

## **The Merits of Social Credit Rating in China? An Exercise in Interpretive *Pros Hen* Ethical Pluralism**

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*Social credit rating in China (SCRC) has been criticized as “dystopian” and “Orwellian,” an attempt by the Communist Party to hold onto power by exerting ever greater control over its citizens. To explain such measures, value differences are often invoked, that Chinese value stability and cooperation over privacy and freedom. However, these explanations are oversimplifications that result in ethical impasses. This article argues social credit rating should be understood in terms of the commonly human problem of large-scale cooperation. To do so, this paper relies on a cultural evolutionary framework and is an exercise in interpretive pros hen ethical pluralism, attempting to understand how apparently irresolvable cultural differences stem from common human concerns. Wholesale condemnation of SCRC fails to acknowledge the serious, intractable nature of problems resulting from a lack of trust in China. They take for granted the existence of institutions ensuring largescale, anonymous cooperation characteristic of – but somewhat unique to – Western Educated Industrialized Rich and Democratic (WEIRD) cultures. Because of its history and rapid development, China lacks the institutions necessary to ensure such cooperation, and because of anti-social punishment, social credit rating might be one of the few ways to ensure cooperation at this scale. The point is not to defend social credit rating in general, but to raise the possibility of its defense in China and show one way this would be done.*

*Keywords: China, social credit rating, cultural evolution, (non-)WEIRD populations, norms*

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## 1. Introduction

In October of 2011, Chinese Vice Premier Wen Jiabao announced that China would develop a social credit rating system, assigning citizens scores based on financial information, educational background, online activities, and so on (Lee, August 9, 2020). Western academics and media have criticized the plan as “dystopian” and “Orwellian” (Brehm & Loubere, January 15, 2018; Mosher, May 18, 2019), merely an attempt by the Communist Party to hold onto power by exerting ever greater control over its citizens. Defenses of such policies often invoke value differences, that Chinese value stability and cooperation over privacy and freedom. This article argues that social credit rating in China (SCRC) should be understood from a cultural evolutionary perspective, in terms of the problem of large-scale cooperation (Chudek & Henrich, 2011). Therefore, it is an exercise in interpretive *pros hen* ethical pluralism, attempting to understand how apparently irresolvable cultural differences stem from commonly human concerns (Ess, 2020).

To do so, this article is divided into five parts. It begins by briefly outlining trends in philosophy and technology related to culture, the nature and criticisms of SCRC, shortcomings of value approaches to culture, and a cultural evolutionary framework as an alternative. Part two describes the commonly human problem of large-scale, anonymous cooperation, as well as how various social issues facing China can be understood in terms of this problem. Third, this paper argues China has been organized as a small-scale society throughout most of its history, because of which it has not evolved institutions capable of fostering trust and, therefore, facilitating large-scale cooperation. Finally, it explains how antisocial punishment inhibits cooperation and, therefore, why social credit rating would be one of the few ways of addressing this problem in China. The point here is not to defend SCRC in general, but to raise the possibility of its defense and explain how this would be done.

## 2. Technology, Values, and Evolution

In recent years, greater attention has been paid to culture in both philosophy and technology studies (Ess, 2001; Luegenbiehl & Clancy, 2017; Machery, 2017; Srite & Karahanna, 2006; Van de Poel, 2018; N. Wang, 2013). Much of this work has focused on exploring cultural differences, where differences are conceived in terms of values. Although a useful first step, this approach tends to highlight differences but offers little in the way of mediation or resolution (P.-H. Wong, 2021). Claiming differences result from culture, and that culture consists in values, leaves cultural differences largely unexplained. Examining SCRC highlights the limits of value approaches alone, as well as the merits of broader, more encompassing theories of culture.

The immediate motivations for developing SCRC have been economic: China does not have financial credit rating practices like many developed countries in East Asia, Europe, and North America, which are based on personal income, debt, and home ownership, for instance, which are recent phenomena in China (Jiang, 2020). Without financial credit scores, it is more difficult to determine whether individuals or organizations are credit risks. Risks related to fraud

and corruption have raised concerns about the economic and political stability of China (Chow, 2015; Wedeman, 2004).

