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Smart courts, smart justice? Automation and digitisation of courts in China

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Chapter Five: Towards Smarter and Fairer Justice? A Review of the Chinese Scholarship on Smart Courts¹⁷

5.1 Introduction

The previous chapter examined the ideological foundations of China's rapid embrace of technology in its governance system. By now, I have established how law and courts function in China (chapter 2) and how CCP ideology justifies the instrumental conceptualisation of law and courts in governance, which further explains their positive attitude towards the automation of justice and governance (chapter 4).

This chapter continues to illustrate the importance of these ideas in shaping discourse on digitisation and automation by analysing scholarly discussions on SCR and automation of justice. In this way, it further examines how scholars assess and perceive the implications of smart courts. Reviewing how academics discuss and weigh in on policies is integral to understanding Chinese policy-making and reform (Snape 2019). However, no international scholarship on smart courts has conducted a systematic and critical review of this scholarship or the normative ideas guiding this debate.

The central aim of this dissertation is to examine to what extent ideological and normative ideas shape the goals of SCR. To this end, this chapter asks how Chinese scholarship evaluates smart courts and the automation of justice. It argues that the ideological and normative ideas outlined in chapter 6 explain the positive evaluation of SCR. Therefore, this review asks: "How does China's scholarship evaluate smart courts in the context of the 2014 judicial reform agenda?" With this review, the chapter aims to reveal key attitudes and themes that recur in the evaluation of smart courts and, more broadly, digitisation and automation of China's judiciary and critically analyse the normative concepts behind SCR goals within the context of China's political-legal system. It finds that the scholarship considers digitisation and automation crucial pathways to achieve reform objectives in key areas.

The main contribution of this chapter lies in its introduction of the Chinese academic debate on a specific policy and the normative concepts used to evaluate it. This review may help other

¹⁷ This chapter is based on a reworked version of my article "Towards Smarter and Fairer Justice?". See: Papagiannas, Straton 2021b. Towards Smarter and Fairer Justice? A Review of the Chinese Scholarship on Building Smart Courts and Automating Justice. *Journal of Current Chinese Affairs* 51:327-347.

disciplines, such as socio-legal studies and law and technology studies, interested in how normative concepts regarding judicial fairness, efficiency, and consistency shape and influence the debate on automation and digitisation of justice.

In the next section, the chapter identifies and contextualises four key areas where smart courts are meant to enhance judicial reform to construct an evaluative framework of smart courts. Then, it discusses the data and methods, after which it conducts the review, using the four key areas of reform to guide it. The conclusion discusses the implications for broader judicial reform and justice administration in China.

5.2 An Evaluative Framework of Smart Courts

As the introduction explains, this dissertation opts for a broad definition of smart courts. Due to the fragmented approach to policy implementation, no prototype of a ‘smart court’ exists. It is also important to reiterate that smart courts are not a separate circuit of courts such as maritime or military courts. All courts in China now show some level of digitisation or automation, and many different initiatives by local courts may fall under the SCR policy.

Therefore, with ‘smart courts’, this dissertation refers to courts where the majority or all stages of the judicial process may take place in an online digital environment (but do not necessarily have to), where some, but not necessarily all, tasks are automated with programmes that may or may not be using learning algorithms. Central to this digitised and automated judicial process is the interaction between humans and the technology supporting the process.

5.2.1 The Judicial Reform Agenda

As explained, China’s judiciary suffered a crisis of public confidence caused by Hu Jintao’s policy prioritising mediation over formal law and court adjudication (He 2007; Minzner 2011). Therefore, one of the key goals of judicial reform was to restore public confidence in and the authority of China’s judiciary (Biddulph et al. 2017). Chapter 2 briefly overviewed the key themes specific reform initiatives tried to address, such as transparency, consistency, and accountability. The reform agenda and the ensuing initiatives are oriented towards better and stricter procedures and procedural enforcement.

In addition, chapter 3 outlined all relevant government and judicial documents related to SCR. It shows how the judiciary recognised the power of technology to support judicial reforms related to

efficiency and uniformity and, in general, provide better decision-making support for judges. However, the true acceleration of judicial informatisation came after the publication of the 2017 SPC Opinion, which clarified work goals and overall requirements. Although chapter 3 outlined this document already in full, the next sub-section identifies four key areas of reform goals that smart courts are supposed to help achieve. These four areas are efficiency, consistency, transparency and oversight, and judicial fairness.

