is chiefly manifested in the creation of technical modes and logics of governance. Driven by digital technology, raising governance performance by means of digital governance has come to look like the principal practical orientation of the modernisation of social governance. Under the "collusion" of digital technology and the technical logic behind it, social governance has resolved such problems as the non-objectivity of the data and information that "float above" the surface of social governance and the influence of human factors on the fairness of governance, so that "the rationality of technology has become the rationality of politics" (Marcuse, 1964[1]). As a mode of governance grounded in instrumental rationality, however, digital governance overemphasises an "efficiency orientation and lacks any transformation of governance ideas" (Ma, 2023[2]); it severs the relation between technical rationality and public value and cannot fundamentally advance the modernisation of social governance. In the course of digital governance, therefore, clarifying the boundary between efficiency and fairness and fixing the position of each is of considerable value for advancing that modernisation.

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2 The efficiency-first principle in digital governance and its intensification

The empowerment of social governance by digital technology "aims to construct relations of production suited to the laws governing the development of the digital social formation" (Sun, 2022[3]). The conspicuous advantage of these relations of production is the formation of a high-performance pattern of social governance under that empowerment: using the powerful computing capacity, algorithms and integrative functions of digital technology to identify complex social problems, to build digital public service platforms for multiple scenarios, and to supply the public with more and better high-quality public goods. In other words, what digital governance pursues is the efficiency-first principle, and digital technology keeps intensifying that principle.

First, the data of governance objects is stored and processed at scale under the empowerment of digital technology, which makes governance problems clearer and governance decisions more scientific. Digital technology has enhanced the data acquisition and storage capacity of governance subjects. Building on existing government affairs data, financial and economic data and social governance data, information-collection software such as web crawlers can gather data and information relevant to the governance domain to the greatest possible extent and store it through cloud platforms, databases and the like, supplying richer and more solid base material for social governance. Digital technology has also optimised the data processing capacity of governance subjects. Traditional social governance relied chiefly on the capacities of governance subjects or on limited government affairs data to identify governance problems, whereas digital technology can observe and detect problems arising in the course of social governance in real time through intelligent algorithms. Shanghai's "urban operation digital vital-signs system", for instance, conducts comprehensive real-time monitoring of how the city is operating and can present social problems in a visual and easily grasped form. Digital governance is thus digital technology's expression of social reality in data symbols, and its presentation of social problems as data and information by such means as algorithms, so that social problems that could not be identified by human effort, that change dynamically and that are unknown are "presented" in a data-based and visual way. In this process, digital technology "turns the invisible into the visible, the unsayable into the sayable, and the unknown into the known" (Han, 2019a[4]). Social problems are presented more clearly under the measurement of digital technology, databases and algorithms, while large-scale data and information together with powerful algorithms and computing capacity drive governance decisions to be more scientific and effective.

Second, social governance reconstructs the governance process according to an algorithmic logic under the empowerment of digital technology, so that the governance process is presented in a structured and procedural manner and the capacity to address complex social problems is raised. Digital governance is essentially a process of identifying and handling social problems by means of algorithms. An algorithm is a process of computing data and information within a certain structural framework, one that "includes such elements as input, instructions and output" (Cormen, 2013[5]). The large-model structure of algorithms makes it possible to identify and resolve complex social problems. ChatGPT is a typical algorithmic large-model structure: it analyses and synthesises an enormous corpus through a large language model, generates content consistent with the conventions of human linguistic communication, and possesses a certain value orientation and ethical character. In the course of digital governance, the structured algorithmic models for governance problems developed under the leadership of governments at all levels can be applied to different governance scenarios and can effectively process both structured and unstructured data, resolving the difficulty that earlier social governance faced in rapidly and effectively handling different types of data and information. In essence, digital governance is a procedural process of governing social problems according to an algorithmic logic. The governance subject or object raises a demand; with the support of intelligent algorithms the governance model analyses that demand, intelligently captures the relevant data and information for modelling and analysis, and then reaches a conclusion and provides feedback. In the course of digital governance, that is, every step from the raising of a governance demand to the realisation of the objective is determined by the logic and rules of algorithms, and every step is a processing of structured and unstructured data and information. With their powerful computing capacity, their structural models applicable to multiple scenarios and their procedural computational logic, algorithms present the problems of social governance in classified and clearly delineated form and supply solutions, greatly raising the performance of social governance.

