CHAPTER 13

Right to Data Access in the Digital Era: The Case of China

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Introduction

China has the second-largest internet market in the world. With the rapid creation and adaptation of digital platforms and e-commerce, the access to, collection and dissemination of data have become the focus of academic debate and policymaking. Three factors contributed to these developments: (1) the internet and data are perceived in China as an important driving force for economic development and an important manifestation of social vitality; (2) with the rapid development of the platform economy, the mass production of data has raised governance problems in relation to the storage, transmission and use of data; and (3) the role of digital social media platforms in data access and dissemination has strengthened the public demand for the government to protect the right to information in China. It is within this context that the question on the right to access to

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M. Aslama Horowitz et al. (eds.), *Epistemic Rights in the Era of Digital Disruption*, Global Transformations in Media and Communication Research - A Palgrave and IAMCR Series,
https://doi.org/10.1007/978-3-031-45976-4_13

data in academic research, policy and regulation becomes the research focus of this chapter.

The primary data used for the analysis include policy documents and regulations produced by the Chinese government concerning data access, the right to information and data protection. The secondary data include academic literature, policy research and news media reports.

Epistemic Rights and Right to Data Access

According to the definition given by Lani Watson (2021), epistemic rights are closely linked to the creation and dissemination of knowledge—relating not only to being informed but also to being informed truthfully, understanding the relevance of information and acting on its basis to benefit themselves and society as a whole. Hannu Nieminen's chapter in this volume also highlights the equality nature of epistemic rights, such as equality in the access to and availability of information and knowledge, and equality in obtaining critical literacy in information and communication.

While often thought of as pure information, data is a form of knowledge. As argued by Gitelman and Jackson (2013, p. 4), 'raw data is an oxymoron' and 'data does not just exist' (Manovich, 2001, p. 224). The three concepts of data, information and knowledge are interrelated, but the nature of the relations among them as well as their meanings are debatable. Many scholars claim that data is the raw material for information and that information is the raw material for knowledge (Zins, 2007, p. 479). In this chapter, data is defined as a set of symbols representing a perception of raw factors. Information is organised data that has been processed into a form that is meaningful to the recipient; knowledge is understood information (Davis & Olson, 1985; Debons et al., 1988; Zins, 2007), and digital data is a set of symbols made up of units of binary code that are intended to be stored, processed and transmitted by digital computers (Zins 2007, p. 482). Personal data refers to any information that is related to an identified or identifiable natural person (Art. 4 (1), GDPR, 2016). Public data refers to the information collected, produced, or paid for by the public or government bodies. Enterprise data refers to the data collected and processed by market entities in production and business activities that do not involve personal information. Commercial data refers to proprietary data commercialised by a company and sold by professional data providers with commercial support. It needs to be imagined as data

to exist and function, and the imagination of data involves interpretation. Therefore, data, as a form of knowledge, is created through social processes; its creation and definition therefore involve human agency and interpretation (Berger & Luckmann, 1967, p. 10; Haggart, 2019). As such, Chinese academic and policy debates on access to digital data and its regulation inevitably become a social construction process, involving different agencies and interpretations.

Underpinned by the normative criteria of epistemic rights discussed in this volume, this chapter examines the academic debate on access to digital data in China and its national policy. More precisely, this chapter discusses the conceptualisation of the right to access data in China and the related regulatory framework. It also considers the legitimacy of those rules in relation to the public's epistemic right to data.

Right to Access Data

In this chapter, the right to access data is defined as consisting of two elements: (1) a right to access public information (recognised as an individual human right by many jurisdictions and human rights bodies, see Riegner, 2017); and (2) an inclusive right for all members of society to benefit from the availability of data.

Viktor Mayer-Schonberger and Thomas Ramge (2022) define data as a non-rivalrous informational good, as opposed to a physical good, and a public good for accelerating innovation for the benefit of all. Access to data must align with the fundamental principles of free enterprise and open information flows. They argue that through control of access to data and monopoly of data as raw material, major technology companies could undermine the capacity for innovation, as they have less incentive to be disruptive. To address this problem, economic policy must focus on the structural issues of data access and drastically broaden access to data. In addition, data cannot legally be owned like physical property; affording an exclusive ownership right, such as the property right to data, is impractical due to the difficulties in restricting the use of data to a specific purpose or specific users, and trading data in the market is inefficient because the market cannot adequately perform its role as an allocation mechanism. A compulsory opening of the dataset is proposed by Mayer-Schonberger and Ramge (2022) to promote innovation capacity and crack down on the information-based domination derived from exclusive access to data. Thus, a competitive advantage will rely on extracting insights from data,

not from access to data. The access mandate provides that non-confidential data should be open access, and that the direct exchange of data between the data holder and requester should be facilitated by an open system of data access.

