

China's Social Credit System: An Evolving Practice of Control

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A major problem in China's legal reform efforts has been ensuring effective legal and regulatory implementation, enforcement and compliance. In areas ranging from the enforcement of civil judgments¹ and intellectual property², to environmental protection³ and food safety⁴, the phenomenon that "enforcement is difficult" (*zhixing nan*) remains prominent. The Chinese leadership has recognized this, identifying the improvement of implementation and compliance mechanisms as a key component of the legal reform agenda outlined at the 4th Plenum of 2014⁵. Partly, subsequent reform measures have focused on the incremental improvement of existing judicial and administrative mechanisms. A revision of the Administrative Litigation Law, combined with directives to the courts to accept more administrative cases, led to a considerable increase in the number of administrative cases accepted⁶. The institution of circuit appeals courts reduced the dependence of the judiciary on local governments, while changes to the case filing system reduced the discretion courts had to accept and reject cases – a process often infused with issues of politics and corruption⁷.

At the same time, the leadership has also explored the development of novel, technology-driven tools for social control, to supplement traditional means of governing state and society. The high priority of forestalling threats to the integrity of China's political system have fuelled an increasingly powerful security state⁸. Surveillance and monitoring have become pervasive across China, particularly in politically sensitive areas such as Tibet and Xinjiang. Technology is increasingly introduced into the judicial system, to enhance the effectiveness of trial processes⁹, and increase the

¹ Clarke, Donald C. "The execution of civil judgments in China." *The China Quarterly* 141 (1995): 65.

² Dimitrov, Martin. *Piracy and the state: The politics of intellectual property rights in China*. Cambridge University Press, 2009.

³ Van Rooij, Benjamin *et al.* "Pollution Enforcement in China: Understanding National and Regional Variation." In: Sternfeld, Eva (ed.) *Routledge Handbook of Environmental Policy in China*. Routledge, 2017: 193-207.

⁴ Jiang, Qijun, and Ying Zhu. "Challenges for enforcing food safety law and regulations in China: Case studies of government agencies in the Shanghai region." *APLPJ* 18 (2016): 36.

⁵ CCP Central Committee. *Guanyu quanmian tuijin yifa zhiguo ruogan zhongda wenti de jue ding [Decision concerning Some Major Questions in Comprehensively Moving Governing the Country According to the Law Forward.]* 28 October 2014. Translation available:

<https://chinacopyrightandmedia.wordpress.com/2014/10/28/ccp-central-committee-decision-concerning-some-major-questions-in-comprehensively-moving-governing-the-country-according-to-the-law-forward/>

⁶ Mahboubi, Neysun *et al.* "The Future of China's Legal System." *Chinafile*. 11 August 2016. Online: <http://www.chinafile.com/viewpoint/future-of-chinas-legal-system>

⁷ Zhao, Yanrong. "The Courts' Active Role in the Striving for Judicial Independence in China." *Frontiers L. China* 12 (2017): 278.

⁸ Wang, Yuhua, and Carl Minzner. "The rise of the Chinese security state." *The China Quarterly* 222 (2015): 339.

⁹ Xu, Alison. "Chinese judicial justice on the cloud: a future call or a Pandora's box? An analysis of the 'intelligent court system' of China." *Information & Communications Technology Law* 26.1 (2017): 59-71.

transparency of judicial information¹⁰. In urban areas, “grid management” techniques integrate information and communication technologies with street-level policing, social services and both coercive and cooperative forms of management. The objective is responding to social unrest, and preventing the materialization of potentially destabilizing risks¹¹. Here too, the use of technology has been central, encompassing the installation of increasingly sophisticated CCTV cameras, surveillance through mobile devices number plate recognition and facial recognition tools. Ambitious development plans also indicate the leadership’s intention to further harness big data and artificial intelligence for the purpose of social management¹².

One social management programme that has gained particular prominence is the Social Credit System (*shehui xinyong tixi* – SCS¹³). According to the planning document that outlines its most recent iteration, “its inherent requirements are establishing the idea of a sincerity culture, and promoting honesty and traditional virtues, it uses encouragement for trustworthiness and constraints against untrustworthiness as incentive mechanisms, and its objective is raising the sincerity consciousness and credit levels of the entire society¹⁴.” In other words, the SCS is framed as a set of mechanisms providing rewards or punishments as feedback to actors, based not just on the lawfulness, but also the morality of their actions, covering economic, social and political conduct. This maximalist objective, combined with China’s rapidly increasing technological prowess, the absence of strong constitutional protections for individual citizens, and the turn towards stricter Party control under the Xi Jinping administration, have led numerous observers to portray the SCS as an Orwellian nightmare¹⁵, where Big Brother and big data conspire to finally realize the totalitari-

¹⁰ Ahl, Björn, and Daniel Sprick. "Towards judicial transparency in China: The new public access database for court decisions." *China Information* (2017): 0920203X17744544. On big data analysis of these sources, see also Liebman, Benjamin L., et al. "Mass Digitization of Chinese Court Decisions: How to Use Text as Data in the Field of Chinese Law." *SSRN Working Paper* (2017). Online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2985861

¹¹ Hoffman, Samantha. *Programming China: The Communist Party's Autonomic Approach to Managing State Security*. 2017. PhD Thesis (on file with author); Wu, Qiang. "Urban Grid Management and Police State in China: A Brief Overview." *China Change*. 8 August 2013. Online: <https://chinachange.org/2013/08/08/the-urban-grid-management-and-police-state-in-china-a-brief-overview/>

¹² State Council. Cujin dashuju fazhan xingdong gangyao [Action Programme to Stimulate the Development of Big Data]. 31 August 2015. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2015/08/31/outline-of-operations-to-stimulate-the-development-of-big-data/>; State Council. Xinyidai rengong zhineng fazhan gui Hua [Next Generation Artificial Intelligence Development Plan]. 8 July 2017. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2017/07/20/a-next-generation-artificial-intelligence-development-plan/>.

¹³ One linguistic note must be made: the Mandarin term “credit” (*xinyong*) carries a wider meaning than its English-language counterpart. It not only includes notions of financial ability to service debt, but is cognate with terms for sincerity, honesty, and integrity.

¹⁴ State Council. Shehui xinyong tixi jianshe gui Hua gangyao (2014-2020 nian) [Planning Outline for the Construction of a Social Credit System (2014-2020)]. 14 June 2014. Translation online: <https://chinacopyrightandmedia.wordpress.com/2014/06/14/planning-outline-for-the-construction-of-a-social-credit-system-2014-2020/>

¹⁵ “Orwell’s Nightmare: China’s Social Credit System.” *Asian Institute for Policy Studies*. 28 February 2017. Online: <http://en.asaninst.org/contents/orwells-nightmare-chinas-social-credit-system/>; Brehm, Stefan, and Nicholas Loubere. “China’s dystopian social credit system is a harbinger of the

an impulses of China's autocratic leaders¹⁶. In this vision, often compared with an episode of the dystopian television series *Black Mirror* in which people continuously rate their interactions with one another¹⁷, China will have established a comprehensive system by 2020. This will not only track the movements and actions of individual citizens, but also process them to result in a quantified score¹⁸. This score would be based on data points including online purchases, posted content on social media, and the sort of friends one has. In turn, the score would have a wide-ranging impact on people's lives, influencing their ability to get jobs, loans and mortgages, their relationships with friends and family, and even their ability to travel.

The image such portrayals conjure up is one of an omnipotent behemoth relentlessly carrying out a long-prepared scheme for complete control. The question, however, is whether that assessment is justified, and if not, how the SCS does impact the direction of China's legal and governance reform. Exactly how does the SCS complement, reinforce or undermine the functioning of existing judicial and administrative law enforcement processes, which role does it play itself in the shaping of social rules and norms? More broadly, as an example of what Lyon would refer to as a "social sorting¹⁹" mechanism, what sort of social control tool is the SCS meant to be, and how does the SCS designate different classes in Chinese society, and justify differentiated treatment?

The answer to these questions requires, first and foremost, a thorough study of the thinking and design processes behind the SCS, and providing this is the objective of this Article. It combines the extensive use of Chinese language source material, hitherto unutilized in English-language scholarly work, with observations from field visits to China in the period 2014-2017. During this period, SCS-related initiatives are deployed simultaneously by multiple stakeholders, at various levels of government, in the public and private sectors, continuously learning off and influenced by each other. The idea originated first in the context of China's market economic reforms, where it was seen as a potential solution to the perceived lack of trustworthy and moral conduct resulting in abuses ranging from intellectual property infringement to the sale of adulterated foodstuffs. Over time, its scope of application expanded as the leadership found the idea attractive in other areas of governance as well. There is a central core: the fundamental objective of the SCS is instituting cybernetic mechanisms of behavioural control, where individuals and organizations are monitored in

global age of the algorithm." *The Conversation*. 15 January 2018. Online: <https://theconversation.com/chinas-dystopian-social-credit-system-is-a-harbinger-of-the-global-age-of-the-algorithm-88348>

¹⁶ "China invents the digital totalitarian state ." *The Economist*. 17 December 2016. Online: <https://www.economist.com/news/briefing/21711902-worrying-implications-its-social-credit-project-china-invents-digital-totalitarian>

¹⁷ Nguyen, Clinton. "China might use data to create a score for each citizen based on how trustworthy they are ". *Business Insider*. 26 October 2016. Online: <https://www.businessinsider.nl/china-social-credit-score-like-black-mirror-2016-10/?international=true&r=US>

¹⁸ Botsman, Rachel. "Big data meets Big Brother as China moves to rate its citizens ." *Wired*. 21 October 2017. Online: <http://www.wired.co.uk/article/chinese-government-social-credit-score-privacy-invasion>

¹⁹ Lyon, David. "Surveillance, security and social sorting: emerging research priorities." *International criminal justice review* 17.3 (2007): 161-170.

order to automatically confront them with the consequences of their actions. Following Shue and Thornton²⁰, it studies the SCS as an evolving practice of governance. While it builds on intellectual, ideological and structural antecedents already present in China's governance architecture, the SCS has undergone, and continues to undergo, a process of development which builds on, and feeds into, shifting governance priorities, new possibilities enabled by technological development, and the iterative learning process so typical of Chinese policymaking²¹.

This paper consists of four sections. A first section will review the historical antecedents for the SCS. More specifically, it will discuss how the SCS is building on, and tactically borrowing from, a storehouse of ideas, concepts, approaches and techniques that has profoundly shaped Chinese political and legal practice in the past, sometimes dating back to imperial days. The second section will trace the emergence and expansion of social credit-related notions at the central and local levels of the Party-State, as well as preliminary institutional steps taken to start constructing the system. The third section will survey the 2014 Plan for the Construction of the Social Credit System, which remains the most comprehensive planning document in this field, as well as subsequent implementation measures and local trials. It will pay particular attention to the Joint Punishment System (*lianhe chengzhi tixi*), the first major element of the SCS to enter into nationwide service. The fourth section shifts the attention from the state to the private sector: spurred on by policies to develop tools to measure financial creditworthiness, a few of China's tech giants have created social credit-like systems of their own. Yet the relationship between these private initiatives and the governmental scheme remains ambiguous and ambivalent. The concluding section will summarize the fundamental elements of the SCS as it stands, and identify the dimensions of potential transformation that may be used to guide future research.