Third, digital technology supplies social governance with systematised solutions, raising the operating efficiency of data and information and improving the overall performance of social governance. "A political multi-agent system has such characteristics as purposiveness, interactivity, autonomy and adaptability; it will become very intelligent and can reduce resource use, thereby maximising returns" (Vespignani, 2016[6]). With the support of digital technology, systematised solutions for social governance have been developed, of which Shanghai's "single window for all procedures" and "unified management over the whole network", Shenzhen's "digital pioneer city" and Chengdu's "digital park" are typical representatives. Some cities have integrated the administrative examination and approval and administrative licensing of government, the handling of individuals' medical care, education and travel, and the tax payment, establishment and alteration, employment and business licensing of enterprises into a single digital system platform. Horizontally, digital technology integrates the resources of every government department, and even social resources, which the digital

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government affairs platform then applies intelligently, integrating and drawing out the maximum value of those resources; vertically, digital technology converts the value of governance resources into public goods and public services delivered directly to the public, which not only lightens the administrative burden inside government but also advances the equal supply of public goods. The systematised solutions for social governance that digital technology supplies integrate multiple governance subjects, all kinds of resources and different governance problems by digital means, realise the concentration of data, the convergence of interests and the exchange of personnel in the process of social governance, advance the construction of a "social governance community" (Yu, 2020[7]) and improve the performance of social governance.

Finally, digital technology supplies social governance with diversified application scenarios, making intelligent governance and agile governance possible and extending the space and time of social governance. In the digital age, government must be "able to respond rapidly to changing social and economic circumstances" (Micklethwait & Wooldridge, 2014[8]), and digital technology and the governance tools it develops make it possible to meet that need. On the one hand, digital technology fuses the elements of governance — people, objects, data and time — scientifically and effectively into a governance organism. In the dimension of time, the data generated by social operation every minute and every second, and the data generated by people's daily lives, all form constituent elements of that organism; in the dimension of space, the governance organism integrates material and non-material resources that were originally dispersed, fragmentary and plural, belonging to different spaces and different regions, within a single space, making rapid, real-time and individually tailored governance possible. On the other hand, social governance can supply individualised and differentiated demands intelligently under the empowerment of digital technology. In speed of supply, the powerful computing capacity of digital technology allows real-time identification of the demands of governance objects and intelligent generation of the corresponding supply; in quality of supply, digital technology can integrate all kinds of material and non-material resources in order to meet the demands of governance objects and achieve a high degree of fit between supply and demand; in effect of supply, the individualised and humanised governance delivered with the support of digital technology satisfies, to a certain extent, both the material and the spiritual needs of governance objects, raising the warmth and validity of governance.

Through building digital information infrastructure and platforms, reconstructing governance processes and mechanisms, and supplying social governance with systematised solutions and diversified application scenarios, social governance under the empowerment of digital technology becomes more agile and efficient. It may be said that the exercise of digital technology's functions in digital governance shows that digital technology is undergoing "a transformation from a tool function that meets the needs of production and development to a value function that constructs what the development of modern society requires" (Pan, 2021[9]). With the support of digital technology, the digitalisation, proceduralisation, structuration, individualisation and intelligentisation of social governance have advanced considerably. Digital technology has painted, for "the realisation of humanity's need to pursue a better life" (Xi, 2017[10]), a picture of efficient and high-quality governance.

3 Why the efficiency-first principle in digital governance obscures fairness, and with what consequences

The highly efficient social governance that digital technology pursues in fact contains a value core of fairness. In human history, "technology contains not only a philosophy of nature and a method, but also, by virtue of its intrinsic properties, has incontrovertibly consolidated the idea of progress" (Marx, n.d.[11]). Technological progress drives the progress of human society, and this shows itself not only in the development of the social productive forces but also in the promotion of human ideas, especially of the value of fairness that humanity pursues. That is, "it is closely bound up with the idea of progress … and among these ideas none is more relevant than technology" (Nisbet, 1980[12]). In digital governance, the use of objective data rather than the subjective will of governance subjects, the delivery of governance schemes by digital systems rather than by the decision of governance subjects, and the capacity of the systematised solutions and multi-scenario applications of digital government affairs platforms to provide services fairly to all governance objects — all of these embody digital governance's pursuit of the value of fairness. Yet, as Marx said, "in our days, everything seems pregnant with its contrary. … the victories of technology seem to be bought by the deterioration of morals" (Marx, 1856[13]). In reality, too, we see that the new form of digital governance generated by the embedding of digital technology in social governance pursues efficiency too single-mindedly in the course of modernising social governance, neglects the pursuit of the principle of fairness, and so brings about the obscuring of that principle in digital governance.

