Fairness and justice through automation in China's smart courts

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ABSTRACT

Xi Jinping's judicial reforms have placed the concepts of 'fairness' and 'justice' at the forefront, coinciding with the integration of information technology and AI into all aspects of China's court system through smart court reform. According to official Chinese discourse, smart court reform is supposed to make the justice system 'fairer'. However, research has not yet clearly established how 'fairness' and automation are connected in the Chinese context. This article is interested in how smart court and automation fit *into* Chinese interpretations of 'fairness'. Therefore, we ask what notions of 'fairness' drive and justify smart court reform? The main argument is that SCR allegedly reinforces elements of procedural fairness, i.e., internal accountability, external visibility, and due process in a way that they are conducive to substantive goals of legitimation, social stability, and user convenience. Most noteworthy, there is a strong emphasis on *procedural* consistency. This article conducts a systematic qualitative analysis of the foundational texts and discourse about smart courts in China, such as judicial policy documents, development and reform plans, white papers, and regulations. In our analysis we find that smart courts promote procedural and substantive components of 'fairness' that strengthen legal rationality while keeping open channels of control. Our findings help explain the rapid embrace of automation and technology in China's justice administration: they fit perfectly within the ruling party's worldview and perpetuate it in turn.

1. Introduction

China's legal and judicial system experienced a decade of far-reaching reforms under Xi Jinping. Improving the 'fairness' of China's judicial system has become its lode star, illustrated by the slogan of 'striving to make the people feel fairness (*gongping* 公平) and justice (*zhengyi* 正义) in every judicial case'.[1] Since the Chinese Communist Party (CCP) published its Fourth Plenum Decision in October 2014, judicial reform has aimed to transform the judiciary into a more effective, efficient, reliable, professional, and transparent institution (see, e. g., [1–3]).

To enhance the success of these reforms, Chinese courts have started to digitise and automate their judicial process by integrating information technology in all aspects of their work [4,5]. This reform is called 'smart court building' (*jianshe zhihui fayuan* 建设智慧法院). A smart court is a legal court where judicial officers use technological applications to facilitate their work and provide better judicial services to the public. It can be any physical or online court where the judicial process

is conducted on a digital platform [6,7]. The People's Republic of China (PRC) is one of the first nations to digitise and automate its judicial system to such a far-reaching extent. In addition, it has enthusiastically embraced automation in many other aspects of its governance apparatus.

In contrast, western jurisdictions have been hesitant to integrate similar advanced technologies, primarily out of fear of their negative effects on principles such as procedural fairness and individual rights [8, 9]. Generally, it is argued that automated justice prioritises efficiency at the expense of 'fairness', compromises human decision-making, and undermines perceived human dignity in the judicial process [10–12].

Conversely, according to official Chinese discourse, smart court reform (SCR) allegedly makes the justice system 'fairer' [13]. Scholars have already argued that the PRC has a strong ideological affinity with quantification and automation, which explains its enthusiastic embrace [14]. However, research has not yet established how this is connected to SCR and 'fairness'. Therefore, we ask what notions of 'fairness' drive and justify smart court reform. To this end, we investigate how smart courts

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[1] In this article, 'fairness' refers to the concept that we are investigating. With justice (without quotation marks) we refer to justice administration or the larger justice system.

and automation fit into the official Chinese interpretation of 'fairness' as stated in official documents.

Previous scholarship has already assessed the normative impact of smart courts, evaluating its implications on normative principles such as access to justice, legal ethics, and judicial independence. Xu [7] provides the first English-language analysis of two trial pilots of smart courts, examining elements of automated online dispute resolution (ODR). She identifies issues of transparency, conflict of interest, and fairness as potential bottlenecks to further development of online case resolution. Likewise, Guo [15] discusses the general challenges of moving the judicial process online, such as procedural safeguards and their impact on civil jurisdiction. Meanwhile, Sung [16] analyses them from the perspective of a single normative issue, asking whether Internet courts can promote access to justice. He argues that Internet courts substantially improve access to justice, especially for e-commerce, but numerous issues, such as due process and the validity of digital evidence, remain.

Zheng [5] gives a comprehensive overview of SCR and contextualises the initiative as part of broader informatisation efforts and judicial reform in China. He is amongst the few to recognise that SCR is part of a broader policy push to increase hierarchical control over courts and standardise adjudication through algorithmic-enhanced formalism. He contends that China is moving towards an algorithm-empowered case-law system. Other scholars, such as Stern et al. [17] and Shi et al. [18], frame the increase of hierarchical control as a negative externality, whereas Zheng [5] shows a better understanding of the ideological-normative context in which Chinese courts operate.

This difference becomes clear from the three normative concerns that Stern et al. [17] make in their article: First, they ask how the judiciary should consider weighing competing values and whether standardisation through digitisation and automation genuinely equates to fairness and justice. Second, they argue that SCR is more about scoring political points for technological accomplishments rather than improving court administration. Thirdly, they are concerned with how the perception of constant surveillance due to SCR will alter judicial behaviour. They conclude that smart courts are part of broader global trends related to the increase of algorithmic governance and the assault on judicial authority.

In contrast to Stern et al. [17] and Sung [16], Wang [19] and Wang and Tian [20,21] do not question the improvements to access to justice or efficiency and speed, but focus on another series of concerns. They argue that it is unclear how AI systems can incorporate legislative changes, how they will affect human accountability, and whether they will de-incentivise judges from dissenting with the algorithmic recommendation software. Although their concerns are warranted, much like Stern et al. [17], they frame these consequences as negative externalities, failing to consider that they might be the intended goals of SCR. Lastly, Shi et al. [18] also make this normative mistake: while they argue that SCR aligns with traditional values of a transparent, efficient, and people-centric judiciary, their main concern lies with the disruptive effect of algorithms and AI on judicial independence. They do not consider the place of judicial independence in China's political-legal system.

In sum, the scholarship provides a thick description of what SCR looks like and discusses the implications for numerous normative issues such as access to justice, legal ethics, and judicial independence. The scholarship is characterised by reasonable scepticism and concerns about the future of Chinese adjudication. However, a crucial element is missing. The scholarship primarily employs pluralistic conceptions of norms in its evaluation, derived from liberal rule of law theories. These conceptions generally underscore values such as democratic trust and accountability [22–26]. Moreover, it argues that promoting justice with algorithms seems fundamentally constrained by the context-sensitive nature of 'fairness' [27–30]. The main limitation of this literature is that it maintains a Eurocentric notion of 'fairness' when assessing the automation of justice administration. Therefore, we contribute to the extant literature by adopting a non-Western perspective, focusing on smart courts in China.

To this end, we draw on Chinese socio-legal studies, which recognise that law and justice are politically and ideologically bounded [31–33]. This implies that the discussions about 'fairness' and legal rationality need to be placed within boundaries determined by the collectivist and teleological conception of law [34,35]. Hence, if local political and ideological dynamics bind law, then the conceptual dynamics between smart courts and 'fairness' are different from the ones assumed by scholarship that employs Eurocentric evaluative frameworks. Scholars have yet to fully appreciate what notions of 'fairness' might underly automation reforms such as SCR in the Chinese context. After all, if we want to get a clear sense of SCR's ramifications in China's political-legal system, we need to understand what normative principles animate and justify the reform.

To fill this gap in the literature, we qualitatively analysed the foundational texts and discourse about smart courts in China, such as judicial policy documents, judicial reform plans, white papers, and regulations, in addition to case studies and official press releases. We find that SCR enhances specific procedural and substantive components of 'fairness'. However, beneath the surface, our analysis reveals that procedural fairness is conceptualised in a way that is subordinate to substantive fairness. Our main argument is that elements of procedural fairness, i.e., internal accountability, external visibility, and due process, must be conducive to the substantive goals of legitimation, social stability, and user convenience. Most noteworthy, there is a strong emphasis on due process or *procedural* consistency, referring to the extent to which rules and procedures are applied and followed consistently in all cases, regardless of the individuals involved. This is the main goal of procedural fairness because there exists, *in fine*, only one single substantive standard to which law and courts' functioning can be evaluated: sustaining the legitimacy of the CCP by following the single truth to the single common good. Therefore, automation makes justice 'fairer' because it enhances the party-state's ability to intervene when it deems it necessary. This conceptualisation of 'fairness' only makes sense within the bounded context of the Chinese case and cannot be uncovered by adopting a Western gaze.