I. Historical and intellectual roots

At the macro-level, the context in which the concept of social credit evolved is perhaps best characterized as one of repeated efforts at building an effective, powerful and prosperous state. The term was mentioned first in the Nineties, in the context of the market-economic reforms that had started under the leadership of Deng Xiaoping. These reforms themselves were the latest iteration in a series of attempts that begun in the mid-19th Century, often abortive, to modernize China's state and society²². Early generations of reformers saw law as a key element of these reforms, exploring constitutional reform during the late Empire, and importing German and Japanese elements of civil codification²³. Yet successive generations of leaders were

²⁰ Shue, Vivienne, and Patricia Thornton. "Beyond Implicit Political Dichotomies and Linear Models of Change in China". In: Shue, Vivienne, and Patricia Thornton. *To Govern China: Evolving Practices of Power*. Cambridge University Press, 2017.

²¹ Tsai, Wen-Hsuan, and Nicola Dean. "The CCP's learning system: thought unification and regime adaptation." *The China Journal* 69 (2013): 87-107.

²² See Mitter, Rana. *A Bitter Revolution: China's Struggle with the Modern World*. Oxford University Press, 2004; Schell, Orville, and John Delury. *Wealth and Power: China's Long March to the Twenty-first Century*. Random House, 2013.

²³ Chen, Jianfu. *Chinese Law: Context and Transformation*. Martinus Nijhoff, 2008, Chapters 1 and 2.

unable to establish stable domestic governance across the entire Chinese territory, and protect it from foreign intrusion. Consequently, law moved to the background in the overall picture of China's political transformation, replaced by a hard-nosed focus on the acquisition and maintenance of power, often through military means. The first three decades of Communist Party rule were characterized by legal nihilism and continued turmoil. Law only regained a meaningful role in Chinese governance after the death of Mao, and China's entire legal system had to be rebuilt from the ground up.

This long period of neglect meant many of the substantive and procedural developments that occurred in legal systems around the world throughout the 20th Century largely passed China by. The judicialization of constitutional protections and the introduction of human rights-based practices in Western countries²⁴, which occurred particularly after the Second World War, never gained a foothold in China. While discussions about fundamental rights and the role of the state did take place in intellectual circles²⁵, China's Leninist governance system prioritizes the flexibility and discretion of its vanguard Party. The 2014 4th Plenum clearly affirmed Party leadership over the legal system, while the doctrine of the "Three Supremes" (*sange zhishang*) requires the judiciary to first and foremost observe the supremacy of the Party's cause. At the same time, it also meant that once the decision to reinvigorate the legal system was taken, there were few extant indigenous resources the system could lean on. The result is that legal reform became a syncretic process integrating selectively adopted ideas from Chinese political history and lessons learnt from foreign legal systems²⁶. Exactly the fact that law is not seen as an autonomous sphere, but one intimately connected with politics and governance, means those pursuing legal and institutional innovation have cast a wider net in terms of inspiration. The SCS combines a number of these strands. The most important are first, the notion that the State is not merely in charge of legal authority, but should also foster social morality; and second, a positivist view of social reality based on systems theory, which holds that society can be understood and engineered through a holistic, scientific approach, blurring boundary between state and society, public and private.

The state as promotor of moral virtue

The close linkage between morality and authority lies at the heart of China's political tradition. The fundamental notion of imperial legitimacy, the Mandate of Heaven, holds that power is bestowed by Heaven unto a just ruler, and will be withheld from an unjust one²⁷. For centuries, the only path to officialdom lay through an examination system based on a canon of Confucian texts, which posited virtue as the central

²⁴ Loughlin, Martin. *Foundations of public law*. Oxford University Press, 2010.

²⁵ Svensson, Marina. *Debating human rights in China: A conceptual and political history*. Rowman & Littlefield Publishers, 2002.

²⁶ See, amongst others, Pieke, Frank N. "The Communist Party and social management in China." *China Information* 26.2 (2012): 149-165.

²⁷ Zhao, Dingxin. "The mandate of heaven and performance legitimation in historical and contemporary China." *American Behavioral Scientist* 53.3 (2009): 416-433.

element of governing the person, the family, the region and the empire²⁸. Education was a crucial element of that process, and a primary task of officials. By the late empire, state-sponsored schools had come into being. In rural areas, semi-monthly lectures (*xiangyue*) were organized to propagate the Sacred Edict, a list of sixteen maxims covering Confucian morality in a condensed matter, as well as oral vernacular expositions, not dissimilar to the homily in Catholic tradition²⁹. The CCP has inherited and carried forward this mantle of moral authority, through its ambition to create “new Socialist citizens”. Even after the Cultural revolution, the period of reform and openness (*gaige kaifang*) did not repudiate that goal, but recast it as an integral part of social management. The construction of a “spiritual civilization” (*jingshen wenming*) would accompany the concomitant progress in material and economic conditions³⁰. Moreover, legal and moral authority are fused, where lawful and morally just conduct are coterminous. Illustratively, the 4th Plenum denoted “governing the country by virtue” (*yide zhiguo*) as equal to “governing the country by the law” (*yifa zhiguo*).

Law thus is a tool to cultivate subjects’ moral sentiments and transform their worldview, in order to achieve social and cosmic harmony³¹. In Thornton’s³² view, successive generations of Chinese rulers also instrumentalized morality and normative authority as part of a state-building process that sought to redraw the boundaries between the centre and the localities, as well as between state and society, in pursuit of shifting “socio-ethical agendas”. The central state would portray itself as morally superior to its local agents. It would reframe political conflicts would be redefined as moral failings, to be remedied by the deployment of both cooptative and coercive measures. Individuals or forces who did not submit to these central efforts would be expunged from the state’s ambit. Enforcing these moral standards justified expansion of the state’s capacity to monitor and discipline the conduct of local officials, and to penetrate grass-roots society. While Thornton analyses a period between the late Empire and the early People’s Republic, these techniques are reflected even in the current anti-corruption campaign under Xi Jinping³³.

The SCS fits squarely in this tradition. From the very beginning, the compliance problem that the SCS is intended to solve has been framed in moralistic terms. In 2001 already, the *People’s Daily* called for the creation of corporate and individual credit dossiers, arguing that sincerity, being the root of morality, was indispensable

²⁸ Eno, Robert. *Confucian Creation of Heaven, The: Philosophy and the Defense of Ritual Mastery*. SUNY Press, 1990.

²⁹ Fairbrother, Gregory P. "The Chinese paternalistic state and moral education." *Citizenship education in China: Preparing citizens for the "Chinese Century"* (2014): 11-26: 19.

³⁰ Brady, Anne-Marie. *Marketing dictatorship: Propaganda and thought work in contemporary China*. Rowman & Littlefield Publishers, 2009; Shambaugh, David. "China's propaganda system: Institutions, processes and efficacy." *The China Journal* 57 (2007): 25-58.

³¹ Jiang, Yonglin. *The mandate of heaven and the great Ming code*. University of Washington Press, 2011, 176-177.

³² Thornton, Patricia M. *Disciplining the state: virtue, violence, and state-making in modern China*. Vol. 283. Harvard University Press, 2007.

³³ Chen, Dan. "'Supervision by Public Opinion' or by Government Officials? Media Criticism and Central-Local Government Relations in China." *Modern China* 43.6 (2017): 620-645.

in developing China's market economy³⁴. SCS policy documents claim its objective is to stimulate "sincerity" (*chengxin*) and "trustworthiness" (*yongxin*). The Joint Punishment System, analyzed in detail below, explicitly targets acts of "untrustworthiness" (*shixin*). The SCS can also be seen as a response to a moral crisis in politics. It came to prominence during a time where the political initiative had moved from the centre to the localities, resulting in perceptions of weak central leadership and rampant local corruption. To the extent that the SCS is also aimed to better check the performance of local administrations, it forms part of efforts started in the second half of the Hu Jintao administration and accelerated under Xi Jinping to centralize power, strengthen discipline and return the Party and its *mission civilatrice* back to prominence³⁵.

Complex systems engineering as basic theoretical approach for social intervention

Chinese political tradition has, for centuries, conceived of society as an organic whole, where harmony can be achieved if all its members conduct themselves as appropriate to their position in public and civil structures. Yet not until the consolidation of CCP rule would there be a comprehensive governing authority, capable of penetrating society and influencing the daily lives of citizens nationwide. After the disaster of the Cultural Revolution, the question how to apply that authority in pursuit of national development fostered a search for applicable intellectual frameworks that would guide the Deng leadership's more pragmatic, institutionalizing policies. Critical in this process were ideas about systems theory, derived from natural science and applied in the social context³⁶. Influenced by Western scholarship on cybernetics and systems theory, scholars such as Qian Xuesen and Song Jian worked closely with government to develop a conceptual framework for the adoption of systems engineering techniques in governance. Particular regard was given to the role of information flows, not just towards and within government, but also as part of cybernetic feedback loops to create self-correcting responses in society. These ideas also underpinned the "Golden Project", a series of plans to develop information systems within about a dozen policy areas. In the area of social management, the "Golden Shield" project deserves particular attention. This is a programme to create a national infrastructure within the police and internal security bureaucracy, which has rapidly become ever more potent in recent years, accruing better technological, analysis and management capabilities³⁷.

A corollary of the holistic, systems-based conceptualization of social reality is that its elements are primarily evaluated in terms of their potential function in achieving the

³⁴ "Chengxin - daode jianshe de genben [Sincerity - The Root of Moral Construction]." *People's Daily*. 3 December 2001. Online: <http://www.people.com.cn/GB/guandian/26/20011203/617481.html>

³⁵ Brown, Kerry, and Una Aleksandra Bērziņa-Čerenkova. "Ideology in the Era of Xi Jinping." *Journal of Chinese Political Science* (2018): 1-17.

³⁶ Hoffman, Samantha. *Programming China: The Communist Party's Autonomic Approach to Managing State Security*. PhD Dissertation, University of Nottingham. 2017. On file with author. Bakken, Børge. *The exemplary society: Human improvement, social control, and the dangers of modernity in China*. Clarendon Press, 2000.

³⁷ Schwarck, Edward. "Intelligence and Informatization: The Rise of the Ministry of Public Security in Intelligence Work in China." *The China Journal* 80.1 (2018)

objectives of the system. Party members, individual citizens, government officials, businesses, neighbourhood committees and social organizations are all supposed to contribute to the realization of social harmony and economic development. This, in turn, blurs the boundaries between public and private actors. In contrast, Western legal systems, lacking the strong teleological focus of Chinese Communist Party (CCP) ideology, tend to delineate the rights, obligations, entitlements and responsibilities of public and private actor through well-delineated categories of state and society. As Thornton posits, this fluidity between was already one of the key characteristics of late imperial society rendering traditional state-society dichotomies invalid for the case of China³⁸. Philip Huang reaches a similar conclusion, conceptualizing a “third realm” that intermediated between the central state and the grass roots³⁹. Key players in this third realm were the scholar-gentry elites, usually educated and privately wealthy individuals without official appointments in the bureaucracy who, often on a voluntary basis, were active in local governance, tax collection and education⁴⁰. The central state also sought to overcome its limited capacity by mobilizing its subjects into forms of collective self-governance, such as the *baojia* system in the Ming and Qing dynasties.

The SCS embodies this logic as made possible by information technology. Its core function is to create a system whereby the compliance of individuals and businesses with laws and regulations is increasingly monitored, and the consequences of non-compliance subject to swift and efficient sanction. Within this process, the support of private parties is enlisted for both information capture and enforcement. In other words, the “social” dimension of the SCS also entails that members of society create the incentives for each other to act in the desired manner, without direct intervention of State actors.

II. Early steps towards a SCS

The notion of social credit first emerged in debates concerning the development of China’s nascent market economy. Trust was identified as a critical element in supporting market transaction, and one that in China was sorely lacking⁴¹. The first high-level political mention of the social credit system came in the Political Report that the outgoing Secretary General Jiang Zemin delivered at the 16th Party Congress in 2002. This called for the establishment of a social credit system, as part of a broader effort to deepen modernization of the market system⁴². Here already, the separation between two major elements of the SCS was visible: on the one hand, credit referred to financial creditworthiness, similar to FICO scores in the United States; on

³⁸ Thornton, 2007.