5.2.2 Smart Courts in the Judicial Reform Agenda

5.2.2.1 Efficiency

Efficiency is the relation between input and output: in this case, how much funding, judges, hardware, and so on are needed to process and decide a given number of cases. Processing more cases with the same number of judges or the same amount of funding would increase efficiency (Reiling 2010).

Due to judicial reform, the public has become more reliant on the courts for dispute settlement (Ng and He 2017: 5). In addition, due to the judge quota reforms, explained in chapter 2, and the changes to the case-registration system, courts have become increasingly overwhelmed by the dramatic growth in court cases. While cases grew, the population of court personnel did not (see, e.g., Chen 2019; Zuo 2020). Therefore, further improving the efficiency of the judicial system is a cornerstone of the current reform agenda. According to the Smart Court Opinion (2017), technology is primed to help courts provide faster and more efficient judicial services (section III.9, IV.12, V.14).

However, one must consider the local context in the discussion of efficiency. Nonetheless, within the context of a dual state, as explained in chapters 2 and 4, other efficiency concerns exist, such as their social governance tasks. As discussed earlier, these are ensuring the implementation of central policies (Trevaskes et al. 2014a; Trevaskes 2017), maintaining social stability, and ensuring regime legitimacy (Nesossi and Trevaskes 2017; Chen and Li 2020b). Therefore, I examine the scholarship on this double track of smart courts' aim to improve the efficiency of judicial services and social governance.

5.2.2.2 Consistency

Consistency, or uniformity, refers to the uniform application of law and the degree to which similar cases have the same substantive outcome. Chinese policy documents refer to this with the term *tong'an tongpan* (same case, same judgment, 同案同判). In addition, it refers to procedural consistency, namely the extent to which court personnel comply with procedural requirements. This is referred to as the 'uniform application of the law' (*tongyi falu shiyong*, 统一法律适用). Consistency has been a long-time weak spot in the Chinese judiciary due to lack of expertise, relative vagueness of laws, and vested interests (Gong 2004; Li 2012; Wang 2013).

Traditionally, consistency was also not considered important in the Chinese judiciary. In contrast, uniform application of law and consistency have become essential hallmarks of the current judicial reform agenda. Through digitising the entire judicial process and automating specific procedural tasks, smart courts provide an array of functions that help improve both substantive and procedural uniformity.

The Smart Court Opinion (2017) calls for courts to develop programs that can trace and record all steps of the judicial process to enable both live and post-facto oversight (section II.6, III.7). Courts are to develop programs for evidence treatment, allowing for the tracing of production, cross-examination, and authentication of evidence. Every single step is recorded and accessible to senior court personnel. In this way, these programs are meant to help standardise evidence treatment (section III.10). Chapter 3 describes one such system.

Later regulations again illustrate how smart courts are meant to enhance procedural reforms regarding the uniform application of law and procedural compliance.

However, it merits repeating that one must understand uniformity from a Marxist-Leninist perspective. Procedural compliance or consistency cannot be equated with due process. Uniform application of the law is only legitimate insofar as it facilitates the fulfilment of courts' dual tasks (Guo 2014; Nesossi and Trevaskes 2017). Chapter 7 illustrates this in more depth through a case study.

5.2.2.3 Transparency and Oversight

Transparency is traditionally considered a primary vehicle towards procedural justice. It also helps increase social acceptance of judgments. When litigating parties understand the judicial process

and how judges make decisions, they will trust and respect the outcome (Tyler 2006; Grimmelikhuijsen and Klijn 2015).

Digitisation and automation are supposed to help with court management by providing more detailed insights into its operations (section I.2, II.6). As explained in chapter 3, digitisation efforts of the judiciary were meant to disclose as much information about the operation of courts as possible. The online availability of all case-related business through digital platforms should enable a fuller, transparent judicial process by allowing litigants to have easier access to information related to their case (section IV.13). The Smart Court Opinion (2017) frames this as promoting courts' "direct accountability to the people" (section I.1, I.2, III.10, IV), reiterating the ideological foundations of people's oversight in a Leninist state structure.

