

# The Dilemma of Information Ecology in Postmodern Society and the Reflections of Its Practical Ethics <sup>†</sup>

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**Abstract:** There are many reasons for the absence of network information ethics in the era of big data. Generally speaking, the main cause of the absence of network information ethics is the variation of virtual personality. The negative effect of big data technology is the objective condition for its emergence, while the lack of statute institution is the social background for its emergence. Excellent practice-value reconstruction of modern information ecology ethics must be based on the diversity and differentiation of information ecology, in accordance with the logic of synergy, reciprocity, and symbiosis, and in line with the beautiful ideal of promoting the development of human society and the information environment. We should create a fair, harmonious and open environment for information creation and sharing, reasonably configure and cultivate more shared information resources, and strive to achieve the balance of the information ecosystem. Eventually promote the sustainable and healthy development of people and information, even the material and spiritual life ecology of human society.

**Keywords:** postmodernism; information ecology; practical ethics

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## 1. The Dilemma of Information Ecological Ethic in Postmodern Society

Since the beginning of the 21st century, with the development of cloud computing, the Internet of things, and mobile Internet, human society has entered the era of “big data”. While big data’s technology has brought positive changes to human society, it also brings the ethical problems of “information ecological imbalance”, such as the spreading of information alienation, the disappearance of the rights boundary of personal data, the wanton infringement of information privacy, and the expanding digital divide. As David Shenk says, “we thought information was a wonderful thing until we realized that it could rob us of our birthright—peace” [1].

At present, due to information awareness, values, interest temptation, and other reasons, it is easy to lead to deviation in the moral judgment of information ethics. The disorder of information ethics in postmodern society is mainly manifested in six aspects: information crime, interpersonal alienation, value dislocation, double personality, information infringement, and information pollution. “The nature of the increasingly complex relationship between humans and information technology: we thrive on information, but we can also drown in it” [2]. The purpose of reflection on information ecology ethic is to explore and return life ethics in information space. Since the Enlightenment, knowledge has risen to be the primary secular force, and endorsed with power, the dominative “knowledge–power” structure was formed. Although the late modernity based on social informatization has also introduced more participative new information media into the information space, the development of these new media is essentially accompanied by a new reproduction of “knowledge–power” structure. As a result, the information space, as a life world, has also encountered a deeper level of “colonization”, which has led to the alienation and degradation of the

information space. Based on these reflective value questions, we can seek for an ethical framework aimed at transcending the “knowledge–power” structure of late modern times.

## **2. The Lack of Information Ecology Ethics in Postmodern Society**

There are many reasons for the lack of network information ethics in the big data era. Generally speaking, there are three reasons:

The first reason: The variation of virtual personality is the main cause of the lack of network information ethics. In the era of big data, massive data based on cloud computing need more and more complex virtual storage devices. The continuous generation of these massive data is changing the mode of production and way of life in human society. The virtual survival of human beings has gradually become a reality. Especially when social networks become a major way of interpersonal communication, personality variation is becoming the norm.

In real society, people often bear the pressure from all sides and have no way to vent. Many people have been in a social environment of tension, depression, irritability, anxiety, and even confusion and dissatisfaction for a long time. However, it is impossible for them to find more ways of communication and catharsis to dispel the bitterness. In the vast and free virtual society, they vent their emotions wantonly to comfort themselves. The majority of these people who participate in insults, abuse, intimidation, and attacks on social networks are “anonymous” and deliberately hide their true identity. In the unconstrained “free” space of the network, the virtual personality changes due to the emergence of the “unmarked” group.

The second reason: The negative effect of big data technology is the objective reason.

The negative effect of technology is usually an inevitable phenomenon because science and technology in each historical period are only the product of the development of human cognition and practice to a specific era. While applying science and technology, human beings cannot fully predict its overall effect and its intricate connection with other things. It is the same with big data technology. With the continuous and exponential growth of data sources, the amount, variety, and complexity of information are also expanding rapidly, and the ability to extract information from massive data is rapidly becoming a strategic compulsive requirement. While big data’s technology changes the mode of thinking, improves product design, strengthens risk prediction, and improves service quality, it will inevitably promote the government and enterprises to be more fully and deeply involved in personal life and have a deeper impact. It will even change the traditional meaning of terms such as rights, personality, and privacy, thereby it will change our economic, political, and social cultural life. Because of the free and open nature of big data technology and the characteristics of virtual concealment, the randomness and blindness of data disposal in the process of analysis and mining are obviously enhanced, which will weaken the Internet identity and ethical consciousness of data users.

The third reason: The lack of statutes is its social background.