Hence, our focus on China offers valuable lessons for the broader discussion on algorithmic and automated justice [36,37]. It shows how adopting local normative frameworks in which technology operates casts a different light on how and why this technology operates in a particular context. As a result, this study illustrates what occurs when the assessment of automation is guided by interpretations of key concepts such as 'fairness' that are entirely different from jurisdictions based on liberal and democratic rule of law ideals.

The article is structured as follows: The next section reviews Chinese conceptions of 'fairness' to inform the empirical investigation. The third section contextualises SCR within broader judicial reforms. The fourth introduces data and methods. The fifth section presents the results of our analysis by showing how 'fairness' features in SCR documents and relates to notions of technology and automation. The analysis sheds light on internal justification and discursive framing of automation in SCR and discusses the implications. In our conclusion, we discuss the implications of the study of fairness and automation.

2. Chinese conceptions of 'Fairness'

We map the extant international literature on its meaning to understand Chinese conceptions of 'fairness' in China's political-legal context. This will help us interpret our findings in the analysis, which we will connect with the literature. This section discusses the role of Marxist-Leninist ideology and traditional philosophy in shaping understandings of law and justice.

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The Chinese concepts of 'fairness' and 'justice' in relation to the administration of justice are encapsulated in the term 'judicial fairness' or 'judicial justice' (*sifa gongzheng* 司法公正), which explains why 'fairness' and 'justice' are often used interchangeably.[2] Nonetheless, we differentiate between the two from hereon and maintain the term 'fairness' in our analysis to avoid confusion. Despite the contention on a precise definition of both, a common core is a distinction between process and substance [38]. Substantive fairness refers to the fairness of the outcome, and procedural fairness refers to the fairness of proceedings. In the Chinese context, substantive fairness has traditionally trumped procedural fairness in the sense that law, institutions, and litigants are more outcome-orientated in evaluations of the fairness of a process [39–41].

To unravel the interpretation of 'fairness' and 'justice' from the perspective of the party-state, we briefly turn towards the CCP's Marxist-Leninist ideology. We follow Creemers [42] on the premise that a discussion of law and justice administration cannot be understood adequately without recognising the role that Party ideology plays in the development of China's legal system "as intended by those in charge" (p.33). The driving purpose of the Chinese political context in which law operates has consistently been teleological and collectivist, which takes precedence over the individual. In addition, Chinese legal scholars follow a clear substantive doctrine: advancing the cause of socialist modernisation for the collective people instead of the autonomous individual [43]. Procedural rights are only important in so far as they contribute to achieving overarching political goals and do not exist as an inalienable right in and of itself ([44]: 3–5). China's political-legal system exists to achieve a utopian future, not to govern the present [45]. Therefore, 'fairness' in the Chinese context is collectivist and instrumentalist in nature and purpose. The 'fairness' of a case outcome is determined by the extent to which it serves the broader socio-economic and political context.

In addition, according to Leninist organisational principles, the CCP legitimises itself as a vanguard party with exclusive access to the truth. Therefore, it is the only entity able to achieve the aim of China's prosperity. It is tasked to disseminate this truth to the people [46]. Through this dissemination, "the people", a faceless, imperfect mass, can be moulded into this ideal notion determined by the party ([47,48]: 50). Simply put, the role of the people in China's political-legal system is to be governed by the vanguard party. Legitimate conflicts of values and interests are impossible in this monist interpretation of public life ([42]: 51). Following these lines, "the people" possess no inherent rights and merely exist to be cultivated.

This exclusive position of the CCP also entails that no entity but itself can hold it accountable. Consequently, internal self-discipline and party unity are more important than external, legal, and procedural accountability. Law and justice are in name a form of the people's will expressed through the party [49]. This means that party leadership over the law and its required flexibility in governance are irreconcilable with procedural rationality and accountability that lie at the heart of Western conceptions of 'fairness' ([42]: 45–50).

Because law cannot exist outside of the party's power, what is 'fair' in the Chinese context also carries a strong moral and substantive component. Morality must act with the law to discipline individual behaviour and constrain power ([50,47]: 122). In addition, traditional moral philosophy distinguishes between 'high' and 'low' justice. The former, expressed in the term *zhengyi* (正义), is a moral doctrine about the legitimacy and moral supremacy of the ruler and discards the needs of the individual. The latter, expressed in *gongzheng* (公正), pertains to a fair system and fair treatment and ranks at the lower end of what is considered fair governance in Chinese conceptions ([51]: 67–69). 'Unfairness' does not necessarily affect the legitimacy of the system because

it does not affect the moral superiority of the ruler. This unique prioritising of moral superiority rather than the legality of governance blinds Chinese interpretations of 'fairness' for abuse of power. Therefore, China's legal system is not made to protect individual rights in a social structure and has less interest in procedures.

In short, 'fairness' is collectivist and instrumental in nature and purpose, is determined by the vanguard party, cannot be contested, and has a strong moral and substantive component. According to Sapio et al. [[52]: 8], this performative and instrumental function "pervades every dimension of the PRC legal system". This interpretation of 'fairness' explains why the focus lies on substantive outcomes: it needs to adhere to the utilitarian goals of the party-state. An outcome can only be considered 'fair' if it sustains the political-legal culture and legitimacy of the PRC. Moreover, as a Leninist vanguard party, only the CCP can determine what is 'fair' and administrate it. Political-legal institutions, such as courts, perpetuate this by legitimising the authority of the CCP and its prerogative to determine what is 'fair'. They are an integral component of social governance, which is not necessarily unique to the Chinese context [53].

For example, a fair outcome in criminal justice is an outcome that repairs the "social harm" that specific behaviour has caused and one that punishes the wrongdoer ([44]: 2–3). Therefore, judicial fairness needs to contribute to social harmony and stability [54] and to the overarching goals of national modernisation and development. In this sense, judicial 'fairness', as a lower form of 'justice', is merely a conduit to sustain the party-state's legitimacy.

These priorities trump concerns over due process, fair trial standards, and Western notions of procedural fairness more broadly. While criminal justice reforms have focused on improving procedural fairness, its fundamental normative purpose remains to achieve a collectivist society and protect socialist morality ([55]: 1106). Therefore, criminal procedures aim to achieve an acceptance of substantial outcomes of proceedings ([56]: 300).

In sum, 'fairness' in the Chinese political-legal context primarily entails a specific interpretation of substantive fairness, with only a minor role for procedural fairness. In addition, it prioritises the collective and is part of a larger toolbox at the disposal of the party-state to achieve a Marxist utopia. It is a state-centred and unilateral interpretation. China's political-legal context is not pluralistic and does not allow much contestation of the meaning of these concepts.

In this regard, it fundamentally differs from and stands in contrast with Western conceptions that rely on a strong procedural component, such as Habermas' deliberative conception of law as a legitimising force and Rawls' theory of justice [25,57]. These conceptions stand in the Kantian tradition but forgo metaphysical foundations and substantive doctrines in favour of an intersubjective and procedural interpretation of individual moral autonomy, in which reasoning can lead to legitimation [58]. Crucially, they allow for competing claims of what is and what is not fair [59]. The next section briefly contextualises and explains SCR.

