

We're just data: Exploring China's social credit system in relation to digital platform ratings cultures in Westernised democracies

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Karen Li Xan Wong and Amy Shields Dobson 

Curtin University, Australia

Abstract

Social media platforms and apps have become increasingly important tools for governance and the centralisation of information in many nation states around the globe. In China, the government is currently piloting a social credit system in several cities in an ambitious attempt to merge a financial credit score system with a broader quantification of social and civic integrity for all citizens and corporations. China has already begun to experiment with metrics and quantification of the value and virtue of its citizens, going beyond the function of measuring workplace performance and health-related self-tracking to measuring one's purchasing and consumption history, interpersonal relationships, political activities, as well as the tracking of one's location history. China has also already begun to apply a reward and punishment system that rewards those who comply with the Chinese government's ideals and punishes those who deviate from them. Although there are no such ambitiously unified systems currently proposed in Western liberal democratic countries, some aligned structures and cultures of social media use are already well in place. This article seeks to offer a comparative examination of the structures and cultures of China's social credit system with those which are already present and in place in Western liberal democratic countries. While it may be convenient to digitise everyday social, political and economic life, China's social credit system brings about a vision of what may be to come, should democratic countries continue to do so without stricter data use policies in place.

Keywords

China, digital culture, F. policy and law, privacy, ratings cultures, social credit, social media

Introduction

The social credit system is the Chinese government's ambitious plan for creating a system for measuring social and civic integrity as well as financial credit scores. It is planned that participation

Corresponding author:

Amy Shields Dobson, Internet Studies, Curtin University, Kent Street, Perth, WA 6845, Australia.

Email: amy.dobson@curtin.edu.au



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will be mandatory for all Chinese citizens in the year 2020 (Hvistendahl, 2017). The social credit system bears a resemblance to, and is inspired by, credit score systems used in Westernised countries, such as FICO scores in the United States. However, the social credit system in China goes beyond credit score systems. Not only does the system take one's financial information into account but also includes broader aspects of a person's life, such as their purchase history, political activities and interactions with others (The Week, 2018). Each company and citizen in China will have a citizen score which will be affected through constant evaluation and monitoring of these aspects of one's daily life through digital networks. The main purpose of the social credit system, according to the Chinese government, is to foster honesty among the citizens of China. China seeks new digital ways of cultivating trust and policing 'dishonesty', understood as the common factor across high-level corruption, commercial fraud, food safety crimes, and the production and selling of counterfeit goods, as well as the 'malicious arrears' of individual citizens, such as the evasion of taxes and fleeing bank debts (Wang, 2017).

Honesty is a highly valued moral virtue in China. Implementing a social credit system that comprises disciplinary technology that rewards those who are honest, trustworthy and virtuous, while punishing those who display signs of dishonesty, corruption and deception is alleged by the Chinese government to be a necessity in fixing moral decay and bringing about a virtuous state of social harmony in China. China is considered a 'low trust' society in comparison with Westernised cultures (De Cremer, 2015). The Chinese concept called *Guanxi* is highly valued among the Chinese society, whereby almost automatic and personal trust exists between people who have personal relationships with one another, whereas strangers are immediately shown with distrust (De Cremer, 2015; Hunwick, 2018). Furthermore, Chinese society is thought to be currently facing a crisis of trust related to several cases of fraud and corporate corruption and mismanagement exposed in China over the last decade, including the toxic baby milk scandal in 2008 (Klabisch, 2018). China remains the counterfeiting capital of the world, with many companies producing goods with fake luxury brand labels (Suokas, 2016). When one is deemed to be not trustworthy, the individual may 'lose face', and their reputation being tarnished. In China, the maintenance of one's reputation and social standing is very important, as individuals do not want to bring shame to their family (Qi, 2017, p. 13). 'Face' represents the personal dignity of an individual and how they are viewed by others (Wang, 2017). The social credit system in China has been linked into these important cultural discourses around trust and is billed as a solution to the crisis of trust and dishonesty in Chinese society.