³⁹ Huang, Philip CC. ““ Public Sphere”/“ Civil Society” in China? The Third Realm between State and Society.” *Modern China* 19.2 (1993): 216-240.

⁴⁰ Shue, Vivienne. *The Reach of the State: Sketches of the Chinese Body Politic*. Stanford UP, 1988.

⁴¹ Yang, Chengxun, and Qiao, Farong. “Shichang jingji shi xinyong jingji [The Market Economy is a Credit Economy].” *People’s Daily*, 18 January 2001. Online:

<http://www.people.com.cn/GB/jinji/36/20010118/381270.html>

⁴² Zai Zhongguo Gongchandang di shiliuci quanguo daibiao dahuishang de baogao [Report at the 16th National Congress of the Chinese Communist Party], 8 November 2002. Online:

<http://cpc.people.com.cn/GB/64162/64168/64569/65444/4429120.html>

the other hand, it referred to a broader notion of trust and honest conduct in the marketplace.

The People's Bank of China and related institutions took some initial steps to regulate financial credit reporting⁴³. Building on the "Bank Credit Registry and Consulting System", established in 1997, the People's Bank of China established a "Credit Reference Centre" in 2006, which was the only national credit-scoring bureau. Banks and other financial entities were obliged to report on their client's creditworthiness, with supplementary, non-financial information being transmitted from courts, government departments, telecommunications companies and fiscal authorities. However, at that time, comparatively few Chinese citizens held bank accounts, and the majority of transactions were settled in cash, marking it more difficult to provide adequate and accurate credit scores. By 2012, only 280 million citizens were reported to have a credit report⁴⁴.

It would, however, take five years before the first concrete policy and organizational measures were taken concerning broader social credit ideas. In April 2007, the State Council established an interministerial joint conference for the construction of the SCS, with a membership clearly reflecting the primarily economic nature of the initiative as it stood then⁴⁵. Its remit was framed broadly: planning the system's construction, researching and drafting major policy measures, trouble-shooting and overseeing policy implementation. An accompanying State Council policy document outlined more specific objectives. First, it required the creation of better credit information records in the market economy, with particular reference to tax compliance, contract implementation and product quality. Second, it demanded the creation of credit information systems, particularly for the financial sector. Third, it called for the development of credit service markets, with government departments playing a leading role through increasing transparency of data it held on credit subjects within their jurisdiction⁴⁶. By that time some departments had already started working on ways to exchange information⁴⁷.

While the initial efforts surrounding the SCS were primarily focused on market economic concerns, the linkage between credit and social management started being

⁴³ Guanyu qiye he geren zhengxin tixi jianshe youguan wenti de tongzhi [Notice concerning Issues concerning the Construction of a Credit Reporting System for Enterprises and Individuals]. People's Bank of China, et al. 20 May 2002; Guanyu geren zhengxin xitong jianshe youguan wenti de tongzhi [Notice concerning Issues on the Construction of a Personal Credit Reporting System]. People's Bank of China. 1 February 2002.

⁴⁴ Zhou, Cuiling. "Credit Information Database in China." Presented at 4th Credit Reporting and Risk Management Conference, Kuala Lumpur, 5-9 November 2012.

⁴⁵ See table 1.

⁴⁶ Guanyu shehui xinyong tixi jianshe de ruogan yijian [Some Opinions concerning the Construction of a Social Credit System]. State Council General Office. 23 March 2007. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2007/03/23/state-council-general-office-some-opinions-concerning-the-construction-of-a-social-credit-system/>

⁴⁷ Guanyu zai shehui xinyong tixi jianshe zhong jiaqiang qiye chengxin xinxi ziyuan gongxiang hezuo de huiyi jiyao [Record from the Conference on Strengthening Enterprise Sincerity Information Resource Sharing and Cooperation in the CONstruction of a Social Credit System]. People's Bank of China, General Administration of Quality Supervision, Inspection and Quarantine. 30 August 2006.

explored in local initiatives. In some cases, such as in Yichang, this meant the creation of honorary titles, such as “credit towns” and “credit communities” for localities with a “good credit atmosphere⁴⁸”. Perhaps the best-reported example, however, is the county of Suining, in Jiangsu province. In 2010, Suining introduced a “mass credit” (*dazhong xinyong*) programme, which measured and scored individual conduct. Citizens were given 1000 credit points to start with. Points could be deducted for infringement of specific legal, administrative and moral norms. For instance, a conviction for drunk driving cost 50 points, having a child without family planning permission cost 35 points, and non-repayment of loans 30 to 50 points. Lost points could be recovered after a period of two to five years, depending on the rule broken and the gravity of the infraction. On the basis of the resulting scores, citizens were categorized from A to D. While A-class citizens would be granted preferential access to employment opportunities, lower-ranked citizens were to face increasing levels of scrutiny when undergoing particular examination requirements. These included (1) political examination for Party membership, enlistment in the military, and appointment as civil servant; (2) processes to qualify for government procurement vendor, low-cost government housing, and basic social welfare; (3) business licenses for establishment as an individual business operator (*getihu*), including in the healthcare and transportation sector, as well as state monopolies such as salt and tobacco, and (4) governmental support, including subsidies, low-interest loans and government-sponsored skills training. The Suining government created a public record of the points their deducted, listing culprits’ names and actions⁴⁹.

The Suining experiment attracted considerable attention, as well as criticism from State media. Official press bureau Xinhua compared the system to the “Good Citizen Cards” (*liangminzheng*) that the Japanese occupation authorities issued during the Second World War⁵⁰. The Global Times argued that it shouldn’t be the task of government to control citizens in this manner, but should be subject to citizen oversight instead⁵¹. The A-D classification was subsequently dropped. Nonetheless, the Suining system already contained the embryonic forms of several elements of subsequent social credit initiatives: the notion of disproportional disincentives against rule-breaking, public naming and shaming of wrongdoers, and most importantly, the expansion of the credit mechanism outside of the market economic context, also encompassing compliance with administrative regulations and urban management rules (See table 3).

⁴⁸ “Guanyu biao Zhang 2006 niandu “xinyong xiangzhen” he “xinyong shequ” de tongbao [Circular concerning Awarding the “Credit Town” and “Credit Community” Titles for 2006].” Yichang Municipal People’s Government, 12 March 2007.

⁴⁹ “Suining Xian dazhong xinyong guanli shixing banfa [Suining County Trial Management Rules for Mass Credit].” Suining County Government. 1 January 2010. Online: <http://jssnfy.chinacourt.org/public/detail.php?id=388>; “Suining Xian dazhong xinyong xinxi pinggu xize [Suining County Implementation Regulations for Mass Credit Information Assessment].” Suining County Government. 15 March 2010. Online: <https://bkso.baidu.com/item/睢宁县大众信用信息评估细则>

⁵⁰ “Jiangsu Suining: “Xinyongfen” rang huai ren chikui hao ren deli [Suining, Jiangsu: “Credit Points” Let Bad People Suffer and Good People Benefit].” Xinhua. 19 June 2014. Online: http://news.xinhuanet.com/2014-06/19/c_1111213122.htm.

⁵¹ “China’s Social Credit System Won’t Be Orwellian.” Global Times. 1 November 2016. Online: <http://www.globaltimes.cn/content/1015248.shtml>.

Another local initiative that followed in the wake of the 2007 policy emerged from the province of Zhejiang and its capital, Hangzhou. Hangzhou had already established a “Credit Hangzhou” coordination mechanism involving 69 government departments in 2002, while the provincial government issued regulations about the collection and publication of credit information concerning enterprises in 2005⁵². The following year, Hangzhou published a social credit system development plan for the 11th Five-Year Plan cycle, followed by the provincial-level equivalent in 2007. Going much further than the central plan, the Zhejiang provincial government expanded the definition of credit from the market economy to also include the sincerity of civil servants. It also foreshadowed the construction of information management infrastructure that would be necessary to scale credit mechanisms at anything above small-town level. At the heart of its plan lay the use of information sharing platforms, one for corporations and one for individuals⁵³. For the latter, a three-stage process was envisaged. In the first stage, experiments with basic information systems took place in individual localities and departments. During the second stage, information would be broadly collected. One focus was on specific professions, ranging from chartered accountants and land value appraisers to medical professionals, journalists and tour guides. A second focus was compliance with taxation regulations, lending obligations, performance in individual judgments and payment of utility and social security fees. The third stage comprised better cross-regional information sharing, as well as exploring new forms of using the information collected⁵⁴.

At the central level as well, it was realized that credit-related mechanisms could be applied to more fields than merely the market economy, particularly in managing Party and state actors, as well as in social management. This evolution coincided with a rapid expansion of security, surveillance and social management structures, as well as a renewed political focus on spiritual and moral affairs. The increasing adoption of smartphones and social media led to a public sphere buzzing with political scandals and rumours, but also fraud and depictions of a perceived moral vacuum. Revelations about scandalous conduct by local Party officials not only became near-daily occurrences, but the speed at which information was disseminated online meant they rapidly gained visibility in a manner that propaganda authorities were largely powerless to prevent. Clips of scandalous individual conduct, from a TV dating show participant claiming she’d rather cry in a BMW than smile on the back of a bicycle⁵⁵ to the gruesome death of a toddler in a hit-and-run car accident, where subsequently not a single bystander came to the assistance⁵⁶, caused national outcry. Food security scandals, such as the discovery of melamine in infant milk formula,

⁵² "Qiye xinyong xinxi zhengji he fabu guanli banfa [Enterprise Credit Information Collection and Dissemination Management Rules]." Zhejiang Provincial People's Government, 1 September 2005. Online: <https://baike.baidu.com/item/浙江省企业信用信息征集和发布管理办法>

⁵³ http://www.nbaic.gov.cn/art/2008/9/3/art_2022_22054.html

⁵⁴ Ibid. Section 2.3.

⁵⁵ Cockain, Alex. "Regarding subjectivities and social life on the screen: the ambivalences of spectatorship in the People's Republic of China." *China Online*. Routledge, 2014. 63-80.

⁵⁶ Wang, Wilfred Yang. "Weibo, framing, and media practices in China." *Journal of Chinese Political Science* 18.4 (2013): 375-388.

further eroded trust in governance institutions⁵⁷. In response, the leadership initiated a resurgence of attention for “spiritual civilization construction”, amongst others by dedicating the 6th Plenum of the 17th Party Congress in 2011 to culture and ideology. The Decision emanating from this plenum called for the construction of a credit system to foster sincerity in society, not only in commercial affairs, but also in matters of social and political morality⁵⁸.

This policy shift greatly affected the conception of the social credit system. It would not only focus on trustworthiness (and creditworthiness) in the marketplace, but was seen as having an important role in transforming the overall governance strategies and tactics of the CCP. Consequently, the membership of the Interministerial Joint Conference was expanded: high profile Party bodies such as the Central Discipline Inspection Committee (the internal anti-corruption watchdog), the Central Political Legal Committee (which oversees internal security, including the judiciary and the police), the Central Propaganda Department and the Central Leading Group for Spiritual Civilization Construction joined the group, together with a number of their associated ministries. The Supreme People’s Court and Supreme People’s Procuratorate were also added, indicating a growing role for the judiciary. With the mandate of the 6th Plenum, this group started drafting a much more ambitious and wide-ranging social credit plan, which saw the light of day in the spring of 2014.