3. Smart court reform

Smart court reform is part of broader judicial reforms to restore public trust in China's legal and court system. In 2012, at the start of Xi Jinping's tenure, China's current president and leader of the CCP, its court system suffered a serious credibility crisis [60]. This was due to its weak position in the broader political-legal system and its ineffectiveness as a recourse for citizens to assert their legal rights [61,62]. The Chinese party-state needed to rebuild confidence in its judicial and legal system. Authoritarian regimes such as the PRC benefit from a well-functioning court system. Courts are employed as governance instruments, channel divisive political issues, and maintain legitimacy by replacing other credible public accountability mechanisms [63]. Therefore, with the pledge to 'make people feel justice and fairness in every judicial case', the Chinese judiciary launched a series of far-reaching reforms in 2014 as part of Xi Jinping's *yifa zhiguo*

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[2] To reiterate, 'fairness' in this article refers to the fairness of justice administration and encompasses both procedural and substantive components.

('governing the country according to law' 依法治国) reform agenda. Amongst others, judges came to hold life-long responsibility for their decisions ([64,65]: 8–16), the judge's cohort was professionalised [3], and mechanisms were implemented to improve uniformity [1,2].

The judiciary invested heavily in digitisation and automation to further enhance these reforms, encapsulated in smart court reform. Chief Justice Zhou Qiang first mentioned the term 'smart court' (*zhihui fayuan* 智慧法院) in the 2016 SPC's Annual Work Report. According to him, courts should use smart applications to:

Leave [digital] trails throughout the trial and enforcement process, standardise judicial conduct, and diligently build a comprehensive, mobile-connected, transparent, convenient, safe, and reliable intelligent information system by the end of 2017.

China's judiciary had already spent the preceding years laying the groundwork for smart courts, such as the digitisation efforts focused on creating public access databases of court documents and video-depositories of trial hearings, which were meant to enhance transparency and accessibility reforms [2,66].

Because of the PRC's fragmented and experimental nature of policy implementation [67], there is no single prototype of *the* smart court. Rather, it is an umbrella term ([17]: 524–527). Scholarship has described smart courts as courts where judicial officers use technological applications to facilitate their work and provide better judicial services to the public. It can be any (physical or online) court where the judicial process is conducted on a digital platform [6,7]. This digital platform is integrated with advanced applications based on algorithms, artificial intelligence (AI), and big data analytics, automating specific tasks.

The SCR has been happening *in parallel* with other judicial reforms. For example, Papagianneas [65] argues that SCR is envisioned and operationalised as a way to enhance other structural judicial reforms that otherwise might not be as successful. For example, as a consequence of judicial reform, the public has become more reliant on the courts for dispute settlement ([31]: 5). Therefore, courts have become increasingly overwhelmed by the dramatic growth in the volume of court cases. While cases grew, the population of court personnel did not (see, e.g., [68,69]). Therefore, increasing efficiency is a cornerstone of SCR.

By now, numerous courts across China have achieved different levels of digitisation and automation in their court work, developing and installing different kinds of smart platforms for various aspects of judicial work [70]. The most prominent examples of SCR are the Internet Courts, established in Beijing, Hangzhou, and Guangzhou. These courts provide fully online litigation, mediation, and dispute resolution for internet-related disputes, such as e-commerce or small loan disputes. These Internet Courts also employ advanced technologies, such as facial recognition to confirm the identity of the litigants, blockchain technology to store evidence, and machine learning to automatically generate adjudication documents (see, e.g., [15,18,71–73]).

Other courts have integrated smart systems into their judicial and managerial work, such as the Shanghai High Court, which developed an AI system to help enforce criminal evidentiary procedures by automatically checking and verifying submitted evidence against evidentiary standards [13]. According to Cui [13], the AI system has many other functions: it can recognise and extract information from evidence, transcribe audio and video files, detect evidence factors in those files, and explain the relationship between different items of evidence. It can also assess the social harm of a criminal case, quantifying and weighing factors in the case file to determine the social harm or recommend similar cases and offer a frame of reference for sentencing.

According to the latest *Five-year Development Plan for the Informatisation of People's Courts* ("Development Plan") (2019–2023), 95 per cent of courts have built "informatised litigation service halls", providing a fully digital judicial experience for court users such as litigants and lawyers. Different managerial elements within the judiciary, such as personnel management, case-load assignment, and 'trial oversight and management', are also fully digitised and automated in more than 90 per cent of courts across the country. Both official discourse and Chinese

scholarship are convinced that smart courts provide a pathway to achieving more 'fairness' [6,16,18].

Although these claims are made, it is yet unclear how 'fairness' drives and justifies SCR. In other words, we want to know how smart courts and automation fit *into* the official Chinese conception of 'fairness'. So far, we have explained the Chinese interpretation of 'fairness' and provided an overview of SCR. After discussing the data and methods, we examine how they are connected.

4. Data and methods

We qualitatively analysed a series of different documentary sources. Because we are not interested in the empirical reality of SCR, we do not evaluate the *actual* fairness of SCR against pre-determined normative benchmarks. Chinese scholars, judges, litigants, and officials at different levels naturally have different understandings of 'fairness'. Moreover, the SPC is a rational actor that pursues its institutional self-interest [1, 74–76]. Despite this, the judiciary remains firmly embedded in China's political-legal system and is an inherent part of its governance apparatus [31,77]. In this article, we are interested in how smart court and automation fit *into official* Chinese interpretations of 'fairness'. Therefore, the singular focus on official documentary resources of this empirical research is appropriate because it gives us ample insight into how a certain policy is justified and rationalised by the party-state (see, e.g., [35,78,79,80], for a similar approach).

Moreover, the documents are aimed at an internal audience and are meant to result in actionable measures. In this sense, they are transparent about smart courts' nature, function, and purpose. Furthermore, we do not exclusively consider these documents as informants but also as actors in their own right. This approach focuses on how human actors use these documents as resources for purposeful ends ([81]: 825). Hence, they provide valuable insights into how normative concepts shape policy development and, more specifically, how central authorities conceptualise smart courts in relation to 'fairness'. Below, we list the types of documents analysed.

Most documents are judicial documents published by the Supreme People's Court (SPC), the highest judicial organ in the PRC. In a centralised and unitary legal system, the SPC wields substantial power over the development path of its local counterparts. To achieve this, the SPC regularly publishes numerous types of judicial documents.

First are Opinions (*yijian* 意见) and Guiding Opinions (*zhidao yijian* 指导意见). These documents create and transmit new or updated judicial policies and establish new legal guidance that directs lower courts but may not be cited. In addition, they are linked to important party-state strategies or initiatives. Opinions can also consolidate rules or guidance found in disparate documents and guide and steer the behaviour of lower-ranked courts. Opinions can be considered a type of SPC "soft law", i.e., norms that affect the behaviour of related stakeholders, even though the norms do not have the status of formal law [82]. Opinions and Guiding Opinions make up the bulk of our documentary resources. Examples are the 2016 *Opinion on Comprehensively Promoting the Synchronous Generation and In-depth Application of Electronic Archives* [83] and the 2017 *Opinion on Accelerating the Building of Smart Courts* [84].

Second are Rules (*guize* 规则 and *tiaoli* 条例). These Rules, adopted by various SPC Offices or SPC Judicial Committees, are primarily used for internal court rules and procedural matters. These Rules are legally binding [82]. The analysed rules are the *Online Litigation Rules* [85], the *Online Mediation Rules* [86], and the *Online Court Operation Rules* [87]. They constitute the procedural framework around smart courts.

Third are Five-Year Developments Plans and white papers (*baipi shu* 白皮书), also issued by the SPC. Development Plans push for broader judicial reforms and signal priorities for the next five years. White papers summarise and evaluate past reform experiences and provide an outlook for future reform. Examples are the white paper on *Chinese Courts and Internet Judiciary* and the *Five-year Development Plan for the Informatisation of People's Courts* (2019–2023) [88].