First, while digital technology enhances the capacity of governance data in its "storage and retrieval", it confines the range within which that data may be handled; some governance objects and some data are excluded from the field of governance, and fair governance becomes difficult to achieve. Social life, as a complex, mutable and ambiguous existence, is in essence human practical activity. In abundant social practice humans create both quantifiable material wealth and

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much non-quantifiable, non-measurable spiritual wealth, together with modes of thought, ideas and the like; all of these may be called the object-related resources of social governance. In digital governance, government collects, stores, handles and uses the object-related resources of social governance by setting digital information standards and applying digital technology, which is in fact a process of rendering those resources "standardised" and "patterned". In this process, "some data that cannot be quantified or recorded will be simplified by algorithms" (Lu, 2023[14]). To be sure, this mode of governance can convert data and information rapidly, efficiently and scientifically and can pinpoint the problem to be governed; at the same time, however, it confines the field of governance to the range of data and information that government is able to collect, and from this a difficulty of fairness arises. In the first place, these object-related resources cannot reflect the full picture of the problem to be governed. The data and information of highly complex problems are stored by algorithms at a "reduced order" as simple and definite items of data, and in the course of digital governance it is very difficult to restore from them the full picture of a complex problem; governance oriented to data and information is inevitably not governance oriented to complex social problems, with the result that some governance objects fall outside the field of governance and governance loses its fairness. In the second place, these object-related resources cannot contain all the information of the problem to be governed. Data show that as of June 2023 China's internet penetration rate stood at 76.4 percent (CNNIC, 2023[15]), and that more than 300 million residents were still not using the internet. To confine the field of governance to internet data and information alone is therefore unfair.

Second, while digital technology advances the scientific character of governance decisions, it runs into the risk of algorithmic non-neutrality, and some governance decisions and governance acts find it difficult to be genuinely fair and impartial. The objectivity and neutrality of algorithms have always been the justification for using them in social governance decisions. In traditional social governance decisions, some complex and multi-causal social problems put decision-makers in a difficult position, because "such problems are usually not capable of precise and definite answers" (Behn, 1981[16]); traditional governance decisions thus find it hard to win the approval of the public, and the authority and credibility of those decisions suffer. Because algorithms appear to reach conclusions by "computing" objective data through an objective machine procedure, they can reduce "the degree of human control and the degree of empowerment" in the governance process (Yu, 2023[17]); their decisions therefore readily win public trust and thereby give digital governance the image of being efficient and fair. Yet every algorithm is developed according to an orientation set by government or by an enterprise, and written by engineers in a computer language; behind it there must lie the emotions and preferences of government, of enterprises and even of the engineers themselves. As the algorithm itself is concerned, the existence of such problems as algorithmic discrimination and algorithmic price targeting means that algorithms are not neutral; as the governance decision-making process is concerned, decision-makers tend to place greater trust in algorithmic decisions representing the newest technology and to disregard the opinions of experts and participants, with the consequence of "automation bias" (Alon-Barkat & Busuioc, 2023[18]); as decision feedback is concerned, supervision of algorithmic decisions and algorithmic behaviour is usually difficult to carry out because of the "proprietary, non-transparent and inexplicable character" of algorithms (Busuioc, 2021[19]). Algorithmic decision-making in digital governance, that is, cannot achieve absolute fairness. In fact, while decision-making is made more scientific and fair through algorithms, new unfairness is produced.

