The Innovation Research of Science and technology Philosophy in Big Data Era

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Abstract: the most crucial part, the scientific instruction conception is necessary if the society intends to be developed in a better pattern. Since the coming of the Big Data era, plenty of business values have been brought by the development of data ideas, which also enriched people's mental worlds in the mean time. The purpose to regard every phenomenon caused by the Big Data era objectively is by the means of scientific methodology and world conceptions, the Science and technology philosophy, is to remind people not to ignore signals of coming dangers and consider the ways to handle while enjoying the fortune and mental materials. In order to realize the sustainable development in the Big Data era. In this article, Big Data and the Science and technology were combined into one, which has reflected the innovation values and enriched the content of Science and technology in the background of The Big Data era.

1. Introduction

Regarding the rapid development of the current society, the Big Data has gained a lot of popularity, and become a kind of resource with the same status than energy and materials, which has extremely high value. As a main ideology, Science and technologygained the challenges from the modern transmission media, meanwhile, has also obtained the precious data resource while it is in transmission. In the time that the internet become a necessary thing for college students, the processing of the innovation development of Science and technologycan be speed up by using the big data technology, which can promote the effect of Science and technologytransmission in a large scale. There is no doubt that the Big Data brings the challenges to the traditional ideas' pattern of Science and technologyphilosophy. To revise the ideal methods, and to rebuild the conceptional philosophy properly according to time change, shall be the best development direction of the Science and technology philosophy in this era.

2. The definition and characters of the Big Data

Defined as a large scale data collection by McKinsey Institute, the big data has the better competence than other conventional data collecting software for the purpose to acquire, analyze, store and manage the data. In the term "Big Data", the Big means that it has an extremely large capacity, nowadays the data quantities are rapidly increasing in a kind of index level, meanwhile it is also increasing for these data that people need to analyze and adopt, by classifying the data, men can discover the total new knowledge, as well as bring more values. There are vast quantities of data contained in the Big Data, besides, the transmission speed is fast and there are also a lot of types of data, which are full of values. It can lift the abilities of processing optimization and decision making, that to deal with the data by means of technologies' methods.

The characteristics of big data mainly have four aspects: First, the amount of information is large, which is the most basic feature of big data. It can be seen from the unit change of the data storage, taking bytes, terabytes, megabytes, kilobytes. The second characteristic is that the amount of information shows an exponential growth trend. Relying on the development of electronic information technology, the storage capacity of data information is improved. For example, a large supermarket chain will process more than one million electronic transactions per hour. It can be said that data is generated every minute. Third, the data representation of big data is not only digital, but also more diverse expressions, such as text, images, video, audio, geographic location information,

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sensor data, and information data generated in social media, data management. The modes are mainly unstructured, semi-structured, and structured. Fourth, the value of big data is huge. More scholars have explored the information in big data to provide resources for future development.

3. The innovation patterns of Science and technologyphilosophy in the Big Data era

3.1 The innovation of Science and technologyvalues in the Big Data era

Values, as the products of the era, is the presentation and reflection of the social experience, practice, existing of people in a certain time, is also the results caused by lots of reasons, such as : the lives habits, styles, cultural convention and social psychology in a certain era. Thus, in various era backgrounds values can obtain different effects and generate differences. No matter a person’s value idea or a group’s, it is generated by the lives’ practice in that certain time, besides it can be changed and developed as the change of the era, then , the value ideas shall receive the test and refine from the social practice.

Before the big data appears, people think those things, such as land, energy, material as well as labors, which can be seen and touched, are the most valuable. But data is only a type of tool to record these matters, and just has symbolic value. However, with the rapid development of the information age, big data has become the focus of people's attention and research. Nowadays, the meaning of data is no longer just a means of recording, but also a tool of scientific cognition. And the data itself has become a new type of wealth, which is wealth of data. For the society, now the nature of data value has undergone qualitative changes. The view of wealth in Marxist Philosophy has been surpassed by the view of data wealth, which makes the values in the data age develop in diversified direction.

In the field of values, people are the subject and society is the object for the self-value, and as far as social value is concerned, society is the subject while man is the object. From the perspective of Marxist Philosophy, under the background of the development of the big data era, the dialectics of Marxist Philosophy can guide people to see the relationship between social value and self-value from the perspective of practice and form correct values. The first is the reconstruction of values through materialist dialectics against the background of data age. Materialistic dialectics puts forward the law of the connection between things in the world, which provides scientific guidance for the relationship between big data, and reflects the inseparable relationship between society and human beings. The value of data and the value of human beings can be obtained by researching on data correlation. Materialistic dialectics puts forward the law of development of things, which reflects the value created by data and future development. Social value and self-value are combined through big data, and social development and personal progress is achieved through continuous creative processes. In addition, the foundation of Marxist Philosophy is practiced in the era of big data, data mining is required to examine and realize people's self-value and this process is also the process of practice. Marxist Philosophy is to complete the inspection activities and value realization of the subject in the era of big data through its own experience guidance. In the era of big data, people learn about the world mainly by mining big data and apply the results of data analysis to practical activities. Science and technologyrequires that when carrying out practical activities, it should be conform to the purpose of human beings and the law of the development of things. That is to say, in the face of uncertainties in values brought about by the data age, people should follow the law of practice and realistic principles, abandon wrong values and establish correct values.

3.2 The practice of Marxist Ethics in the era of big data

Marxist Ethics puts social relations in the main position. Marxist Philosophy points out that moral behavior is a norm of human behavior and a product of economic and social relations. In the process of material production, various social relations are gradually formed between people, and conflicts arise because of various interests. Therefore, it is necessary to formulate norms of conduct to limit these conflicts, thus forming morality. In this data age, social relations between people are becoming more and more complex, and a series of social and moral problems have emerged.

Therefore, the traditional moral concept has been affected to some extent. Engels once put forward that morality is the product of social economy. With the development of society and the change of the relationship between society and society, the standards of ethics and morality will change accordingly. But the nature of moral ethics will not change and the essence of moral ethics is to formulate certain moral norms, maintain social order and safeguard people's interests and safety through the current situation of social relations. The ethical morality in Marxist Philosophy holds that the ethical morality is the product of the economic and social relations of the times. It comes into being in order to maintain social order and has initiative. This point of view suggests that people should put moral construction in an important position and make use of the regulatory and cognitive functions of morality. The aim of Marxist Philosophy is to realize the free and all-round development of human beings, which is mainly to respect human rights and interests.

In the era of big data, people's ethical and moral issues are thought to be completely solved. It is necessary to start from the materialist methodology of Marxist philosophy and re-establish Marxist philosophical ethics according to the reality. In the data age, it is not only the big data technology that needs to be developed. At the same time, freedom and responsibility should be combined, and self-behavior should be constrained by scientific cognition, so that the social ideology can be safely protected and create a more harmonious social development environment.

4. Conclusion

In conclusion, big data brings challenges and opportunities to Marxist philosophy. Big data changes the way people know the world, and data becomes a kind of wealth that affects Marxist philosophical values. In addition, the moral and ethical issues brought about by the development of the data age have impacted the ethical view of Marxist philosophy. The reality tells us that we must establish moral norms that conform to social reality and use scientific cognition to solve the current ethical problems. Marxist philosophy is a constantly evolving philosophy, and its good quality is to keep pace with the times.

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