Fourth are case studies published in the China Court Informatisation Development Report ("Report"). The research offices of different local courts write these case studies. The Report itself is compiled by the Chinese Academy of Social Sciences, a central state research institute and think tank for the government (see, e.g., [89]). The practice of "summarising experiences" has a long history in communist policy-legal rhetoric since the establishment of the PRC. It is meant to unite disparate practices into a unified national approach to court work [65,80]. These books are a bundle of research reports that evaluate the status quo and summarise experiences and achievements of different court initiatives across the country. They are the most up-to-date official reports on the development of smart courts. We have collected case studies from 2020, 2021, and 2022 Development Reports. These reports are insightful objects of analysis because they give us an accepted official reading and evaluation of the status quo and lay out the path for future developments. Moreover, many case studies of specific digital and automated systems or applications in courts are now more widespread and used across all levels of courts nationwide. Therefore, these case studies are "model cases" meant to contribute their experience to future SCR. In this sense, they provide an important documentary resource for analysis.

The last type of sources are the courts' official press releases and explainers on their websites, as well as books authored by court leaders to analyse further specific case studies, such as the SPC's Faxin 2.0 Smart Push System and the Shanghai High Court's 206 System.

The Faxin 2.0 Smart Push System is one of the first software systems developed nationally for all courts across the PRC. The SPC started developing the "legal knowledge and case big data integration service platform" in 2012. Press releases say the software is connected to various legal knowledge and court decision databases. It uses big data analytics to process and aggregate legal provisions, cases, legal opinions, and court decisions to analyse judgments, push similar cases, and provide legal workers and the public with expert solutions. "Faxin" was officially launched in 2016 [90]. The SPC [91] directed courts at all levels to use the platform to strengthen and deepen SCR. According to its website, the Faxin System is the primary national database for laws, regulations, judicial interpretations, administrative decisions, case references, opinions, periodicals, and standards. It offers case retrieval, professional analysis, and intelligent assistance services.

The Shanghai High Court started developing its own AI system in 2017. Officially called the "Trial-centred Litigation Reform Software", it is more commonly known as "Project 206" or "206 System" (206 refers to February 6, the start of the project). It was the first court to experiment with AI in adjudication. Its primary goals were to standardise and streamline evidence collection, improve consistency, and strengthen oversight of judges ([17]: 541). The then-president of the Shanghai High Court, Cui Yadong, wrote a book on it, providing a first-hand account of the system's development and functions [13]. Initially, the purpose of the 206 System was to assist investigators, prosecutors, and judges in handling criminal cases. A human remains in the loop and remains the final decision-maker. It, therefore, functions as a kind of judge assistant ([13]: 67–68).

We adopted a two-step coding approach for the analysis, creating a parallel track of "bottom-up" and "top-down" research. First, we coded the data by staying close to the text and being open to theoretical surprises while drafting memos. Line-by-line, we constructed the principles of 'fairness' from the empirical material. Second, we connected the identified themes with the theoretical discussion in the international literature reviewed in Section 2 to guide our analysis further and help us identify and interpret recurring patterns of 'fairness'. To do this, we engaged in more focused coding by synthesising larger data segments and comparing various codes. Finally, we used these themes to systematically analyse the entire corpus in NVivo, using qualitative data analysis software. Both authors undertook this step in dialogue and switched between extensive reading and coding the corpus, creating an iterative process. The coding sheet is shown in Supplementry material.

5. 'Fairness' in smart court reform

We divided the analysed corpus into four themes. We first analyse the challenges of judicial reform discussed in SCR documents. Then, we discuss how SCR aims to resolve these issues regarding procedural and substantive fairness. Finally, we analyse how, according to the official narrative, automation and technology can harmonise procedural and substantive fairness.

5.1. Challenges of reform

We identified three key themes around the challenges of reform in SCR discourse: the persistence of corruption, the fallible nature of human beings, and the dilemma of balancing uniformity with flexibility. These three themes are also at the forefront of judicial reform. Moreover, they strongly relate to judicial fairness: scandals of judicial corruption and inconsistencies in judicial outcomes have severely damaged courts' credibility. According to SCR documents, these are key goals of judicial reform, which it has been unable to achieve satisfactorily. Therefore, we interpret this discourse around the challenges as the judiciary legitimising the decision to digitise and automate their processes. As we continue the analysis, we further clarify how these documents conceptualise technology as a pathway to resolve these persistent issues and, by extension, achieve 'fairness' from the perspective of the party-state.

In this sense, we identified a strong presence of the narrative that corruption is primarily caused by undue interference. The Development Reports' case studies argue that undue interference is caused by the lack of specific procedural rules that clarify and divide the division of powers and responsibilities and how exactly 'trial oversight and management' needs to be conducted [92]. While judicial reforms have tried to address this through stricter procedures, the documents also reveal that these more stringent procedures caused tensions between the role of individual judges and court leaders (i.e., the court (vice-) president, division (vice-) chief). Moreover, empirical scholarship on these reforms of accountability and oversight argues that the vagueness of procedures led to a situation where court leaders do not dare to supervise or even know *how* to exercise their responsibilities properly (see, e.g., [93–95]). In short, SCR aims to tackle these challenges of unclarity and lack of consistent oversight and compliance.

A second challenge we identified in the documents is that human adjudication is fallible. SCR documents clearly articulate that the risks for mistakes in adjudication will be lower when machines do most of the work. This is also consistent with prevalent 'data fixation' in China's judiciary and Marxist-Leninist ideology. From the standpoint of the CCP's Marxist-Leninist convictions, social reality is reducible to a set of objective truths that simply exist and can be extracted. In addition, it stresses the role of the CCP as the vanguard party, which is the only entity capable of identifying these objective truths. This conviction explains why reformers believe machines can track this scientific truth better than humans (see, e.g., [14,45]). One case study in the analysed Development Reports praises the effectiveness of their smart system because it 'effectively eliminates the human factor' and avoids 'human feelings' in the adjudication process [96]. This also explains why the Shanghai 206 AI System, another case study in our corpus, is touted to 'make a real science out of justice [administration]' [13].

A final challenge we identified is the dilemma between the uniform application of law and the flexibility to address individual circumstances in cases. The SPC considers the uniform application of law as a prerequisite to achieving fairness [97], and judicial reforms in the past decade aimed to improve this [98]. These reforms have improved uniformity because judges are increasingly unwilling to violate clear-cut rules or procedures. The increased professionalisation of judges has also made them more law- and formality-orientated [99]. Nonetheless, courts still need discretion and flexibility to address special circumstances or ensure the "political correctness" of case outcomes. Another major goal of judicial reform, parallel to improving judges' autonomy and uniformity

in applying the law, was strengthening party leadership over courts to guarantee this 'fairness' [100,101]. Balancing these opposing needs of uniformity versus flexibility has been a consistent issue in China's judicial reform over the past decades [102]. This issue can be attributed to the dual role and function of legal courts in an authoritarian regime like China: they are caught between serving the normative legal system and the prerogative of the party-state [103]. Courts need to fulfil their political task by taking political considerations into account when dealing with sensitive cases. The outcome of such cases is more political than legal ([31]: 85–87). This requires a certain degree of flexibility and discretion for judges to deviate from the procedural and substantive rules. It explains why courts have historically preferred discretion and informality [104].

However, because of increasingly complex disputes arising from social and economic transformation, courts needed to become more professional and adjudication more predictable. Therefore, the judiciary has tried to increase the professionalism and credibility of courts as legitimate dispute resolvers over the past decades. Nonetheless, the tension between uniformity and flexibility remains. This inherent tension constitutes a persistent barrier to judicial reform and exemplifies the autocrat's legal dilemma [63,105,106]. The SPC conceptualises technology and automation as a key pathway to resolving this contradiction by using technology to improve the 'scientific and technological application for the uniform application of law and regulate the exercise of discretionary powers' [97], thus achieving 'fairness'.

In sum, we identified three key challenges that justify the construction of smart courts. The following sections explain how smart courts should resolve these issues by achieving specific procedural and substantive fairness goals. First, we organise the identified solutions according to procedural and substantive elements, then bring them together to discuss how SCR is supposed to unify their contradicting requirements (Fig. 1).

