

Analysis of Professor Wu Kun's Philosophy of Information

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Abstract: Professor Wu Kun established a profound Information Philosophy system in 2004, this is a great theoretical exploration, which has profound theoretical value. But I have a great difference with Professor Wu. Professor Wu distinguished three essences of the concept of information: signal, source and consciousness. Professor Wu's mistake is to confuse associations with signals, and he thought that signals themselves are not real. The reason why the "catching moon in the water" is absurd is not because the moon in the water is unreal, but because the association that people have after seeing the moon in the water is unreal. I believe that calling three fundamentally different things information is unscientific and leads to misunderstanding, which can cause serious problems. According to Professor Wu, the existence of the world is composed of matter and information, rather than matter and consciousness as the traditional world picture. Professor Wu is wrong with his description of the concept of real, and then he used this wrong understanding and unscientific concept of information to reclassify existence, which leads to his wrong direction in the study of ontology.

Key Words: System Theory; Ontology; Information; Wu Kun.

1. Introduction

Professor Wu Kun established a profound Information Philosophy system in 2004, which had made unique contributions to the study of system theory, epistemology and ontology. He took the concept of information as the core and tried to rebuild the theoretical system of philosophical ontology and epistemology. This was a great theoretical exploration, which had profound theoretical value regardless of whether it can succeed or not, and was worth learning and referring to seriously. I also did such theoretical exploration, but I had some difference with Professor Wu. I think some of his claims are seriously wrong. This paper discusses my difference with Professor Wu on the concept of information and ontology.

2. Three Essences of Information

Professor Wu distinguished three essences of the concept of information. He said, "The first essence of information is one level objective display of direct existence". "The second essence of information is the multi-level objective display of direct existence". "The first essence of information is regarded as the coded signal which maps the content of the second essence of information." Simply put, the first essence of information is the signal, and the second essence of information is the source.[1]62 "The third essence of information is the essence of a new and creative subjective relationship endowed to information by human cognition." [1]63 In other words, the third essence of information refers to consciousness.

Professor Wu's distinction between the three essences of information is similar to my viewpoint in the article "The Definition of Information"[2], but with a little difference. Professor Wu believes that the first essence of information as a coded signal is the objective display of direct existence. For example, the shape and color of an apple are the coded signals of an apple, and the apple itself is the source of information. Professor Wu's explanation of the source of information and signals is not comprehensive. Signals not only include the attributes of things themselves, but also include other things that have nothing to do with the attributes of things but can make people think of them. For example, the picture of an apple, a photo of an apple and the word "apple" are all signals. They have



nothing to do with apples at the beginning. The picture of an apple is made of canvas and paint, which has nothing in common with the material of apple, but it can remind people of real apple. Artificial signals are called symbols, pictures, photos and words are symbols. The word "apple" is a symbol, which have nothing to do with apples, but because of long-term convention, they can remind people of apples. Therefore, Professor Wu is wrong in defining the first essence of information as "the one level objective display of direct existence". The convention of symbols is not an objective display, but a subjective regulation.

Professor Wu said that the source of information only includes the direct existence of the thing itself, that is, the source of information is the information of second essence, which is also wrong. Symbols are man-made, people who make and send symbols can also be the source of information. If one person takes a photo of an apple and another person sends the photo out, then both the two people and the apple are the source of information. The structure and attributes of the apple itself are the information of the apple as the second essence of information, while the people themselves are not the information of the apple.

Information is not a scientific concept because it has many meanings, and these different meanings refer to things with completely different natures. If corals and dolphins are called aquatic creatures, and insects and birds are called flying animals, you can see that this is problematic and violates the basic principles of biological classification. A person with two names is all right, but two people with the same name can be in big trouble. For example, if John commits a crime and is to be shot, but another John ends up being shot, is not that a big problem? The unscientific concept of information not only leads to misunderstanding, but also to ontological confusion.

3. Reflecting Objects Are Real Things

The moon in the water is not the moon in the sky. The image of the moon in the water is a reflecting object, and the moon in the sky is a reflected object. Reflecting objects and reflected objects are both objects, both exist, and both real. Reflecting objects are signals, and the function of signals is to remind people of the reflected object. Signals are objective and real substances. The associations that signals make people generate are not objective and real substances, but consciousness. Professor Wu's mistake is to confuse associations with signals, and he thought that signals themselves are not real. He said: "In the phenomenon of 'the moon in the water, the flower in the mirror', the 'moon' and 'flower' are both objective and unreal." "The content of the trees' rings which condensed the conditions of cold and heat experienced by the trees over many years and other relevant relations, the content of the historical relations of the life species and the general procedures of individual development encoded in DNA, the content of the historical relations of geological evolution condensed in the stratum structure, the content of the origin and evolution of the universe condensed in the current state of the universe structure, etc., all have the property of being objective and unreal. In this way we find a 'objective and unreal' field of existence. 'Objective and unreal' is just the name for the reaction (like reflection) content between objective things." [1]37