III. The Social Credit System after 2014

The 2014 Social Credit Plan

The 2014 “Planning Outline for the Construction of a Social Credit System” remains the most authoritative blueprint for subsequent SCS efforts, and represented a major advance in political thought on social credit at the national level. Building on previous local initiatives, such as the ones in Hangzhou and Zhejiang described earlier, this new plan combined the economic aspects of credit, both concerning financial creditworthiness and trust in the market, with the broader initiative to enhance social harmony and discipline government. It put forward a timetable until 2020 for the realization of five major objectives: creating a legal and regulatory framework for the SCS, building credit investigation and oversight, fostering a flourishing market built on credit services, and completing incentive and punishment mechanisms. It identified priority fields in four major policy areas⁵⁹. In government affairs, the SCS would increase transparency, enhance lawful administration, build trustworthiness

⁵⁷ Yang, Guobin. "Contesting food safety in the Chinese media: Between hegemony and counter-hegemony." *The China Quarterly* 214 (2013): 337-355.

⁵⁸ "Guanyu shenhua wenhua tizhi gaige de jue ding [Decision Concerning Deepening Cultural Structural Reform]." Central Committee. 18 October 2011. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2011/10/18/central-committee-of-the-chinese-communist-party-decision-concerning-deepening-cultural-structural-reform/>

⁵⁹ "Shehui xinyong tixi jianshe guihua gangyao [Planning Outline for the Construction of a Social Credit System (2014-2020)]." State Council. 14 June 2014. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2014/06/14/planning-outline-for-the-construction-of-a-social-credit-system-2014-2020/>. A useful map of this sizeable and complex document, created by Jeremy Daum, is available online. <https://www.chinalawtranslate.com/map-of-the-2014-2016-social-credit-plan/>

for government actors, and display the government as a model of sincere conduct. In the market economy, social credit, would enhance efficiency, trust and transparency across a range of sectors, ranging from finance to construction, food and e-commerce. In social services, the SCS would enhance trust in healthcare providers, strengthen management over particular professions and enhance scrutiny over online conduct. Lastly, the introduction of credit mechanisms would enable courts to more effectively implement judgments, enhance information sharing about parties in lawsuits and support norms for the legal profession.

Moreover, the 2014 Plan focused on the creation of the underlying information infrastructure that would be required for the system's successful rollout. It systematically provided for standardized means to record credit-related information in different sections of the administration, databases to store this information at the central and local levels, the establishment of credit reporting mechanisms to enable public access to the information, as well as information sharing processes in order to counter the siloing of data within the bureaucracy. The major programme that this infrastructure would support is a system of rewards and punishments on the basis of blacklists and redlists (which record particularly conspicuous merit). These incentive mechanisms would not only be implemented through governmental means, but also through market mechanisms and self-regulatory regimes in particular sectors. The final sections of the document address the development of credit service markets, data and information protection, and specific guidelines for implementation.

The 2014 plan thus created a comprehensive roadmap that is gradually being implemented, containing substantive provisions, as well as measures to create the underlying technical, bureaucratic and financial support systems. It identified the major mechanisms that would be implemented, in particular the incentive and punishment systems that now form the major operational elements of the SCS. Interestingly, however, the document does not identify quantitative scoring as an evaluation method. Neither does it contain reference to the sort of correlative big data analytics that foreign observers have ascribed to the SCS.

The Joint Punishment System

The major programme outlined in the 2014 Plan was a system of rewards and punishments for sincere and untrustworthy conduct. The principle behind punishments was disproportional sanction, as summarized in the phrase "if trust is broken in one place, restrictions are imposed everywhere⁶⁰". The programme is based on a blacklist system: identified miscreants are entered on a published list, which means they are blocked from specific activities. The first area where this mechanism was implemented, and still the most wide-ranging one, is the punishment system for "un-

⁶⁰ "Guanyu jiakuai tuijin shixin bei zhixing ren xinyong jiandu, jingshi he chengjie jizhi jianshe de yijian [Opinions concerning Accelerating the Construction of Credit Supervision, Warning and Punishment Mechanisms for Persons Subject to Enforcement for Trust-Breaking]." Central Committee and State Council. 25 September 2016. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2016/09/25/opinions-concerning-accelerating-the-construction-of-credit-supervision-warning-and-punishment-mechanisms-for-persons-subject-to-enforcement-for-trust-breaking/>

trustworthy persons subject to enforcement” (*shixin bei zhixing ren*), which addresses non-performance of legally binding judgments. Subsequently, individual departments started developing their own, more focused blacklist systems for their own policy areas.

The origins of this system lie in the 2012 revision of the Civil Litigation Law, which stipulated that, where individuals did not carry out legal obligations arising from a court judgment, courts could prohibit them from leaving the country, create an entry in their credit file and publish their names in news media⁶¹. As this principle was worded rather vaguely, individual courts started implementing these rules in an inconsistent manner. In order to systematize matters, the Supreme People’s Court issued more detailed regulations in 2013⁶² for a comprehensive blacklist system. These stipulate that anyone who is obliged and capable of carrying out a valid legal document, such as a court order or administrative decision, and fails to do so, will be entered on a blacklist. In principle, they will remain on that list for a period of two years, except in certain circumstances where that period may be extended. If they perform the required obligation earlier, a court may decide to remove them from the list⁶³. The rules required the SPC to publish the name list through mass media and online. Moreover, government departments, supervisory institutions, financial institutions, sectoral associations and credit agencies were required to extend penalties to those listed in areas including government procurement, bid tendering, administrative approvals, government subsidies, access to credit, market access and assessment of qualifications. Lastly, where state employees, People’s Congress or Consultative Conference members, State-owned enterprises or public institutions were listed, additional political scrutiny applied.

Early in 2016, 45 Party bodies, government departments and judicial institutions, including the National Development and Reform Commission, the Supreme People’s Court, the People’s Bank of China, and the Chinese Youth League concluded a memorandum of understanding to further clarify their respective roles in what had now become known as the Joint Punishment System. This memorandum contained 32 headings where these bodies were required to assist enquiry into information they held, use blacklist status when reviewing applications, or restricting individuals and businesses from particular actions (See table 4). A first category of restrictions affected economic opportunities, limiting access to establish companies in the financial sectors, issue bonds, receive stock options, establish social organizations or par-

⁶¹ Zhonghua Renmin Gongheguo minshi susong fa [Civil Procedure Law of the People's Republic of China]. 9 April 1991. Revised 31 August 2012. Article 255.

⁶² Ironically, these regulations were published on the same day as data protection and real-name registration requirements for mobile telephone and Internet users. "Guanyu gongbu shixin bei zhixing ren mingdan xinxi de ruogan guiding [Some Regulations concerning Publishing Name List Information of Persons Subject to Enforcement for Trust-Breaking]." Supreme People's Court. 16 July 2013. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2013/07/16/some-regulations-concerning-publishing-name-list-information-of-persons-subject-to-enforcement-for-trust-breaking/>

⁶³ "Guanyu renzhen guan che zhixing 'Guanyu gongbu shixin bei zhixing ren mingdan xinxi de ruogan guiding' de tongzhi [Notice concerning the Earnest Implementation of the 'Some Regulations concerning Publishing Name List Information of Persons Subject to Enforcement for Trust-Breaking']". Supreme People's Court. 2 August 2013. Online: <http://m.055110.com/zq/6/249.html>

ticipate in government procurement programmes. Second, they could no longer receive government subsidies or in-kind support. Third, they were barred from senior positions in SOEs, financial sector companies and social organizations, as well as from entry into the civil service, the Communist Party, and the military. Fourth, they were restricted from particular sectors, including food, drugs, fireworks and dangerous chemicals, and refused authenticated status for customs purposes. Fifth, blacklist entrants were no longer eligible for honorary titles, and special procedures were required where they applied for loans. Sixth, they were barred from purchasing real estate, land-use rights, and exploitation of natural resources. Lastly, and perhaps most notoriously, black list entrants (and where it concerns legal persons, their senior staff) faced restrictions on conspicuous consumption. They were no longer allowed to travel first class, on high-speed trains, or on civil aircraft, to visit star-rated hotels or luxury restaurants, resorts, nightclubs and golf courses, to go on foreign holidays, to send their children to fee-paying schools, to purchase particular kinds of high-value insurance products, to buy or renovate their homes, or purchase cars.

Later that year, the Central Committee General Office and the State Council General Office jointly issued a set of opinions that confirmed these substantive measures, and provided more detailed procedural standards for the blacklist system⁶⁴. The document also encouraged local governments, social organizations and businesses to institute further punishments and restrictions of their own, based on blacklist status. In some cities, individuals placing telephone calls to blacklisted persons are notified that “the person you are calling is on the central credit blacklist”, before connection⁶⁵. Alibaba’s Taobao and Tmall e-commerce platforms, for instance, block blacklisted individuals from making luxury purchases⁶⁶. According to a spokesperson for the National Development and Reform Commission, which oversees the SCS, over 9 million plane ticket sales and over 3 million rail ticket sales were blocked through the blacklist system by March 2018⁶⁷.

Departmental and local incentive and punishment schemes

Following the initial experience with punishment for failure to perform court judgments, the blacklist scheme was expanded to include the broader administrative apparatus. Individual ministries started publishing separate systems for blacklisting within their own jurisdictions, with specific memorandums of understanding being

⁶⁴ 2016 Punishment System Opinions, n. 60. Note that this covers both natural persons and legal persons. The text of this document does not distinguish these two categories.

⁶⁵ Vanderklippe, Nathan. “Chinese blacklist an early glimpse of sweeping new social-credit control.” *Globe and Mail*. 3 January 2018. Online: <https://www.theglobeandmail.com/amp/news/world/chinese-blacklist-an-early-glimpse-of-sweeping-new-social-credit-control/>

⁶⁶ Ahmed, Shazeda. “Cashless Society, Cached Data: Security Considerations For A Chinese Social Credit System.” *CitizenLab*. 24 January 2017. Online: <https://citizenlab.ca/2017/01/cashless-society-cached-data-security-considerations-chinese-social-credit-system/>

⁶⁷ “Zhang Yong: Jianshe shehui xinyong tixi yao guifan 'honghei mingdan' de tuichu jizhi he chayi chuli jizhi [Zhang Yong: The Construction of the Social Credit System Requires Standardization of Withdrawal Mechanisms and Dispute Handling Mechanisms for 'Redlists and Blacklists'].” *Caijing*. 6 March 2018. Online: <http://economy.caijing.com.cn/20180306/4413422.shtml>.

signed on an *ad hoc* basis where cooperation was required. For instance, two sub-regulations published in early 2018 created a blacklist for conduct involving train and air travel respectively. Targeted infractions range from rail ticket scalping and using false IDs to purchase preferential rail fares, to forcibly entering airplane cockpits and unnecessarily opening emergency exits. Individuals committing these acts would be subject to a blanket travel restrictions for 180 days on railways, and a year for air travel. On the other hand, the measures targeted “gravely untrustworthy conduct” in other areas, including tax evasion, financial misconduct, and social security fraud, as well as being listed on the original joint punishment blacklist. For trains, offenders in these cases were subject to a partial ban: as with the joint punishment system, they were barred from high-speed trains, and first-class seats and sleepers on slower services. For air travel, they would also be subject to a comprehensive ban⁶⁸. Further specific measures emerged for, among others, the insurance sector⁶⁹, logistics and transportation⁷⁰, the oil and gas sector⁷¹, housing⁷², food security⁷³ and environmental protection⁷⁴.

⁶⁸ Guanyu zai yiding qijian nei shidan xianzhi teding yanzhong shixinren chengzuo huoche tuidong shehui xinyong tixi jianshe de yijian [Opinions concerning Appropriately Limiting Specific Gravely Untrustworthy Persons from Riding Trains for a Certain Period, and Promoting the Construction of the Social Credit System]." National Development and Reform Commission et al. 17 March 2018.

