

The Magic Power of Information: The Inner Drive of the Development of Information Society

(Extended Abstract)

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1. Introduction

The information society is a very popular topic and many researchers study on it from different perspectives. In this paper, the author will turn to information itself to discuss it. The concept and basic characteristics of information will be analyzed in this paper. The mechanism of information acting on human society will be discussed. Then, the challenge and solution method in the development of information society will be given in this paper. Lastly, the conclusion will be drawn.

2. The Description of the Information Society: Different Perspectives

Many scholars have expounded the cause of the development of information society. There are two main perspectives, including the perspective of economy and the perspective of technology. For example, Daniel Bell and John Naisbitt discussed the change of society at the point of view of economy. Daniel Bell maintained that the human society already entered the "post-industrial society" based on service industry compared with the previous society and information has become the core competitiveness but not physical strength and energy sources and workers engaged in information fields played dominant roles.¹ John Naisbitt studied the composition of American workers in 1956 and found out that white-collar workers who dealt with information were more than blue-collar workers who engaged in manufacturing and declared that America has entered "information society".² Information technology is an important perspective used to describe the information society. Alvin Toffler had declared that human would usher in "the third wave" and step into the information society from the industrial society based on the development of science and technology.³ In addition, Manuel Castells believed that human has entered "a new society" that could be called "the network society" rooted in the development of network technology.⁴

These scholars' views are very convincing and become the mainstream views to describe the information society. Nevertheless, they ignored that information was the core in the information society. The development of information economy and technology is just the external phenomenon of the information society. Researchers should return information itself to describe the inner drive of information society. Information is using its magic to penetrate the human society and change it.

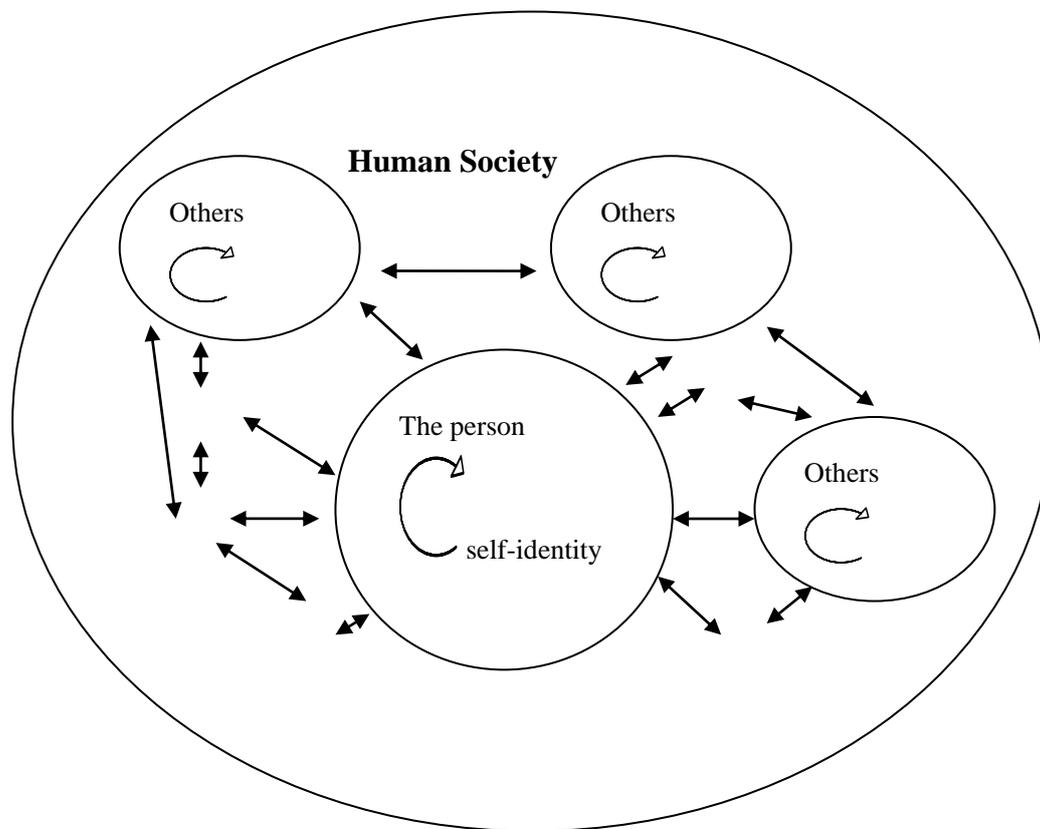
3. The Concept and Basic Characteristics of Information

