Systems Ethics Thinking

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Forwards

People live and die in connection with others. As long as you connect with others, conflicting situations are inevitable. This is because each person's interests and stances are fundamentally different in relation to any problems. There are always problems that can lead to conflicts, but the nature of which changes with social transformation. Today, the 21st century has already entered into the 20s, and society has changed dramatically.

For example, the introduction of artificial intelligence (AI) and robots has changed the way people work and living. The aging and declining birthrate, as well as the increasing number of singles using SNS and convenience stores, have reduced the ability to help each other. The boundaries between truth and fake have been obscured by the press, and division and hatred are rampant. Virtual reality is so permeating that the value of tradition and ideals is becoming meaningless.

Behind these oscillations, of course, in relation to other events, are the effects of digital communications connected by computers. This impact will be even greater in the future and will fundamentally change society. Already now, with the changes in society, conflicts and confusion among people, among groups or among nations are deepening. People are puzzled and anxious in that whirlpool. Many are isolated, lose their goals, and have no hope for the future.

However, every existing ethics seems to be not ready for that situation. Most

ethics still stop at the framework of "individual conscious action" in the 19th century or "behavior in the environment" in the 20th century. On the other hand, there is an increasing trend in ethics that emphasizes "Japanese culture". The pillar of this ethics is the idea "ambiguity embracing diversity" without separating the individual from the relationship and making a black and white decision. And its keyword is "Between". But in that there is no place for LGBTX, Al robots, and cyborgs.

In order for ethics to respond to changes in this society caused by digital communication and other events, in my view, two additional perspectives are needed in addition to "Between. The one is the viewpoint of logically grasping communication and seeing the "Structure" there. The other is the perspective of the "Method" of shifting the conflict by directly looking at the reality of the conflict, rather than by emotionally grasping the relationship and aiming for a simple agreement.

When incorporating this structure and method perspective, Systems Ethics of this book is born. Regarding the fundamental viewpoint and the basic framework of system ethics, I will refer to the opening chapter of this book, and here I will introduce the main assumptions that are hard to see from the surface.

The first point is the general theory of communication, including digital communication via a computer, in which "the relationship among all things and their connections is communication". This is the foundation of Systems Ethics.

The original meaning of communication is the connection that exchanges "something". This something is not limited to "word and gesture", but can be anything that has "shape". Shapes become patterns (i.e., Structures) as the exchange is repeated. Then, this pattern acts to direct the movement

of communication (i.e., Structuring), and by that emerges Systems that maintain the inside (i.e., the Self), separated from the outside.

When connection and communication, pattern and structuring, and connected relationship and communication system are interchanged respectively, the connection among all the things becomes the communication. Materials exchange electronic energy with each other, and cells also exchange biomolecules with each other. And when Structuring happens by chance, emerges System. The universe appears as one huge communication networking.

The second point is to view people as "an integrated mind of Four-dimensional Communication Systems". This is the cornerstone that supports Systems Ethics.

In the vast communication network of the universe, what is the characteristic of communication among people is the exchange of "meaning-interpretation" through the expression of the body. Interpretation patterns (i.e., Structures) are formed from the interactions, and this function (i.e., Structuring) establishes mutual communication systems.

In my opinion, there are four dimensions of structuring in humans. In other words, humans control the other three functions such as reasoning, intelligence, and instinct by the function of self-reference while using their body as a base of the environment. In that occurs the meaning-interpretation.

Until now, the conception "people" has been divided into "humankind" and "person". However, if we introduce the perspective of integrating the four-dimensional communication systems, we can unify these two. Similarly, if we focus on the dimensional composition of system and its integration, we can compare life, living things, materials, machines, computers and robots.

The third point is that as long as the human meaning-world is constructed by "Four-dimensional Correlation", that can be "reconstructed" as the four-dimensional correlation. This perspective not only transforms the view of the "world," but also introduces a whole new view of "ethics."

Based on that the human communication system consists in the four-dimensional integration, the four dimensions interlock in the human communication that exchanges meaning-interpretations, and the interlocking four dimensions constitute the human meaning-world. In this book, four-dimensional interlocking connections are called "Four-dimensional Correlation." This is shown in Fig. 1.

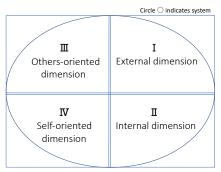


Figure $1\,$ The Four-dimension of human communication system

The human meaning-world extends from individual minds to face-to-face relationships, groups, institutions, society as a whole, history, and thoughts. They are usually treated as separate realities, but from the general perspective of communication, they are each system of communication. Moreover, the conscience in the mind, trust in face-to-face relationships, customs for groups, institutional purpose, tradition in history, and central values of thought are all regarded as structuring of the system, and they are all reconstructed as the four-dimensional correlation.

On the other hand, in the meaning-world, the word "morality" has been used for the conscience of the mind, and the word "ethics(倫理)" has been

applied for human relations and group customs. However, if the communication system corresponds to "倫 (namely relationship)" and the structuring that establishes the system corresponds to "理 (namely order)", the scope of ethics or morality will spread to the entire meaningworld. In other words, the meaning-world is nothing other than the world of ethics. The name of system ethics comes from the point of view of ethics as the structuring of the communication system.

The fourth point is the thinking method of "Four-dimensional Correlation". Systems Ethics is a universal theory, but at the same time it is an effective tool for analyzing any realities. That was made possible by a very simple way of thinking.

The Four-dimensional Correlations that make up reality are the set of four dimensions. However, if only one dimension of the correlation is overemphasized, any type or position will emerge from there. Any types or positions are one-sided, and as long as you stick to them, there will occur conflicts among them.

The Four-dimensional Correlation thinking method constantly returns back to the four-dimensional "Correlation" that is the source of types and positions. And It corrects the bias while considering the four-dimensional balance. This thinking is somewhat similar to Zen Buddhism's indiscriminate perspective, but whether or not there is the four-dimensional structure is the crucial difference between the both. By using this way of thinking, it is possible to reconstruct events, ideas or problems, and move the conflict situation based on the reconstructing.

Where is the destination of moving conflicts? Systems Ethics envisions the world in which people with different interests and perspectives "connect and admit differences while conflicting". Alternatively, it is the age of "Competitive Symbiosis" in which heterogeneous systems such as humans,

animals, cyborgs, AI robots mutually support each other, while improving their strengths, compensating for their weaknesses, and working hard.

So far, the premise of Systems Ethics has been introduced. Readers would be confused by the sudden emergence of unique terms. This point should be alleviated by reading this book. This book is the first systematic development of that Systems Ethics.

Systems Ethics can discuss every concepts and problems in all the areas of human beings, using the one and same simple framework, "Four-dimensional Correlation." In this book, for examples, personality and industry, medical care and law, organization and nation, risk and playing, family community, surrogacy and euthanasia, QOL scale, happiness and purpose of life, mind and soul in animals and robots, digital society, ethnic collision will be taken up and reconstructed.

I have spent nearly 8 years to accomplish this Systems Ethics. I am convinced that this Systems Ethics is the practical philosophy suitable for the 21st century. So, let's guide you into this new universe of thinking.