In addition to addressing such problems, SCRC would also come with benefits. For example, individuals with higher scores receive preferential access to medical treatment and lower financial service fees (Kostka, 2019; K. L. X. Wong & Dobson, 2019). At the same time, the system has been criticized for infringing on privacy and controlling citizens, and responses to these criticisms have tended to focus on how they mischaracterize the system.

At present, SCRC is neither as centralized nor mature as criticisms in Western media have assumed. SCRC is not any one thing (Horsley, November 16, 2018; Kobie, June 19, 2019; Matsakis, July 29, 2019). Rather, it is a patchwork of both public and private organizations that collect information and assign scores on this basis (Liang, Das, Kostyuk, & Hussain, 2018). Additionally, the information on which scores are based is overwhelmingly financial in nature – only some of it could be described as “social.” However, these responses only push back the problem until when SCRC is as centralized/mature as critics claim. Additionally, horror stories related to social credit rating – dissidents unable to buy plane and train tickets (Mistrear, April 3, 2018; Wang, December 11, 2017), or children affected by the debts of their parents (Chen, December 24, 2020; CGTN, July 13, 2018) – seem to justify criticisms of SCRC.

As with other criticisms of Chinese policies and politics, a second set of responses could appeal to cultural differences, conceived primarily in terms of values: Chinese adhere to Eastern values, where the greatest goods would be social stability and group cohesion (Kulich & Zhang, 2012). If policies accord with the cultures and promote the values of the people to which they apply, then there would be nothing wrong with these policies (Bell, 2015). Indeed, Chinese citizens support social credit rating (Kostka, 2019). From this perspective, criticisms of SCRC would be indicative of cultural chauvinism, unfairly criticizing China on the basis of values alien to China (Cho, 2020; K. L. X. Wong & Dobson, 2019). Values are typically conceived as 1. longstanding beliefs or ideas, 2. about which types of states are worth pursuing, 3. which guide behaviors (Kulich & Zhang, 2012). However, value approaches to cultural differences are empirically and normatively problematic.

Normatively, understandings of cultural difference in terms of values alone tend to result in impasses. Disagreements regarding technology stem from different, conflicting values, all of which would have to be respected (P.-H. Wong, 2021). On the basis of values alone, there is no clear reason to prefer one set of values to another: Values aim at preferred states, but simply because some states are preferred does not say anything about why they should be preferred, which ones are better or worse (Rachels, 2011).

Empirically, although the centrality of values to culture is often taken for granted, values are a particular psycho-social construct, only one of many ways to understand culture (Gelfand, 2012; Gelfand & Harrington, 2015; Gelfand & Jackson, 2016). This centrality likely stems from the influence of Geert Hofstede, who carried out some of the earliest, large-scale quantitative studies of cross-national differences (Hofstede, 2001). As a result, subsequent large-scale, long-

term studies of culture have tended to focus on values, albeit using different theoretical paradigms – for instance, the World Value Survey and Asian Barometer, and the work of Shalom Schwartz, Ronald Inglehart, and Christian Welzel. However, it is unclear that values do the work they are supposed to.

Values are not especially good at picking out cultural groups. For example, the values of mainland Chinese, Hong Kongese, and Singaporean Chinese are more similar to those of people in Zimbabwe, Israel, and Malaysia, respectively, than they are to each other; the values of Taiwanese are different from all three groups (Smith, 2010). (The assumption here is that these peoples are part of the same cultural group, by no means an uncontroversial claim, but one often taken for granted.) Further, the extent to which values predict behaviors – presumably a central reason to study values – varies by culture (Knafo, Schwartz, & Levine, 2009).

Hence, although values are cultural, much of culture is unrelated to values. Value approaches can be supplemented with broader, more encompassing theories of culture. One such approach is cultural evolution.