5.2. Procedural fairness goals of smart court reform

We identified a strong emphasis on procedural fairness in SCR documents, confirming the shift towards more procedural fairness suggested in the literature. However, the conception implied in the empirical material is remote from what is usually understood with procedural fairness by Western literature. We organise our analysis of procedural fairness in three main goals of SCR: internal accountability, due process, and external visibility. We discuss these goals and how SCR operationalises these goals in the everyday functioning of smart courts. We find that procedural fairness in the SCR context has characteristics that align with the CCP's status as the sole and superior actor from a morality, legitimacy, and epistemic perspective. It underscores the Chinese conceptions of 'fairness' discussed previously.

5.2.1. Internal accountability

First, procedural fairness in SCR aims to foster internal accountability. We previously stated that procedural fairness should not be considered as including procedural accountability. Nonetheless, it has a clear internal component, meaning that courts and their judges are not necessarily accountable to the law but to CCP discipline as governed *through* law [107]. This fits within the CCP's worldview of law, reflecting the people's collective will as represented by the party [49]. Given the challenges discussed above, especially corruption, smart courts provide a pathway to resolving this by enforcing more internal accountability through a dual process. On the one hand, smart courts aim to create conditions for more self-discipline amongst judges. On the other hand, they are built to institutionalise and automate oversight mechanisms. In this sense, they enhance reform efforts to create better oversight procedures and increase judicial accountability.

Oversight is realised and reinforced in many ways by the SCR. We also find that SCR connects increased oversight with 'fairness'. Given that the CCP is the sole arbitrator of what is fair and only accountable to

itself, this means that, by extension, better enforced procedural compliance leads to more discipline and more 'fairness'. For example, the *Online Court Operation Rules* [87] and the *Opinion on Accelerating the Building of Smart Courts* [84] explicitly state that courts should establish a unified information system, creating conditions for both goals. A unified information system is only internally accessible and would strengthen central control and oversight over adjudication. SCR documents strongly state that procedures are to be strictly enforced through these information systems.

SCR documents discuss additional tools to bring about internal accountability. Digitisation is considered a way to clarify rules and responsibilities to judges. Digitisation creates the conditions for standardising practices and decision-making. Standardisation is important since it eases the analysis of the acquired big data and allows for more top-down control of judges. An example from one of our case studies is the Faxin 2.0 Smart Push System,[3] one of the first software systems developed at the national level and implemented in all courts across the PRC [108]. It uses big data analytics to process and aggregate legal provisions, cases, legal opinions, and court decisions to analyse judgments, push similar cases, and provide judges with expert solutions [109]. The software is embedded into courts' digital platforms and automatically pushes matching cases, laws, and judicial opinions to case-handling judges. It also includes a deviation trigger, warning judges that their judgement deviates too much from the average judgement in similar cases. Deviating from the consensus might have serious implications for the future career prospects of the judge.

Although the system is primarily presented as a tool to help reduce workloads for judges, we also found explicit references to using technology to achieve aims of due process and uniformity in the *Guiding Opinions on Strengthening Searches for Similar Cases to Unify the Application of Law* [110] and *Opinion on Improving the Working Mechanism on Standards for the Uniform Application of Law* [111]. Therefore, it is safe to interpret this system as a way to enforce better due process and hold judges accountable in case they deviate too much from the procedural norms. Although the Faxin 2.0 System is meant to be used by the judge, it also functions as a monitoring device for central court leadership.

We can see this more clearly in a case study of the smart management system the Jiangxi Provincial High Court developed. The 'Trial e-Management Platform' system allegedly enables intra-court communication, intra-department data integration, and personnel management [96]. This platform is a central digital venue where court clerks, frontline judges, and court leaders can manage a case together and interact throughout the judicial process. Although it is presented as streamlining cooperation and collaboration in courts, it also has a strong accountability and enforcement component. The platform acts like a line manager that oversees and regulates the behaviour of judges at every stage in the judicial process. It limits judges' choices when dealing with a case and records their actions. Because users each have their own account, these actions are automatically tied to the correct court member and may impact their performance assessment. As a result, a judge's activities can easily be monitored, measured, and compared to their peers. In this sense, these platforms also function as self-discipline tools for judges. Digital file management systems also increase self-awareness through self-assessment and self-management. Despite the constraints for judges, SCR is not merely implemented top-down. The reforms also incentivise judges to comply of their own volition. In other words, they are lured into a digital iron cage of procedural oversight and self-discipline by the promise that smart courts will facilitate their work.

Another case study on the 'Integrated Judicial Power Oversight and Restriction Platform', developed for courts in Hebei province, further illustrates how digitisation and automation make oversight mechanisms extremely granular and pervasive: it allows daily and precise supervision of key actions at key moments in the judicial process. Through

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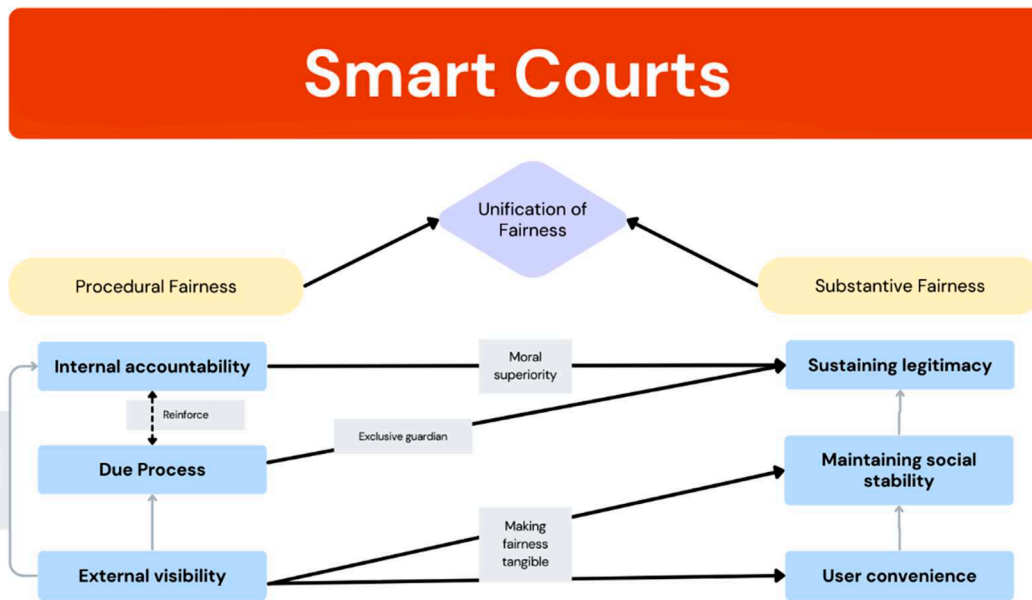[3] An explainer can be found on their website here (in Chinese).

Fig. 1. Unification of procedural and substantive fairness in smart courts.

automatic identification and flagging of 'troublesome cases', supervisors supposedly have an immediate grasp of the issues at hand and know which measures to take. It explicitly frames this as 'letting fairness and justice shine through by locking the judiciary in a systemic cage' ([112]: 265).

In short, SCR enhances new procedures and rules around accountability and oversight by drawing the entire judicial process into these systems and logging every procedural step so that, at any point, court leaders know who did what and who is responsible. From our findings emerges a sense that 'fairness' can be achieved through rigid oversight and strict enforcement of compliance and accountability. This is in line with the international scholarship on the Chinese conception of 'fairness': a fair and just world can only be achieved if all actors adhere to the monist party-state doctrine, which requires a high level of compliance and self-discipline by the agents of the party-state. Following Leninist maxims, this can only be achieved by high levels of party embeddedness and control. This control is exercised through strict procedures. In addition, the power of technology is leveraged to enforce compliance with these procedures, thus achieving 'fairness'. As stated earlier, this does not consider popular or subjective experiences of the fairness of proceedings. Where the people are considered in the equation, the party-state determines what is important and how 'fairness' *should be* experienced or defined.