Translation available online:

<https://chinacopyrightandmedia.wordpress.com/2018/03/17/opinions-concerning-appropriately-limiting-specific-gravely-untrustworthy-persons-from-riding-trains-for-a-certain-period-and-promoting-the-construction-of-the-social-credit-system/>

Guanyu zai yiding qixian nei shidang xianzhi teding yanzhong shixinren chengzuo minyong hankongqi tuidong shehui xinyong tixi jianshe de yijian [Opinions concerning Appropriately Limiting Specific Gravely Untrustworthy Persons from Traveling on Civil Aircraft for a Certain Period, and Promoting the Construction of the Social Credit System]." National Development and Reform Commission et al. 2 March 2018. Translation available online:

<https://chinacopyrightandmedia.wordpress.com/2018/03/18/opinions-concerning-appropriately-limiting-specific-gravely-untrustworthy-persons-from-traveling-on-civil-aircraft-for-a-certain-period-and-promoting-the-construction-of-the-social-credit-system/>

⁶⁹

"Guanyi dui baoxian linyu weifa shixin xiangguan zeren zhuti shishi lianhe chengjie de hezuo beiwanglu [Memorandum of Understanding concerning Cooperation in Implementing Joint Punishment Against Relevant Responsible Subjects for Law-breaking and Untrustworthiness in the Insurance Area]." National Development and Reform Commission et al. 28 August 2017. Online:

http://www.ndrc.gov.cn/zcfb/zcfbtz/201708/t20170830_859400.html

⁷⁰Guanyu dui yunshu wuliu hangye yanzhong weifa shixin shichang zhuti ji youguan renyuan shishi lianhe chengjie de hezuo beiwanglu [Memorandum of Understanding on Cooperation concerning Implementing Joint Punishment against Law-Breaking and Untrustworthy Market Subjects and Relevant Persons in the Transportation and Logistics Sector]." National Development and Reform Commission. 24 August 2017. Online:

http://www.ndrc.gov.cn/zcfb/zcfbtz/201709/t20170906_860217.html

⁷¹ "Guanyu dui shiyou tianranqi hangye yanzhong weifa shixin zhuti shishi lianhe chengjie de hezuo beiwanglu [Memorandum of Understanding on Cooperation concerning Implementing Joint Punishment Against Law-breaking and Untrustworthy Subjects in the Oil and Natural Gas Sector]." National Development and Reform Commission. 2 August 2017.

http://www.ndrc.gov.cn/gzdt/201708/t20170828_858894.html

⁷² "Guanyu dui fangdichan lingyu xiangguan shixin zeren zhuti shishi lianhe chengjie de hezuo beiwanglu [Memorandum of Understanding on Cooperation concerning Implementing Joint Punishment against Untrustworthy Responsible Subjects Connected to the Real Estate Area]." National Development and Reform Commission et al. 23 June 2017. Online:

https://www.creditchina.gov.cn/lianhejiangjie/lhjcgzdt/201709/t20170922_47420.html

To ensure consistency and interoperability between these various systems, the NDRC and the PBoC published regulations that outlined which departments were entitled to run blacklist and redlist systems, and what information they could use to make their decisions. These include (1) registration information held by government, (2) information on criminal and administrative punishment, licences, inspections and other administrative processes, (3) information on compliance with court verdicts; (4) information on potential honorary titles and awards received, and (5) information that specific laws and regulations may define⁷⁵. Industry associations and chambers of commerce could be authorized to also establish redlist and blacklist systems. Furthermore, industry associations and chambers of commerce, big data enterprises, financial institutions, news media, social organizations, as well as individual citizens were “encouraged” to report (un)trustworthy conduct to the authorities, and to participate in creating constraints on blacklisted individuals, as well as “green channels” for those on redlists. Lastly, in cases where particular undesired conduct did not meet the standard for listing on a blacklist, the NDRC permitted the creation of a “key scrutiny” list. These lists had to be shared on the national credit information platform, but not necessarily made public. Where a particular entrant was present on three separate key scrutiny list, they would be flagged on a publicly available “Big Data Warning List”⁷⁶.

As seen earlier, a considerable number of local governments had initiated social credit initiatives far ahead of the central government, and were ready to incorporate the blacklist systems within their own jurisdictions. Sometimes, these were connected to petty infractions. For instance, the city of Ningbo listed individuals for fare-

⁷³ "Guanyu dui shipin yaopin shengchan jingying yanzhong shixinzhe kaizhan lianhe chengjie de hezuo beiwanglu [Memorandum of Understanding on Cooperation concerning Launching Joint Punishment against the Gravely Untrustworthy in Food and Drug Production and Trading]." National Development and Reform Commission et al. 13 September 2016. Online: https://www.creditchina.gov.cn/biaozhونغuifan/hangyexingbiaozhونغuifan/201801/t20180104_105591.html

⁷⁴ "Guanyu dui huanjing baohu lingyu shixin shengchan jingyin danwei ji qi youguan renyuan kaizhan lianhe chengjie de hezuo beiwanglu [Memorandum of Understanding on Cooperation concerning Launching Joint Punishment against Untrustworthy Production and Trading Work Units and their Relevant Staff in the Area of Environmental Protection]." National Development and Reform Commission et al. 20 July 2016 Online:

https://www.creditchina.gov.cn/zhengcefagui/zhengcefagui/201709/t20170916_43872.html

⁷⁵ "Guanyu jiaqiang he guifan shouxin lianhe jili he shixin lianhe chengjie duixiang mingdan guanli gongzuo de zhidao yijian [Guiding Opinions on Strengthening and Regulating Efforts on the Management of Lists of Persons Receiving Joint Incentives for Trustworthiness or Joint Punishment for Untrustworthiness]." National Development and Reform Commission, and People's Bank of China. 30 October 2017. Translation available online: <https://www.chinalawtranslate.com/国家发展改革委-人民银行关于加强和规范-守信联/?lang=en>

⁷⁶ "Guanyu zuohao 'guanyu jiaqiang he guifan shouxin lianhe jili he shixin lianhe chengjie duixiang mingdan guanli gongzuo de zhidao yijian [Notice on Successful Implementation of the 'Guiding Opinions on Strengthening and Regulating Efforts on the Management of Lists of Persons Receiving Joint Incentives for Trustworthiness or Joint Punishment for Untrustworthiness']." National Development and Reform Commission. 19 January 2018. Translation available online: <https://www.chinalawtranslate.com/关于加强和规范守信联合激励和失信联合惩戒对象/>

dodging on local public transport⁷⁷, while Shenzhen installed facial recognition cameras and listed repeatedly caught jaywalkers⁷⁸. Provincial governments started publishing detailed regulations for the management of social credit information. These explicitly excluded information on someone's religious affiliation, as well as biometric data⁷⁹. One particularly salient initiative emerged in Shanghai, where the municipal government sponsored the development of a smartphone app called Honest Shanghai. On the one hand, this app allowed users to check the credit report of local businesses, such as restaurants and international trading businesses. The app also allowed its users to sign up with their ID card number or through facial recognition, in order to obtain a tailored credit report for themselves. While no punishments would result from a poor score, high-scoring individuals would be eligible for benefits such as discount flight bookings⁸⁰.

In a bid to propagate particularly successful local social credit initiatives, at the end of 2017, the NDRC and PBoC designated twelve "model cities", from which important lessons could be learnt⁸¹. This list illustrates the diversity of local credit trials depending on their location, size, economic structure and level of economic development. Ximen, a prosperous port city on the Taiwan Straits, was listed for its achievements in expanding the credit structure to the processing of imported and exported goods, as well as the efforts it had made to improve healthcare, education and legal services through social credit⁸². Suqian, a smaller city in the province of Jiangsu that has attracted some of Shanghai's ICT industry, gained plaudits for the quality of its technical infrastructure and security arrangements, as well as its locally developed "Credit Plus" model, which actively stimulates local businesses and organizations to make public credit commitments⁸³. Yiwu, China's leading trading hub for manufactured goods, was held up as an example for integrating credit with fi-

⁷⁷ "Ditie taopiao naru geren xinyong dang'an [Subway Fare-Dodging Entered into Personal Credit File]." Hexun News. 26 July 2016. Online: <http://news.hexun.com/2016-07-26/185154311.html>

⁷⁸ "Shenzhen tui 'zhineng xingren guojie xitong' chuang hongdeng bei pai jiang yingxiang zhengxin [Shenzhen Introduces 'Smart Pedestrian Crossing System', Walking Through Red Lights and Being Photographed Will Influence Credit Records]." Ifeng.com. 3 March 2017. Online: http://m.ifeng.com/house/shareNews?fromType=vampire&aid=sub_9404335

⁷⁹ "Shanghai Shi shehui xinyong tiaoli [Shanghai Municipal Social Credit Regulations]." Shanghai Municipal Government. 23 June 2017. Translation available online: <https://www.chinalawtranslate.com/上海市社会信用条例/>

⁸⁰ O'Meara, Sarah. "New App Rates Shanghai Citizens' Honesty." *Sixth Tone*. 14 November 2016. Online: <http://www.sixthtone.com/news/1554/new-app-rates-shanghai-citizens%20-honesty>.

⁸¹ "Guanyu yinfa shoupi shehui xinyong tixi jianshe shifan chengshi mingdan de tongzhi [Notice concerning Issuing the Name List of the First Batch of Social Credit System Construction Demonstration Cities]." National Development and Reform Commission, and People's Bank of China. 28 December 2017. Online: http://www.ndrc.gov.cn/zcfb/zcfbtz/201801/t20180109_873397.html

⁸² "Shehui xinyong tixi jianshe shifan chengshi dianxing jingyan jieshao zhi san: Xiamen Shi [Social Credit System Construction Demonstration Cities, Introduction of Typical Experience No. 3: Xiamen Municipality]." Xinhua. 6 February 2018. Online: <http://credit.xinhua08.com/a/20180206/1748111.shtml>

⁸³ "Shehui xinyong tixi jianshe shifan chengshi dianxing jingyan jieshao zhi liu: Suqian Shi [Social Credit System Construction Demonstration Cities, Introduction of Typical Experience No. 6: Suqian Municipality]." Xinhua. 6 February 2018. Online: <http://credit.xinhua08.com/a/20180209/1748612.shtml>

nance, foreign trade and market supervision⁸⁴. Weihai, a seaport in Shandong, was commended for the efficient way in which individuals could access the credit information system, and its initiative in producing clear lists of reward and punishment measures. It also had introduced a ranking system for businesses, dividing them into four tiers based on their compliance with market regulations⁸⁵. Another city in Shandong, Rongcheng, entered the list on the strength of its tiered system for individuals, ranking them in six classes, from AAA to D⁸⁶. The experiences from these cities will serve to further enhance the functioning of the provincial-level and national credit systems.

The blacklist systems have received criticism both inside and outside of China, addressing both the principle of the punishment system and reported instances where the system did not work as prescribed. Apart from concerns about privacy and the principle of disproportional punishment, news media and institutions such as Human Rights Watch identified cases where individuals who had been politically active had been listed without proper notification, and without apparent recourse to appeals procedures⁸⁷. Various documents, including the 2016 Opinions, indicate that individuals must receive prior warning before entry on the blacklist, and have the right to appeal. Where they fulfilled their legal obligations, courts must remove their information from the blacklist system within three days, and all bodies that imposed restrictions must remove these promptly. A question requiring further research is the extent to which this is the consequence of teething troubles, incompetence or intent. The NDRC, for its part, has recognized the necessity of this element of the system to work, in order to buttress its legitimacy as a whole, and identified it as a priority area for revision⁸⁸.