Cultural evolutionary theories attempt to understand culture in terms of mechanisms similar to those of natural evolution, using an array of empirically supported methodologies to do so, including mathematical modelling, economic games, cognitive science, and other psychological and behavioral studies (Henrich, 2015b; McElreath & Boyd, 2007; Richerson & Boyd, 2005). In this framework, culture is conceived as social information, transmitted through behaviors, which makes differences to behaviors in the long term (Henrich, 2015b; Ramsey, 2013). This information forms the basis of cultural variants – for example, beliefs, thought styles, self-concepts, norms, and so on – some of which would be responses to evolutionary challenges. Cultures with histories of greater existential threats, for example, are “tighter” – they have more norms, which are more strictly enforced – than those with histories of fewer existential threats, which are “looser” – they have fewer norms, which are less strictly enforced (Gelfand et al., 2011). Such dynamics need to be understood in terms broader than values alone. Technologies and associated behaviors and beliefs should be understood from the perspective of cultural evolution (Boyd, Richerson, & Henrich, 2013).

This perspective helps to move beyond disagreements based on values alone, identifying points of cultural convergence (Haidt, 2012; Machery, 2008), demonstrating how technologies can be understood as responses to commonly human problems (Boyd et al., 2013; Clark, 2004). SCRC should be understood in terms of one such problem, that of largescale, anonymous cooperation. Given the perennial importance/centrality of cooperation to human survival, were Western countries facing this same problem and its associated existential threats, public sentiment and legislation might well be different, supporting something like SCRC.

### **3. Cooperation, China, and Large Groups**

Cooperation is operationalized in terms of an individual incurring a cost/foregoing a benefit for

the sake of a net benefit to the group, where the collective good would be greater than and in conflict with that of the individual (Turchin, 2013). To cooperate effectively, individuals must be able to trust each other, that other individuals will incur a cost/forego a benefit for a net benefit to the group. Various social issues and ethical dilemmas can be understood in terms of these dynamics, as cooperation problems involving trust (Curry, Jones Chesters, & Van Lissa, 2019). China is ripe with such problems.

In China, high profile cases related to construction (Berlinger, October 11, 2016; Canaves, June 29, 2009), transportation (Branigan, July 25, 2011; BBC, December 28, 2011), health (Huang, 2004; Zhuang, February 20, 2013), food (Reuters, December 24, 2016; Hunt, January 16, 2015), intellectual property (Reuters, November 3, 2017; Perkowski, April 18, 2012; Tang, September 20, 2017), honesty (Beng, February 28, 2013; Hugh-Jones, 2016; Wang, November 17, 2015), and citizen apathy (Osno, October 18, 2011) are rooted in conflicts between individual and collective well-being. They are often caused by corruption and have resulted in widespread mistrust of Chinese companies, organizations, and individuals, both in China and abroad. In largescale, cross-national studies of honesty and trust, China has ranked last (Cohn, Maréchal, Tannenbaum, & Zünd, 2019; Hugh-Jones, 2016).

Some have argued these problems are the result of the loss of traditional Confucian values, caused by the Cultural Revolution under Mao and capitalism since reform and opening up (Ci, 2014, 2019). However, studies have found that rates of prosocial giving among Chinese are correlated with the amount of time they lived under Maoism, challenging the former explanation (Zhu, Gigerenzer, & Huangfu, 2013). Instead, social problems in China should be understood in terms of more general dynamics governing cooperation. To precisely study cooperation under different conditions, researchers have used economic games (Henrich, 2015a). Although such games involve only simple cooperative behaviors, they allow researchers to precisely measure such behaviors under controlled conditions. By contrast, research on values tends to explore what people say they believe and care about, as opposed to how they actually behave.

In cooperation games, players take turns deciding how much (typically) money to put into a common pot. After each player has taken a turn, money in the pot is then multiplied by some percentage and distributed equally among the players. The cooperative dilemma is as follows: For the group, it is best if everyone puts in all of their money, cooperating. For the individual, it is best if others put in all their money and the individual keeps his/hers, defecting. To maximize benefits, players must be able to trust each other, that other players will forego individual benefits for collective wellbeing.

Rates of cooperation typically begin high and then fall as players begin to defect and trust is lost, although rates vary by culture – a point further addressed below (Henrich, 2015b). Defection involves and results in a lack of trust, since players are less likely to cooperate when they believe others are less likely to cooperate (Bicchieri, 2016). The problem can be addressed with punishment.

