

## Chapter 1 / Human Communication

### 1. Exchange of meaning interpretation

"Communication" is one of the difficult words to translate into Japanese. Dating back to the Latin etymology, it was originally "munus" (gift), and the exchange of "munus" with each other was "communis." From here, "communication" and "community" are derived. In other words, the core of the meaning of "communication" is the relationship of exchanging something.

We usually exchange gestures, symbols and words. And we think that only these exchanges are "communication". However, there are countless relationships in which something is exchanged, including electron energy and pheromones. As long as something is exchanged, there is a relationship among things. And all relationships are communications.

If so, what are the characteristics of human communication among them? It is not just simple gestures and words that are exchanged in daily communication among people. It is the "interpretation" of the "meaning" expressed by them.

#### **Expression/Meaning/Interpretation**

What is the meaning interpretation? Let's take a gesture of raising hands as an example.

Suppose you can see a "hand raised" movement. It is the "intention" of the person concerned that makes this movement "raise hands". Of course, just looking at the gesture from the outside, it is not clear what kind of intention it is. It could be a "taxi stop" or an "opposition". Maybe it's a bow, or sometimes

just a gymnastic exercise. If so, the only way to determine the inner intention of the person's mind is to make a guess, considering the context in which the gesture or facial expression is expressed.

A series of gestures is a visible "expression". An expression points to something else, that is, means something. Another meant here is the inner intention of the mind of the party. It doesn't look as direct as it is. Therefore, it is necessary to guess the invisible intent by using the visible expression as a clue and determine the meaning of the expression as uniquely as possible. This series of processes is called "interpretation." However, not only the will but also the motive that the person is not aware of is inside the mind. Therefore, I will continue to explain using the word "intention" widely.

## **2. Face-to-face communication**

In mutual communication where people face each other, the process of interpretation regarding meaning progresses within the minds of both parties, and both processes interact through body expression. The process of internal meaning interpretation of both parties is communication that repeats self-dialogue (self-questioning). Therefore, in one big communication, two small internal communications run side by side like a mirror.

### **Two examples**

Let us analyze this communication process along with two examples. Firstly, a student who came into my lab said, "I'm in trouble. It's very hot right now."

(1) The clues to interpret the student's intentions are expressed actions and facial expressions. He seems to be a little out of breath, but he doesn't look as hot as the statement, he's just holding a handful of books. This information is usually immediately detected.

(2) The next stage is to find out the true intention of the student. The season is early spring. The room temperature is never too high. Are you joking? Is it because he ran up the stairs? Or is there another circumstance unrelated to the room temperature? I could see the title of the book. "Warming..." One interpretation emerges. "I wonder if he came to ask about the issue of global warming."

(3) Next, regarding the relevance of this interpretation, I mobilize past experience and existing knowledge, and compare it with other possible interpretations in light of the context. In last week's lecture, he addressed the issue of "global warming." This student was listening hard. I've been asked before about the "dose of radiation exposure". If so, it must be a question about global warming today.

(4) Finally, I move to comprehensive evaluation and decision-making based on the determined interpretation. Unfortunately, I have a meeting, and I don't have time to talk to him. However, answering questions and discussing can be more enjoyable and meaningful than the meeting. What should I do. The choice is arbitrary. Let's take a rest by contacting the clerical office that there is an urgent need. Pick up the handset while saying, "The question is about global warming."

(5) This statement, that is, the behavior is accepted as information by the student, and progresses to a new interpretation. "Well, it's a love consultation, but the professor misunderstands something..."

In the next example, the night before, the student with whom the other student was walking was told something unexpected. What she said was "I can die. "

(1) "Oh, this is not just a thing." The clues that interpret her true intentions are expressed actions and expressions. Her eyes are moisturized, her lips are

slightly open, her face is burning. This information is usually immediately detected.

(2) The next stage is to explore the true intentions of the opponent. Why is this right now? Is she joking? Perhaps she is in a suicide urge. Everything seems different. One interpretation emerges. No way, a confession of love?

(3) Then, regarding whether this shocking interpretation is valid or not, the past experience and existing knowledge are mobilized, and compared with other possible interpretations in the context. She doesn't play around or make fun of people. Rumor has no boyfriend. She's been staring at me so far. According to the book I read, this apparently applies to patterns of love. It must be a confession of love.

(4) Finally, I move to comprehensive evaluation and decision-making based on the determined interpretation. I'm happy, but I have no experience of romance, so I'm in trouble. What should I do. The expression of the response is completely arbitrary. What shall I response? There was an urban legend attributed to Soseki. Translation of "I love you". That's right, "The moon is beautiful, isn't it".

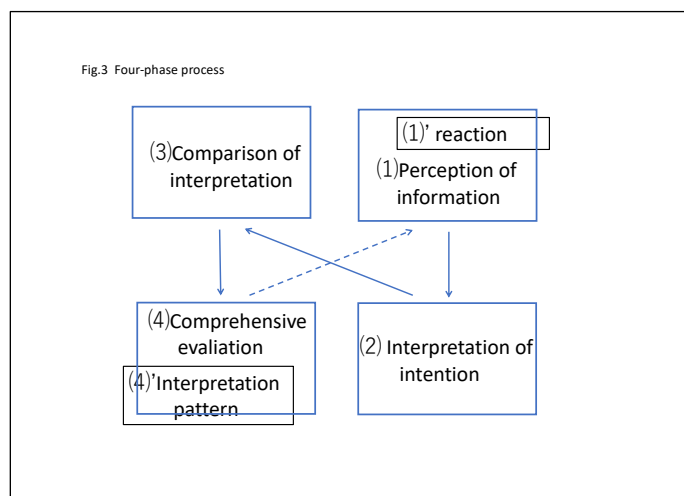
(5) This statement, that is, the behavior is accepted as information by her, and progresses to a new interpretation. "Eh? I wonder what happened to him when I was going to rehearse the stage of Turgenev's "First Love"."

