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# How Technology is Changing Justice in China

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In their article [How Will Technology Change the Face of Chinese Justice?](#) (Columbia Journal of Asian Law, 2020), Professor **Zhiyu Li** of Durham Law School and Professor **Benjamin Chen** of the University of Hong Kong examine China's aggressive efforts to technologize court processes and how the Chinese public and litigants view those efforts. Based on an original survey of roughly 1,000 netizens and interviews of over 100 legal aid seekers, the authors find that internet and artificial intelligence technologies are helping Chinese courts address case backlogs and improve efficiency and giving litigants more cost-effective options for settling disputes. But, the authors note, technology also may be sidelining the lawyers and legal activists who can identify systemic problems and challenge the "ideological hegemony of the state," leading to a new "Chinese brand of authoritarian legality."

The following is a Q&A with Li and Chen, led by Professor **Shitong Qiao** of Duke Law School, about the study's findings and the idea that court technology is reshaping the face of justice in China.

**SHITONG QIAO:** Firstly, congratulations on this wonderful paper. It's an important topic. For the benefit of our readers, can you tell us in a nutshell about your basic argument — how will technology change the face of Chinese justice?

**BENJAMIN CHEN:** China is one of the jurisdictions that has really been pushing the use of technology in courts. When we first became interested in this phenomenon, it had already been going on for some time, and many others had written on the subject. But we thought that the then-current contributions to the subject were still quite limited. Many of them tended to focus on a particular application of technology, such as the use of blockchain for storing evidence or the use of automated transcription systems. We wanted to look beyond specific applications and consider why technology is being introduced at such a pace in the Chinese legal system, and to what ends?

So, when we think about how technology will change the face of Chinese justice, the question we first ask is what problems or needs are the tech-

nological innovations responding to? Once we have some idea of what they are responding to, we can try to broach the question of whether or not they are going to be successful. In the article, we lay out three tensions in the Chinese legal system which technology could help alleviate. First, Chinese courts are inundated by millions of cases, and a primary cause of that is the move towards legality. There's a deliberate shift away from political dispute resolution mechanisms like 信访 (letters and visits) toward the judicial process, and that has resulted in a sharp rise in court caseloads. But related to this move toward legality is the professionalization of the judiciary. In the past, anyone could be a judge. But not anymore. The quota judge reform drastically reduced the number of court officials who could serve as adjudicators. That means an explosion in the average number of cases that each judge has to handle. So an important reason why certain kinds of technologies are being introduced is to help judges decide cases more quickly and efficiently. This reason is familiar to everyone.

Another tension we identify is the

one between adherence to rule of law and social harmony. China descended into chaos during the Cultural Revolution. Traditional rules and institutions all came under attack. After the Cultural Revolution, the legal system had to be rebuilt. Deng Xiaoping called for the rule of law. Of course, rule of law as it's espoused in China does not coincide with Western, liberal democratic conceptions of the rule of law — but the idea very broadly speaking is that there were going to be certain general rules of conduct governing private and public conduct, and this would restore stability and order to society.

But the discourse of law and rights also resulted in mass dissatisfaction. Law disrupts social relationships. If you apply it too rigidly, you can create outcomes that are unfair. Also, when people start claiming rights as entitlements, they become more pugnacious and less willing to compromise. And so the Hu-Wen administration articulated this notion of a harmonious society. That was a time when mediation was being heavily promoted as a form of dispute resolution. The imperative to mediate was so strong that there are many instances of forced settlements, of parties being coerced into mediated agreements that judges knew would not ultimately be enforced. In fact, the number of cases a judge successfully mediates remains a criteria by which they are assessed.

Technology also helps alleviate this second tension. In many courthouses in China, there are machines that offer predictions of the chances of success in civil suits and warn plaintiffs about the dangers of litigation — not just the financial cost, but also the relational, emotional costs. These machines try to steer people toward settlement, but in a way that does not ignore legal rules.