While the Chinese government may promote the social credit system as a powerful tool in establishing China to be a prosperous, harmonious and successful state, in the eyes of the media in Western liberal democratic countries, the social credit system has been strikingly portrayed as an omnipresent and panoptic mass surveillance system which is instrumental to the Chinese government for social control. Headlines such as 'Big data meets Big Brother as China moves to rate its citizens', 'China Uses "Digital Leninism" to Manage Economy and Monitor Citizens' and 'China's dystopian social credit system is a harbinger of the global age of the algorithm' have been prominent in the Western media (Botsman, 2017; Brehm & Loubere, 2018; Browne, 2017). The social credit system is described in Western media as an advanced system that consists of technologies for mass surveillance and social control, disguised and hidden behind promises of a flourishing state with a harmonious and a righteous society, as well as the increase in credit opportunities for the Chinese citizens. In Western democratic countries, there are increasingly prominent public concerns about the issue of surveillance, data use and privacy, as companies and

governments continue to monitor citizens and gather information about them across multiple types of digitally connected platforms, apps and devices. In common with the systems currently being piloted in China, in liberal democratic countries, the *representations* of individuals through their digital activities, such as consumption behaviours and social interactions, are suggested to have become more pertinent as the subject of surveillance than physical, biological selves and bodies (Galič, Timan, & Koops, 2017). Digital data collected are used to construct unique profiles for each individual on different apps and platforms, and such profiles play a part in limiting one's access to certain information, services and places, sometimes leading to the possibility of the offering or refusal of certain social and economic perks (Galič et al., 2017). Credit score systems long in use in countries like the United States are one example. The rating mechanisms present in platforms such as Uber, Ebay and Facebook are another example that constitute mechanisms whereby the value of an individual is calculated representationally, in the form of the number likes, ratings or stars awarded (Hearn, 2010); with the prevalence of rating measures available across various digital platforms, many people are also participating in the digital and representational rating of others (Hearn, 2010).

The concept of surveillance in Western democratic countries has been theorised as an 'exchange relation', whereby individuals are submitting themselves to progressively comprehensive forms of monitoring in order to have access to the services provided, often freely or cheaply, by social media and search companies (Andrejevic, 2007). This has created 'digital enclosures' of data ownership over a very broad array of social, cultural and political lives and practices (Andrejevic, 2007). While all the infrastructures and technologies are thus already largely in place in Western democratic countries, they are currently often unconnected. This is in contrast to China's social credit system plans, whereby the Chinese government aims to create an ambitiously centralised system. The objective of this article is to comparatively assess China's social credit system, together with the cultural, social and technological infrastructures that are similarly present in Western democratic countries in light of concerns over the implementation of similar systems in Westernised democratic countries in the near future.

Social credit system pilot projects in China

On 14 June 2014, the social credit system in China was first announced via a document entitled 'Planning Outline for the Construction of a Social Credit System' by the State Council of the People's Republic of China. The social credit system project (SCSP) is coordinated by the Central Leading Small Group for Comprehensively Deepening Reforms and is managed by China's state leader Xi Jinping (Meissner, 2017). By 2020, the SCSP is expected to be up and running in full function as the Chinese government wishes to launch it nationwide and make it compulsory for all Chinese citizens (Meissner, 2017). The SCSP consist of 'blacklist' and 'red list' systems that supports reward and punishment mechanisms built into the system (Creemers, 2018; Liu, 2017). Model citizens with high scores will find themselves on 'red lists', while those who possess low scores will find themselves on 'blacklists' (Creemers, 2018). Each citizen in China is expected to have their own exclusive score tailored to their behaviour as it is the Chinese government's intention to link the scores together with the identity card system in the hopes of establishing a unified social credit code system (Yin, 2014).

The execution of the SCSP is in its preliminary testing stages. Currently, there are pilot projects in which both the public and the private sectors cooperate together, such as the *Sesame Credit*

or *Zhima Credit*. The Chinese government had enlisted the help of eight Chinese companies, including Tencent and Baidu (Economy, 2018; Hatton, 2015; Swanson, 2015). The government has allowed them to build and implement their own pilot credit systems, in the hopes of implementing some of the algorithms and centralising them in their own SCSP (Economy, 2018; Hatton, 2015). One of the more notorious pilot projects is *Sesame Credit*, developed by Alibaba. Alibaba has a large and unique database of consumer information. This allows the company to give a *Sesame Credit* score to every individual in the database based on their financial transactions and other factors such as their personal information and timely payment on bills (Hatton, 2015). *Sesame Credit* is largely based on credit score systems developed in countries like the United States, but expands to include social ranking systems that rate individuals based on ‘credit history’, ‘fulfilment capacity’, as well as interpersonal relationships and purchasing history (Botsman, 2017; Greenfield, 2018; Hvistendahl, 2017). Among the different specific factors that *Sesame Credit* uses to score individuals, the types of products purchased is one known factor (Botsman, 2017). This shows that the *Sesame Credit* aids in shaping the behaviour of Chinese citizens, as it ‘nudges’ individuals away from behaviours and purchases and towards others. While individuals have their credit scores shared publicly, the algorithms behind them are a trade secret. Therefore, users will not be able to know how their data are being collected, used or shared by Alibaba (Hatton, 2015; Hvistendahl, 2017). As the algorithms lack clear transparency into how the credit scores are calculated, users are obliged to accept the scores given.