Prof Wu is wrong. The growth rings of trees are objective and real materials, the many years of cold and summer conditions experienced by trees and other related contents are also objective and real materials, and it cannot be said that the growth rings of trees are not real. However, the years of cold and hot weather experienced by trees that people think of when they see tree rings are not real, but human speculation and imagination, which may be the same or different from the years of cold and hot weather experienced by objectively real trees. If I use a color pen to draw the annual rings on a tree stump that has grown for ten years into twenty circles, and someone says that the tree has grown for twenty years without careful identification, this speculation and imagination is wrong and unreal. Many of the rigorous academic views of scientists are correct, but are they all correct? Of course not, no matter how rigorous the scientist's point of view is, it is consciousness, not matter, and all consciousness is unreal. It's just that what we call "rigorous" or "correct" ideas are more valuable and have the potential to guide practice to greater benefit. The benefit mentioned here include immediate

benefits and long-term benefits. The logical unity of knowledge is also beneficial to people. Problems that were previously unknown are suddenly clarified, this is the benefit, too. Contrary to consciousness, the growth rings on the stumps are real, both the real growth rings of the stumps and the growth rings I drew with colored pens are both objective and real. The reason why the "catching moon in the water" is absurd is not because the image of the moon in the water is unreal, but because the association that people have after seeing the moon in the water is unreal.

The reflected object is concrete and complex thing, with many properties, structures and other contents, which are all information, and a certain reflector can only reflect part of the content. For example, trees have many attributes and structures, in addition to growth age, there are height, weight, variety, gender, genetic structure, and so on. The rings contain information about the tree, but only a small amount of information such as growth age is involved, and we cannot learn other things from the rings. The growth age, height and weight of the tree itself are the information of the second essence, and the annual ring as a reflector is the information of the first essence. The amount of information of the second essence in trees is large, and the amount of information of the annual rings as the first essence is small. The information of the first essence and the information of the second essence are objective information, and only the information of the third essence is subjective information.

Professor Wu divided existence into two parts: objective existence and subjective existence (consciousness), the objective existence includes objective real existence (matter) and objective unreal existence (objective indirect existence), subjective existence is also called subjective unreal existence and subjective indirect existence.[1]38-39 In my view, Professor Wu's division of the objective world into objective real and unreal existence is wrong. What do you mean real? All objective existence is objective and independent of man's will, so they are real. Some things are stable and seem real, and some things are unstable and seem unreal. But stability is relative, all the existence can disappear, so they are not absolutely stable. Some things are visible and touchable and seem very real, while other things are invisible and untouchable and seem unreal. In fact, can see, touch is only an illusion, not necessarily real. So everything is both real and unreal. If the unreal existence is information, then all objective existence is information. If consciousness is also information, then all matter and consciousness are information. Rather than, as Professor Wu suggested, the world can be divided into matter and information.

Professor Wu believes that the three different types of information can be combined, and the combined information has important value in ontology. I think this view of Professor Wu is wrong. The reason for this wrong view was firstly from his inaccurate description of the concept of real, and then he used this wrong understanding and unscientific concept of information to reclassify existence, which leads to his wrong direction in the study of ontology.

4. Wrong Picture of the World

"Based on the above analysis, we can conclude that all 'being' in the whole universe (world, nature) can be classified into three domains: objective real existence, objective unreal existence and subjective unreal existence," Professor Wu said. "The material category does not encompass the whole world outside of mind, and there is a realm of 'objective unreal existence' between matter and mind to which traditional science and philosophy have not given sufficient attention." [1]37

Prof Wu sets out four expressions:

Matter = objective real existence = real existence = direct existence;

unreal existence = objective unreal existence + subjective unreal existence (spirit) = indirect existence = information;

Objective unreal existence = objective indirect existence = objective information;

Subjective unreal existence = subjective indirect existence = subjective information. [1]38

Based on these four expressions, Professor Wu created a world picture in which both matter and information exist. The traditional world picture thinks that the world is composed of matter and consciousness, this new world picture is completely different from the traditional world picture. So Professor Wu said: "The discovery of the world of information fundamentally changed our concept of existence, and it is in this world picture of the dual existence of matter and information that Philosophy of Information establishes itself as the basis of metacosophy or first philosophy." [1]39