Third, while digital technology raises governance efficiency, it suppresses the construction of the agency of governance subjects; some governance subjects are bound and fettered by technology, and fair governance becomes difficult to achieve. Giving expression to agency is an intrinsic requirement of digital governance: by means of the empowerment of digital technology, human will and human thought are embedded in the whole process of social governance, and human value is thereby expressed. The process of digital governance is thus a process of constructing the agency of governance subjects, one in which the exercise of that agency advances the modernisation of social governance. While digital technology raises governance efficiency and gives expression to the agency of governance subjects, it also brings negative effects. In criticising large-machine production under capitalism, Marx and Engels pointed out that "the workman becomes a mere appendage of the machine, and it is only the most simple, most monotonous and most easily acquired knack that is required of him" (Marx & Engels, 2018[20]). In the course of digital governance, governance subjects likewise run the risk of being bound and fettered by digital technology. In the decision-making process, "contemporary public decision-making has ever more conspicuously taken the developmental direction of technology replacing politics" (Liu & Zhang, 2021[21]). Digital technology follows a technical route: it structures and datifies the demands of governance objects, applies reusable decision models, and processes and computes data and factors, so that the self-consistency and intelligence of technical decision-making are brought into play to the greatest degree. This process, however, neglects and excludes the governance experience, personal feelings and other elements of governance subjects that cannot be brought within the decision logic of digital technology. It also means that governance subjects cannot participate directly in the resolution of concrete social problems or in the making of governance decisions. In the course of digital governance, indeed, the identification of governance problems, the making of governance decisions and the implementation of governance acts are all carried out by

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digital technology, and the influence of governance subjects on social governance is gradually shrinking. A more radical view holds that digital technology "delivers us over to the programming and control of psychopolitics" (Han, 2019b[22]), and on that view it is even harder to speak of the expression and construction of the agency of governance subjects with the support of digital technology.

Finally, while digital technology supplies systematised solutions, it expands the power of government and enterprises; some governance objects are dominated and controlled by technical power, and fair governance becomes difficult to achieve. Systematised solutions are the conspicuous advantage of digital technology in driving change in social governance: the integrative advantage of digital technology and its powerful intelligent algorithmic functions can supply overall solutions for social governance. But overallity also means a concentration of power. In an age in which "data is power" (Brockman, 2017[23]), the foundation of systematised solutions is the possession by government and enterprises of enormous quantities of data, which gives rise to the "political data-leviathan" and the "commercial data-leviathan" (Liu, 2023[24]); and algorithms, as "a distinctive, dispersed and impersonal form of modern power" (Feenberg, 2018[25]), determine the operating logic of the system and the supply of public goods. On the one hand, with the support of digital technology and of the enterprises behind it, government builds enormous digital carriers and platforms for data storage, data processing and public service supply; its control over society and over the public grows as never before, and government power, like air, is "everywhere", compelling the public to "comply with whatever it is commanded" (Yuan, 2021[26]). On the other hand, enterprises combine the profit logic of algorithmic marketing and algorithmic manipulation in the commercial sphere with techniques of political control, and on the basis of pursuing their own interests "collude" with government, further strengthening the latter's control. The United States government's PRISM programme, for instance, is a typical case of government colluding with digital giants to surveil the public and other nation-states. What accompanies the systematised solutions of digital governance is the expansion of the power of government and enterprises; digital technology is no longer, for governance objects, merely a technical tool for supplying high-quality public services, but has also become a means of dominating and controlling them (Noble, 2018[27]).

4 Disenclosing the fairness principle in digital governance: unifying the ought-to-be with the actual

In essence, fair governance ought to be the objective that digital governance pursues. The reason is that fairness is an ethical value embedded within digital governance, and also the value foundation on which digital governance arises and possesses legitimacy. From the actual situation, upholding the principle of fairness in digital governance can advance the smooth unfolding of digital governance. While pursuing high efficiency, therefore, digital governance must resolve its problem of legitimacy — that is, it must govern in accordance with the principle of fairness. Strauss held that "a value-free political science is impossible" (Strauss, 2011[28]). By the same token, a digital governance that does not contain fairness is also impossible. Only by taking fairness as a principle that digital governance must uphold, and by disenclosing, from the ought-to-be to the actual, the obscuring of that principle by digital governance, does digital governance become a complete and perfected form of governance.