The Social Credit System and information technology

The SCS is a poster-child example of what the Chinese government sees as a process of informatization in governance. It uses information technology to transform the manner in which Chinese government authorities manage both state and society, by horizontal and vertical information sharing, overcoming the principle-agent prob-

⁸⁴ "Shehui xinyong tixi jianshe shifan chengshi dianxing jingyan jieshao zhi shiyi: Yiwu Shi [Social Credit System Construction Demonstration Cities, Introduction of Typical Experience No. 11: Yiwu Municipality]." Xinhua. 6 February 2018. Online: <http://credit.xinhua08.com/a/20180214/1748625.shtml>

⁸⁵ "Shehui xinyong tixi jianshe shifan chengshi dianxing jingyan jieshao zhi jiu: Weihai Shi [Social Credit System Construction Demonstration Cities, Introduction of Typical Experience No. 9: Weihai Municipality]." Xinhua. 6 February 2018. Online: <http://credit.xinhua08.com/a/20180212/1748619.shtml>

⁸⁶ "Shandong Rongcheng: Xinyong jianshe jie shuoguo renren dou you 'chengxin shenfenzheng' [Rongcheng, Shandong: Credit Construction Yields Great Results, Everyone Has 'Sincerity ID']." Credit China. 5 February 2018. Online:

http://www.creditchina.gov.cn/chengxinwenhua/chengshichengxinwenhua/201802/t20180205_108168.html. A detailed report about the Rongcheng trial can be found in Mistreanu, Simina. "Life Inside China's Social Credit Laboratory". Foreign Policy. 3 April 2018. Online:

<http://foreignpolicy.com/2018/04/03/life-inside-chinas-social-credit-laboratory/>

⁸⁷ Wang, Maya. "China's Chilling 'Social Credit' Blacklist." *Human Rights Watch*. 12 December 2017. Online: <https://www.hrw.org/news/2017/12/12/chinas-chilling-social-credit-blacklist>

⁸⁸ *Caijing*, 2018, n. 67.

lems and departmental protectionism that continues to plague China's governance architecture, and digitizing data hitherto contained only on paper. To ensure this is possible, the supporting technical infrastructure must ensure that subjects are identifiable, information about them can be collected, stored, processed, shared and used.

A first, fundamental requirement for the system is to ensure everyone subject to it can be identified. This happens at two levels: first, ensuring that there is a uniform filing system that allocates unique identifiers to discrete subjects, and second, disabling actors from acting anonymously. For individuals, the choice of identifier was relatively simple. The 2003 Identity Card Law already mandated that identity cards would carry a number that was the unique, lifelong identifier for a particular person⁸⁹. In 2004, a new generation of identity cards came into being, which carried an 18-digit code, replacing the 15-digit identifier present on older identity documents. The 18-digit code combines information about the issuing local authority, date of birth and individual sequencing. In 2013, when the SPC commenced the implementation of the joint punishment system, accompanying regulations clearly indicated that the identity card number should be used for the purposes of that system⁹⁰. The requirement to limit anonymous conduct is not new; it is the reason for the introduction of number plates on cars, for instance. However, the broader adoption of digital technology caused new challenges. To counter ubiquitous anonymity in the digital environment, the leadership intensified efforts to introduce real-name registration requirements, amongst others for acquiring (mobile) telephones⁹¹, using online account-based systems⁹², and in social media⁹³. Furthermore, the Chinese state is expanding its biometric identification databases to further enable identification of individuals and connecting this identification with state-held records⁹⁴.

For corporations and other legal persons, the bureaucratic task was somewhat more complicated. Historically, each regulator had their own numbering system under which they would register businesses and organizations. Consequently, a business would have one registration number for a business licence, another for fiscal purposes, another for social security services and yet another for any special regulatory

⁸⁹ "Zhonghua Renmin Gongheguo jumin shenfenzheng fa [Resident Identity Card Law of the People's Republic of China]." 28 June 2003.

⁹⁰ 2013 Name List Publication Regulations, n. 62.

⁹¹ "Dianhua yonghu zhenshi shenfen xinxi dengji guiding [Telephone User Real Identity Information Registration Regulations]." Ministry of Industry and Information Technology. 17 July 2013. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2013/07/16/telephone-user-real-identity-information-registration-regulations/>

⁹² "Hulianwang yonghu zhanghao mingcheng guanli guiding [Internet User Account Name Management Regulations]." Cyberspace Administration of China. 4 February 2015. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2015/02/04/internet-user-account-name-management-regulations/>

⁹³ "Hulianwang luntan shequ fuwu guanli guiding [Provisions on the Management of Internet Forum Community Services]." Cyberspace Administration of China. 25 August 2017. Translation available online: <https://chinacopyrightandmedia.wordpress.com/2017/08/25/provisions-on-the-management-of-internet-forum-community-services/>

⁹⁴ "China to build giant facial recognition database to identify any citizen within seconds." *South China Morning Post*. 12 October 2017. Online: <http://www.scmp.com/news/china/society/article/2115094/china-build-giant-facial-recognition-database-identify-any>

regimes they would fall under. This not only hampered effective integration of government information systems, it also created a considerable amount of red tape. The initiative to integrate the major numbering systems was known first as “three licences into one” (*san zheng he yi*) and comprised administrative registration, tax registration and organizational registration. It was expanded to “five licences into one” (*wu zheng he yi*) by adding social security and statistics registration numbers⁹⁵. Under this integrated system, only “one licence and one code” (*yi zhao yi ma*) would be required. The new coding system was dubbed the “uniform social credit code” (*tongyi shehui xinyong daima*), again consisting of an 18-digit code⁹⁶. These unique identifiers, combined with real-name registration systems for the digital environment, enable government to increasingly connect incoming data points to individuals and businesses. These data points mostly comprise administrative and financial information, but are increasingly supplemented by other sources, such as the facial recognition cameras used in some of the local social credit projects. Also, the system is starting to use information originating from the private sector: ride-sharing service Didi Chuxing, for instance, is providing information on the number of black-listed passengers it carries⁹⁷.

The second step is the creation of databases where information from different sources can be appended to unique identifiers. Local governments had already established such websites prior to 2014, and formulated catalogues for information to be shared with the platform. The 2015 Shanghai catalogue, for instance, includes information from 99 work units, including 46 municipal administrative bodies, 17 district-level governments, 10 Shanghai-based branches of central departments, 2 “people's organizations”, the judiciary, 10 state-run institutions and 13 social organizations; it identified 3441 categories of credit information to be entered, of which 2770 concerned legal persons, and 671 natural persons⁹⁸. Other credit information catalogues also contain limits on the duration at which infractions are listed. In June 2015, the NDRC and the State Information Centre jointly inaugurated the “Credit China” platform, designed in collaboration with Baidu. The objective of this website, and the underlying information platform it supports, is to concentrate all credit-related information members of the Interministerial Joint Conference, as well as governments at the local level, hold about individuals and corporate actors. Much of

⁹⁵ Guanyu jia kuai tuijin 'wuzheng heyi, yizhao yima' dengji zhidu gaige de tongzhi [Notice concerning Accelerating the Promotion of the "Uniting Five Licences, One Licence One Code" Registration System Reform]." State Council. 30 June 2016. Online: http://www.gov.cn/zhengce/content/2016-07/05/content_5088351.htm

⁹⁶ "Faren he qita zuzhi tongyi shehui xinyong daima bianma guiding [Coding Regulations for the Uniform Social Credit Code for Legal Persons and Other Organizations]." General Administration of Quality Supervision, Inspection and Quarantine, and National Standardization Management Committee. 17 September 2015. Online: http://qyj.saic.gov.cn/zyfb/gszjfb/201612/t20161208_232473.html

⁹⁷ "Didi Agrees to Share Credit Data With China's Top Economic Planning Agency." *Yicai Global*. 8 March 2018. Online: <https://www.yicaiglobal.com/news/didi-chuxing-agrees-share-credit-data-china-s-development-agency>

⁹⁸ "Shanghai Shi gonggong xinyong xinxi mulu [Shanghai Municipal Public Credit Information Catalogue (2015 Edition)]." Shanghai Municipal Credit Investigation Management Office. Online: <http://www.shcredit.gov.cn/images/sj.pdf>.

this information is also made publicly available, making the website in itself one of the incentives in the SCS.

The final step in the process is processing and using the stored information in furtherance of social management objectives. The development of information technology has increasingly provided the storage, communication and computational capabilities not just to collect and share data, but also to process and analyse it to generate actionable insights. Perhaps the best-known example of this is correlational big data analysis, which sorts individuals into categories on the basis of probabilistic computations. Yet this point in time, with the exception of the narrow scope of financial credit scoring as discussed below, there seems to be little algorithmic processing of data. As far as public documents indicate, anyone's social credit status will only be influenced by the history of their own conduct to the extent that it is covered through the SCS's remit. Technological analysis is used, however, to make mass information more manageable, accessible or technologically presentable. For instance, the Big Data Key Scrutiny function within the blacklist system is intended to automatically flag individuals appearing on multiple lists. Similarly, the credit reports in the Honest Shanghai app reflect an integration of data from the existing credit databases.

IV. Private social credit systems

Not only the Chinese government has occupied itself with social credit. Some of China's private tech businesses have done so as well, spurred by a PBoC initiative to foster the development of a personal credit rating system akin to the FICO score system prevalent in the United States. In early 2015, the PBoC selected eight companies to begin "preparatory work" (*zhunbei gongzuo*) for the establishment of formal credit reporting system, and gave them six months to do so⁹⁹. Perhaps the best known of these systems is Sesame Credit, developed by Ant Financial Group, an affiliate of the E-commerce behemoth Alibaba. Sesame Credit combines elements of a traditional credit scoring system with components of a loyalty scheme. It calculates a score between 350 points and 950 points based on data in five major categories: (1) credit history, or records of past credit repayments; (2) behavioural trends, referring to someone's conduct when making purchases, processing payment, settling accounts and managing their finances; (3) ability to honour agreements, meaning having stable economic revenue and personal assets; (4) personal information, referring to the amount of verifiable and reliable information about themselves a member provides, and (5) social relationships, referring the extent to which one interacts with good friends and behaves in a friendly manner on the platform¹⁰⁰. They respectively amount for 35%, 25%, 20%, 15% and 5% of the score, although the specific scoring algorithms remain confidential. Also, the platform gives little information on which specific actions would alter one's score, and to what extent. While Sesame Credit

⁹⁹ "Guanyu zuohao geren zhengxin yewu zhunbei gongzuo de tongzhi [Notice concerning Accomplishing Preparatory Work for Personal Credit Reporting Business Activities]." 5 January 2015. Online: http://www.gov.cn/xinwen/2015-01/05/content_2800381.htm.

¹⁰⁰ Li, Tianxia. "Hulianwang jinrong de dashuju fengkong zhi shu [The Art of Internet Finance Big Data Risk Management]. *Zhihu*. 4 January 2017. Online: <https://zhuanlan.zhihu.com/p/24712959>

remains an opt-in function in the broader Alibaba platform, this vagueness has raised concerns about the considerations that might be part of the scoring process, and to what extent they can inform policy that might one day be taken over by government. Some markers seem to be somewhat arbitrary; for instance, reports suggest that frequent changes of address might also lower one's credit score¹⁰¹. Senior corporate officials at Ant Financial have made vague and sometimes conflicting statements on scoring. Chief Data Scientist Yu Wujie suggested that donating to charity would raise one's score, but without stating the extent of donations desired. Technology director Li Yingyun suggested in a press interview that persons buying nappies would be seen as more trustworthy as someone playing video games for ten hours per day¹⁰². Although Ant later denied this, it had already fuelled foreign concern about Sesame's alleged invasiveness and propensity for behavioural control.