In addition, the Smart Court Opinion (2017) clarifies that it envisions technology as a tool to improve internal oversight. Smart surveillance hardware and software enable better monitoring. In this sense, it restricts the discretionary exercise of judicial power. This should, in turn, induce a more uniform application of law and ensure more substantive and procedural consistency (section V.16). The entire judicial process is made traceable and transparent, allowing senior personnel to have insights into who did what at what particular time in the case-handling process (section III.10).

Therefore, transparency should not be understood only in terms of increasing public accountability and credibility but also as a way for the central judiciary to regain oversight and control over its local counterparts. It illustrates how technology is meant to overcome the tension in central-local governance by resolving information asymmetries (Fewsmith and Gao 2014). The judiciary is no exception to this.

5.2.2.4 Judicial Fairness

The overarching goal connected to all previously mentioned reform goals is the improvement of judicial fairness. Smart courts are meant to enhance trial-centred reform and modernise the trial and governance system. As discussed in chapter 2, judicial reforms and smart courts are meant to make people feel fairness and justice in every judicial case.

Nonetheless, fairness, expressed in substantive and procedural justice, is highly contextual. The concept of fairness in China's political-legal context is encapsulated in the term 'judicial justice'

(*sifa gongzheng*, 司法公正). In Chinese legal scholarship and political-legal culture, it refers to procedural justice as part of facilitating and obtaining a fair substantive outcome. Therefore, this concept entails substantive and procedural elements, prioritising the former. In other words, procedural requirements are primarily structured to make substantive law more receptive to central-party state policies (Nesossi and Trevaskes 2017).

Nonetheless, the new focus on procedures is remarkable in a legal system that has long prioritised substantive outcomes instead of procedural compliance (Seppänen 2017). However, procedural justice, as understood from a Western rule of law perspective, would hinder the political tasks of Chinese courts, which require a certain degree of judicial discretion (Trevaskes et al. 2014a; Clarke 2020). Therefore, there is an inherent contradiction between the technology-imposed restrictions and standardisation on the one hand and its political tasks on the other. Especially for local courts, the increased focus on procedural compliance is in tension with their primary task of resolving local conflicts, which sometimes requires substantial judicial discretion (Ng and He 2017).

The Smart Court Opinion (2017) calls to reduce this tension between the two by promoting the organic unification of substantive and procedural justice (section III.7). ‘Organically unifying’ (*youji tongyi*, 有机统一) is an often-used policy term that refers to promoting a particular way of thinking that binds together “what might otherwise be read as dissonant concepts or statements” (Lin and Trevaskes 2019: 51). Chapters 6 and 7 examine how technology and smart courts are meant to overcome these tensions.

In sum, the meaning of these concepts in the Chinese political-legal context differs from their meaning in a liberal rule of law context. As chapters 2 and 3 have explained in detail, it is essential to recognise the political imperatives of law and courts in the PRC and the ideological foundations that lead to an instrumentalist understanding of what these concepts mean. This understanding also shapes and influences the debate around technology and smart courts.

5.3. Data and Methods

5.3.1 Retrieval Protocol

In line with practices of systematic literature reviews (Hagen-Zanker and Mallett 2013), I used a review question to guide the search and retrieval process: ‘How does the Chinese legal scholarship evaluate smart courts against the judicial reform agenda?’. Based on this question, I developed

specific keyword search strings to conduct the retrieval. I retrieved the articles from the CNKI database. In addition, I used filters to make the number of results manageable. To illustrate the difference this made, when conducting the first keyword search using only the publication year as a filter, it resulted in 141 hits. After using stricter filtering, only 54 hits remained.

I opted for a broader time range to capture as much relevant discussion on smart courts and judicial informatisation as possible. However, the filters excluded all hits before 2016. The closeness to the launch of the policy in 2017 might explain this. In addition, the term “smart court” was only used for the first time in 2016. Given the clear demarcation of the research topic as a domestic policy of technological innovation within the judiciary, I further excluded papers on smart technology unrelated to the judiciary, on tribunals as part of the Belt and Road Initiative (BRI), or that researched actual judicial practice based on big data. To maintain academic quality, I also excluded papers with no citations and fewer than six pages. Although this last criterion might be arbitrary, its primary motivation was maintaining a manageable number of articles. In total, I retrieved 55 articles through the formal collection. I conducted this research in November 2019. Therefore, the review reflects the literature up to this point.