Purtova (2015) argued that data is not a public good but a rivalrous resource. Without policy action to assign property rights, including no access and non-disclosure in personal data to the data subject, it will effectively make the individual defenceless in the face of corporate power, eroding the autonomy, privacy and right to informational self-determination of the individual.

In Europe, the EU Commission has adopted data access for all strategies, that is, data is to be available for access to all—whether public or private, big or small, start-up or giant. 'Big commercial digital players must accept their responsibility, including by letting Europeans access the data they collect. Europe's digital transition is not about the profits of the few but the insights and opportunities of the many' (von der Leyen, 2020, p. 2). The 2022 Data Governance Act allows the creation of common European data spaces in certain key areas: health, environment, energy, agriculture, mobility, finance, manufacturing, public administration, and skills. Data marketplaces, that is, online platforms where users can buy or sell data, will help new intermediaries to be recognised as trustworthy data organisers. Companies, individuals and public organisations can also share personal data for the benefit of society, i.e., data altruism (European Parliament, 2022). Meanwhile, it is suggested that the EU needs to establish a framework for business-to-government (B2G) data access and explore the creation of a cross-EU regulatory framework (European Commission, 2020).

In comparison to the European approach, in 2022, the World Economic Forum proposed that Data Marketplace Service Providers (or DMSPs) operate and manage data exchanges. These are defined as platforms where information, or the right to access certain information under certain conditions, can be traded in an open, efficient and accountable way and where participants in data exchanges would trade information collected in a wide range of fields, from healthcare to manufacturing (WEF, 2022).

Academic Debate on the Right to Access Digital Data in China

The right to access data has not been treated as an independent right for deliberation in China but has been considered as part of the debates on the right to information and data property rights.

Regarding the former, where the data are owned by the government, the right to access data is interpreted as part of the personal right to public information (Zhang, 2022). There are two views on ownership. According to one view, these data should be owned by the public because the source of the original data comes from the daily work of the government, the collection of data is publicly financed and the data is ultimately used in people's daily lives, so it is a public good and its ownership belongs to the people (Huang et al., 2018). Others argue that the data belong to the state, as 'the ownership of collective data is rooted in state ownership' (Song & Qiu, 2022).

For non-public data, the legal basis of the right to personal information is argued as the right to self-determination of information: any data controller or processor needs to obtain the 'expressed consent' of individuals before collecting, obtaining, and processing data, and data commercialisation that ignores the personal dignity of individuals attached to data should not be accepted. If data protection is not in place, it will damage the rights and interests of individuals and organisations and even cause social and economic risks. If overprotected, big data analytics will become impossible (Huang, 2023a). However, the right to access personal data is not explicitly discussed, and the equality nature of the epistemic right, such as equality to access and availability of information and knowledge, has drawn little attention among Chinese academics.

As mentioned, the right to access data is also treated as part of discussions on data's property rights. In other words, in contrast with the EU's GDPR approach, which does not define the ownership of data but regulates the access of data, the Chinese academic debate has revolved around data ownership. This is partly because data are largely not seen as a public good shared by consumers or companies. All activities of data collection, analysis and processing are aimed at unlocking the potential commercial value of data, providing personal information and protecting national security (Zhang, 2021). Therefore, pragmatically, the priority is to formulate a data trading system supported by the right to data ownership so that data can be traded to generate economic value. This is also partly triggered

by the government's policy objective of using big data. Thus, the Chinese academic debate is heavily policy-driven.

Some scholars advocate the establishment of a dual-right structure in which the data subjects own the data, and the data processor owns the data's usufruct or operational rights (Shen, 2020; Long, 2017). It is also argued that data property rights should be assigned to data companies that collect and process data and that the rights of 'sensitive personal data' should be assigned to data subjects (Xu, 2018). Xiaodong Ding (2019) argued against the allocation of data ownership rights to individuals, as this would incur extremely high transaction and communication costs and overtake some of the data rights enjoyed by platforms, making it impossible for platforms to carry out certain normal business activities.

Mei Xiaying (2022), among very few other scholars, supports the public good nature of data and argues that data sharing should be the default position and that control of access to data requires justification because data is a natural public good. The construction of a data control system should be based on the premise of data sharing.