First, as a kind of political act, digital governance contains the ethical orientation of fair governance. Digital governance is first of all a political act, an administrative mode by which the modern state conducts social management and social governance. In its content, digital governance contains the intrinsic logic of governance subjects using digital technology to enhance the legitimacy of social governance. "The rightness of an act, seen formally, also presupposes that the act in question accords with the value principles or ethical norms acknowledged by a certain community" (Yang, 2018[29]). An important precondition, that is, when digital technology is used to enhance the performance of social governance, is that the act of social governance under the empowerment of digital technology must accord with the ethical norms originally proper to social governance — namely fairness and justice. One important reason why digital technology is applied to social governance, for instance, is that its fair and objective processing of enormous quantities of data and information can avoid the subjective bias of governance subjects in traditional social governance, and so form fair governance decisions and governance acts. That digital governance contains the ethical value of fair governance has two levels of meaning. On the technical level, digital governance contains the ethical value of advancing the realisation of social fairness through technological progress. The objective processing of enormous quantities of data and information by digital technology, the realisation of intelligent decision-making under algorithmic computing capacity, and the intelligent and precise supply of public demands all show that digital technology can achieve "efficient fairness" in the allocation of social governance resources (Zhang, 2021[30]). On the process level, digital governance, as a new governance model, is a breakthrough from traditional governance models: it reshapes social governance with new ideas, new structures and new processes, and its objective is precisely to achieve fairer social governance.

Second, as a kind of social act, digital governance contains the value pursuit of realising the people's happiness. In form, the acts of digital governance must comply with the ethical principle of fairness; in substance, digital governance is meant to let the public obtain a sense of satisfaction and happiness from intelligent governance decisions and intelligent

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governance acts — that is, to make "people's lives happier and better" (Xi, 2022[31]). Just as enterprise management needs to "give play to people's self-control and subjective initiative, and to stress empowerment, participation and consultation" (McGregor, 1960[32]), digital governance is in fact a process of "technical empowerment" of social individuals by digital technology, and thence of giving play to human subjective initiative and participation. Digital technology, that is, enables social individuals to participate in the making of government policy and to interact and cooperate throughout the whole process of social governance; through such means as the "co-production" of data resources (Shi & Chen, 2022[33]), the joint making of governance decisions and the individualised satisfaction of governance demands, it forms an "open and pluralistic system of social governance" (Wu, 2020[34]). By building a modern system of social governance and empowering social individuals, digital governance realises the fair value objective of "constantly enhancing the people's sense of gain, happiness and security" (State Council, 2022[35]).

Finally, as a kind of partisan act, digital governance contains the value choice of fairness and justice. Digital governance, as the strategic choice by which the state advances the modernisation of the social governance system and capacity for governance, contains the Communist Party of China's value orientation and objective pursuit with regard to China's political development and social development. The report of the Twentieth National Congress of the Communist Party of China set out China's social development objectives for 2035, including "basically modernising the state governance system and capacity for governance" and "basically achieving equal access to basic public services" (Xi, 2022[36]). To realise these objectives of social development, digital governance must pursue not only highly efficient governance but also fair governance. Should only high efficiency be pursued in the course of digital governance, the ethical value of digital governance might be lost, which would also mean a loss of the meaning of governance. The reason is that the political acts of any party must take as their primary objective winning the recognition and support of the masses, which is to say that a party obtains the legitimacy of its own exercise of power through the pursuit of fair governance. The acts of a party, that is, must possess the capacity to make people "produce and adhere to the belief that existing political institutions are the most appropriate for society" (Lipset, 1997[37]). The Party-building objective put forward in the report of the Twentieth National Congress — "leading social revolution with the Party's self-revolution" (Xi, 2022[38]) — in fact contains the Communist Party of China's ethical value objective of advancing social development to a new level through its own continuous self-renewal. Concretely in social governance, this means taking digital governance as an important channel for pursuing social fairness and justice, enhancing the Party's capacity for social development through the empowerment of digital technology, and consolidating the social foundation of socialist modernisation.

5 Optimising digital governance: the "mutual constitution" of fairness and efficiency

"The conflict between the value of fairness and the value of efficiency in social development seems unavoidable, and a good society must be able to seek the correct balance between the two" (Okun, 1988[39]). Since fairness and efficiency are both objectives that digital governance pursues — without efficiency digital governance cannot show its superiority, and without fairness digital governance cannot show its legitimacy — the functions of digital technology must be brought fully into play in order to pursue the fairness and justice of social governance within a highly efficient course of digital governance.