What is the information magic and how does it change our world? The researchers could answer these questions at many points of views, such as information dynamics, sociology and ethics. But this paper will discuss these questions based on the analyses of the concept of information and basic characteristics of information. It was generally recognized that Shannon established the information theory firstly after publishing his famous paper *A Mathematical Theory of Communication* and he regarded information as the elimination of the "uncertainty" of information sink.⁵ Norbert Wiener also studied for information and considered it to be the thing that was different from material and energy, and stated that information was itself.⁶ Obviously, the information described by Wiener is beyond the field of information and communication technology. Actually, the information is researched in many fields and numerous studies have shown that information is a widespread existence. So, it is difficult to give information a unified definition. But there are two researchers' views to be noteworthy. Kun Wu, a Chinese philosopher, described that "information was the philosophical category marking indirect existence and self-representation of existing way and status of matter (direct existence)."⁷ Gareth Evans, a British philosopher, stated that information was more fundamental than knowledge and thought that perceptual experience was a state of information and it antedated the concept.⁸ Both of them described the information from the most basic level. Two basic characteristics of information that are the characteristic of representation and the characteristic of medium can be derived from the above two descriptions of information. Existing things must be in a certain way or status to represent that it is existing. The process of representation is the process of information generated and the characteristic of representation accompany information always. If someone or something represent to you, you will know it and will say "I get the information about it". On the contrary, if someone or something don't represent to you, you will know nothing about it. However you can only say "I cannot get the information about someone or something", you cannot say "there is no information of someone or something", because it's just not to represent to you, but it can represent to me, he or others, even itself. Of course, it is the implicit premise that information is objective. Information of things can be captured by somewhat or be felt by someone, even by its

own, because it can represent to outside and itself. Things are connecting itself with the outside world and inside world in the process of being captured and felt via information. So, the characteristic of medium is the other basic characteristic of information.

4. How does Information Play the Magic Power: Medium, Representation and Self-identity

The characteristic of representation and medium is only one of the conditions for information to act as a magic power in human society. Human society is made up of people. Only associated with people can information play its magic power and change the society. Then, the further discussion will rely on some psychological theories. Some interesting social phenomenon can be found in our daily life. For example, some people buy clothes or watches not only for using, but also for representing their taste, status or profession via the brand (a kind of symbol information). Some social media (Twitter, Facebook, Pinterest, etc.) are more popular, because they are very good representation platform. Why do people like to represent themselves in a variety of ways? To achieve self-identity. There are two approaches for the implementation of self-identity. One is self-reflection. The other is evaluation by others. In order to illustrate how these two approaches act on self-identity, the analyses will stand on the system's perspective. If the person is seen as a system, the process of achieving self-identity will be like a cycle. The operating mechanisms of this cycle is that the person represents himself via information (carried by language, behavior, clothing, pictures, etc) to the external system (other persons or the society) and get others' or social evaluation, then these evaluation will feed back to the system (the person) and the person carry out self-reflection, repetitiously, and achieve self-identity. In addition, the self-reflection and evaluation by others occur practically at the same time. The diagram 1 can be used to demonstrate this process, too.



↔ Evaluation and information (carried by human language, behavior, etc.)

↻ Self-reflection and information

Diagram 1: The Process of Self-identity in Human Society

It can be seen from diagram 1, the information play very important role in the process of self-identity in human society. Information can help the person represent himself and it is the medium between persons and the person's inner (mind). The person achieves the relational-self from the individual-self via information. People will adjust their social relationships, communication relationships and ethical relationships based on the self-identity. In modern society, with the increasing of information content and the accelerating of information flow, the state of people's self-identity will change accordingly. Then, the traditional social relationships will be challenged and the human society will experience the change.

Discussing still further deep, the person can interact with nature via information

and then act on human society. Nature is the foundation of human being and human society survival. Human activities will influence on nature and have a (good/bad) effect on it. Information, from the effect, will feed back to the person, which also form the basis of the person's self-identity and vision of nature. Then, the person will adjust his activities based on the vision of nature. Repetitiously, people's vision of nature and natural systems will change in the interaction between human and nature. The diagram 2 can be used to demonstrate the interaction between human and nature.