Outside of its usefulness as a portable credit score, Sesame solved several problems that Alibaba faced in the development of its e-commerce business. The most important one of these concerned payment and creditworthiness. China was, at that time, still a largely cash-based economy, where few individuals held credit cards. Alibaba's model as an intermediary for purchasers and sellers required it to be able to facilitate payment. Without external broad-based providers, Alibaba decided to set up a mobile payment system of its own, which became known as Alipay¹⁰³. This, in turn, required Alibaba to be able to assess customers' financial creditworthiness. In the absence of a recorded financial history, they turned towards other potentially useful proxies. Second, Alibaba's business model depends on its ability to present itself as a trusted intermediary brokering between buyers and sellers who do not know each other. Sesame Credit was seen as a tool that could support this trust-building process. It is now also used outside the immediate financial context on the Alibaba platform. On its dating service Baihe, for instance, hopeful singles often post their Sesame Credit scores in the hope that it will raise their attraction¹⁰⁴.

As the adoption and the profile of Sesame Credit has grown, Ant Financial has increasingly expanded external partnerships, leveraging the trust infrastructure they created to facilitate linkages between consumers and other parties. Individuals with high Sesame Credit scores, for instance, enjoy expedited procedures when applying for Singaporean and Schengen visa¹⁰⁵, access to fast lanes at airport security¹⁰⁶, and a

¹⁰¹ "Ma Yun kaishi gei geren xinyong dafen, kualai kankan ni zai pengyoujuan zhong pai diji [Ma Yun Begins to Hand Out Personal Credit Scores, Come Quickly to See Where You Rank in Your Group of Friends]." *The Paper*. 28 January 2015. Online:

http://www.thepaper.cn/newsDetail_forward_1298828

¹⁰² "China 'social credit': Beijing sets up huge system." *BBC*. 26 October 2015. Online:

<http://www.bbc.com/news/world-asia-china-34592186>.

¹⁰³ Lee, David Kuo Chuen, and Gin Swee Zhang Jinrui Teo. "Emergence of FinTech and the LASIC principles." *Journal of Financial Perspectives* 3.3 (2015): 1.

¹⁰⁴ Hawkins, Amy. "Chinese Citizens Want the Government to Rank Them." *Foreign Policy*. 24 May 2017. Online: <http://foreignpolicy.com/2017/05/24/chinese-citizens-want-the-government-to-rank-them/>

¹⁰⁵ "Alitrip Introduces Credit-based Visa Application Service for Qualified Chinese Travelers." *BusinessWire*. 3 June 2015. Online:

<https://www.businesswire.com/news/home/20150603006726/en/Alitrip-Introduces-Credit-based-Visa-Application-Service-Qualified>.

reduction or waiver for deposits on a host of products and services, including mobile phones, hotels and bicycle rentals¹⁰⁷. Local governments have also enthusiastically adopted the deposit waiver approach. Ant Financial itself reported that, in early 2017, 381 cities waived deposits in sectors such as healthcare, social housing and public services based on their Sesame Credit Score¹⁰⁸.

This raises the question to what extent Sesame collaborates with government, particularly on the governmental credit system. Popular news media have regularly conflated the two. However, at the time of writing, there is no hard evidence for this claim. Sesame's General Manager, Hu Tao, wrote a letter to the *Financial Times* arguing the company anonymised and encrypted all user data before analysis, gave users ample control over the extent to which their information was shared. Hu denied allegations both that Sesame was contracted to execute the governmental social credit system, and that it shared user data and scores with the government without users' prior consent¹⁰⁹. At the same time, Alibaba is one of the private actors collaborating with the implementation of the blacklist scheme, disabling luxury purchases on its Taobao and Tmall platforms for designated individuals¹¹⁰. Moreover, privacy seems to become an increasing concern for users. In early 2018, Alipay introduced an annual reporting feature where users, by default, gave permission to access their Sesame scores. This led to an outcry on social media, a rapid reversal by Alipay, and a strongly worded apology¹¹¹.

From the point of view of the PBoC, which sought to develop the credit scoring industry, systems developed by Alibaba and the other businesses involved were not successful. In fact, Tencent's version of a credit system was ordered to shut down a day after it went into wider application¹¹². A first major problem the bank identified in its pursuit of both expanded domestic consumption and better financial risk control was that the eight businesses had developed their credit arms to support their core commercial, financial and insurance businesses, leading to conflicts of interest¹¹³. There were also concerns about the accuracy about some of the data generated by the private scoring systems, often due to the fact that they could only capture

¹⁰⁶ "China: When big data meets big brother." *Financial Times*. 19 January 2016. Online:

<https://www.ft.com/content/b5b13a5e-b847-11e5-b151-8e15c9a029fb>

¹⁰⁷ "Ant Financial Pushes Sesame Credit In New Tie-Ups." *Seeking Alpha*. 10 May 2017. Online:

<https://seekingalpha.com/article/4071862-ant-financial-pushes-sesame-credit-new-tie-ups?page=2>

¹⁰⁸ "Quanguo chengshi xinyong mianya fuwu baogao [National Report on Urban Credit Deposit-Waiving Services]." Ant Financial. 23 March 2017. Online:

<https://www.antfin.com/newsDetail.html?id=590aa809e2dac846a0361260>

¹⁰⁹ "Zhima Credit does not share user scores or data". *Financial Times*. 15 November 2017. Online:

<https://www.ft.com/content/ec4a2a46-c577-11e7-a1d2-6786f39ef675>

¹¹⁰ Ahmed, 2017, n. 66.

¹¹¹ "After Privacy Concerns, Zhima Credit Admits It Was 'Stupid'". *Sixth Tone*. 4 January 2018. Online: <http://www.sixthtone.com/news/1001503/after-privacy-concerns%2C-zhima-credit-admits-it-was-stupid>

¹¹² "Tencent Pulls Credit Scoring Service, Source Says." *Caixin Global*. 1 February 2018.

<https://www.caixinglobal.com/2018-02-01/tencent-pulls-credit-scoring-service-source-says-101206268.html>

¹¹³ "No more loan rangers? Beijing's waning support for private credit scores." *Reuters*. 4 July 2017.

Online: <https://www.reuters.com/article/ant-financial-credit/no-more-loan-rangers-beijings-waning-support-for-private-credit-scores-idUSL3N1JO05W>

credit data from their own customer bases and business activities. Consequently, the PBoC decided not to extend the eight licences. A solution was found when the eight companies, together with the National Internet Finance Association (NIFA), jointly established a united credit scoring bureau, named Baihang. NIFA is a sectoral intermediary organization established in 2015, which falls under the administrative leadership of the PBoC¹¹⁴. As such, and given NIFA holds a 36% stake in Baihang, PBoC control over tech-based scoring initiatives remains assured.

Conclusion

As it stands today, it is mistaken to conceive the Social Credit System as a single, integrated entity. Instead, the term covers an entire ecology of fragmented initiatives that share a basic set of objectives, operational frameworks and policy language. From the government's perspective, the two prime objectives are improving legal and regulatory compliance, which is the major purpose of the punishment systems, and developing the financial services industry. For the private sector, this created opportunities to develop their own scoring systems, which combine the functions of user ratings on platforms and a loyalty scheme. While the concept of social credit originated as a means to remedy a perceived lack of trust in the marketplace, its purposes now also include combating benefit fraud, incentivising domestic consumption and the development of new economic activities as part of a broader strategy to rebalance China's economic development process, lubricating the cogs of consumer commerce by inducing individuals, particularly the unbanked and underbanked into a system where they can become trusted traders through verification and assessment by a reliable third party, harmonising social conduct, and perhaps most importantly, devising new ways to discipline governmental actors. It may thus be one example of what Schlaeger calls the "battering ram", the use of information technologies to knock down the protective walls subordinate government departments have erected to protect them from the scrutiny of their administrative superiors. At the same time, for the private businesses operating their own credit system, it has become a useful tool to reward loyal customers and render their platforms more attractive than those of competitors.

The SCS blurs the line between state and non-state actors. On the one hand, the blacklist mechanisms in the SCS amplify traditional law enforcement tools, vesting the norms to be enforced through the system in existing laws and regulations. With regard to financial scoring, however, the cash-based nature of China's economy meant developing a credit economy required the use of non-financial proxy categories to substitute for a well-measured creditworthiness record. In view of the conflicting statements by private businesses about their data collection and processing practices, the question of the extent to which they take the enforcement of social norms into consideration in this process is an open one, pending future research. However, the notion of private enforcement of social norms through credit reports itself is a promising topic for comparative research. Early forms of credit reporting in the United States, such as the progenitors of today's Equifax, were explicit about their goal to impose "discipline" on citizens. In this pursuit, credit investigators

¹¹⁴ "About NIFA." *NIFA*. Online: <http://www.nifa.org.cn/nifaen/2955866/2955892/index.html>

would include elements ranging from the stability of a subject's marriage, their college grades, racial and gender prejudices, and the McCarthyite biases of the 1950s¹¹⁵. Not until the Fair Credit Reporting Act of 1970s would rights to personal data, limitations to information sharing and anti-discrimination requirements become part of federal law. The extent to which "data justice" exists in today's economy remains a question worth asking¹¹⁶.

The broader question remains whether the SCS is, or has the potential to become, the Orwellian nightmare many fear it to be: an omniscient machine hoovering up the massive amounts of data individuals generate as they plod through their lives, processing it to deliver a quantified score that creates an ideological and consumerist straightjacket for every Chinese citizen. Undoubtedly, Party ideology still fundamentally believes in social engineering on the basis of system science, on the malleability and transformability of the individual, and a rather maximalist approach to social intervention that sees this reading of the SCS as an attractive vision. Not only the SCS plan, but also national big data and artificial intelligence strategies explicitly intend the expanded use of automated, data-based systems for social control. Leading Party media call for the use of these systems for informing policymaking, automating internal governmental discipline, forecasting economic and social trends, and creating a situation in which "government prepares the stage, society sings the harmony"¹¹⁷. The underlying creation of information technologies that ensure more effective ways of "seeing like a state"¹¹⁸ indicates a commitment towards radical transparency: information on subjects' trustworthiness is to be made publicly available, and in some circumstances even actively broadcast. Similarly, information about the conduct of bureaucratic departments and, in some cases, their officials, as well as the compliance record of businesses, is to be made available.

Nevertheless, at present, the SCS remains a rather crude tool for social sorting. To a certain degree, this is perhaps due to the fact that the Chinese government does not see the need to control the conduct of its citizens through surreptitious or invisible means. Social control techniques prevalent in Western liberal democracies, such as gamification or nudging, are supposed to be largely unnoticeable: individuals are steered through the exploitation of inherent biases and unconscious decision-making strategies. The SCS on the other hand does not hide its paternalism under a bushel: it is part of an openly declared and widely propagated effort to instill civic virtue, and conjoined with propaganda campaigns to raise individuals' consciousness about their actions. More specifically, in order to assess whether and how the "Orwellian"

¹¹⁵ "Equifax Isn't A Data Problem. It's A Political Problem." *Huffington Post*. 13 September 2017. Online: https://www.huffingtonpost.com/entry/equifax-credit-bureaus-reform_us_59b95627e4b0edff97187e7d

¹¹⁶ Taylor, Linnet. "What is data justice? The case for connecting digital rights and freedoms globally." *Big Data & Society* 4.2 (2017): 2053951717736335.

¹¹⁷ Chen, Gang. "Yunyong da shuju siwei he shouduan tisheng zhengfu zhili nengli [Use Big Data Thinking and Methods to Enhance the Government's Governing Capacity]." *Qiushi*. 12 July 2016. Online: <https://chinacopyrightandmedia.wordpress.com/2016/07/12/use-big-data-thinking-and-methods-to-enhance-the-governments-governing-capacity/>.