First, "narrowed" data and information in digital governance should be supplemented with complete human experiential knowledge. The reason digital governance can, to a certain extent, complete such tasks of social governance as formulating governance policy and supplying public services efficiently lies chiefly in the support of enormous quantities of governance data and information. If, however, human experiential knowledge is neglected or excluded in the pursuit of enormous quantities of governance data and information, the data and information on which digital governance relies will become one-sided and narrow. A Chinese saying has it that "man's plans cannot outdo Heaven's calculations": careful logical deduction and procedural computation can, to be sure, yield comparatively accurate predictions of how things will develop, but social development is usually made up of many sudden and contingent uncertain events, and in such circumstances human experiential knowledge and intuition become especially important. "The calculating power of the brain may be able to solve known risks, but when faced with uncertainty, intuition becomes crucial" (Gigerenzer, 2019[40]). To solve the problem of the "narrowing" of data and information in digital governance, therefore, that data and information must be supplemented with complete human experiential knowledge. In digital governance, attention must be paid both to the value of the objective data and information on which governance relies, drawing out its potential in the service of governance to the greatest extent by means of digital technology, and to the value of experiential knowledge, integrating human experiential knowledge into the whole process of digital governance and remedying the defect by which the "reduced order" processing of data and information by technology simplifies complex problems, so as to present the full picture of complex social problems. In the course of digital governance, that is, digital technology should be used to open up the boundary between data and information on the one hand and human experiential knowledge on the other, and to build a new pattern in which knowledge of all kinds and data and information coexist and jointly support social governance. Only thus "will the

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development of science and the progress of technology not become deformed, and only thus can it be ensured that humanity always benefits from them" (Zhang, 2019[41]).

Second, the "anomie" of technical decision-making in digital governance should be regulated by a perfected system of digital institutions. Digital governance pursues the scientific character of decisions through algorithmic decision-making, but the problems inherent in algorithms and their misuse in governance (Wang, 2023[42]) mean that governance decisions are not entirely scientific and neutral, and the process of technical decision-making needs to be regulated by digital institutions. Where institutions of rights are concerned, a perfected system of data property rights should be built, the problem of distributing rights and interests in the production, processing, circulation and use of data resolved, and the data rights and interests of all kinds of governance subjects — especially the public — made clear. As Rawls said, "a just system of property rights should make a reasonable distribution of the rights and duties in the legal relations of property rights" (Rawls, 1999[43]). A perfected system of data property rights must give full consideration to the rights and interests of the public and give the public a full right of participation and of suggestion in the course of algorithmic decision-making, so as to safeguard their own rights and interests. A perfected system for allocating responsibility should also be established: in the development and application of the algorithmic technology used in digital governance, the respective division of responsibility among engineers, enterprises, government and the relevant staff should be made clear. Where institutions of supervision are concerned, a system of supervision over and accountability for algorithmic decisions should be established. With the help of social forces, and through building industry ethical norms, norms for the application of digital technology and norms for industry development, the application of algorithmic technology should be supervised, so that algorithmic applications tend towards the good. In government supervision, government should fully recognise the defects of algorithmic technology applied to decision-making, build a digital governance decision-making mechanism in which algorithmic decisions work in coordination with expert and public participation, strengthen legislative supervision over algorithmic black boxes and algorithmic discrimination, and require algorithm designers to publish, within certain limits, the logic and processing of algorithmic inputs and outputs. An algorithm applied to digital governance, for instance, should disclose the logic and processing of its design to government, so as to facilitate government supervision over it. In the system of tracing, a mechanism of accountability should be established, so that when digital governance decisions produce serious consequences, the algorithm-developing enterprise and the relevant government staff are held accountable according to law in accordance with the division of responsibility, and governance decisions are prevented from becoming unfair because people develop and use algorithms according to their own preferences.

