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Information Philosophy in China
——Professor Wu Kun 30 years of academic thinking in
information philosophy

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Abstract: Professor Wu Kun, from Xi'an Jiaotong University of China, has been studied in philosophy of information for 30 years. He thinks information conception is one of the most fundamental areas in philosophy, and founded the information philosophy. He has done a lot of pioneering and original research in information ontology, epistemology, social information theory, information production theory, information evolution theory, the value of information and information thinking directions. And therefore he is the first person to set up a complete view of theories, systems and methods about information philosophy.

Keywords: Wu Kun, information philosophy, set up, theories, systems

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Summary: Professor Wu Kun, from Xi'an Jiaotong University of China, has been studied in philosophy of information for 30 years. He thinks information conception is one of the most fundamental areas in philosophy, and founded the information philosophy. He has done a lot of pioneering and original research in information ontology, epistemology, social information theory, information production theory, information evolution theory, the value of information and information thinking directions. And therefore he is the first person to set up a complete view of theories, systems and methods about information philosophy.

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Since 1980 till now, Professor Wu Kun has been researched for 30 years in information philosophy, and has been well known as “a pioneer or the first person in information philosophy”.

Main academic contribution of Professor Wu Kun is that he thinks information conception is one of the most fundamental areas in philosophy, and founded the philosophy of information. He has done a lot of pioneering and original research in information ontology, epistemology, social information theory, information production theory, information evolution theory, the value of information and information thinking directions. And therefore he is the first person to set up a complete view of theories, systems and methods about information philosophy. He has published 13 monographs. Such as <Introduction to Information Theory>(1987), <A new spirit of the times -Philosophy Information>(1989), <Natural logic> (1990), <Evolution of information world>(1994), <Information and social development> (1998) <Knowledge and Information's Economy>(2000), <Research on Philosophy of Value>(2002), <Information Epistemology>(2002), < Analogies and Criticism in philosophy> (2002), <Theory • system • method in information Philosophy>(2005), <Information and Multi-dimensional Interaction Mode Exploring in Western Development>(2006), < Information Philosophical Argument>(2008), < Information, Systems and Complexity Thinking on Ancient Philosophy-- Greece • China • India>(2010). In addition, 200 theses have been completed by him. Professor Wu Kun's main symbol of academic achievement are a thesis named <Information Philosophy Theory Chambers> (1985) and a monograph entitled <Philosophy Information introduction> (1978) and < Theory • system • method in information Philosophy> (2005).

To better understand information philosophy and his contribution in this field, now I summarize Professor Wu Kun's 30 years academic history as below.

foundation of information philosophy(1980 ~ 1987)

Since half of the 20th century, with the worldwide development and progress in information technology revolution, information economy, information sociality, socialized information, information philosophy emerged.

At the beginning of 20th century early 80s, with introduction of related subjects, Chinese academia warmly discussed information problems, so information philosophy was founded timely. In china, Professor Wu Kun is one of a fewer scholars whom study information problems. In 1980,

Professor Wu Kun began to explain the relationship of material and spiritual scientifically. According to traditional philosophy, material and spiritual constitutes existence of two basic areas of the world, which is a two unity of opposites, but, is a two unity of opposites reasonable? Material to be translated into the spirit and spirit to be effected on material, both they need an intermediate link to transformation, transition and contact for each other. Professor Kun Wu thinks the one who can find out and explain intermediate link scientifically will bring about an overall change of philosophy. Guided by this thought, Professor Wu Kun started his research. Later he finds out "information" can be regarded as the basic conception introducing into philosophy and acts as interaction link between material and spiritual.

In July of 1980, Professor Kun Wu finished his 1st research paper named '*Thinking - an advanced form of material and information activities*' (published in Journal of Lanzhou University Student Paper Series, No. 1, 1981). In this paper, for the first time he considered information is a "material existence form and status show". Then he proposed and also proved information has three basic forms of in itself, for itself and regeneration. Thirdly he also raised information field, imaging information, symbol information and other information forms. Finally he described material to spiritual process as information activities process. It was these points in this paper which make information into philosophy possible, and then laid the foundation of basic premise of information ontology and epistemology.