Punishment in economic games typically consists in one player paying to have another player lose some amount. This punishment is “costly” – one player must pay to punish another – since monitoring and sanctioning in the real world come at a cost, for instance, police salaries. Players typically punish each other when one player has contributed too little to the common pot, resulting in higher contributions after. This punishment is also frequently termed “altruistic,” since it is good for the group (the punished individual gives more), but the cost is paid by a punishing individual. Anticipation of punishment would motivate players to give more. Players giving more would, in turn, motivate other players to give more, keeping rates of cooperation high and defection low. The ability to punish and anticipation of punishment ensure trust between players. Here trust, punishment, cooperation, and defection can be understood in terms of mechanisms of direct and indirect reciprocity.

Direct reciprocity consists in treating someone how that person treats me, for instance, loaning money to a friend after that friend loans money to me. Indirect reciprocity consists in treating someone how that person treats others, for example, declining to loan money to an acquaintance after that acquaintance refuses to loan money to a friend. Direct and indirect reciprocity can make sense of cooperation up to a point, if one is capable of tracking social relations. Tracking social relations is important, since it allows one to learn who is trustworthy, poses a threat, and so on. In smaller groups, this information can be inferred directly, by monitoring others, or learned indirectly, by asking others. Individuals who are untrustworthy, threatening, or uncooperative can be avoided or sanctioned, potentially ensuring cooperative compliance in the future, as in cooperation games (Chudek & Henrich, 2011). Mirroring these dynamics in economic games, tit-for-tat strategies, where one conditionally cooperates – cooperating as long as others do/until others do not – outcompete other strategies (McElreath & Boyd, 2007). When groups become large, however, and social relations complex, tracking all such relations becomes impossible.

On average, humans are only capable of tracking up to 150 social relations (Dunbar, 1992). Above this threshold, people have difficulty following others. As a result, humans have lived in relatively small groups throughout most of their history, on average, 50-150 individuals (Henrich, 2015b). Large-scale, anonymous cooperation cannot be understood based on direct and indirect reciprocity alone. Addressing this problem requires the evolution of institutions, collections of intrinsically motivating norms and corresponding norm systems – formal and informal rules about which behaviors are obligatory or forbidden, with sanctioning mechanisms (Chudek & Henrich, 2011; Henrich, 2015a; Kelly & Setman, 2020; Sripada & Stich, 2007). Such norms and norm systems have evolved over hundreds and thousands of years throughout European societies and Western Educated Industrialized Rich and Democratic (WEIRD) cultures, allowing for the effective scaling up of anonymous trust and largescale cooperation (Henrich, 2020; Henrich, Heine, & Norenzayan, 2010). China has not had time to do this.

Because of its history and rapid development, China lacks institutions necessary to ensure largescale trust and cooperation. The problem is less that Chinese have lost their values or are no longer “Confucian,” and more that norms associated with these traditions are ill adapted to

present-day China. Despite having a large population for a long time, Chinese institutions have evolved to govern small-scale societies, and they are incapable of addressing contemporary problems facing China.

#### **4. Small China, Big Gods, and Social Norms**

China appears to be a largescale society, and many have argued China has evolved institutions characteristic of such societies (Nichols, 2015; Norenzayan, 2015; Norenzayan et al., 2014; Sarkissian, 2015). For instance, Confucian institutions have worked well for thousands of years, resulting in higher per capita GDP's for most of that time than Europe (Kissinger, 2012). Further, despite the fact present-day China is officially atheist, it has a long religious tradition – including developments in Buddhism, Islam, and Christianity, as well as state and folk religious traditions, especially Confucianism – associated with “big god” religions, further considered below (Nadeau, 2012). However, characterizations of China as a largescale society are mistaken.

Although China has had a population of hundreds of millions since at least the Tang dynasty (Spence, 2012), as an agricultural society, people have lived and worked together in relatively small groups, based on and organized around families. Social relations have tended to be dyadic and hierarchical in nature. For example, Mencius outlines five fundamental relations (五伦) – father-son, husband-wife, older brother-younger brother, ruler-ruled, and friend-friend. Families have worked the same land for generations – people would be born, live, and die within a few square kilometers. As a result, everyone would be capable of knowing and keeping track of everyone else, based on this network of relations. Those in positions of authority – for example, parents in relation to children, and rulers in relation to the ruled – would be responsible for monitoring and sanctioning. This has been a relatively effective response to problems of social governance in a country as large and diverse as China, captured in the well-known Chinese expression, “heaven is high and the emperor is far away” (天高皇帝远), pointing towards problems of ensuring appropriate behavior in the absence of a single supervisory/sanctioning authority. In modern times, the hukou (户口) system has reinforced this arrangement.