Most retrieved articles were published in 2018 and 2019 (85 per cent). The short time frame and proximity to the launch of SCR might explain the relatively small amount of empirical research in the literature: only six articles conducted a case study, survey, or court visits. Because I conducted this review at the beginning of my dissertation, another limitation is that it does not include the literature from 2020 until 2022.

I read all 55 articles yet did not cite all of them. In hindsight, some articles could have been excluded by using stricter exclusion criteria. Saturation was achieved before completing the analysis when no new themes were identified. Once the key themes were selected based on triangulation, data saturation was also achieved when attitudes or arguments were repeated multiple times across different publications, diminishing the added value to continue the analysis (Saunders et al. 2018).

A total of 64 scholars participated in the debate. The overwhelming majority of the authors (80 per cent) were affiliated with a university as a professor, researcher, or PhD Candidate. Only 17 per cent was affiliated with a judicial organ as a judge, researcher, or officer. The remaining three per

cent was affiliated with a party school. In the selection, the authors are mainly criminal (procedure) and procedural law experts.

References to English language literature on law and technology (e.g., Isaac 2018; Simmons 2018; Sourdin 2018) were prevalent in the selection: 62 per cent of the reviewed articles had at least one reference to English language literature. The Hangzhou Internet Court and the Shanghai 206 System were the most cited examples. They were also covered in detail as a case study (Yu and Li 2018; Ge 2019). Their frequency is self-explanatory because, at the time, these two courts were the most advanced in their pilot projects. Chapter 3 features these examples for similar reasons.

In this sense, the review does not tell us anything about the empirical reality of SCR. It is possible that filtering has excluded voices from government and judicial officials as well as other empirical research. However, multiple checks during the period of 2021 did not indicate that significant research was missed.

5.3.2 Analysis

Similar to chapter 4, I opted for a mixture of practices from narrative and systematic literature review methods. Practices from these methods enhance transparency and reproducibility (Geertz 1973; Hagen-Zanker and Mallett 2013). In the first step, I inductively coded the literature. I triangulated the identified themes with key reform concepts identified in official policy documents. I chose these themes because they were (1) the most critical themes according to official documents (see chapter 2), and (2) discussions relating to these themes were more numerous in the literature than others, such as equality of arms or access to justice.

Based on this, I organised relevant paragraphs and sentences according to the theme. This process was all done manually. In the second step, I used basic coding according to the reform concepts. I then analysed all articles systematically in NVivo, a qualitative data analysis software.

5.4 The Chinese Scholarly Debate on Smart Courts

5.4.1 Efficiency

Many scholars consider efficiency to be the main advantage of SCR. It is significantly easier to achieve when it comes to simple processes. There is a consensus about the positive contributions of digitisation and automation to judicial efficiency. SCR is said to increase trial efficiency,

expedite litigation, reduce costs, expedite information retrieval, and allow quicker closing of cases (Guo 2017c; Pan 2017; Feng and Hu 2018; Qian 2018; Zhou 2018; Gao 2019b; Xu et al. 2019). Given that one of the most significant issues with China's judiciary was the long process and delays due to understaffed and overworked courts, it is understandable that increasing efficiency is also framed as a way to re-establish judicial credibility (Xu et al. 2019: 88). This framing also aligns with the broader reform goals outlined in Chapter 2. In addition, the scholarship frames courts mainly as administrative governance institutions rather than institutions that protect citizens' rights. In this sense, the scholarship does not question the appropriateness and usefulness of automation to improve courts' efficiency.

Nevertheless, this lens is flawed because it leaves out many important considerations. For example, Wang (2019) notes that while basic digitisation of the judicial process may improve efficiency, applying big data analysis and algorithmic technology risks diminishing inherent attributes of the judiciary. He argues that judicial reform risks being reduced to a technical problem, where every issue is perceived to be solvable with technological innovation rather than institutional reform. It risks blindsiding observers in their evaluation of judicial digitisation and automation. Reform goals are implicitly achieved by equating efficiency with "a more just and fairer judiciary" (Pan 2017) despite not being explicitly addressed. Judicial informatisation is not a 'magic cure' that will suddenly resolve all issues in the judiciary.