5.2.2. Due process

A second procedural goal of SCR is to improve the consistency of all court processes and outcomes. Moreover, improving *procedural* consistency or due process is key to the judiciary's efforts to digitise its courts. Although consistency of procedures might relate to a legislative issue, many court practices are determined and documented in SPC Rules and Guiding Opinions [82]. Therefore, it is primarily an issue of the judiciary.

Our corpus contains lamentations that judges are overly free to manage cases. The documents express consternation that this might lead to unsatisfactory results, such as too many diverging judgments. In this sense, SCR reflects the general distrust of human judgement and perpetuates the conviction that humans are fallible. It is also noted that a lack of consistency harms internal accountability. As stated above, the more standardised and consistent the procedures are, the easier they are to control. Hence, internal accountability and due process are intrinsically connected. Although consistency in Chinese judicial reform also

refers to treating like cases alike (*tong'an tong pan* 同案同判), the emphasis of SCR lies on improving *procedural* consistency, which we refer to as due process: the extent to which rules and procedures are applied and followed consistently in all cases, regardless of the individuals involved.

SCR promote both types of consistency in multiple ways. First, there is a standardisation of judicial outcomes. We already discussed how the Faxin 2.0 Smart System promotes internal accountability by automatically recommending laws, cases, and past decisions as a reference to the case handling judge, along with a sentence recommendation. Although there is no empirical proof that this effectively improves consistency in outcomes, the context in which adjudication takes place in China, as well as the intentions expressed both in the case studies and regulatory documents in our corpus, point towards the reinforcement of an environment where there is pressure to comply with the consensus as expressed by the algorithm (see also, e.g., [64]). In addition, the Jiangxi Provincial High Court case study illustrates how unified digital case management platforms ensure that judges stay within the legally permitted parameters in their decision-making.

Another case study of the Yibin Intermediate Court's 'Full Process Automated Supervision Platform' combines automated and manual functions to enhance 'trial oversight and management'. This is a platform that screens and indexes incoming cases. Based on a set of parameters, the platform decides whether a case requires closer review by court leaders, who are obliged to conduct this review. This case study is explicitly presented as a solution to the tension between normative and prerogative principles in justice administration. It justifies the existence of automated oversight mechanisms by arguing that the absence of oversight will lead to unfairness. In this sense, this platform is not necessarily concerned with enforcing consistency in outcomes but with consistent application of oversight procedures.

The platform was designed with keywords that trigger the system to flag incoming cases requiring oversight by court leaders. According to the case study, the platform 'intelligently' identifies, flags, and pushes cases that require oversight to senior court leadership [92]. Superiors are then obliged to exercise their oversight powers by the system. The platform can also warn higher-ranked courts of incoming sensitive cases requiring further attention. It records every action taken at every procedural step, reporting non-compliance. Given that all case-handling procedures are managed in a digital and automated platform, court leaders oversee all cases handled by their court with the assigned

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responsible judge. Neither the adjudicating judges nor the supervising senior judge can escape this oversight mechanism. It is argued that this oversight mechanism enhances due process.

Second, and in this sense, SCR standardises power and oversight procedures. The above case studies show that SCR entails that the powers and responsibilities of presiding judges, court leaders, and all other personnel should be explicitly listed and clarified. As discussed above, China's courts require a certain degree of flexibility to address their normative and prerogative tasks. This requires personal discretion. Then, SCR is presented as a way to ensure further institutionalisation of this personal discretion by integrating new procedural reforms regarding oversight responsibilities into a digital platform. Third, smart courts are meant to standardise court practices across the country: the SPC calls to integrate existing standards in various regions into one unified and consistently applied standard that applies to all four-level courts.

How can intervention in adjudication be considered fair? Following the literature on political oversight in adjudication, according to Marxist-Leninist principles, the vanguard party has the exclusive prerogative to decide what is 'fair'. Hence, it can justify party intervention in the normative framework of the court system. However, courts do not always know what is 'fair'; therefore, special cases require direct party intervention to maintain a 'fair' outcome. The party-state must be able to intervene and 'correct errors' in judicial decisions when citizens petition to challenge final judgments. According to this approach, a judgment's political correctness is more important than preserving its finality [113]. Oversight is crucial because of the Marxist-Leninist nature of the political-legal system ([114]: 16; [115]: 4). Additionally, it serves as an institutional check on individual judges and offers the required flexibility to bring decisions in line with external policies of the central government. To prevent abuse of this prerogative, SCR presents a satisfactory solution because it helps codify intervention mechanisms in a rigid procedural framework. Accordingly, it contains clear conditions for action, descriptions of specific actions to be taken when conditions are met, and consequences in case of non-compliance. This clear and rigid structure, akin to an IF-THEN chain set, allows for the automation of these mechanisms. Thus, SCR helps achieve 'fairness'.

5.2.3. External visibility

External visibility is the final procedural goal that we identified in the corpus. By external visibility, we refer to the transparency efforts to make court information and procedures visible and available to ordinary Chinese citizens. Smart courts facilitate this and thus make 'fair justice administration' possible because of their transparent character [116]. This move is explicitly motivated by the idea that courts should accept the people's oversight. In other words, citizens are called upon to fulfil an oversight function. This is in line with how the role of the people is envisioned within the Leninist state structure, meaning that oversight is not linked to external accountability but only to the extent that it perpetuates internal accountability and self-discipline [117]. Therefore, external visibility prevents the development of accountability that fosters impartial judgments and 'fairness' from a Western perspective [118].

However, according to Leninist maxims, a key difference exists between internal accountability and external visibility. Judges and other court personnel are only held accountable internally. As a vanguard party, the CCP is the only credible guardian of accountability within the Chinese state. Citizens are merely activated to supervise and report to official party authorities in case of perceived abuse, creating a feedback loop for Chinese governance. However, disciplinary actions remain the party's prerogative [119]. Therefore, the call for popular oversight by SCR documents must be understood in light of big data's imperfections and the current crackdown on judicial corruption [120]. External visibility helps the CCP to achieve internal accountability but is by no means its legitimate equivalent.

Nevertheless, SCR documents claim that the people have the right to participate in and monitor judicial activities. This was also the idea driving many of the digitisation efforts, referring to creating a 'sunshine judiciary', such as in the SPC *Opinion on Several Issues Relating to Advancing the Establishment of Three Platforms for Judicial Openness* [121]. However, as we just explained, the ideological ideas behind law and justice in China imply that external visibility is merely instrumental to internal accountability.

SCR documents call on courts to present visualised, quantified, and evaluable court information to the public. This practice aligns with common governance practices of outsourcing oversight to the public [117]. Therefore, the judiciary's public work should be enhanced and stimulated in all instances. One way to achieve this is to construct a multi-channel authoritative information disclosure platform. It should disclose court work via multiple channels, such as WeChat (a Chinese all-in-one messenger platform), Weibo (a social media site), and various online portals. The most prominent examples of this are the three transparency platforms: China Court Trial Online (*Zhongguo Fayuan Tingshen Zhibowang* 中国法院庭审直播网); China Judicial Process Information Online (*Zhongguo Shenpan Liucheng Xinxi Gongkaiwang* 中国审判流程信息公开网), and China Judgments Online (*Zhongguo Caipan Wenshuwang* 中国裁判文书网).

Therefore, smart courts provide various oversight channels by disclosing judicial activities to the public, granting court leadership clearer oversight powers, monitoring judicial behaviour, and cultivating self-discipline by digitising and automating judicial practices. This draws the judiciary into a '[big] data iron cage' (*shuju tielong* 数据铁笼). Therefore, our analysis finds that SCR perpetuates the monist and instrumentalist conception of procedural fairness. This dovetails with the previously discussed literature that underscores the monist and instrumentalist role of law in China, which also explains how 'fairness' is conceptualised in the data. Because the CCP, as the vanguard party, has the sole prerogative to decide what is 'fair', procedures only exist to allow the CCP to enforce their conception of 'fairness', not to protect diverging contestations of this concept. In the next section, we analyse what kind of substantive fairness goals the SCR perpetuates.