Another pilot project currently operating in China is the ‘Honest Shanghai’ application. Individuals can opt to voluntarily download and sign up for this app by providing their identification number from their resident identity card or through the usage of facial recognition technology (Creemers, 2018). The application itself draws from 3000 pieces of information from nearly 100 public authorities (Schmitz, 2017). The application relies mainly on facial recognition software to identify and locate chunks of personal data associated with an individual across multiple government platforms. These data are then collected and integrated to produce a customised credit report on individuals and businesses. Whether the Chinese government decides to integrate these private pilot platforms with a centralised SCSP in the near future or allow each of them to continue working independently, or even completely abandoning them, remains to be seen.

With reference to the public sector, there are already several pilot cities in China where social credit schemes have been implemented by China’s central government and are currently being operated by the respective state governments. One of the public pilot projects that is currently in operation in China is located in Rongcheng, a city in the Shandong province. Each resident in Rongcheng initially starts off with 1000 points and, depending on their scores, will have a grade which ranges from A+++ to D (Mistreanu, 2018). According to the Director of the current pilot project in Rongcheng, individuals who possess a score of more than 1050 are considered to be model citizens and will find themselves on ‘red lists’, while those who possess a score of 849 should take caution as it is at the warning level before certain restrictions are imposed on them (Farrell, 2017). If an individual’s score drops below 599, they will find themselves added to ‘blacklists’, published publicly, as well as becoming an ‘object of significant surveillance’ (Deutschlandfunk Kultur, 2017; Farrell, 2017). Those who possess scores that are situated in the C-group will have certain restrictions imposed on them and are visited regularly by government authorities, while those who possess scores that are situated in the D-group will lose their credit-worthiness and will no longer qualify for certain job positions like management roles (Deutschlandfunk Kultur, 2017).

Techno-social tools for influencing Chinese society

Before the establishment of the SCSP, there were related efforts to create digital social systems undertaken by the Chinese government. The Golden Shield Project is one of them. According to Hoffman (2017), the Golden Shield Project was an early phase in the technical establishment of a SCSP and consisted of China's plan to link all of the state's individual surveillance networks with a large centralised online database to automate information sharing. This is only recently feasible. Technology has made it possible for the Chinese government to compile all the collected data on Chinese citizens in digital databases, as well as allow them to integrate surveillance with systems that consistently 'nudge' towards compliance (Creemers, 2016). Resulting interventions have already been implemented in several places in China. In Dengfeng, a city in the Henan province, one is greeted with an audio message instead of a ringing tone that informs the caller that the person reached is an irresponsible and dishonest person when trying to call an individual who is on the system's blacklist (Wang, 2017). In the city of Taishan, light-emitting diode (LED) billboards and TV screens located in public places have been used to expose and publicly humiliate people on the blacklist by displaying their pictures (Yu, 2018). Other punishments include restrictions from travelling via trains and airplanes. Over 44 government departments in China have signed a memorandum to limit and restrict 'discredited' individuals across multiple levels (Yang, 2017). The memorandum can be seen as an important act in regulating the behaviour of Chinese citizens via the creation of a network of entities that can cooperate together and act in the interest of the state by punishing certain citizens. Across a span of multiple years starting from 2013, it has been reported that around 7 million people have been banned from taking flights and another 3 million people have been banned from riding on high-speed trains by the Chinese government as a punishment for showing dishonest behaviour by not repaying debts to the state (Xu & Xiao, 2018; Yang, 2017; Yu, 2018).