The scholarship rarely considers the negative influence of efficiency goals on other principles. While efficiency is equated with more fairness, a faster process might not necessarily mean a fairer trial. For example, in their empirical research on divorce in China, both He (2021a) and Michelson (2022) show that efficiency concerns perpetuate discriminatory and gendered outcomes. However, the scholarship does not discuss these implications. Therefore, it reflects the instrumental conceptualisation of law and courts in that technology will improve the governance capacity of courts rather than their capacity to resolve legal disputes and protect rights.

5.4.2 Consistency

The scholarship is more divided on consistency or uniformity: different considerations play out in the debate. On the one hand, digitisation and automation are suitable for standardising the judicial process and making outcomes more consistent (Gao 2018; Wang 2019). Consistent outcomes and standardised adjudication are other prerequisites for judicial fairness because they improve

predictability and uniformity (Feng and Hu 2018; Qian 2018). On the other hand, the potential of mechanically enforcing consistent adjudication risks limiting judicial discretion, “the essence of justice” (Huang 2017; Wu 2018). Liu (2019) argues that courts should not be recklessly pursuing uniform adjudication just for the sake of it. The adjudicator can consider smart systems’ advice but should not mindlessly follow it.

This second group of scholars argues that it can potentially jeopardise the primary function of courts to ensure substantively fair outcomes, which requires consideration of the unique circumstances of a case. Smart systems are not equipped to maintain the balance between consistency and unique circumstances of a case (Huang 2017; Pan 2018; Sun 2019).

Others argue that the automation of tasks upsets the power balance in courts. Wang (2019) argues that a digitised and automated judicial process presents a new form of knowledge production. Technical knowledge becomes more important than legal knowledge. His point is that this would lead to new power dynamics in the judiciary, where more ‘tech-savvy’ judges might become better at adjudicating, regardless of their legal knowledge. Ultimately, these ‘tech-savvy’ judges might hold more authority than those who are not.

For Sun (2019) and Ji (2018), this situation could lead to dramatic consequences: the subversion of judicial discretion by technology. They argue that by trying to achieve consistency through technology, the judicial system risks surrendering its power, shifting the nexus of decision-making power to the algorithms behind the smart systems. Judicial informatisation could lead to a fully automated judicial process with little human agency. Judges would become mere law-applying bureaucrats with little to no discretion.

These scholars fear that exaggerated uniformity and aversion to discretion will endanger judicial pluralism. Previous campaign-style judicial reforms prove this fear is not unfounded: the balance tilts too far toward uniformity (Trevaskes 2007a; Biddulph et al. 2017; Wang 2020c). This ‘dystopian technocracy’ hypothesis, mainly focused on the replacement dilemma, is a recurring argument in the literature.

Other authors dismiss the idea; they argue SCR goals are not to replace human judges but rather to assist and support them. Adjudication remains a value-laden and normative judgment over human affairs, even in a dual state. It, by default, should be presided over by other humans because a

computer does not have values (Xu 2017b; Luo 2018; Tu and Yu 2018; Jiang 2019; Wu and Chen 2019). However, by dismissing the potential of judges being replaced, they fail to recognise that technology does not need to fully replace humans to reduce human agency or perpetuate human biases.

The above illustrates the point of Qian (2018) that judicial informatisation is useless if other reforms do not accompany it. Smart systems can undermine or support judicial reform goals, depending on what choices are made during the design and application of technology. He argues that observers, whether scholars or public officials, need to assess SCR within the context of judicial reform goals. They must ask: “Is this specific (smart) program that digitises or automates certain tasks helping us achieve stated policy goals?”

For example, Wu (2018) argues that the questions that should be asked are “How much discretion should be granted to judges under a given legal system?” and “Do we want to regulate judicial discretion through computers?” Here, he also hints at the tension between central and local courts. Depending on the answer to these questions, the so-called adverse effects of digitisation and automation turn into desired outcomes. According to Wu (2018), the way to achieve more consistency is to restrict judges’ discretion. By extension, the primary way to restrict their discretion is through digitisation and automation.

Interestingly enough, Qian (2018) disagrees with this restriction, arguing that it would hamper the judiciary’s role in interpreting the law and reduce the judiciary to another ‘law enforcement’ agency. Technology-induced formalism and standardisation can reduce the interpretative and innovative role that the judiciary plays in Chinese society (Li 2018). The question is, then, what outcome is desired by the reform agenda? Based on the larger policy context outlined in chapters 2 and 3, it is clear that reducing human discretionary decision-making is likely a desired outcome.