In China, each citizen has a particular hukou, an administrative region to which they pay taxes and from which they collect social benefits, such as education and healthcare. Historically, Chinese have been unable to move freely within China. Rather, people have been tied to areas, to discourage migration throughout the country. This has been motivated by the desire to 1. ensure the resources of any one region are not exhausted – coastal cities such as Beijing and Shanghai have better education and healthcare systems, which would cause people to migrate to these areas, quickly exhausting their resources 2. reduce the possibility of social unrest through meetings between and organization by rural populations, typically the worst-off in authoritarian countries (Ma & Adams, 2013). Although Chinese cities have had larger populations than countryside villages, urban arrangements like those in rural areas have reduced anonymity in social relations.

Beginning in the Mao era – and extending to the reorganization of state-owned enterprises in the early 1990’s – urban workers were organized into danwei’s (单位), work units. Employees received housing, healthcare, and education through their work units. As a result, people would work and live together. Children attended schools together, and families grew up and old together (Lin, 2019). As with agricultural production teams, this arrangement would reduce anonymity in social relations, ensuring more prosocial/cooperative behaviors through reputation maintenance (Liberman, Samuels, & Ross, 2004). This tendency is evident in and would be reinforced by living arrangements in two of China’s biggest cities: Hutongs in Beijing and lane houses in Shanghai include common areas, where residents would interact with and get to know each other.

Although China has had a huge population for a long time, it has been organized into small groups, essentially villages of 50-150 people, where everyone would know everyone else. Although higher offices – such as brigades and collectives – have been responsible for administering agricultural production teams – ultimately accountable to the central government – on the ground, the population was organized into relatively small, dense groups (Yang, 1996). This was as true in modern-day as dynastic China. As a result, mechanisms of direct and indirect reciprocity, discussed above, would have been sufficient to ensure prosocial behaviors and cooperation (Chudek & Henrich, 2011; House et al., 2013). People would know which individuals could be counted on/trusted and which could not. All of this began to change in the late 1970’s and early 1980’s.

With reform and opening up, hukou restrictions have been relaxed, allowing unprecedented movement within China. Rural residents have migrated to coastal cities, and urban residents have moved between cities, taking advantage of economic opportunities (Ma & Adams, 2013). These movements have introduced anonymity into social relations. People no longer know each other as they did before. As a result, Chinese tend only to trust close others, such as family and friends, motivating the importance of guanxi (关系) in business, knowing/being able to trust those with whom one does business. Ironically, this nepotism can breed corruption, further undermining trust and cooperation. However, this problem is by no means unique to China.

Most people, in most places, throughout most of history have given preferential treatment to close others, since knowing whom one can trust is difficult (Bernhard, Fischbacher, & Fehr, 2006; Fessler et al., 2015; but see Piazza & Sousa, 2016 too). Where this is not the case, intrinsically motivating norms and norm systems have evolved to facilitate trust in and cooperation between anonymous individuals in largescale societies (Chudek & Henrich, 2011; Henrich, 2015b, 2020; Sripada & Stich, 2007). Such institutions have been associated with and facilitated by the evolution of prosocial religious traditions, ones with big gods.

Big gods are moralizing, supernatural monitors and punishers (Norenzayan, 2015; Norenzayan et al., 2014). They prescribe how people should behave, monitoring to ensure they



do, and sanctioning if they do not. The god of the Abrahamic tradition is prototypical in this regard, but Hinduism and Buddhism include tenets related to moral behaviors and sanctioning, for instance, karma and reincarnation. Despite the seeming ubiquity of religions with big gods, they are in the historical minority. Most gods, throughout most of history, have been neither moral nor omniscient. They have been provincial, unconcerned with moral behaviors, belonging to the religions of small-scale societies. In small-scale societies, people can do the kind of work passed on to big gods. Big gods would take on the costly work of monitoring and punishing antisocial behaviors, thereby facilitating largescale, anonymous cooperation by fostering trust between people (Norenzayan, 2015).