As technology continues to advance, the SCSP integrates further tools such as facial recognition technologies. China is believed to own the world's largest camera surveillance networks with 176 million surveillance cameras at present and expected to grow up to 626 million by 2020 (Global News, 2017; Grenoble, 2017; Wang, 2017). With the integration of China's large camera surveillance network with facial recognition technology, the Chinese government will have the ability to cross-reference surveillance footage with other kinds of digital data on individuals in the centralised database (Wang, 2017). Such developments chime with Foucault's theory of biopower, where he asserts that the regulation of the body is the best and most efficient method for states to govern people (Ceyhan, 2012). Foucault (1991) argues that a succession of control techniques to produce obedient and loyal citizens is vital in the survival of a state, and parallels can be seen with the technological tools used in China's SCSP. Several pilot cities in China, such as Shenzhen, Jinan and Fuzhou, have already been utilising facial recognition technologies to track and identify offenders such as jaywalkers and immediately publish their names in local media (Chin & Lin, 2017; Wang, 2017; Yu, 2018). These facial recognition technologies are also currently being used in airports and banks to verify identities as well as to allow access to places like hotels and residences (Denyer, 2018). This technology is also being used to police minor crimes such as theft of toilet paper from public restrooms by limiting the amount of toilet paper that can be taken (Denyer, 2018; Grenoble, 2017). Through such developments, it is then both the digital representation of individuals that is monitored (Galič et al., 2017), along with the faces and movements of bodies in physical spaces. This can be seen as a tool for assimilating biopower into digital systems.

Comparative infrastructure possibilities for social credit systems in Westernised states

Credit score systems

The infrastructural and cultural foundations for a social credit system exist in Western democratic countries. Across different countries, the credit score system has already been implemented and is widely used across different areas in many democratic countries. Due to China's large population, it has been difficult for the Chinese government to construct a centralised financial credit score system (Hvistendahl, 2017). Nevertheless, the Chinese government has continued to place great emphasis on establishing a centralised credit score system through the SCSP. A large part of the intention of the SCSP by the Chinese government is to implement financial credit score systems more widely in China (Hvistendahl, 2017). The general aim of credit score systems is to predict risk for financial institutions, and banks use such systems to evaluate financial and social data to enable them to differentiate between low-risk and high-risk clients (Thomas, Crook, & Edelman, 2017).

However, credit scores statements that are formulated by mostly large private agencies have shown signs of going beyond their stated function and more generally acting as measures of trustworthiness (Arya, Eckel, & Wichman, 2013). The FICO system determines the credit score of American citizens and has the possibility to influence the interest rates that they are offered as well as determining whether they can obtain loans, credit cards and mortgages (Schneier, 2016). The FICO system primarily looks at the criteria of one's new credit, types of credit used, payment history, length of credit history and the amounts owed in order to calculate one's total FICO score (Hurley & Adebayo, 2017). In Germany, the Schufa also utilises geo-scoring: factors such as having numerous neighbours with poor credit ratings or living in a low-rent or substandard neighbourhood can lead to one's overall credit rating to be lowered (Jahberg, 2018). This indicates that these credit scores already exert extensive power in several Western democratic countries: an individual's credit score can influence significant aspect of life such as career opportunities, the possibility of obtaining loans and the locations where one can live (Jahberg, 2018; Wilson, 2018).

Several companies have begun to experiment with social media data to build an algorithmic model that is able to measure creditworthiness through the evaluation of one's phone number, email and social media accounts. The posts, pictures and connections the individual has on their social media profiles will give companies the ability to evaluate how the individual is currently living their life in alignment or not with deemed creditworthiness, based on this representational data. In the United States, the financial company Affirm has moved away from traditional credit reporting to the scanning of one's profile on social media platforms like Facebook to evaluate if they are deemed worthy of a loan (Redrup, 2017; Reisinger, 2015). In Australia, Lodex predicts likelihood of loan repayment through the analysis of an individual's smartphone usage and emails (Redrup, 2017). Factors such as one's purchases online and the frequency at which one responds to emails are some of the data points taken into account by Lodex's algorithmic systems (Redrup, 2017).

Metrics and self-quantification movements

The emergence of a plethora of digital platforms in conjunction with computational developments that allow for very large data storage capacity is giving rise to a society where many aspects of human behaviour and life are being measured quantitatively, and human judgement is being replaced by algorithmic models that function to calculate the values of human beings (Carah, 2014;

Cheney-Lippold, 2017). In many countries around the world, quantification itself is becoming routine, as metrics are discursively constituted as key to enhancing the lives of individuals as well as improving bureaucratic efficiencies (O'Neil, 2016). As more wearable devices and mobile applications such as Google Fit and Fitbit pedometers are being used by individuals for self-tracking, the quantification of one's self has become normalised (Lupton, 2016; Sharon, 2017; Swan, 2013). Metrics are being applied to individuals in areas ranging from the measurement of total steps taken or the level of calorie intake, to one's water consumption, sleep, heart rate, alcohol consumption and estimated blood-alcohol levels, to bowel movements, stress level indicators and so on (Lupton, 2016). Several companies do incorporate some sort of reward measure in the form of soft incentives. Like China's social credit pilots various reward mechanisms, they provide light 'nudges' to individuals in the form of rewards for conformity to a specified behaviour. In Australia, some insurance companies now offer lower premiums on life insurance if individuals decide to share data from their fitness-tracking device (Munro, 2015). In the United States, there are health insurance companies that offer individuals Amazon gift cards as a form of reward if they reach their daily goals in relation to measurements via Fitbit wearables and iPhone health apps such as steps taken daily (Purbasari, 2016). Companies have also begun expanding into other areas such as the tracking of people's driving so that careful drivers will be offered a lower insurance payment (Dredge, 2013).