Therefore, most scholars assess that technology will make Chinese administration of justice more consistent in procedure and substance. However, they disagree on the implications this has for justice in China and whether this is desirable.

5.4.3 Transparency and Oversight

Judicial transparency is considered the primary vehicle to restore credibility and people’s sense of justice, both in the reform agenda and the scholarship. However, the transparency of smart justice

goes further than online disclosure, as discussed in chapter 3. Instead, SCR guarantees full procedural transparency, where every step is disclosed and accessible to the public. Many scholars argue that this makes adequate public oversight possible and improves credibility vis à vis the public (Guo 2017c; Xu 2017b; Yu and Li 2018; Lu 2019). This argument illustrates the Leninist interpretation of the people as an oversight entity rather than an entity with rights (see chapter 4). The first empirical survey on Chinese public attitudes towards judicial digitisation supports the validity of this argument (Chen and Li 2020a).

Feng and Hu (2018) and (Liu 2019) argue that this kind of transparency best guarantees procedural fairness. If the process happens completely transparently, it will also encourage procedural compliance by the court. Full process transparency will lead to increased procedural standardisation. Ultimately, courts' legitimacy and acceptance of outcomes will increase. They envision an interactive dynamic between an open, transparent judiciary and a scrutinising public. In turn, transparency becomes a way to supervise and hold the court accountable. It would also require standardising the judicial process through a clear procedural framework.

In contrast, some scholars argue that smart systems do not improve and potentially undermine transparency because the algorithms driving these systems are inherently opaque. They refer to the 'black box dilemma' meaning that the exact functioning of learning algorithms that drive the programs will change over time and experience, to the extent that its original developers do not know anymore how the algorithm exactly functions (Huang 2017; Sun 2019; Wang 2019).

Zuo (2018) argues that simple disclosure of decisions is insufficient to convince the public. The black box characteristic of algorithms is in natural conflict with the transparency required to gain acceptance of judicial decisions. Also, he argues that the procedural obsession induced by transparency will hinder judges' task to focus on substantive outcomes. Likewise, Feng and Hu (2018) points out the contradiction between the openness and standardisation of front-end elements and the 'mystification' of back-end behaviour. Technology cannot overcome the inherently opaque decision-making process in the judiciary, which is also influenced by other elements.

In addition, in their analysis of the strategic cooperation between courts and private companies, Li and Wang (2019) worry that the smart systems' private developers will ultimately determine outcomes because of their technology's dominant presence in the judicial process. Automation of judicial tasks requires codifying procedures and substantive laws and regulations. When these

codes are not part of the public domain but rather the intellectual property of private enterprises, it is difficult to argue that automation will make the judicial process more transparent.

Like with consistency, these scholars have difficulties reconciling technical and legal expertise. There is an inherent contradiction in the transparency objective of judicial informatisation and the opaqueness of algorithms (Tu and Yu 2018; Chen and Sun 2019). Technical staff does not have legal expertise, and judicial staff might not have the technical expertise to understand the system's output (Wu and Chen 2019).

While these standpoints vary, scholars discuss transparency through the lens of external explainability and accountability. Their primary concern is how SCR will improve judicial transparency to the public. As explained in chapters 2 and 3, this is also the primary justification of these reforms: to restore public trust in the judiciary.

However, few scholars recognise the goal of official reform to increase monitoring and central control over the judiciary through SCR. Smart systems are also meant to monitor judicial work for internal and hierarchical oversight. Therefore, smart courts also play an essential role in improving internal transparency and oversight, mainly meant to increase judicial accountability and reduce misconduct (Feng and Hu 2018).

Qian (2018) is one of the few to recognise that consistency and standardisation have the implicit goal of tightening oversight over judges' behaviour. He argues that smart systems are the perfect tools to re-establish supervisory control over judges. In this, he acknowledges the political element of judicial informatisation.

Gao (2019a) points out transparency and oversight are inherently linked to accountability. He discusses the implications of automation for avoiding responsibility among judges (also called shirking). He argues that this will allow the judiciary to hold judges better accountable for their decisions and reduce shirking because, at every step of the judicial process, it will be clear who took what decision.