Notably, the most recent debate has re-oriented the focus from data ownership to the structural separation of data property rights into three separate rights—data holding rights, data process and use rights, and data product management rights. Meanwhile, data sharing is no longer about the sharing of original data but the sharing of data products. In other words, it is not the original data but the access to data to perform the calculation that is shared (Huang, 2022, 2023a, 2023b). A researcher at the State Council's development research centre has conceded that the current data trading model is difficult to sustain from the perspectives of actual needs and government policy (People's Posts and Telecommunications News, 2022). In practice, it is unclear whether individuals have data ownership rights or how they can exercise this right, and it is therefore impossible to talk about data trading rights and data revenue distribution (Zhou et al., 2022). The idea is to use technology such as privacy encryption to separate data ownership from data use rights so that data can be used but not shared and data usage can be controlled and measured. Government policy should focus on the development of data services to release data value under the premise of ensuring privacy and security (People's Posts and Telecommunications News, 2022).

Rules Governing Access to Digital Data in China

According to incomplete statistics, (draft) regulations on 'data' have sprung up all over the country. By the end of 2021, nearly 225 local legislations (including 67 local regulations and 158 local departmental rules) had been adopted (Bai & Li, 2022). The most important element of China's data strategy policy is that data is officially defined as a new factor of production besides land, labour, capital and entrepreneurship, and it builds the foundation for the country's digitalisation, connectivity and AI. To qualify as a factor of production, according to a Chinese economist who participated in the government's data strategy policy drafting, 'it must be a must-have basic resource in the production of goods and services; data can only qualify as factor of production if it is used in production and business activities and generate significant value' (Huang, 2023b).

First, for the collection of and access to personal data, China's Personal Information Protection Law (PPL) stipulates that the data collector can collect personal information only if it obtains the consent of the individual, if the collection is necessary for the conclusion and performance of a contract, for the performance of statutory duties or obligations, to respond to public health emergencies or for conducting news reporting and other acts in the public interest. If the collector wants to provide personal information collected about third parties, it shall inform the individual and obtain their consent. Additionally, the individual has the right to know, decide, rectify, restrict and refuse the process, and to delete, be forgotten and obtain an explanation and copy of the data.

Also, Article 47 establishes an obligation for data collectors to actively delete personal information if the purpose for collecting the data has been achieved, cannot be achieved or is no longer necessary, or if the collector stops providing products or services, if the storage period has expired when the individual withdraws consent. Against this legal backdrop, on December 12, 2022, after the State Council announced seizure of the use of health code apps, including both the communication travel card and health code, three mobile operators (China Telecom, China Mobile and China Unicom), the main data collectors of communication travel cards, announced that they would delete data related to users synchronously to ensure the security of personal information in accordance with the law. Personal information collected by them after de-identification and anonymisation will be provided to relevant government departments in a

targeted manner through the joint prevention and control mechanism of the State Council. According to Article 4 of the PPL, if the personal information received by the government is anonymised, the government agency may independently use such information (Zhang, 2022).

Second, data circulation in China is driven by the state's policies. Between 2015 and 2022, the Party, the State Council and its ministries announced a series of policies on the access and trading of data. The policies define data as a new factor of production that should be traded according to market mechanisms, i.e., to maximise benefits and optimise efficiency based on market rules, prices and competition, to facilitate the country's economic development (Table 13.1).

In 2022, China adopted the most important data policy to date: 'Building a Data Base System for Better Use of Data as Factor of Production'. The goal of this policy is to facilitate the compliance and efficient circulation and use of data, to empower the economy and to enable sharing among all people of the benefits created by the digital economy. It is estimated that the scale of China's data trading market is nearly one trillion RMB, and no one can ignore such an untapped market (Fuxi Institution, 2022). The policy creates an authorised data access and trading system based on three different types of data: public, enterprise and personal data. Different access policies are formulated for and applied to each type of data (see Table 13.2). The property right of data is separated into three rights: the right to hold data resources, the right to process and use data and the right to manage data products. Ownership of data is no longer discussed in policy formulation. The government will guide and regulate the data revenue distribution system to ensure both efficiency and fairness (Xinhua News Agency, 2022).

The policy also supports different methods to circulate data and establish data exchange market systems at national, regional and industrial sector levels. However, the policy has not adequately addressed how the system can benefit individual data subjects. While personal privacy, data security and the right to data portability are protected in the policy, how individual data subjects can share the benefits deriving from data remains unclear.