5.3. Substantive fairness goals of smart court reform

We identified three main goals of SCR related to substantive fairness and organised our analysis accordingly: sustaining the CCP's legitimacy, maintaining social stability, and improving user convenience. Our analysis reveals how these three elements overlap and interact with each other. Finally, we discuss how SCR achieve these goals in justice administration.

5.3.1. Sustaining legitimacy

A first goal of SCR is to sustain the ruling party's legitimacy. Like other institutions, courts are tasked with the political imperative to continuously reinforce the party's legitimacy and repeat the ideological justifications of party rule. Smart courts must play their part in achieving party leadership *through* the law by modernising and improving the ruling party's governance capacity. SCR needs to adhere to a 'two-pronged approach of system construction and technological innovation' [122], i.e., applying technology to enhance continuous reform of the judicial system.

Smart courts are envisioned to support CCP legitimacy through a variety of pathways. We distinguish between internal and external ones. As discussed earlier, SCR aims to enhance judicial transparency for Chinese citizens. Smart courts' transparent and visible character ensures that people 'can feel the judge is in the middle of the judgement, basically realising the organic unity of the social and legal effects of cases' [88]. In this sense, SCR enhances the propagating effect of courts and makes 'fairness' tangible. They need to feel that the CCP is acting in their interest as the vanguard of the masses. The idea of a morally good and benevolent ruler is an important aspect of traditional justice conceptions. Therefore, 'fairness' is an important legitimation device.

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Internally, smart courts need to function as iron cages. Smart courts create an environment where judicial personnel are strictly monitored and guided in their behaviour by digital and automated platforms. The result is a holistic oversight of the entire judicial process. This environment fosters self-discipline and a strict application of procedures. SCR documents claim this leads to better substantive outcomes: walking the party line naturally leads to 'fair' outcomes. Beyond their oversight function, smart courts' digital platforms are also expected to help build political loyalty and improve party control or 'party building': they need to be used to foster party loyalty by establishing interconnected channels for learning and communication across courts. Our findings confirm the literature's consensus that the goal of judicial and legal reform has been about increasing party leadership over courts and that courts are important actors in sustaining regime legitimacy [123–125]. We also find that fairness is employed as a rhetorical device to describe smart courts' role in educating loyal bureaucrats well-versed in the party's protocol and goals. Again, this makes sense within the CCP's worldview because only the CCP can determine what is 'fair'. Implied is that diligently studying and implementing the party line will lead to 'fair' outcomes.

5.3.2. Maintaining social stability

Naturally, a second theme we identified in the corpus is the importance of leveraging smart courts to maintain social stability. Courts function as stability maintenance institutions [77]. Interestingly, we found many references to 'individual citizens' in the data, especially in the procedural rules around smart courts. This contradicts the idea that the Chinese worldview and the CCP's policies are tailored towards the collective at the cost of individuals. However, further analysis revealed that individuals must only be met in their needs to achieve social stability. For example, courts are concerned with ensuring that losing parties will not protest or appeal to higher levels of government or courts. In this sense, procedures' recognition of individual needs should not be interpreted from a rights perspective but rather from an appeasement perspective.

The propagating and tangible effect of smart courts is an attempt to cultivate a sense that procedures, and thus the way justice is being administered, are just as important as the substantial outcomes. Giving people a sense of control and full information and making them 'have a stronger sense of gain in judicial reform' is one way of satisfying them. Research has shown that the online digital environments of courts provide a fairly intuitive system to litigants that handholds them through the process, giving them a sense of empowerment to make procedural and substantive decisions and to take legal action [126]. This is conducive to litigants having a sense of 'fairness', and smart courts are presented as conducive to this.

There are several ways in which procedural rules in the *Online Litigation Rules* [85], the *Online Mediation Rules* [86], and the *Online Court Operation Rules* [87] attempt to achieve this goal. First, smart court procedures grant individual litigating parties substantial control over the online judicial process and focus on protecting their litigation rights. Judges of smart courts need to consider the judicial needs of distinct groups, such as the elderly or the digitally illiterate, and provide corresponding judicial conveniences. Obtaining consent for online litigation from litigants is crucial: Explicit and informed consent are prerequisites for launching online litigation. In addition, the parties may withdraw their consent at any point during the process. They may also ask to manage specific procedures offline while continuing the rest of the process online. Another important way to cultivate people's sense of control and courts' credibility is to improve procedural transparency: the data in our corpus underscore the importance of making the process visible and tangible, on top of controllable. Finally, smart courts are integrated with judicial disclosure platforms that allow litigants to retrieve and access information about their cases and the court.

The design of court procedures embodies a fundamental tension between the goals of 'fairness' and efficiency [126]. In this trade-off, the

smart court procedural rules favour empowering litigants. The centrality of consent and individual procedural rights in these rules come closest to interpretations of 'fairness' in Western traditions. Nonetheless, we must bring this in connection with the literature: courts' primary role is maintaining social stability [127,33]. This knowledge serves as a caveat to what seems like a focus on empowering litigants. Interpreting these rights as a positive externality to the core aim embedded in these rules is more analytically fruitful. These procedural rights exist primarily to appease litigants but can just as easily be suspended when the party-state deems fit [35]. As discussed earlier, some of our case studies illustrate how automation and technology are meant to enhance the party's ability to intervene in adjudication and exercise its sovereign power.

5.3.3. User convenience

A last theme is how smart courts lower barriers to justice. Technology makes courts and participation in trial hearings more convenient, i. e., smart courts promote easier and more affordable access to legal dispute resolution. With user convenience, we consider the substantive benefits to litigants finding their way to the courtroom. In other words, how technology incentivises people to turn to courts to resolve problems rather than turning elsewhere for help or to attempt to resolve problems independently. In this sense, it relates to the physical accessibility of justice and justice as a social institution and experience [128].

SCR is framed as an important contributor to making justice accessible. This is important because grievances and conflicts must be channelled into courts as easily as possible. In this sense, courts are safety valves that channel pressures and frustrations out of society. However, we find that this is primarily done in an active and propagating way, i.e., bringing justice to the people by 'expanding new channels of justice for the people', 'enriching judicial services for the people' and helping 'reduce the suffering of the masses and reduce litigation and judicial costs' through the use of technology [88].

One of the most effective ways of doing this is by bringing the court to people's homes. Online litigation has made this possible. Smart courts allow for parties to participate in the judicial process asynchronously. Through the online litigation platforms the court provides, they can log on separately within a pre-set timeframe [85]. For specific procedures such as small claims or summary procedures, courts and parties may record and upload videos of themselves conducting their part of the trial hearing to complete the trial asynchronously. When parties do not have the technical equipment and conditions for the online use of audio and video, they will be provided with a place and the necessary equipment to participate. In short, SCR documents tout technology's contributions to the user's convenience of participating in court proceedings. In this sense, we identify a clear socialist bent in this element of substantive fairness. This aligns with how judicial reform has developed under the slogan of creating a 'socialist rule of law country' [47,129].

In conclusion, we identified that SCR aims to reinforce substantive fairness, but only in self-serving ways that sustain the legitimacy of the CCP, maintain social stability, and improve user convenience. As reviewed in the literature, maintaining social stability and sustaining legitimacy are intimately intertwined [33]. By improving courts' capacity to maintain social stability through technology, it also, by extension, helps sustain party rule. Smart courts use a blend of socialist and Leninist tools, such as making justice administration tangible and accessible and increasing vertical control, respectively. Following the conception of law and the people in the CCP's worldview, 'fairness' can be achieved through propagation and control [46,49]. Propagating because the people need to be told what 'fair' and 'just' entails, and control because legal bureaucrats need to perpetuate this unilateral concept. Our final section discusses how procedural and substantive fairness come together in smart courts to be 'organically unified'.

5.4. Unifying procedural and substantive fairness goals

The 'organic unification' of 'fairness' is an overarching theme in the analysed corpus. For example, the SPC *Opinion on Accelerating the Building of Smart Courts* [84] explicitly states that smart courts should 'promote the organic unification of procedural and substantive fairness' (*youji tongyi chengxu gongzheng yu shiti gongzheng* 有机统一程序正义与实体公正).