On the contrary, Ji (2018) argues that, while these systems may make the entire judicial process traceable, judges can still divert responsibility by blaming or deferring to the wisdom of the algorithm. Long (2019) and Cheng (2018) agree, arguing that the increased oversight capacities of smart systems matter little when judges rely on AI to make their decisions. With this, he refers to

the phenomenon of algorithmic complacency. These authors see the learning algorithms as a second authority external to the judge, making allocating responsibility more complex.

In sum, the scholarship lauds judicial informatisation for improving external transparency, public oversight and accountability. This attitude neglects its internal supervisory purpose, despite internal oversight being an important tool in guiding the work of lower-ranked courts (Finder 2019b, c). Smart courts will only improve the SPC and provincial high courts' ability to supervise and guide the work of lower-ranked courts. This increased oversight is bound to have a normative effect on Chinese jurisprudence, yet it is barely mentioned in the scholarship, with a few exceptions. In contrast, some of the early English language literature on SCR had already recognised the major oversight potential of smart courts (Zheng 2020; Stern et al. 2021).

This discussion also illustrates how, even within Chinese scholarship, there are different ways smart courts are being assessed. More positive and enthusiastic people assess SCR through a lens closer to that of the Chinese party-state. Other scholars maintain different understandings of the concepts. Chapter 7 examines the implications of technology for oversight and accountability in more detail.

5.4.4 Judicial Fairness

The scholarship believes that SCR can contribute little to substantive justice (Huang 2017; Pan 2018; Sun 2019; Wang 2019). However, SCR can improve procedural justice and reduce 'injustice' (Guo 2017b; Xu 2017b; Qian 2018; Zhou 2018; Liu and Chen 2019). Nonetheless, few scholars attempt to define what 'judicial justice' means, and it remains an ambiguous concept throughout the literature—chapter 6 attempts to clarify more.

For now, Feng and Hu (2018) 's definition provides sufficient clarity. They argue that to achieve judicial justice, the judicial process must follow proper legal procedures, and the substantive outcomes must reflect the spirit of fairness. Therefore, judicial justice can be seen as procedural and substantive justice. They hold that judicial informatisation can only assist in achieving judicial justice in the context of current reforms. In essence, they come back to a previous argument, namely that the technology of SCR can only be a conduit to achieve reform goals of restoring judicial fairness. The implications of judicial informatisation depend on the people that make up the judiciary.

Most scholars prefer to maintain a procedural interpretation of judicial justice when discussing SCR. They argue that digitisation and automation will make procedures more visible and tangible for litigants, improving people's sense of fairness and increasing the judiciary's credibility (Xu 2017b; Zhou 2018). Other scholars argue that judicial informatisation will improve efficiency, consistency, standardisation, and, by extension, judicial fairness (Guo 2017c; Gao 2018; Liu and Chen 2019). Pan (2017: 102) goes as far as to say that "judicial efficiency is judicial justice in a sense".

These scholars envision technology as a facilitator of procedural reforms aimed at providing better judicial services but not necessarily at protecting procedural rights. The instrumentalist understanding of judicial justice might explain the positive assessment of smart courts' influence on this concept. At the same time, it might also demarcate the limits of the academic debate. Technology as a way to improve right seekers' search for justice is beyond the function and scope of SCR.

In a more nuanced assessment, Yuan and Xu (2018) labels procedural justice as the entry point to achieve judicial justice. It requires transparency of the judicial process, clear and rational procedures, and parties' participation. They argue that digitisation and automation help reduce arbitrariness, making it more rational. They simultaneously point out that this also limits judges' discretion. They argue that judicial fairness is based on carefully considering a case's complex and unique circumstances. However, technology enforces a certain degree of rigidity in the judicial process, reducing the subjectivity required to solve an individual case.

This argument points out the contradiction between technological rigidity and human flexibility. In search for more consistency, accuracy, and efficiency, the judiciary risks diminishing human agency during decision-making, which could negatively affect people's sense of fairness. A few scholars repeat and expand this argument (Feng and Hu 2018; Jiang 2019; Liu 2019; Sun 2019).

Long (2019) also warns that the increased use of smart systems will lead to overreliance, affecting the autonomy of human judges. However, this does not imply that human biases or subjectivity are removed from the judicial process, as humans ultimately design smart systems. Wang (2019) argues that technology in and of itself does not constitute judicial fairness. Instead, it is a conduit through which to achieve it. Its advantages can also become disadvantages that subvert reform goals in other contexts.