Third, the "construction" of the autonomy of governance subjects in digital governance should be advanced through good digital humanistic literacy. In the course of digital governance, digital technology on the one hand raises governance performance and satisfies people's diversified needs for social governance, and on the other hand suppresses the exercise of the subjective initiative and agency of governance subjects, obstructing the realisation of fair governance. If digital governance is genuinely to achieve mutual promotion between efficiency and fairness and to advance the modernisation of social governance, governance subjects must be allowed to give full play to their subject functions and to express their subject individuality, with humans leading the process of digital governance rather than digital technology. As Jaspers said, technological development "liberates man from the imprisonment of his animal nature, from his material want, from threat and from servitude" (Jaspers, 1989[44]). Yet when technology serves human society, the alienation of technology (Heidegger, 2004[45]) imprisons man within a narrow physical and intellectual space, with the result that "man will be erased, like a face drawn in sand at the edge of the sea" (Foucault, 2001[46]). To give expression to human agency in the course of digital governance, a good digital social ecology must be built, and the digital literacy of all members of society raised so as to "tame" digital technology in the course of social governance. Concretely, this means popularising digital knowledge and basic technical skills among the whole people through such channels as digital training, special digital funds and digital poverty alleviation, and helping people quickly establish digital modes of thinking and understand digital logics, so that they possess the capacity for critical reflection on and response to digital technology.

Finally, the "expansion" of the power of subjects in digital governance should be limited by a vertical and horizontal division of digital power. The concentration of data and information and the iterative upgrading of digital technology enable digital governance to supply better public services, and at the same time bring about an expansion of the power of government and enterprises, strengthening government's control and enlarging enterprises' say in digital governance. Plainly, if fair governance is to be realised, the unrestrained expansion of the power of government and enterprises in digital governance must be limited, and the public given a greater leading role and right of participation in digital governance. The power of government and enterprises in the digital age, that is, must be divided, and their power-expanding behaviour thereby restrained. From the standpoint of government, government should take the initiative in opening to society the data and information, algorithmic technology, decision-making processes and governance processes of governance, and safeguard the public's right of participation, right of suggestion and right of supervision in the course of digital governance. The "strengthening of the development and sharing of public data" and the "joint construction and common use of

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government affairs informatisation" put forward in the state's Fourteenth Five-Year Plan (NPC, 2021[47]), for instance, both embody the idea of the state taking the initiative to divide power in the course of digital governance. From the standpoint of the application of digital technology, the state should strengthen legislation on technological application, guarantee by law the neutrality of that application, prevent enterprises from entering into a "marriage" with government, and limit the expansion of enterprises' social power. From within government, the rational function of bureaucracy (Weber, 2010[48]) should be brought into play, and the storage, processing, use and supervision of data and information in the course of digital governance should be managed by department or by level, so as to avoid the emergence of a "digital Leviathan" within government and to break the one-sided monopoly of technical power by government or by enterprises.

6 Conclusion

As the advocates of technological progress say, "the evolution of technology drives the evolution of humanity, and the evolution of humanity is at the same time the evolution of technology" (Stiegler, 2000[49]). Digital technology offers social governance an entirely new perspective: social problems are digitised and displayed before people as a clear picture, making the objects of governance more clearly visible. Digital technology can also supply intelligent governance decisions and precise and finely targeted service provision. In short, in digital governance digital technology has to a great extent "liberated" humanity, raised the performance of social governance and advanced the modernisation of social governance. But digital governance's excessive pursuit of efficiency obscures its value core, namely the principle of fairness. Digital governance can indeed resolve the old difficulties of fairness caused by the strong influence of human factors and the non-objectivity of data and information in the course of social governance; fundamentally, however, the fairness of social governance that digital technology can achieve is confined to the technical dimension — all it can do is confined to the digital expression of social problems, and all it can handle is confined to what algorithms can compute. Faced with a complex and mutable social reality, the social governance functions that digital technology can achieve are limited. What deserves particular attention is that social governance is not cold data computation and machine operation but a human practical activity with an ethical value core, in which the function and influence of "humans" are irreplaceable. Digital governance, therefore, cannot neglect such ethical values as fairness and justice, still less abandon its social core in the name of pursuing high efficiency. Modernised governance should pursue the "mutual constitution" of efficiency and fairness — that is, advance the realisation of fair governance in the course of raising governance efficiency, and raise governance performance on the basis of pursuing fair governance — and so achieve the objective of modernising the social governance system and capacity for governance.

Funding

This work was supported by the National Social Science Fund of China (22BKS086).

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