Coreligionists of big god religions are more likely to trust each other and, therefore, work together, since they adhere to the same moral code and believe the same god is monitoring and will punish them for behaving in an anti-social manner (Norenzayan, 2015). As a result, big god religions have historically coincided with the rise of markets and trade. For example, largescale trade networks developed throughout the Islamic and Jewish world. Markets and trade depend on trust between individuals who do not necessarily know each other, and big gods have facilitated cooperation over long distances and periods of time. Norms and norm systems associated with these traditions have subsequently become codified and secularized, forming the basis of a unique cultural psychology (Henrich, 2020; Norenzayan, 2015).

People from WEIRD cultures are outliers on various psychological and social dimensions, including self-concepts, thought styles, and measures of fairness and trust (Henrich, 2020; Henrich et al., 2010). These psychological proclivities have facilitated, in turn, largescale cooperation. Rates of cooperation and measures of social trust are consistently highest among samples from these populations. As a result, individuals with this cultural-psychological profile might easily take for granted the existence of largescale cooperation and institutions facilitating it, as well as overlooking impediments to their development. In the absence of large-scale cooperation, it is difficult to get it off the ground. If groups do not already cooperate, then getting them to do so is very hard. Chief among the reasons for this is the phenomenon of antisocial punishment.

## **5. Problems of Antisocial Punishment and Solutions in SCRC**

As mentioned above, an early finding from economic games was that introducing punishment could stabilize or increase cooperation (Gächter & Herrmann, 2009; Henrich, 2015b). However, these early conclusions were generally based on WEIRD samples. Studies involving samples from more, different kinds of populations have yielded different findings (Ensminger & Henrich, 2014).

Multi-cultural/-national samples have showed that initial rates of cooperation vary considerably, and that the introduction of punishment does not always result in the stabilization or higher rates of cooperation. Rates of cooperation sometimes go down (Gächter & Herrmann, 2009), including among Chinese samples (Wua et al., 2009). This decline typically coincides with increased rates of “anti-social” punishment.

Anti-social punishment occurs when players punish those who 1. have given too much, rather than too little – perhaps because giving too much raises expectations of giving and the possibility of being punished and 2. have punished others, a retaliatory reaction (Gächter & Herrmann, 2009). Each of these inhibit cooperation: If individuals are punished for punishing others, then everyone is less likely to punish, and rates of cooperation will eventually fall (2). If individuals are punished for giving too much, then everyone is likely to give less (1).

Rates of anti-social punishment are negatively correlated with measures of social cooperation and rule of law (Gächter & Herrmann, 2009). This means that in the absence of social cooperation, getting cooperation off the ground would be difficult. Punishment can facilitate cooperation, but only in populations where social cooperation is already high. Otherwise, introducing punishment results in anti-social punishment, further impeding the evolution of cooperation. One might rightly wonder whether these dynamics correspond to the real world, whether economic game play reveals anything about how people actually behave. Examples of anti-social punishment in China abound.

In a mall in Changsha, for example, a mother attacked a little boy after he stopped the woman's daughter from cutting in line (Shanghaist, May 4, 2018). Similarly, a shop owner in Pingnan was attacked by a group of men after reprimanding a boy who peed in front of his store (New Strait Times, November 6, 2018). These are examples of antisocial punishment, where individuals are punished for reprimanding those behaving in an uncooperative manner, defectors. (The assumption here is that waiting in line and to pee are both examples of cooperative behaviors, insofar as social order (waiting in line) and public health (peeing in a designated location) are public goods, and individuals must forego goods/incur costs for the sake of these goods.)

When altruistic punishment is punished, everyone is less likely to sanction norm violators, inhibiting the evolution of trust and cooperative behaviors. For instance, a man beat his wife to death in front of onlookers in the city of Shuozhou, and no one stopped him (Reuters, November 2, 2020). In these and similar situations, the tendency towards anti-social punishment likely stems from hierarchical, role-based relations, mentioned above.