In the era of big data, the excavation, collection, and analysis of data information mainly rely on the Internet, and the self-discipline system of the Internet industry has become an important link to maintain network information ethics. Big data technology converts all kinds of seemingly unrelated and isolated data into valuable and associated information by means of combining bomb and complex operations. From the association and aggregation of these data, the whole picture of individual social life can be accurately restored and predicted. It can even purify the hidden privacy of personal information. Because of the lack of necessary moral self-discipline and ethical bottom line, some Internet operators are willing to violate user data rights driven by commercial interests, and some organizations even obtain illegal benefits by selling and reselling personal privacy data.

With the weakening of self-discipline, only by introducing the heteronomy supervision can we really promote the harmonious development of the big data ecosystem. With the rapid development of the Internet industry and the arrival of the big data era, there have been legal gaps in big data’s excavation, data collection, storage, use, and responsibility. This not only directly affects the

application of big data technology at the macro level but also leads people to stay away from the network for fear of information crime; thus, a new digital divide is coming.

### 3. Practice-Value Reconstruction of Good Information Ecological Ethics

Information civilization is undoubtedly the latest form of contemporary human civilization. “Information survival” is the destiny that modern people cannot escape. Its theory and practice are fundamentally changing and profoundly reconstructing the way of life in modern society, as well as the modern individual’s life belief, emotion, behavior, attitude, and psychology.

#### 3.1. The Meaning of Better Information Ecology

The reconstruction of modern information ecological ethics must face the openness, uncontrollability, freedom, permeability, internationality, technicality, virtuality, popularity, diversity and immediacy of the information culture brought about by the rapid development. At the same time the tendency of disordering, uncontrollability, “no government”, and “liberalization” of network culture bring severe challenges to social management. The excellent information ecology in the modern sense refers to a system that is composed of people, practice, value, and technology in a specific environment. It is the “knowledge existence” in the whole system [3].

The spiritual and cultural life in modern society, because of the irrepressible expansion, penetration, and spread of information, is facing severe challenges such as “planarization”, “homogenization”, “non-privacy”, and even “alienation”, which has led to a series of social ethical problems. The reason is the “information ecology imbalance” (The disequilibrium between information-person-environment). So to speak, the exchange of the information ecology system was obstructed between the interior and external or the imbalance between its own elements and subsystems. “The imbalance of information ecology is mainly manifested in five aspects: information overload, information monopoly, information violation, information pollution and information syndrome [4].”

#### 3.2. The Essence of Excellent Information Ecology

In the era of increasing informationization and intelligence, how to reduce the harm of excessive and harmful information to people who are the main body of information in a substantive sense, “technical means” in the purely epistemological sense is undoubtedly important and necessary. However, in the sense of the field logic of modern sociology of knowledge, we should pay close attention to the autonomous construction and prescriptive function of culture, value, and ethics other than pure knowledge. Focusing on the core information practice and the theme of the information cultural value of “information ecological balance” ensures the movement law of four links: information production, information transmission, information consumption, and information decomposition. To make the types and quantities of information people (the producers of information—the consumption of information) match reasonably, the factors of the information ecological environment are coordinated with each other, the information people are highly adapted to the information ecological environment, and the information of the entire system is running smoothly, which is even more important.

#### 3.3. The Core Path of Good Information Ecology Reconstruction

“A good information ecology should be able to meet people’s normal spiritual needs and guide everyone to fully explore their own potential, so as to promote the continuous progress of human civilization [5].” Therefore, the practice and value reconstruction of excellent modern information ecology ethics must be based on the diversity and differentiation of information ecology, according to the logic of synergy, reciprocity, and symbiosis, in line with the beautiful ideal of promoting the harmonious development of human society and the information environment. creating a harmonious and open environment in which information creation and sharing is fair and rationally allocating and cultivating more shared information resources. We should endeavor to achieve the balance of the

information ecosystem and then promote the sustainable and healthy development of human beings, the information environment, and even the social material to the spiritual ecology of human society.

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## References

1. Shenk, D. *Data Smog: Surviving the Information Glut*, 2nd ed.; Jiangxi Education Press: Nanchang, China, 2002; p. 175.
2. Shenk, D. *Data Smog: Surviving the Information Glut*, 2nd ed.; Jiangxi Education Press: Nanchang, China, 2002; p. 2.
3. Zhang, F. A preliminary study of information ecology. *Inf. Sci. J.* **2002**, *1*, 31–34.
4. Zhang, C.; Li, Q. Several problems of information ecology. *Econ. Forum J.* **2001**, *6*, 13–14.
5. Cao, J. Principles of Information Ethics. *Jiangxi Soc. Sci. J.* **2003**, *10*, 6–10.



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