The term 'organic unification' or 'organically unifying' is a key term in party and state documents on judicial reform and building the rule of law. 'Organically unifying' (*youji tongyi* 有机统一) is a signal from central party-state institutions that it wants to promote a particular line of thinking that binds together or 'organically unifies' concepts or statements that might otherwise be contradictory ([47]: 51). For example, under Xi Jinping's *yifa zhiguo* reform agenda, there was an effort to 'organically unify' law and morality to justify embedding the party as deeply as possible into the legal system because they maintain moral supremacy as the ruler and are therefore best positioned to govern *through* law. The rule of law is only possible through strong and moral party leadership [50,107].

Therefore, the fact that smart courts are supposed to 'organically unify' procedural and substantive fairness indicates a recognition that these are contradicting concepts. In both authoritarian and democratic contexts, procedural fairness is commonly defined *in contrast* to substantive fairness ([44]: 6). However, in China's political-legal system, procedural fairness needs to be constructed in a way conducive to achieving substantive fairness. Therefore, procedural fairness, as a concept which underscores the protection of rights and enforcement of procedural accountability through legal liability and legal remedies to deter misconduct, cannot exist in China's political-legal system [130, 131]. Western conceptions of the rule of law and procedural fairness, which focus on a plural conception of the common good, sit ill with the CCP's assertion that there is a singular and intelligible absolute truth that leads to unity and harmony. Hence, procedural fairness must be tamed to fit the Chinese party-state's agenda.

How do technology and automation in smart courts propagate the kind of procedural fairness that plays into the CCP's worldview? As discussed, elements of Western influences of procedural fairness in the SCR corpus do exist. Nonetheless, not recognising the unique political-legal context in which this concept operates would hinder a better understanding of 'fairness' in this context.

We found that the elements of procedural fairness mentioned in our corpus, i.e., internal accountability, external visibility, and due process, must be conducive to the substantive goals of legitimation, social stability, and user convenience. Internal accountability strongly supports the idea that only the CCP can be its legitimate guardian and reinforces its top-down influence over courts. External visibility, on the one hand, creates room for the expression of malcontent, which fosters social stability. On the other hand, external visibility is employed to strengthen internal accountability because it creates oversight channels through a feedback mechanism. Furthermore, external visibility is used to maintain internal discipline, which fosters more legitimacy as it sustains the idea of the vanguard party as the morally superior entity in the political-legal system. Finally, the emphasis on procedural consistency plays into substantive goals, echoing the CCP's monist worldview. Reinforcing due process is the main goal of procedural fairness because there is, *in fine*, only one single substantive standard exists to which law and courts' functioning can be evaluated: sustaining the legitimacy of the CCP by following the single truth to the single common good (Table 1).

6. Conclusion

This article investigated the concept of 'fairness' underlying China's smart court reform. In the Chinese view, SCR leads to a unification of procedural and substantive components of 'fairness'. Our analysis reveals that this is done by subordinating procedural fairness to

Table 1
List of identified themes and sub-themes.

Challenges of Reform
Corruption
Fallibility of humans
Uniformity vs flexibility
Procedural Fairness Goals
Internal accountability
Due Process
External visibility
Substantive Fairness Goals
Sustaining legitimacy
Maintaining social stability
User convenience
Corruption

substantive fairness. In practice, elements of procedural fairness, i.e., internal accountability, external visibility, and due process, must be conducive to the substantive goals of legitimation, social stability, and user convenience. Therefore, 'fairness' is meant to enhance sovereign power, not bind it. In this sense, normative procedures exist to facilitate its coercive power [35,107]. Party rule is a prerequisite to ensure good governance, achieving Marxist utopia, and, therefore, 'fairness'. Within the collectivist, instrumental, and indisputable conception of 'fairness' endorsed by the party-state, automation and smart courts can indeed be considered 'fair' because they enhance the power of the party-state to achieve Marxist utopia.

Our findings illustrate how consequences of SCR that are negatively evaluated by scholars such as Stern et al. [17] and Shi et al. [18] are, in fact, intentional goals of SCR. The main concern of the scholarship is that SCR will undermine judicial independence. However, our findings reveal that increasing party leadership, political oversight, and reducing the discretionary space of judges are intentional goals of SCR. These developments fit within the party-state's official worldview and, hence, are considered 'fair'. At the same time, broader judicial reform has focused on increasing the autonomy of courts and judges [64,99], which nuances our findings.

However, our findings illustrate that SCR intends to allow both dynamics to exist simultaneously. Smart courts enhance due process and internal accountability while simultaneously allowing party oversight (see also [65]). In this sense, the Chinese judiciary can become more autonomous while remaining firmly embedded in the party-state's governance system. It makes party control and oversight more ubiquitous and diffused while not undermining the autonomous functioning of courts. This analysis helps better understand why the Chinese party-state believes smart courts will make adjudication 'fairer'. It explains why the judiciary has enthusiastically adopted advanced technology in their courts.

Naturally, our findings come with a few limitations. Our analysis reveals little about the actual perceived 'fairness' of smart courts by individual judges, officials, and litigants [132]. Moreover, we do not consider how local judges and officials think about issues such as 'fairness' in adjudication [32]. Therefore, our analysis is only concerned with the official conception of 'fairness' as stated in central documents.

Despite these limitations, this article offers valuable lessons for the broader literature on algorithmic and automated justice beyond the Chinese context [11,36,133]. While according to Eurocentric literature, automation is considered to have a cheapening effect on justice and cannot escape from all normative conflict [12,29], in the Chinese case, it is considered to have an enhancing effect. The reason is that there exists no official conceptual space for normative conflict. The monist interpretation of 'fairness' blinds it to the disparity between formal fairness and the real-world impact of automation. This conception is diametrically opposed to Western notions of 'fairness' that guide evaluations of automation in Eurocentric literature [23,134,135]. Only by recognising this specific interpretation of what 'fairness' means can we understand how smart courts fit into it.

Our findings also provide insights into the adoption of technology in courts in other jurisdictions. These developments are not necessarily unique to China. Many countries worldwide are struggling to harness the power of technology for justice. The Chinese case shows how technology is mobilised to improve accountability, due process, and user convenience ([16,116,136]a). These goals are achieved by integrating the judicial process into a digital, online, and all-encompassing platform. This technology-driven ecosystem streamlines the judicial process, standardises each procedural step, and records every action undertaken. In addition, it reduces barriers to courts by, amongst others, enabling litigants to participate in legal proceedings online and allowing them to upload legal documents or file a case via a court's online portal.

However, while technology provides these advantages, it might come at the expense of other judicial values, such as equity or discretion [11,12]. These platforms also serve as management and monitoring systems of the entire judicial process, increasing the "panoptic control" of Chinese judges [137]. Reichman et al. [138] have already shown that this has normative implications for the judicial role: this environment diminishes judges into "assembly-like" law-applying bureaucrats. Whether these outcomes are considered a positive or negative development ultimately depends on a system's normative approach toward the role of law and the judiciary.

The main challenge underscored by our findings is the importance of clearly determining how 'fairness' and other judicial values are conceptualised and how they are embedded and prioritised in a judicial system. Technologies are not value neutral but embedded in a certain vision of law and society. Therefore, it is important for jurisdictions adhering to liberal rule of law ideals to emphasise the democratic and pluralistic values of their judicial system and to prioritise safeguarding those values while adopting technology.

In summary, embedded in SCR documents, we find that automation perpetuates a notion of 'fairness' that fits within the CCP's official worldview. Smart courts provide pathways to achieve this specific 'fairness'. Our analysis illustrates how the party-state's worldview is embedded and promoted in its legal system to sustain its legitimacy. This also helps explain the rapid embrace of automation and technology in China's justice administration: they fit perfectly within the ruling party's worldview and perpetuate it in turn.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.clsr.2023.105897.

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