In this tradition, sanctioning would be the responsibility of those in positions of authority over others. As a result, sanctioning by others would be perceived as illegitimate. Insofar as being ethical within the Confucian tradition consists in recognizing the role one occupies and acting accordingly (Hwang, 2012), exceeding one's roles and engaging in peer sanctioning would be unethical. Characteristics of this tradition are likely to be shared by other cultural groups: Using samples from different demographics, for instance, participants judged that high status individuals would be the most likely to intervene, and that their interventions would be the most successful (Gordon & Lea, 2016). In China, adherence to social convention is motivated by those in positions of authority versus, for instance, in Japan – another non-Western, Confucian culture – where adherence is motivated by peers (Dien, 1997). The merits of SCRC must be

understood in terms of these dynamics.

As noted above, China has had a huge population for a long time, making it impossible for any one, centralized authority to monitor and sanction all citizens – as mentioned above, a problem expressed in the Chinese saying, “heaven is high and the emperor is far away” (天高皇帝远). Instead, this has been accomplished through Confucian social relations, based on and extending family relations (Nichols, 2015). The family is the basic social unit in China, and other relations are based on those of the family. Responsibility for monitoring and sanctioning is distributed among different social roles, but not among everyone equally. This arrangement would be effective in relatively small, stable groups, such as agricultural villages/collectives and urban danwei’s, as mentioned above. However, when groups become larger and anonymity increases in social relations, then trust and sanctioning decrease, and defection and cooperative problems increase (Norenzayan, 2015). Because of antisocial punishment, the responsibility of monitoring and sanctioning in China cannot be outsourced to individual citizens. These responsibilities must be reserved for authorities perceived as legitimate.

Legitimate authority in China resides in the Chinese Communist Party (CCP) and government bureaus. Contemporary legitimacy is based, in part, on economic growth and effective social management (Bell, 2015; Ma & Adams, 2013), for example, China’s management of the CoVid19 pandemic, especially in contrast to its mishandling by the US and Europe. If such bureaus are responsible for monitoring and punishing antisocial behaviors directly, then social credit rating would bypass the problem of antisocial punishment resulting from peer punishment. The legitimacy of the CCP, government, and social credit rating would be further enhanced by the benefits citizens enjoy from this system (Kostka, 2019), in turn enhancing compliance.

Numerous studies have found people are more prosocial as a result of social monitoring (Bateson et al., 2015; Conty, George, & Hietanen, 2016; Nettle et al., 2013; Oda, Kato, & Hiraishi, 2015). Controlling for other factors, countries with higher rates of belief in hell (eternal punishment) have lower rates of crime. Crime rates are better predicted by belief in hell than other factors such as GDP or income distribution – although belief in heaven (eternal reward) was positively associated with crime rates (Shariff & Rhemtulla, 2012). Insofar as SCRC involves monitoring and punishment, it stands to reason that SCRC would result in more prosocial behaviors. As citizens follow them, initially external rules would be internalized, providing intrinsic motivation to comply with prosocial norms (Sripada & Stich, 2007). As more people engage in prosocial behaviors and skew antisocial ones, prosocial behaviors would become the norm, providing additional extrinsic motivation to comply with them (Bicchieri, 2016).

Mechanisms other than social credit rating could well leverage punishment, reward, and reputation to encourage trust and facilitate cooperation. However, with a population as large and diverse as China’s, such mechanisms would be incredibly costly and, therefore, perhaps not entirely feasible. Again, the evolution of intrinsically motivating norms and formal institutions to

foster trust and facilitate cooperation occurred over hundreds and thousands of years in European societies and WEIRD cultures. By contrast, only approximately forty years have elapsed since the beginning of reform and opening up in China, allowing considerably less time for the evolution of institutions to facilitate trust and cooperation.

## **6. Conclusion**

Despite the ethical issues it raises, social credit rating might be one of the few ways to feasibly promote largescale cooperation in contemporary China and, therefore, address numerous social problems related to a lack of trust and cooperation. Instead of defending this system based on values alone, this paper has argued that the merits of social credit rating should be understood in terms of cultural evolution. As such, the foregoing is an example of interpretive *pros hen* ethical pluralism, where SCRC would be a particular cultural response to the commonly human problem of largescale cooperation. Recognizing this problem and understanding its nature helps to consider the ethical ramifications of SCRC.

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