And they benefit from this appear-

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ance of scientific objective. They tell people, “Based on the law, here are your chances of success. They're not looking great, so you should reconsider your position and maybe reach some agreement with the other party.” This logic is reinforced by articles in official media publicizing these machines. Because they appear to be scientifically objective, machine predictions can dissuade people away from litigating a case to the bitter end. But at the same time, machine predictions don't ignore the legal rules. The rules are still there, and people bargain in the shadow of them.

The third tension we address is quite interesting. Here, we are a little more cautious. We are not saying this is being done on purpose. There aren't any official statements saying this is the objective, of course not. The tension is that, on the one hand, the party-state does want people to assert their rights, but on the other hand, it doesn't want them coming together, it doesn't want

them to cultivate group consciousness. A strategy which predates the enthusiasm for AI and machine learning is the atomization of collective actions. Sometimes parties are allowed to bring class actions, but courts can also dismantle these class actions back into individual actions. People are encouraged to assert their rights, but when they band together, it could threaten the ideological control of the party state and this threat has to be carefully managed.

The interesting thing about some of the technologies being introduced is that they democratize law. There are a variety of apps that tell people what the law is, or that help people draft complaints. And these apps bring the law closer to people. They promote this vision that people can, should use the law as their weapon. But technology also dis-intermediates lawyers. And the way it does that is if you can solve a problem easily, if you can find a solution online, there's less of a need to go to lawyers, there's less of a need to consult knowledgeable neighbors. And when there's less of such a need, lawyers become less important as nodes of collective action, because they're not going to have as many clients with the same interests, they are not going to have this constituency standing behind them. They're going to have less clout in the larger scheme of things. Again we are not saying this is being done intentionally, but technology certainly also responds to this tension in Chinese justice.

So these were the theoretical perspectives we developed when we started thinking more broadly about the kinds of technologies being deployed in the Chinese legal system. Then we decided to go into the field and talk to ordinary people, netizens, litigants. What do they make of all

this? I'm going to leave that to Zhiyu. Zhiyu, do you want to summarize who we spoke to, what our findings were, and what these findings can tell us about how technology will change the face of Chinese justice?

**ZHIYULI:** Sure. I'll just add a few details about the empirical findings of our paper. Instead of answering whether AI or modern technology would deliver better justice, our article explores whether and how technologizing the judiciary could shape public perception of the legal system. During the literature review phase of this research, we came across many sources focusing on how legal professionals or government officials interacted with technology in Chinese courts. Ben and I then thought maybe we could look at a different perspective — what do prospective litigants think about such changes? Have they heard of the availability of these AI applications? How useful did they believe those applications to be? That's what led us to survey a number of netizens and interview legal aid seekers in China regarding their views about technology in the legal domain.

What we found quite interesting is that even if AI-powered machines can't always offer disputants more accurate legal guidance, the seemingly scientific analysis they produce could still have an effect on disputants' acceptance of judicial outcomes or their satisfaction with the dispute resolution system in general.

Years ago, China started to promote the use of mediation in courts. Mediation was seen as a relationship-oriented approach that helps people resolve their disputes in a peaceful way. The logic behind it is that litigation always creates winners and losers, but mediation may create a kind of win-win situation. But often-

times litigants would end up reaching an agreement under pressure and later regret the settlement.

Nowadays in China, there are machines set up in court lobbies called one-stop terminals. One of the functions these machines perform is to assess litigation risk and costs. People using these machines might think, "Even if I don't know how the machine reached its conclusions, looking at the cost of money and the cost of time going through the litigation process, I'm making a more informed and rational decision to choose mediation."

We also asked legal aid seekers about whether they had heard of technological applications in courts and whether they had used them. We found that quite a few of the disputants had heard of the applications and saw them as a way to educate themselves about the law. And they thought the technological applications were quite convenient for filing complaints online and getting updates about the judicial proceedings, which brought courts closer to them. Now courts are in their palms. Litigants can take out their phone, pull out the mobile court app, file the complaint, and communicate with court staff in a real time manner.