In spring of 1981, Professor Kun Wu Completed his 2nd paper named '*information status and role in philosophy*' (published in Potential Science magazine 1981.3.). Information is defined as its own show of material existence and status. (This definition is the last half sentence of standard definition of "information"). And more accurately he identified three basic configuration of information. In addition, he also proposed qualitative theory of three different properties at last he pointed out information's status and role in ontology and epistemology.

In autumn of 1981, Professor Kun Wu finished his 3rd research paper with the title "*measurement of information philosophy*" (attended and spoken in scientific paper's report annual meeting of Lanzhou University in 1981). In this paper, he differentiated relative information from absolute information, and gave mathematical models of relative information and dynamic relative information, which differed from Shannon's.

In April of 1982, Professor Kun Wu completed the first draft of *<Introduction to Information Theory>*, and had it to be his bachelor thesis as well. Chapter 1 with the title "*Investigation on Information Intermediary*" was published in Lanzhou Science 5, 1984. "*Information Philosophy Theory Chamber*", published in Humanities Magazine 1, 1985, represents this book's basic points. Very soon, *<Introduction to Information Theory>* was published by Shaanxi People's Publishing House. The completion of this book and its related achievement publication mark the official creation of information philosophy in China. From *<Introduction to Information Theory>* and his bachelor degree thesis's completing time, we can say the creation of information philosophy should be in 1982, but from the whole book published time, the creation time should be confirmed from 1985 to 1987.

For the first time, systematically and comprehensively, Professor Kun Wu raised many new conceptions, such as philosophy nature, categories, qualitative theory of three different properties theory, absolute and relative amount of information, relationship between information and related directions of philosophy, conceptual level of ontology, information intermediary, information theory, differences and similarities in force philosophy and information philosophy, and role in the philosophy evolution and other issues. And all these pioneering study constructs information

theory which is different from the practical information theory. It formally announced a new era of philosophy, information philosophy founded in china.

Improvement of Information Philosophy (1985-2005)

Information philosophy, includes information ontology, epistemology, social information theory, information production theory, information evolution theory, the value of information and information thinking and other contents. For the following 20 years, Professor Kun Wu has done much more research in these areas and set up his complete view ,theories, systems and methods on this field. Now I would like to give a brief introduction about it.

1. Put forward the material and information dual existence theory, found information ontology

In the second half of 1985, while Professor Wu Kun was giving the lecture on "Introduction to Dialectics of Nature" curriculum, he began to think about the issue of information ontology. In Mar 1987, he finished writing a new monograph, *<Natural Logic>*, which was published by Northwest University Press. In this book, he did not only put forward the “discarding the human being’s understanding’s intermediaries” and “expressing nature by nature’s name” ontology methods, but also described the whole nature as a material and information dual existence, dual evolution world whose contents, process and mechanism furthermore was defined, explained and discussed in details. All these achievements mark perfection and maturity of basic concepts and theories in ontology proposed by Professor Wu Kun.

2. Put forward the material and information double evolution theory, found information evolutionism

In April 1988, Professor Wu Kun started to write *<Evolution of information world>* and finished in 1993, published in 1994 by Northwest University Press. The publication of this book perfects material and information double evolution theory.

3. Put forward information intermediary theory, found information epistemology

Professor Wu Kun called his information epistemology as “information intermediary of epistemology”. It is consisted of two parts. One is “information intermediary hypothesis”, and the other is “cognitive process and mechanism’s construction and the virtual hypothesis”. Epistemology part of *< Introduction to Information Theory>* was only involved the 1st respect of this doctrine. In the later study, he has finished and published *<Cognitive, Relative Moving Information Constructive Activity in Multi-level Intermediate>* (Changsha teachers’ college science in No. 3 1989), *< the Cognitive Style of Human Being>* (Seeking Science, No. 3 1989), *<Levels of the Main Information Activities and its Interaction>* (Northwest University Science, No. 3 1993), *<Identification by Differences, Construction by Intermediaries, Virtual by constructing-- General Processes and Mechanisms of Information Cognitive>* (Science • Cognitive • Awareness, Jiangxi People's Publishing House, 2004 edition). In 2002, *<Information Epistemology>* (published by the China Social Sciences Press) was finished by him. The publications of these papers and monographs mark the perfection of epistemological theory of Professor Kun Wu.