For example, Cheng (2018) associates judicial fairness with the criminal evidence treatment. He argues that judges' discretion is crucial in correctly evaluating evidence and providing a fair judicial outcome. Automating this evaluation through the use of learning algorithms will disrupt this. To automate the evaluation of evidence, one needs to give every type of evidence a certain weight so that the algorithm can determine whether the evidence meets certain thresholds for a verdict. He implies that this kind of "automated statutory evidence system" will limit judges' capacity to assess the evidence according to their logic and the circumstances of the case. Judicial officers could 'play' the system and only provide evidence they know will meet statutory requirements so that the judge can render a preferred verdict.

He also asks who ultimately decides what fairness means. Automating justice requires the explicit specification of all judicial knowledge through coding. It forces a developer to make explicit the grounds for every single decision and reasoning. Judicial organs outsource the development of these algorithms. Therefore, they allowed technology companies and computer engineers to influence the administration of justice. He concludes that algorithms will inevitably hold judicial fairness hostage.

In short, when it comes to judicial fairness, it is unsurprising that judicial informatisation is discussed as a double-edged sword. Positive and negative implications are often discussed together. Nonetheless, while this partly helps us answer how normative ideas around fairness and justice shape the evaluation of SCR, we still need a clearer understanding of the concept.

5.5 Conclusion

This chapter analysed the Chinese scholarship on SCR. It found that, in general, the scholarship assesses SCR in a positive light. This assessment is driven by an instrumentalist understanding of the reform concepts and the specific function and purpose of law and courts in China's political-legal system. In this sense, it confirms the arguments made in chapter 2. In addition, it supports the arguments made in chapter 4, namely that the party-state's strong ideological affinity with quantification and automation also shapes and influences how China's intellectual elite conceptualise the implications of technology for justice.

Despite nearly four decades of constant reform, many political-legal barriers remain hard to overcome. The key reform concepts that I identified in this review have, in fact, been part of judicial

reform discourse for decades (Nesossi and Trevaskes 2017). In this sense, the literature reflects longstanding issues identified as hard-to-resolve problems.

Therefore, SCR should be understood in this light of constant reform. It has aimed to improve efficiency and fairness for decades (Grimhede 2006). It occurs in notoriously understaffed and underfunded courts (Gong 2004; Wang 2013). One might argue that reforms are doomed to fail without addressing fundamental political-legal and organisational barriers. In other words, it illustrates the autocrats' dilemma of balancing judicial empowerment with ensuring that the judiciary does not become too strong to overpower the prerogative state (Moustafa 2014). According to the scholarship, there is no doubt that judiciary technology will finally address the efficiency conundrum in many courts. However, how courts' embrace of AI and other technologies is changing their operations remains to be seen.

In addition, many discussions that the review covered relate to judicial discretion. The scholarship is divided over how smart courts will impact this. Whether 'codified' or 'mechanised' justice is desirable depends on whether one favours standardisation or discretion (Roth 2016; Re and Solow-Niederman 2019). In this, Wu (2018)'s comments on how to manage judicial discretion reflect the general discretion of China's judicial system (Woo 1999; Roberts and Pei 2016). Chapter 7 delves deeper into this dilemma and the implications of SCR for judicial oversight and accountability. Nonetheless, more empirical research into how SCR impacts judges' behaviour and work is necessary.

The success of SCR in enhancing procedural and substantive fairness remains to be seen as well. Here, the review finds a more divided debate: it sharply illustrates how normative concepts shape and influence the evaluation of digitisation and automation of justice. The next chapter digs deeper into this, exploring how Chinese interpretations of "fairness" shape and influence SCR.

Finally, it is undeniable that technology has become essential to China's judicial reform goals. China is leveraging the power of technology to break through the limits of authoritarian legality (Gallagher 2017). The party-state and China's intellectual elite regard technology as the primary pathway to overcome specific issues in justice administration and governance (chapter 4).

In the next chapter, which I previously co-authored as an article with Nino Junius, we explore this conviction by examining how notions of fairness are conceptualised and operationalised in SCR

policy documents, pilot trials, and discourse. SCR is seen as a way to achieve and ‘organically unify’ the contradictory requirements of substantive and procedural justice. This unification is conceptually possible only thanks to the specific way that fairness and justice are conceptualised as part of SCR.