Ratings cultures

The act of quantification also goes beyond the measuring of one's self, as ratings cultures encourage digital citizens to designate a value to other individuals and services as well. Individuals are encouraged to publish public reviews and ratings of other individuals and services, and non-participation in ratings culture can become a form of social and economic disadvantage or marginalisation, akin to other kinds of digital divides (Dahlberg, 2015). From writing restaurant or online entertainment content reviews, rating food delivery services, menu items, to rating drivers and driver services and other service-industry businesses, to rating teachers and learning institutions, government departments and services, to prisons, many common interactions, services and public institutions now employ means of quantification through user-generated reviews and ratings (Goldman, 2011; Mahdawi, 2016; Sanders & Sheptycki, 2017; Schwartzapfel, 2015, p. 52). Companies such as Uber, OpenTable, and Airbnb each possess a two-way ranking system. Service providers and customers have the power to rate one another. These review and rating mechanisms have been theorised as the 'digitisation of word of mouth', as well as creating a new kind of currency in the form of reputation (Goldman, 2011; Hearn, 2010). There have been recent controversies in Western liberal democratic countries over the development of rating systems and applications that go beyond the rating of businesses and services to apply performance-based criteria to individuals. PeepLe, which has been described as a 'Yelp for people' application, was created with the notion of wanting to create a new kind of digital currency in the form of character (Newcomb, 2016). Individuals can be rated in three areas: dating, professional, and personal (Newcomb, 2016). Several scholars believe that digital rating and review mechanisms have shifted from measuring trustworthiness to measuring performance (Scott & Orlikowski, 2012). Where an intended function of digital application rating mechanisms was to allow customers to browse and select apparently trustworthy services and providers, they now focus on continuously evaluating the performance of individuals. This prominent rating culture has been suggested to be associated with

broader social shifts and the creation of new forms of political as well as social inequality (Mahdawi, 2016; Scott & Orlikowski, 2012). These ratings are not only able to segregate society through the production of ‘hierarchies of differentiation’ but also place a material value on individuals (Scott & Orlikowski, 2012).

Ratings can be seen on personal social media platforms as well. Many users of social media platforms, such as Facebook, Instagram, and Twitter, find themselves participating in the rating of individuals through the ‘liking’ of posts or pictures. Several scholars have argued that the ‘like’ button on these platforms creates a ‘like-economy’ and an ‘attention economy’, where one’s popularity or reputation is mostly measured in quantified terms, in the manner of the number of likes received (Gerlitz & Helmond, 2013; van Dijck & Poell, 2013). In these economies, those who garner high engagement through likes and comments tend to be promoted further through algorithmic mechanisms, while many remain less visible, creating ‘visibility divides’ (Dahlberg, 2015).

In comparison to the ratings culture in most Westernised states, China’s social credit system is seen to be taking the concept of quantification even further through the evaluation of individuals in a more centralised and formalised manner – an ambitious attempt at tracking and quantifying citizenship more broadly. China’s ambition is to have the power to effectively measure the value and virtue of its citizens while, at the same time, regulating their behaviour. Ultimately, the scoring system in the SCSP determines the overall worth and value of an individual in Chinese society. As Westernised states also continue to quantitatively measure many aspects of human behaviour and designate individuals with a value, this may eventually lead to new expectations and values in notions of citizenship.