**QIAO:** **Is the article based more on theoretical analysis or on empirical investigations? This one-stop terminal, does it tell litigants or potential litigants their chance of winning? If yes, how accurate is that?**

**And have you talked to people who actually have had an experience where they were in mediation, or they were going to litigate their case in court, but decided to settle based on the information they received from this one-stop terminal or based on what the judges have told them about the AI prediction of law?**

**LI:** These are great questions. First, the one-stop terminals give a percentage indicating how likely it is a complainant will win her case if she decides to go through the litigation process. The big-data analysis is said to be based on the nature of the dispute and the judgments of similar cases.

Second, the terminals list the costs of the litigation from various dimensions — the financial cost, the cost to relationships, and the cost of time. The terminal may also outline relevant legal rules for the disputes and describe the stages of litigation — how you should go forward with the process and what kind of materials you would need at each stage of litigation. It also has other functions. For example, some of the terminals can generate automatically a complaint for the litigant. This is the general picture of what a one-stop terminal can do.

Now, for the litigants who have tried these functions, what do they think about them? It was difficult for us to approach people using these machines outside the courthouse. However, there were a few local newspapers which interviewed litigants in court lobbies. Litigants were asked about their opinions on how useful and reliable the machines were. One interviewee said he found it very useful, and after being informed of the costs and the likelihood of winning the case, he decided to choose mediation. There is a mediation room in the courthouse and online mediation platforms he could use, he was quite satisfied with this informed choice.

Even for some of the legal aid seekers we interviewed who have never used some of these technological innovations, they were quite interested in using them in the future. One reason is that it is quite cheap, less costly than consulting a lawyer. And some of them

said consulting a lawyer could help them get a difficult case into the court, but if they can get a case accepted on their own, they will just rely on technology, AI, to remedy their grievances in courts, by themselves.

**QIAO:** You have talked about different kinds of technologies in your paper. The most appealing one we are talking about here is AI, artificial intelligence, talking about the prediction of the outcome of a specific case. That's, of course, revolutionary. But it is a question whether such a prediction is possible and reliable. A recent study which I co-supervised with a computer scientist at Duke finds that the accuracy rate of predicting results of Chinese administrative litigation is about 80 percent. I would imagine for civil litigation there could be more uncertainty in AI prediction.

In your paper you also talk about other kinds of technologies, such as automated transcription or even just simply digitalization of the judicial process, including the online publication of judicial documents, which is basically a judicial version of e-governance in China, which has been going on for quite a while. Both digitalization of Chinese judicial documents and judicial process *and* using AI to predict litigation results are important, but the implications are different. So to help our readers understand the reality in the Chinese judicial terrain more specifically, to what extent has AI been used in Chinese courts?

**CHEN:** This is a good question. And it can be answered at two levels. I'll answer it specifically, and then I'll zoom out and say why we think the question is not just about courts but, more broadly, about how society perceives justice that's being meted out in courts.

The thing about technologies is that some of them, such as the online platforms that publish judgments, are visible and available to everyone. Although we know from recent events that when sensitive topics come up, cases might be deleted from some of these repositories, but generally speaking, it's something the public can observe. The cases are uploaded to China Judgments Online. Trials are also livestreamed on China Trials online. Those are things that the public can observe, and it's very easy to say how well or how badly it's going. We know, for example, when it comes to uploading cases — I think other scholars have investigated this quite extensively — not all cases are actually being uploaded to China Judgments Online, although many of them are, and the disclosure rate really varies across provinces.

But the technologies that are being used by judges are not so observable by the public. It's very hard to say to what extent, for example, an algorithm is correctly predicting the appropriate sentence, say, in a robbery case. There we can only rely on what judges have said. And in fact, their feedback has generally not been very positive. So when it comes to, for example, similar case search algorithms, the judges have said the similar cases that have been found by algorithms, they're not dissimilar, but they're not close enough to actually be helpful. Zhiyu and I are now working on a project where we try to use AI to look for similar cases, and we have the same experience. It's easy to classify cases by broad types, but when you need to find a case that's analogous to the one you have, the results obtained by AI are not impressive. And that is what judges have said.