Prof Wu's new picture of the world is simply wrong. First of all, when Professor Wu divided existence into matter and information, it is equivalent to saying that information is not matter, the three essences of information are not matter, so it is impossible to understand what the second essence of information is. Prof Wu said it is not signal, and it can not be directly perceived by us. [1]62 So what is it? Professor Wu said that the second essence of information is "the information condensed by the source of information itself" [1]62. Isn't "the information condensed by the source of information itself" part of the source? If it is not the source itself, but the signal emitted by the source, then what is the difference between these signals and the first essence of information? Why can't we feel it directly? If you say the information of the moon in the water is unreal, then is the information condensed by the moon itself in the sky unreal, too?

If the "information condensed by the source itself" is not part of the source, then what is left of the "source itself (matter)"? Professor Wu said: "The extension of direct existence includes direct beings: entities and fields, direct modes of existence (including states) : motion, time and space, difference, level, structure, etc., direct existence relations (processes are the relations of vertical movement of things) : interaction, functional effectiveness, transformation of things, rheological generation, etc. [1] Aren't extensions of direct existence the second essence of information? If so, then information includes not only indirect existence, but also direct existence, information is not equal to indirect existence, and the world cannot be divided into matter and information.

Taiji Evolutionism believes that the essence of life is the self-replication of complex structures of the organism, which enables the number of individual organisms to grow exponentially and survive various disasters. The content of biological self-replication is the complex structure of the organism, and the complex structure is the complex information. So the essence of living things is the reproduction and survival of information. Human nature is also the reproduction and survival of information. Language and words are information, language and words can be copied in large numbers, so it can survive all kinds of disasters. Language and words can record the civilization created by human beings, so that civilization can survive various disasters and continue to develop and progress.[3] But the structural information of living things is completely different from language and words. Language is a symbol, which is the first essence of information. The structural information of organisms is neither signal nor symbol. It is not unreal existence as mentioned by Professor Wu, but objective matter itself. It is the second essence information, that is, real existence. The essence of life and human nature can be explained by information, but the information here includes both the information of the first essence and the information of the second essence, including both the unreal existence and the real existence. In other words, it includes both information and matter in the world picture of the dual existence created by Professor Wu. However, Wu's Philosophy of Information only pays attention to information, not to matter, so the value of information he said is greatly reduced.

Secondly, there is an essential difference between matter and consciousness, and Wu's view confuses the difference between matter and consciousness. The signal is matter, and the knowledge of signal and material system is consciousness. For example, electromagnetic wave is matter, whether you know it or not, it exists objectively, it is real and tangible. And people's understanding is not objective, not real, people sometimes think this way, sometimes think that way. Signals, as matter, are easy to store, copy and transfer, especially text and electronic information, people have made full use of their easy storage, copy and transfer properties to create human civilization. Information, as consciousness, is not easy to store, copy and transfer, people are easy to forget things. When people die, the knowledge in his mind is gone. Information, as consciousness, is creative, people can constantly create new knowledge and promote the progress of civilization. But most of the material information

is not creative, most of the distortion of material information has no value, and most of the valuable innovations after the emergence of human beings came from the innovation of human consciousness.

Therefore, information as matter and consciousness are fundamentally different, Professor Wu's combination of the two types of information is not only meaningless, but also leads to a series of serious errors. He said indiscriminately, information is storable, transferable, reproducible and innovative,[1]66 As if all information have these properties. If human consciousness were as easy to store, copy, and transmit as signals and symbols, then signals and symbols would be worthless. If people were telepathic, they wouldn't have to write letters or make phone calls. When Einstein was alive, you asked questions, he answered, and that's you were reading information in his head, but you can not read anything in his mind when he was dead. Even if Einstein's brain were frozen and studied by the smartest neurobiologists, it would not be accessible, we can only read his books. If we could read Einstein's mind after his death, there would be no need to write books.

Professor Wu said that information has revealing function, organizing function, propaganda and education function, evaluation function, construction function and foresight function.[1]68-73 These functions are functions of consciousness and cannot be functions of the signals themselves, but he regarded these functions as functions of all information indiscriminately. These are obvious mistakes, and they all come from mixing up different essences of information.

5. Conclusion

Professor Wu Kun is right about the division of the three essences of information, but he took signals as unreal existence, regarded signal and consciousness as the same kind of existence, opposed to matter, the new world picture based on this is completely wrong. The concept of information is unscientific, and Prof Wu is a victim of this unscience.

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