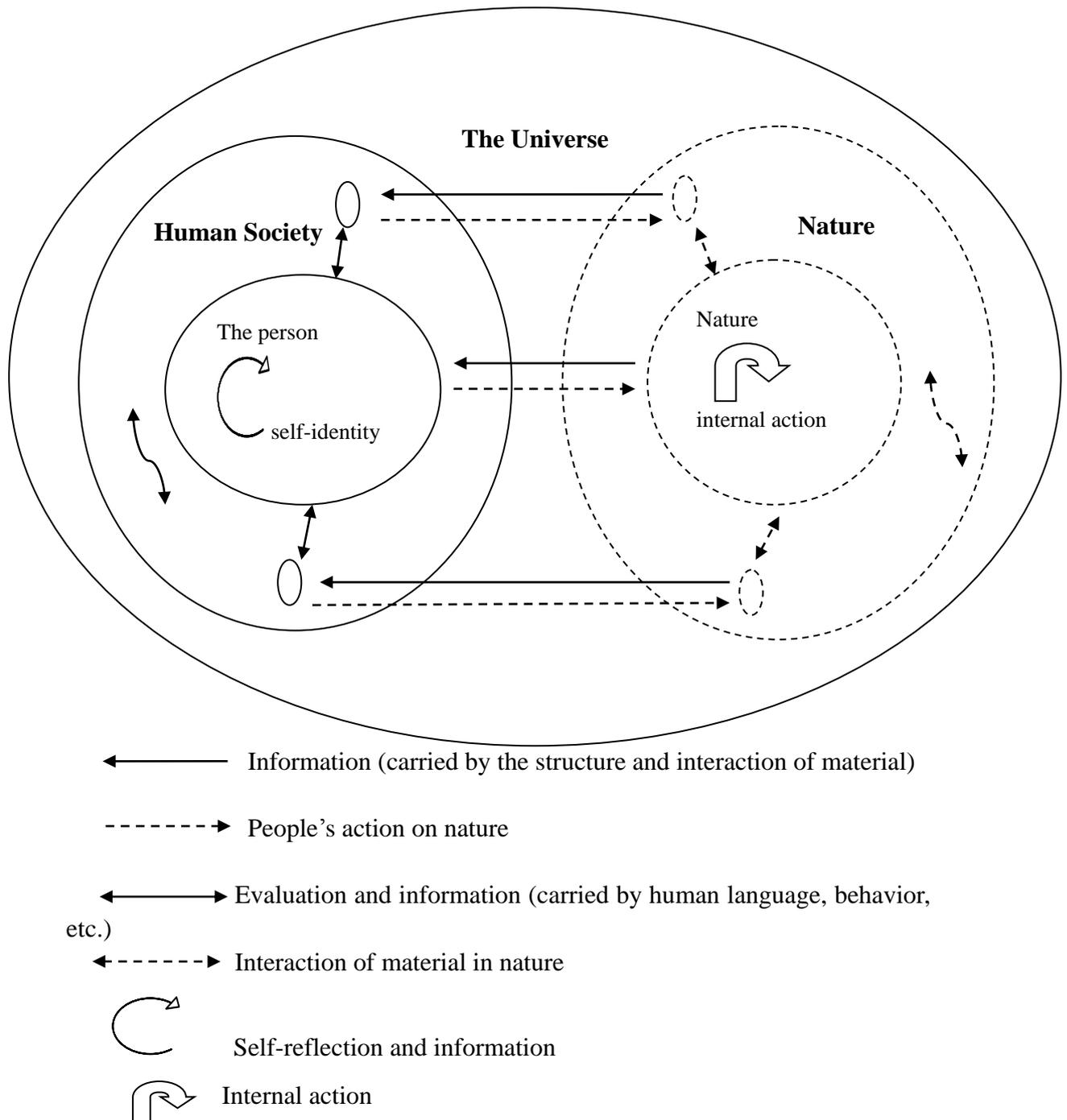


Diagram 2: The Process of the Interaction between Human and Nature

It can be seen from diagram 2, nature is the external force to promote human society to change. Actually, human beings, as a part of the universe, cannot ignore the change of natural environment. Human beings should self-reflect their activities and adjust them based on the feedback (the characteristic of medium and representation of information) of nature. The adjustment of human activities on nature will trigger some social changes.

Now, the magic power of information has been showed completely. In fact, the magic power that is self-identity hides in everyone's heart. Who am I? Which position am I in the human society and the universe? Everyone is looking for the answer depending on their activities. Fortunately, the information that can connect the person's mind, the human society and the universe with the characteristic of medium and representation provides the best tool for us to seek answers. Nevertheless, information is a double-edged sword. It can help human achieve self-identity and initiate the social change. But it can spark unrest, too.

5. How to Face Changes in the Information Society?

With the growth of information content and the acceleration of information flow, people have to accept the impact of diverse values. People should be positive interaction and establish a compatible common human value system. With the development of information science and technology, people's control to nature is strengthened. People need to strengthen interaction with nature, rather than unilateral control. In addition, people need to strengthen global cooperation to establish the sustainable ecological environment.

6. Conclusions

Information has the characteristic of medium and representation that is the important reason for information to connect the world, including the person's mind, the human society and the universe. It also opens the door to the self-identity, the underlying magic power. This magic power guide people to adjust their positions in the human society and the universe. Then, the adjustment of human activities will trigger some social changes. Changes may be good or bad. So, people need to respond to them actively.

References and Notes

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