And so on the whole, the achievements of Chinese courts in adopting

AI are sometimes exaggerated. It's true that there's a lot of interest, and there's a lot of hype around the use of technology. But to what extent it's been practically successful, that's debatable. As far as we can tell, its success is a little overblown.

But taking a step back, I want to talk a little about the bigger picture. Because when we consider the use of AI in Chinese courts and the attention it has attracted both domestically and internationally, it's really not just about how technology will change the face of Chinese courts, but also the face of Chinese *justice*. Hence the title of our article, because the truth is many of us will never see the inside of a court, many of us will never get to experience a real case. The only live cases I've seen were as a law clerk; I've never actually experienced a case as a litigant myself.

When we judge the legal system of a society, even one we live under, we rely on vague conceptions we have, some stories we hear. And that is the motivation for our research. The critical questions for us are not, "To what extent has technology actually penetrated Chinese courts? To what extent is it really helping to reduce the time taken to solve a case?" Because courts sometimes declare in official reports that "the time to resolve the case has gone down by 50 percent." I mean, we're a little skeptical.

Instead, we want to ask, "Has the public heard of these reforms? What is the opinion of laypeople regarding the use of technology? Do they think it will make the law fairer, more determinate?" That's our starting point, and that's what makes the project exciting for us. It's not just about how well a specific piece of technology is working but whether technology as a whole is changing the way people see legal institutions.

So, we recruited people on the internet and asked if they have heard about these changes, and how they understand them. We find that most people have heard of, for example, the initiative to publish Chinese judgments online. I was quite surprised that more than half of them have heard of the initiative and a good fraction of them have even visited the official website.

We also intercepted people entering or exiting legal aid clinics. A question we asked these legal aid seekers is the extent to which they trusted algorithmic predictions. Again, it doesn't matter how accurate the algorithm truly is, what we're interested in is, how much store the public will set by such predictions, the kind that they're getting in the lobbies of the courts? And we find that most of them still prefer human expertise. If the machine said one thing and the human another, the majority of them would believe the human. But a proportion of them would believe the machine, and they believe the machine for the reasons you might expect — machines are more impartial, they're not given to the same prejudices as humans, *et cetera*.

This is a very long answer, but there's what's really happening in the courts and also what society perceives, which is its own form of reality.

**QIAO:** I agree with you, it's not only about the Chinese courts, but more broadly about justice in China, particularly how ordinary people think about the courts and justice in China. It seems there are at least two effects of this rise of technology — first, that it could potentially make the Chinese justice system or the Chinese judicial system more trustworthy and also more predictable. But the second one I found even more fascinating: transparency and disclosures. This

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mass online digital publication of Chinese judicial documents has significantly democratized law in China. China had been “sending law to the countryside” three, four decades ago, but this is on a different scale, this is where technology really works. So it is democratizing law and also raising people's legal consciousness.

A while ago — maybe you saw this after the case of the lady in Xuzhou — people dug out hundreds of judicial decisions about women being kidnapped and saw how light the sentences had been. That definitely, I think, is a demonstration of the democratization effect and also increasing people's legal consciousness.

So that's great. But you also men-

tioned another maybe less great but very interesting observation — that technology actually could dis-intermediate lawyers in China. I would love to hear a little bit more about that, because I can think of arguments both for and also against this dis-intermediation effect of the mass publication of judgments in China.

**LI:** You both raised a very important point. I found it very interesting when Shitong mentioned legal consciousness, legal consciousness of the public. Here, we might need to distinguish individual legal consciousness from group legal consciousness. These AI applications or the use of digital platforms might be able to help individuals access justice, because people can file their complaints online and they can seek remedy for their grievances without first paying for a quite expensive consultation with a lawyer. That's one side of the story.

On the other hand, for group legal consciousness, the promotion and the advancement of AI in courts might impact the evolution of the legal system in the long run. As Ben said, many of our interviewees favored human lawyers over AI because, for example, they perceived the assistance of lawyers as two-way communications instead of one-way interaction, and they thought lawyers sometimes can look at their disputes in a more comprehensive way. That's why they trusted human lawyers. However, a few disputants we interviewed very much preferred AI over human lawyers. Some of them were concerned about the financial burden of litigation and some of them thought machines to be more objective because their analyses were not contaminated by so-called human factors.