4. Put forward information production is the essence of human production, found production information

In 1994, Professor Wu Kun began to pay more attention to the information economy, information society field research. In this field, he has published nearly 20 papers and two monographs, *<Information and Social Development>* (Southwest Financial University Press edition

1998), <*Knowledge and Information Economy*> (Northwest University Press, 2000 edition). Professor Wu Kun thinks information science, information technology, information economy, information society, information socialization and the social information theory and practice is a uniform wave era at half of the 20th century in the world, and he makes a comprehensive study by view of information philosophy. At last he puts forward the information science, information production and productivity directions new ideas and theories. In Professor Wu Kun's view, material can be conserved and immortal, and it can only be changed in the form, but can not be created or destroyed. However the information is not conserved, and information restructuring and creation can lead to material existence form changing. Therefore, the human production can only be information production and productivity can only be human information productivity. These results mark social information and information production theory systems establishment and improvement.

5. Systematically card the humanity scientific paradigm changing and development, found information thinking theory.

In 1989, Professor Wu Kun came to study theory of information thinking. He explored scientific ways of thinking in human being, and clearly defined "physical thinking", "energy thinking" and "information thinking". In May 2000, Professor Wu Kun completed up to thirty thousand words paper with the title "*Material thinking • Energy thinking • Information Thinking*", which was published in the <academic> (No. 2, 2002). After that, Professor Wu Kun studied relationship between complexity and information thinking, relationship between the third technological revolution and information systems integrated complex picture of the world. On this basis, he put forward his own standards and theories about revolution in science and the technological revolution. Later on he published <*Revolution on Complexity and Scientific Way of Thinking*> (Dialectics of nature, No 10, 2002), <*Information Thinking-a New Scientific Ways of Thinking in Information Age*> (Xi'an Jiaotong University Technology, No. 3, 2003). These results mark the foundation of Professor Wu Kun's thinking information theory.

6. From double dimension of both material value and information value, he proposed value of heaven, and found the value of information.

In 1997, Professor Kun Wu published his 1st paper about value of information entitled <*Outline of the Philosophy Value -Explained Philosophy Value with the Name of Natural Body*> (Humanities Journal No. 2 of 1997). Later on, he has published of <*Heaven Value and Human Value*> (Value and Development, Shaanxi People's Education Press, 1999), <*Several Problems Related to the Philosophy Value*> (Journal of Social Science Series No. 5 of 1999), <*value fact, value reflect, and value assessment*> (academic No. 6 of 2000), <*Value Conflicts in the network culture*> (Shenzhen University, No. 5 of 2001) and other papers. In 2002, <*Value Philosophy Problems*> was published by the China Social Sciences Press, and Prof. Kun Wu is the lead author and chief editor of this book. In all these results, Professor Wu Kun defined value as 'value is the things (including material, information and spirit, the main form of information) effect through internal and external interaction'. And he has researched more about value philosophy problems. Based on the information economy, information society and information network, which leads to the corresponding evolution of economic, political, cultural, ideas, life and other aspects, he further explored the social value of information. These results mark foundation of information value theory of Professor Kun Wu.

7. Creation of grand and systematic information philosophy theoretical system

October 2001, Professor Wu Kun began to collect his years of research work, and has < *Information Philosophy Theory, Systems and Methods* > paper as his own independent National Social Science Fund. June 2002, the National Social Science Fund was granted, Professor Wu Kun quickened his step of establishing of complete theoretical system in information philosophy. June 2003, more than 700 thousand words, with 10 Codes, 40 Chapters monograph, < *Information Philosophy - Theory, System and Method* > completed. Landmark achievements of the National Social Science Fund Project ended item in March 2004. In March 2005, this book was published by the Commercial Press.