Table 13.1 Major data policies in China

Year	*Department*	*Policy title*	*Policy aims*
2015	State Council	Action Plan for Big Data Development (促进大数据发展行动纲要)	First national policy document proposed the concept of data trading and provided guidance on data trading market.
2016	Ministry of Industry and Information Technology	Big Data Industry Development Plan (2016–2020) (大数据产业发展规划(2016-2020年))	Proposed pilot scheme of third-party data trading platforms and formulated data circulation and transaction rules.
2019	CPC Central Committee	Decision on Several Major Issues Concerning Adhering to and Improving the Socialist System with Chinese Characteristics and Promoting the Modernisation of the National Governance System and Governance Capabilities (关于坚持和完善中国特色社会主义制度 推进国家治理体系和治理能力现代化若干重大问题的决定)	Defined data as a new factor in production, proposed a mechanism in which the market determines rewards based on contributions.
2020	CPC Central Committee & State Council	Opinions on Building a Better Market-Allocation System and Mechanism for Factors of Production (中共中央 国务院关于构建更加完善的要素市场化配置体制机制的意见)	Guidance for building a data trading market.
2021	State Council General Office	Overall Plan for Comprehensive Reform Pilot Program of Market-Based Allocation of Factors of Production (要素市场化配置综合改革试点总体方案)	Improving public data sharing mechanisms, encouraging enterprises to participate in building trading platforms and exploring various forms of data trading models.
2022	CPC Central Committee & State Council	Building a Database System for Better Use of Data as Factor of Production (构建数据基础制度更好发挥数据要素作用的意见)	Defining data property rights consisting of three rights and accelerating the construction of data infrastructure systems.

Source: State Council (2015); Ministry of Industry and Information Technology (2016); CPC Central Committee (2019); State Council General Office (2021); CPC Central Committee and State Council (2022)

Table 13.2 Access policy on three types of data

Type of data	*Definition*	*Access policy*
Public Data	Data generated by party and government agencies, enterprises and institutions in performing their duties or in providing public services	Strengthens data aggregation and sharing, authorised access and management and interconnectivity; Conditional free access to public data on public interest grounds; Conditional paid access to public data for the reasons of industrial development; Public data must be provided in the form of models, products or services but not in original datasets.
Personal Data	Data bearing personal information	Data processors can collect, hold, host and use data with valid authorisation. Anonymisation of personal data is required to ensure information security and personal privacy. Protects the rights of data subjects to obtain or copy and transfer the data generated by them.
Enterprise Data	Data collected and processed by market entities in production and business activities that do not involve personal information or public interest	Recognises and protects the enterprise's right to process and use data obtained in accordance with legal provisions or contractual agreements. Protects the rights of data collectors to use data and obtain benefits. Protects the right to use data or process data in commercial operations. Regulates the authorisation of data collectors for third parties to access their data and data-related products to encourage the circulation and reuse of data. Original data are not shared or released, but access to data to extract analysis is shared. Government agencies can obtain enterprise and institutional data in accordance with laws and regulations to perform their duties, but they must obtain an agreement and strictly abide by the restriction requirements.

Source: http://www.gov.cn/zhengce/2022-12/19/content_5732695.htm

Conclusion

Access to data as an aspect of epistemic rights has different but similar interpretations in Chinese and global contexts. First, epistemic rights in Western academic literature stress the sociological nature of the creation and dissemination of information and knowledge. Rights are underpinned by the normative criteria of equal access to and availability of information

and knowledge and used for the benefit of individuals and society as a whole. Therefore, data as a form of knowledge is often defined as a non-rivalrous informational good for the benefit of all, and open access to and sharing of non-confident data is proposed. In the Chinese context, epistemic rights have not drawn the attention of Chinese academics, and the closely related concept of the right to information is often approached from a legal perspective, stressing consumer rights to obtain public information and digital platforms' data rights. Data are defined as one kind of factor of production for national economic development.

Notably, in China, the implications of the public good nature of data have not been considered in either mainstream academic publications or in the government's data policies, even though it is agreed that data has non-rivalrous and non-exhaustive characteristics and that, given information asymmetry, data cannot be circulated in the market like land, labour and capital. As a result, the public good and equal access dimensions of data are largely ignored in policymaking. Under the premise of protection of national security and personal privacy, data collection, analysis and processing are aimed at unlocking the potential commercial value of data, especially enterprise data. Therefore, defining the different types of property rights of data has been the main point of contestation in academic and policy debates.

Second, like what has been proposed by Viktor Mayer-Schonberger and Thomas Ramge (2022), the recent data access policy in China has shifted from the sharing of original data to the sharing of data products, from the trading of ownership rights to the trading of holding, processing, use and management rights of data. The establishment of a three-level data trading system in the national, regional, and industrial sectors will be the next step for academic research and policymaking. The government will also guide and regulate such developments to promote market efficiency and fairness in the distribution of the benefits of data trading. The public good nature of data and data altruism might not be on either the academic research or policymaking agenda, but the open nature of public data and sharing mechanisms are endorsed and encouraged in government policy.

Finally, while the rights and interests of data enterprises are the main subject of protection in China's latest data policy, the power imbalance between the individual and corporations (Purtova, 2015) and the sharing of benefits derived from data with individual users or data subjects have not been addressed.

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