One of the points we raise is that if

there are some people, even a small group of people, who prefer AI and are going to make use of modern technology or are going to only rely on these kinds of applications to seek remedies for their grievances, then the use of technology might be distancing these people from legal professionals. Lawyers can help promote change in the legal system, by bringing clients with similar disputes together, by publicizing deficiencies in the law, and by appealing for change. This is how AI can broaden access to justice but can also reduce the social influence of lawyers or knowledgeable laypersons.

**QIAO:** So basically, you're saying that while technology gives Chinese litigants more autonomy, it also has this effect of dis-intermediating lawyers and perhaps preventing lawyers from acting as representatives of group consciousness or agents of social and legal change. That's, I think, a fascinating point to make, although I'm not entirely persuaded.

**CHEN:** We don't think it's happening on a massive scale, but the possibility certainly exists. In the paper, we discussed actual instances of NGOs bringing public interest litigation. And for many NGOs, finding a plaintiff is very difficult, because many plaintiffs don't want to be the face of some kind of public campaign. They want to get their compensation and be on their way. In fact, many of these NGOs have to work around the concerns of the litigants they are representing, by trying to preserve their privacy, by promising to fight for better payouts.

But technology makes it very easy for individuals to seek justice in the courts, to get an assessment of how strong their claim is. Apps will even

help them draft and file the complaint. That makes it even more difficult for NGOs to operate and barefoot lawyers to help others start lawsuits. And when they operate, usually they're not just trying to win the individual case, they're trying to draw social attention to the plight of a particular class of people. Like we said, this is not part of the official narrative; the government or the state is not saying we are doing this to reduce the influence of NGOs, activists, and barefoot lawyers. But this is a natural consequence of democratizing access to law and it is very real.

You just mentioned the Xuzhou case, and that is a very good example. Because what happened is once people began searching for similar human trafficking cases, those cases were removed from China Judgments Online. There was an outage on China Judgments Online which was blamed on a server issue or something like that. But when the site eventually came back online, those cases were gone. That kind of illustrates what we're talking about—judicial transparency is a virtue but not when it starts getting people hot and heavy.

People often think of the Chinese party-state as being hostile to individual rights. But it's not completely true, if you look at its history. There's a fantastic book called *Legal Lessons: Popularizing Laws in the People's Republic of China*, which basically retrieves the history of legal education and legal consciousness in the People's Republic up until the '80s. The party-state has always been quite active in terms of promoting people's rights consciousness. Of course, much depends on the time period we are talking about, but there's been sustained efforts to educate citizens about

their rights. In fact, the term 维权 (rights protection) was initially introduced by the party state, although it was later appropriated by civil activists to mean something a little different.

So people tend to think of China as a jurisdiction that's hostile to individual rights, but that's not entirely the case. What concerns the party-state is not so much that people are asserting their rights, but that they're asserting their rights in a way that challenges official narratives or causes people to coalesce and form organized groups that pose threats to stability and maintenance of order.

And so, the example you raise, the Xuzhou case, that's a very good example, because there's nothing wrong with citizens looking up judgments, learning from them, even criticizing them from time to time. But once an issue gathers social attention, once people are all focusing on specific instances of governmental failure — and it's happening even now on Weibo [a Chinese microblogging platform], where a lot of people are still talking about this — then it becomes a bit dangerous to the party-state. And that's when things get deleted. That illustrates the tension we are talking about. And we're not saying technology is being designed to dis-intermediate lawyers. And the government doesn't say that. But that is a necessary consequence. If people are going to be able to rely on apps to tell them, "Okay, this is what you can expect from law, this is how you file your claim. It's very easy. You just click, you don't even have to show up at the courthouse," there's less of a need to go to barefoot lawyers who might get you in trouble with the authorities, there's less of need to go to NGOs which could be politically not on the correct side.