The five famous Chinese experts Wang Yutian, He Zuorong, Pang Yuanzheng, Shen Zhongying, Meng Xianjun gave 'level A' for Professor Wu Kun's work. And they evaluated "based on the summarized the results of the latest achievements of information science, Professor Wu Kun builds a theoretical system of information philosophy ... all-round, multi-angle, explores the philosophy problems, and creates a complete set of philosophical theories by the information dimension to understand, interpret and change the world". "The result is an original, pioneering, own style of academic masterpiece. The work with its novel academic view, full content, close logic, concise description, has reached a pretty high level". "The results, not only with its original argument, linking of before and after, but also its breadth, a high degree of structure, have indeed become style of hid own". "The outcome is the first systematical work in information philosophy, making much preparation the foundation for the development of its discipline, and having important theoretical value". One of the book review reported "As the results comprehensively building philosophy in the element of information philosophy (first philosophy) level, is a specific form of modern philosophy, so the results have an extremely high academic value of theoretical innovation in terms of development of Marxist philosophy, or critique and transformation of traditional philosophy, or new construction of a new era of philosophy.

Philosophy of information of the latest (2005 ~ present)

After 2005, Professor Wu Kun started to evaluate and sort out different school concepts of ancient and modern philosophy with his own method, besides continuing to deepen in philosophy studies, and expand the corresponding comparative study, which include sorting out and evaluation to human ancient relevant philosophy thinking, comparative study between information philosophy and Marxism philosophy, comparison between systematical philosophy and information philosophy, comparative study between information philosophy and contemporary western philosophy. In recent years, Professor Wu Kun has published a series of papers in this direction and two monographs, < *Argument in Information Philosophy* > (Jiaotong University Press, 2008), < *Information, Systems and Complexity Thinking of Ancient Philosophy - Greece • China • India* > (Commercial Press, 2010 edition). In September 2009, "Third Frontier Forum on Social Science - Contemporary Construction of Chinese Academic System" conference, was held in Xian China, jointly sponsored by the China Social Science magazine, Shaanxi Province Social Science Association, Northwest University. Prof Wu Kun presented a paper entitled < *Basic Problems of Philosophy and Philosophy Fundamental Shift* > and made speech in the conference. In the executive summary of this paper, Prof Wu Kun wrote because of uncertainty of "existence", the philosophy basic question needs to be truly understood and grasped. Specific expression lies in detailed division of the "existence". The evidence of "relationship between

material and spiritual” about philosophy basic question lies in “existence” two major areas, one is material and the other is spiritual. Historically, it was a basic mode that traditional philosophy divides ‘existence’ field, and determines basic areas and general nature of traditional philosophy. The fundamental steering of philosophy is the changing of expression contents of basic philosophy questions, and its basis lies in division mode. So far, although the development of human philosophy in certain study fields has achieved conversion between research priorities and concerned problems, its foundation of existence theory and epistemology has never got any fundamental changing. This is the fundamental commitments and concrete interpretation for binary oppositions of matter and spirit, subject and object. Therefore, the human philosophy development has never had any fundamental theoretical conversion. Because Professor Wu Kun has introduced information concept as one of the most basic concepts into philosophy, and information field clarifies a new existence segmentation model and totally changed specific expression way of basic philosophy question. Information philosophy achieves human philosophy first fundamental shift, and thus leads to a full range, fundamental change of human philosophy.

At last, I only want to emphasize that Professor Wu Kun is of high academic style and academic realm. From 1980, his first information philosophy paper complete till now, he has studied in the field of information philosophy for 30 years. Although the interference and episode one after another occurred, it never stops Professor Kun Wu’s research step. It is indeed “The dress takes to loosen gradually and I am more and more emaciated, No regretful plying at all”. In 30 years constant thinking, Professor Wu Kun’s basic ideas and theories about information philosophy haven’t got any changed. And his academic thinking and mind path, always keep consistent and uniform. From then, we also can infer what a kind of carefulness, honest and serious working attitude professor Wu Kun has. This is an invaluable quality at the time when the china academia is very impetuous.

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