Surveillance infrastructures in Westernised democracies

Besides the self-quantification and rating systems that have arisen as prominent in social media cultures, surveillance infrastructures and technologies have increased in both technical capacities and public prominence in Westernised democratic nations, particularly post-9/11. Countries such as the United States, the United Kingdom and Australia monitor their citizens in a range of ways we do not have the space to detail here. The 9/11 attacks are attributed to an increase in surveillance and securitisation among these countries (Macnish, 2014). For the sake of security, the governments of the United States and United Kingdom tend to view the personal data of individuals as intelligence data which they have an obligation and responsibility to accumulate, study, and retain in keeping the nation safe, instead of viewing them as the intellectual and personal property of citizens (Macnish, 2014). In terms of surveillance, citizens in Western democratic countries may also face the possibility of losing their rights to freedom of speech, privacy and anonymity in this digital age, as many countries are utilising surveillance technologies and infrastructures such as video surveillance imbedded with facial recognition systems (Kostyuk, Chen, Das, Liang & Muzammil, 2017). Moreover, parallels can be made with the surveillance infrastructures used in China with the use of ‘predictive policing’ algorithms in the United States. In New Orleans, the police department has been working with a company that is believed to have connections with the Pentagon and the Central Intelligence Agency (CIA) to experiment with the idea of ‘predictive policing’ with the data gathered from social media and police databases (Loubere & Brehm, 2018; Winston, 2018).

While there are as yet no formal implementation of social credit systems in Western democratic countries, the cultural and infrastructural means are already in place to some extent through rating and self-tracking platforms and apps and the cultural acclimatisation to these means of everyday

metrics, as well as more direct and explicit forms of surveillance. However, data policy and regulation may hinder the progress of potential social credit systems in the near future. The most pertinent example would be the General Data Protection Regulation (GDPR) that was implemented by the European Union in 2018. The regulation functions to harmonise data privacy laws across Europe, restructure the way companies approach data privacy as well as to empower and protect the data privacy of all citizens in the European Union (Baer, 2018; Privacy International, 2019). While enforcement of the GDPR remains difficult and time consuming, many firms have already been forced to make it easier for individuals to have their data deleted or retrieved and also to ensure that their data are not being collected and shared around without their consent (Baer, 2018; Privacy International, 2019). The GDPR has been seen as an important shift towards the enforcement by democratic Westernised states towards more responsible and transparent uses of data by global data firms. Some hopes have been expressed that the United States, for instance, will implement similar regulation in the near future (Privacy International, 2019). The California Consumer Privacy Act which will come into effect in 2020 (Nicastro, 2018) is one further example of stricter regulation of citizen's data. However, it has also been suggested that in the wake of the global financial crisis, there are broad moves towards authoritarianism, austerity politics, and a notably tumultuous cultural and political landscape in the United States and the United Kingdom (Norris & Inglehart, 2019). It thus remains unclear that the GDPR standards now in place in the European Union will be taken up more broadly or that the cultural discourses around citizen privacy and personal data protection will gain momentum in Westernised democracies over competing claims of state protection and securitisation.

Conclusion

China's SCSP combines both big data and algorithm models in order to create a new form of power for the Chinese government. The system integrates data drawn from different government departments to monitor and modify the behaviours of the citizens of China that are in line with the Chinese government's agenda. The emergence of this system has the potential to create new forms of social inequality and restrict the freedom of individuals. Although there are no systems as comprehensive as China's SCSP being implemented in Western democratic countries anytime soon, similar cultures and structures are already in place. Credit score systems such as the FICO scores are already mandated and in use. With the prevalence of social media platforms and rating applications, there is also a rating culture present in many Westernised states, whereby almost everything can now be quantified and measured so as to assign a value. Many social media platforms have been continuously collecting vast amounts of data from their users, and there are also companies that are utilising the data collected from wearable devices to provide users with soft 'nudges' to comply to a certain behaviour. The concept of surveillance is not unfamiliar in democratic states. The United States, The United Kingdom, and Australia are, for instance, continuously implementing additional surveillance infrastructures and legislatures, at the same time as prominent debates continue about citizen's privacy and rights in relation to their individual data. In view of the above, China's social credit system should be viewed as a warning to Western liberal democratic countries of what may be to come. As our technological age allows for vast amount of data to be collected from individuals across multiple platforms, integrated and used to construct representational profiles and map patterns and behaviours, as well as the continuous rating of others via rating applications, the digitising of identity and reputation is already well underway.

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ORCID iD

Amy Shields Dobson  <https://orcid.org/0000-0003-4349-0815>

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Author biographies

Karen Li Xan Wong completed her Masters in Internet Communications at Curtin in 2018 in the School of Media, Creative Arts and Social Inquiry. Her thesis examines the cultural implications of China's social credit systems.

Amy Shields Dobson is a Lecturer in Internet Studies in Curtin's School of Media, Creative Arts and Social Inquiry. Her research focuses on digital and social media cultures, and issues of gender, youth, and public intimacies.