How big is this effect going to be? Well, it might not be very big, in terms of the number of cases, as a proportion of the total number of cases. But its impact on NGOs, I think, could be quite substantial, because many of them are already having trouble finding litigants. They're operating under a lot of pressure, and even more so now that some people don't even have a need to go to them, especially ordinary litigants who are not trying to make a point, but just trying to get compensation.

**QIAO:** Basically, you're saying that even talking about dis-intermediating lawyers, there are both negative and positive things. In the Xuzhou case, maybe it's not a bad thing, actually, that people are taking law back to their hands. They don't even have to rely on lawyers as intermediary profession — lawyers could be controlled and co-opted, but once millions of people have access, that's different.

One last question on one of the theoretical angles of your paper. How does your paper intervene in the legality debate? On one hand you are talking about China's turn towards law, and the increasing legality actually is kind of a background, and why Chinese courts are now interested in being equipped with AI. That's one side of the story. The other side that you have said, well, Chinese courts are using AI for technology basically to induce people to go to mediation, which conventionally speaking is a turn against, or more precisely, turn away from law, if we equate law as courts. So just broadly speaking, I'm wondering how your paper is intervening in this debate about legality in China.

## Chinese courts are using AI for technology basically to induce people to go to mediation, which conventionally speaking is a turn against, or more precisely, turn away from law, if we equate law as courts.

**CHEN:** The way we're intervening in this debate is we are trying to show technology is not just about perfecting law. Oftentimes when we talk about the use of technology in law, many people think, "technology is going to make things the same but better." And they don't really think in a very jurisdiction-specific way. In the article, the approach we take is to look at what's unique about the challenges that China is facing given that it's a socialist legal system, *et cetera*.

The point you make is that on the one hand, there is a movement towards law-based conduct and outcomes. On the other hand, technology is being employed to get people to settle and not actually take their claims all the way through to adjudication. Well, without technology, what judges would do is they would cajole, they would coerce parties into agreements.

And oftentimes, these agreements were not tethered to the strength of the legal claims, they were the result of judges trying to hit their targets, so they can show that they have achieved a high mediation rate. And that is what was described, as you mentioned, by [Fordham law professor] Carl Minzner, as a "turn against law," an abandonment of legal norms because disputes are being settled, but in ways that are contrary to law.

But it's not really a turn against law if the parties settle based on the potential outcomes from litigation, which is what happens all the time in the United States. You know [Harvard law professor R.H.] Mnookin's famous phrase, "bargaining in the shadow of the law." That's what technology facilitates. Instead of giving judges the license to persuade, or threaten, parties into mediation, what happens now is that litigants are confronted by a percentage, something that's very stark, that looks objective, and that basically is supposed to be a reflection of their legal rights, responsibilities, and obligations. In light of what the legal outcome is likely to be, the parties are urged to settle.

Interviews or quotes published in official newspapers should not be accepted at face-value, as representative of how the public feels about these machines. But they tell us how the state is trying to shape mindsets and attitudes. And the state is saying these machines are there to assist you, you should use them and evaluate your litigation chances. And if they don't look good, you should emulate what this person being quoted in the newspaper has done, which is to sign up for mediation. This is not really a turn against law because settlement is based on the relative legal merits of each case. And

that's how technology intervenes.

Again, we can't be sure that the predictions are accurate. Maybe the predictions are off, but at least, on the surface, the system tries to reconcile, on the one end, adherence to legal norms and, on the other, the desire to promote a harmonious society.

**LI:** For many users, their evaluation of courts or the adjudication process is based not only on the outcomes of their cases. Sometimes it is also based on their experience with the court staff, their evaluation of how conve-

nient, how transparent this process was. Therefore, technologizing justice might change people's opinions of the legal system. For people who have never gone to court, heightened judicial transparency could make them think, "well, nowadays I can read judgments online, I can nitpick judgments for typos or disagree with them. Also, I can educate myself and be kept informed of recent legal changes or the judgments in disputes similar to mine."

There is a lot of remarkable research conducted by other scholars in the field on the impact of technology on law and

the legal system. What we have tried to add here is an empirical, bottom-up view of China's technologized justice system.

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