¹¹⁸ Scott, James C. *Seeing like a state: How certain schemes to improve the human condition have failed*. Yale University Press, 1998.

transformation is actually taking place, shifts five dimensions will be useful in guiding future research. The first dimension concerns whether SCS data originates from government or private sources. At the present time, nearly all data on which decisions in the punishment systems are generated by government departments and recognized regulatory authorities. The information that informs financial credit scoring does also originate from the private sector, but is currently only used within this quite narrow scope. The second dimension entails the nature of the rating system itself; whether it is binary or a more sophisticated ranking mechanism. The SCS punishment systems currently are clearly binary: one is either on or off the blacklist. The major central planning documents do not mention quantified scoring. In contrast, Sesame Credit, as well as the abortive Suining experiment and the ongoing Rongcheng trial, are examples of systems with a more fine-grained spectrum of outcomes based on a quantified assessment. A third dimension consists of the nature of decision-making processes, whether judgments and scores are predominantly based on human assessments, programmed algorithms or self-changing deep learning applications over which humans have no full control. This is of particular importance when the SCS is to be used as a tool for normative control: if individuals are to comply with the rules and norms the SCS is built to support, these expectations should be transparent. Simply put, individuals need to know the benchmarks for optimizing their behavior. If automated decision systems do not enable this transparency, their role in social control may thus be limited. A fourth dimension is the temporal orientation of judgments. At present, both the public and private credit scoring systems are past-oriented: they evaluate and rank individuals' previous conduct and append consequences in the present. A future-oriented system would act in a probabilistic manner, delineating scopes for actions based on individuals' expected or likely conduct in the future. A fifth, connected dimension is whether decisions are made on an individual or collective basis. At present, the SCS only takes into account individual conduct, there is no statistical assessment on where this conduct falls in the distribution of the overall population. It may be the case that the private and financial credit systems do take into account how individuals compare to broader classes, but again, the coverage of these systems is comparatively narrow.

Future research on these developments also needs into account potential obstacles. The Party-State also faces no meaningful legal constraints against its actions *per se*. However, while Chinese government can do anything, it can't do everything. In particular, there are three categories of challenges that must be negotiated. The first one is external rejection. While it is not always easy for Chinese citizens to oppose particular policies, there is no shortage of examples where central and local government reconsidered or reversed decisions after popular protest. Within the ambit of the SCS itself, the response to the abortive Suining trial demonstrates the difficulty of implementing a policy that is largely rejected by the citizenry. More recently, the government's response to increasing concerns about user privacy on the dominant online platforms Tencent and Alibaba, by shutting down the former's social credit trial and reprimanding the latter, further underscores the need to ensure citizens are, at least for the most part, on board with the programme. The second one is conflict between the various bureaucracies and actors that constitute the SCS. These tensions can be vertical, where the SCS is partly intended to be a tool to instil discipline over and reduce the often-abused discretion of the very same local governments on which

the central system relies for information gathering, implementation and enforcement. The difficulties in integrating the various departmental punishment schemes further indicate the difficulty of coordinating large, cross-bureaucratic programmes in the Chinese context. The relationship between public and private actors is sometimes uneasy as well: government departments often consider corporate data gathering processes with a mixture of envy and concern. The third category concerns enabling the system to work at a technical level. First, the quality of data going into the system itself needs to be guaranteed, otherwise, the reliability of any of its outcomes is inevitably compromised. A particular problem will arise when individuals try to game the system by maximizing particular measured proxies. Compatibility and interoperability needs to be ensured between data storage formats and systems of central and local, public and private actors. Subsequently, the data needs to be processed and interpreted in a way that ensures the construction of meaning from the data results in useful information and legitimate decisions. These three categories of constraints, external dissent, internal fragmentation, and difficulties in constructing underlying governmental architectures are, of course, not new to any observer of Chinese law and governance. They constitute some of the most fundamental pathologies at the heart of the Chinese polity. To a considerable degree, the SCS is based on the techno-optimist belief that automation might enable the state to transcend them. Yet ironically, they may well infect these very efforts too.

Lastly, future analysis of the SCS would do well to study its relationship with other social management projects. In functional terms, the SCS is currently relatively limited to market supervision and, to a certain degree, internal oversight. It is housed within a section of the bureaucracy that is less involved with politically salient and sensitive issues, and does not seem to include questions of crime, dissent and subversion. Rather, these are the province of a domestic security apparatus run entirely within the Ministry of Public Security and its associated entities. Here, we do find a large bureaucracy aimed at forecasting trends and informing pre-emptive decision-making, leveraging big data approaches as part of a ceaselessly intensifying risk-management and stabilization preservation effort. In other words, the SCS should not be understood as a comprehensive governance tool, but as only one technology-empowered means of governance among many. Sometimes, these may learn from or build on each other, but analysis must also identify where they are distinct. Ideas, objectives, approaches, means and strategies for social control in China may emerge from a unified political context, but the complexities of organization and other intervening variables fragment them as much as they do the rest of China's political-legal landscape.

Table 1: Institutional membership list of the Interministerial Joint Conference for the Construction of the SCS (2007)

State Council General Office
National Development and Reform Commission
National Leading Group for the Rectification and Standardization of the Market Economy Order
Ministry of Commerce
People's Bank of China
General Administration of Customs
General Administration of Taxation
State Administration of Industry and Commerce
General Administration of Quality Supervision, Inspection and Quarantine
State Council Legal Affairs Office
Banking Regulatory Commission
Securities Regulatory Commission
Insurance Regulatory Commission
State Administration of Foreign Exchange
State Council Information Office

Source: 国务院办公厅关于建立国务院社会信用体系建设部际联席会议制度的通知, 18 April 2007. http://www.gov.cn/gongbao/content/2007/content_632090.htm

Table 2: Institutional membership list of the Interministerial Joint Conference for the Construction of the SCS (2012)

National Development and Reform Commission
People's Bank of China
Central Discipline Inspection Committee
Central Propaganda Department
Central Politico-Legal Committee
Central Leading Group for the Construction of a Spiritual Civilization
Ministry of Supervision
Ministry of Education
Ministry of Industry and Information Technology
Ministry of Public Security
Ministry of Civil Affairs
Ministry of Justice
Ministry of Finance
Ministry of Human Resources and Social Security
Ministry of Environmental Protection
Ministry of Housing and Urban Construction
Ministry of Agriculture
Ministry of Commerce
Ministry of Culture
Ministry of Health
General Administration of Customs
General Administration of Taxation

State Administration of Industry and Commerce
 State Administration of Quality Supervision, Inspection and Quarantine
 State Intellectual Property Office
 National Bureau of Corruption Prevention
 State Council Legal Affairs Office
 Banking Regulatory Commission
 Securities Regulatory Commission
 Insurance Regulatory Commission
 State Administration of Civil Service
 State Food and Drug Administration
 State Administration of Foreign Exchange
 Supreme People's Court
 Supreme People's Procuratorate

Source: 国务院关于同意调整社会信用体系建设部际联席会议职责和成员单位的批复, 17 July 2012, http://www.pkulaw.cn/fulltext_form.aspx?db=chl&gid=179820

Table 3: Score table for the Suining Mass Credit System

Commercial services credit information (150 points)

Bank loans (50 points).
 Credit card non-repayment (50 points).
 Contract performance (30 points).
 Peer-to-peer loans (20 points)¹¹⁹.

Social services credit information (120 points)

Tax arrears or evasion (50 points).
 Utility fee payments (35 points).
 Social security payments

Social management credit information (530 points)

City management (25 points).
 Producing or selling fake goods (35 points).
 Pyramid selling, swindling (35 points).
 Birth planning (35 points).
 Heretical activities (50 points).
 Household virtue (50 points)¹²⁰.
 Social order (50 points)¹²¹
 Property theft (50 points).
 Traffic violations (50 points).
 Offering and taking bribes (50 points).
 False accusations and slander (100 points).

Special Social Credit information

¹¹⁹ Both non-repayment and illegal lending were punished.

¹²⁰ This includes domestic violence and failure to take care of the elderly or children.

¹²¹ This refers to “encircling, stalking or harassing Party and government bodies, enterprises or construction sites”. Exposure by news media was sufficient for points deduction.

Civil litigation (50 points).
Administrative punishment (50 points).
Criminal punishment (100 points).

Table 4: 2016 Obligations for Party and State Bodies in the Joint Punishment System¹²²

- (1) Reference for examination and approval when establishing securities companies, fund management companies and futures companies, and for registration as manager in private equity investment funds; restriction from purchasing listed companies
- (2) Strict examination and verification when issuing bonds in the interbank market
- (3) Restriction from establishing financial guarantee companies; restriction from acting as CEO, supervisory board member of senior manager in financial guarantee companies or financial organs
- (4) Assistance in due diligence for government procurement programme information; restriction from participation in government procurement in activities
- (5) Restriction from the establishment of insurance companies, restriction from the purchase insurance products with a cash value by paying high insurance premiums
- (6) Reference for cautious consultation when examining and approving the establishment of commercial banks or branches, representative offices as well as buying shares in or purchasing commercial banks
- (7) Suspension from share-based incentive plans in domestic State-owned or controlled enterprises, or termination of entitlement as a participant in share-holding incentive schemes
- (8) Cautious reference when checking and managing foreign exchange quota
- (9) Cautious reference when awarding credit authorization to financial bodies
- (10) Restriction from subsidies and social security payments support
- (11) Reference when assessing preferential policies
- (12) Strengthening daily supervision, management and inspection
- (13) Restriction from acting as statutory representative, CEO or supervisory board member in State-owned enterprises
- (14) Restriction from registry as the statutory representative of an undertaking work unit
- (15) Open publication through the "Credit China" website and the enterprise credit information publication system
- (16) Open publication through major news web sites.
- (17) Restriction from recruitment as civil servant or staff in undertaking work units.
- (18) Prohibition from recognition as civilized work unit or model of virtue
- (19) Restriction from flying on aircraft, soft sleepers on trains and other such consumption acts not necessary for life or work
- (20) Restriction from staying in high star-rated hotels and guesthouses; restriction from consumption in nightclubs and golf courses
- (21) Restriction from purchasing immovable property and State-owned property

¹²² "Guanyu dui shixin bei zhixingren shishi lianhe chengjie de hezuo beiwanglu. [Memorandum of Understanding on Cooperation concerning Implementing Joint Punishment against Untrustworthy Persons Subject to Enforcement]." National Development and Reform Commission. 28 January 2016. Online: http://credit.mot.gov.cn/zhengcefagui/guojia/201607/t20160706_2058154.html

- (22) Restriction from tourism and vacationing to a certain degree
- (23) Restriction from entering sons and daughters in high fee-paying private schools
- (24) Inquiry into identity, passport and vehicle ownership information; assisting search for untrustworthy persons subject to enforcement; restriction from leaving borders; assisting with the sealing and confiscation of vehicles.
- (25) Restriction from using State-owned forest land, restriction from applying for focus forestry projects, restriction from examination and approval for State-owned grassland usage rights, restriction from applying for focus grassland protection projects.
- (26) Inquiry into customs verification status of untrustworthy persons subject to enforcement; restriction from becoming a customs-verified enterprise; implementing strict supervision and management over imported and exported goods.
- (27) Inquiry into examination and approval for production safety permits; restriction from engaging in trading of medicine, foodstuffs, etc.; restriction from acting as main responsible person, CEO, supervisory board member, or high level manager in production and trading businesses.
- (28) Inquiry into registration information for fishing vessels
- (29) Inquiry into registration information for passenger and goods vehicles
- (30) Inquiry into registration information of lawyers; restriction from participation in selections and award schemes
- (31) Inquiry into marital registration information
- (32) Assisting in the conviction and punishment for refusing to perform judgments or rulings.