#### **Four-phase process**

The following summarizes the processes drawn in the above two examples.

- (1) Perception of information
- (2) Interpretation of true intention
- (3) Comparison of interpretations
- (4) Comprehensive evaluation & Decision-making
- (5) Reaction (→Perception of information)

Here, the expression (5) Reaction is located between the two sides, and the other party's heart immediately shifts to (1) Perception of information phase. Then, the phase of (5) may be regarded as the phase of (1). Therefore, the process of communication inside the mind can be seen as the development from (1) to (4). That is, in the face-to-face communication, as shown in Fig. 3, the processes of the four phases that proceed on both sides run in parallel like mirroring.



### 3. Establishment of Common Sense

#### Pattern of meaning-interpretation

When the process of the four phases is repeated, each other expects that the partner will behave in prospected way, and hopes that a desirable behavior will be there. Then, through the realization of expectations and hopes, a certain <pattern of meaning-interpretation> is established within each other side.

Once the pattern of meaning-interpretation is established, the process from (1) perception of information through (4) comprehensive evaluation to (5)

reaction (equal (1) perception of information) will be stably maintained in response to this direction.

When the internal communication on both sides runs side by side like a mirror and the patterns of meaning-interpretation are shared through the act of expression, one mutual communication that includes both appears. In the second example above, if both sides were serious about love, then "love communication" was born (although it wasn't), where the two hearts in love echoed.

### **Common sense and General common sense**

When mutual communication is established, the pattern of meaning-interpretation believed to be shared by both sides is the "common sense." However, the common sense here is limited to the two parties. When it is believed to be shared in the collective communication among many people, it is called "general common sense."

As long as human communication is the interpretation of meaning, the "common sense" should be subtly different depending on the viewpoints and interests of the interpreting people. For example, there are discrepancies among people even in the interpretation of dress codes. Needless to say, no one can confirm the "coincidence". Nevertheless, people believe that it is there. This is because there is a mechanism to guarantee a rough coincidence.

As M. Scheler pointed out, the basis for the rough coincidence is, of course, required for sharing physical experiences ("Essence and Form of Sympathy"). Sharing physical experiences means that people share emotional communication and imaginary communication, as will be described later in Chapter 2. The basis of this sharing is the living system mentioned in Chapters 7 and 9. However, both emotional and imaginary communication does not go beyond the reach of the body. Beyond this limit is the communication of signs called written words (letters). The belief that the meanings of the signs

coincide is supporting the general coincidence of common sense.

### **System/Structuring/Function**

It is the pattern of meaning-interpretation that forms the process of the four phases of communication. This pattern of meaning-interpretation corresponds to a constant relation, that is, "structure" in mathematics. However, it is different from the static object of mathematics in that it functions to orient, maintain and control the process of communication from the inside.

I would like to introduce the terminology unique to this book here. As explained in the opening chapter, paying attention to the difference of the structure between static and dynamic, we mean pattern of meaning-interpretation by 'structuring'. Similarly, communication controlled by 'structuring' is called 'system'. Also, the movement of the parts that are connected inside the communication system is called 'function'.

The expressions "structuring", "system" and "function" are quite difficult to understand. I should avoid them in popular books if possible. Why I utilize such expressions? This is also explained in the opening chapter, but if the reason is repeated again, it is indispensable for repositioning the daily mutual communication system from a general viewpoint.

## **4. Logic of four-dimensional correlation**

So far, I have tried to grasp the structuring of the communication system through mutual communication where people face each other. However, face-to-face mutual communication is important but only a part of human communication as a whole. If so, there is no guarantee that the four-phase process found in special cases will generally apply. In order for the four phases

to be universal, it is necessary to gain insight into general "logic" in special cases. Only then can mutual communication be repositioned as a special case of general logic.

### **Two division principles**

Then, what is the logic that is generally accepted in human communication systems? Analyzing the four phases reveals two divisional principles: "direct-indirect" and "outside-inside." Here, "direct" means that the system directly contacts the external environment to obtain information, and "indirect" means that the system interprets the information obtained by contacting within the system. In other words, this division principle is related to the way information is processed in the system. On the other hand, "outside" refers to the relationship between the system itself and its outside, and "inside" refers to the relationship with itself inside the system. In other words, this division principle is related to the system relationship (Fig. 4).

### **Basic four dimensions**

Combining the above two division principles yields the following four dimensions. The expression "dimension" has already been explained in the introduction. Let's display the four dimensions with Roman numerals I, II, III and IV, respectively.

#### **External dimension I**

This arises from the combination of direct and outside. Here, the system comes into contact with the external environment, converts the visible shape into an internal one, takes it in, and re-expresses it as a shape. This dimension corresponds to the phase of perception of information and reaction in face-to-face communication.

#### **Internal dimension II**

This arises from the combination of direct and inside. The meaning of the

information captured in I is interpreted here. It is the imagination that supports the interpretation, and the source of the imagination is the consciousness of time, that is, the intelligence that makes predictions. This dimension is the phase of interpretation of intention.

### **Others-oriented dimension III**

This arises from the combination of indirect and outside. The interpretations envisioned in II are compared here with possible interpretations with reference to context and past information. Underpinning this comparison is the reason for manipulating and inferring concepts. This dimension is the phase of comparison of interpretation.

### **Self-oriented dimension IV**

This arises from the combination of indirect and inside. The interpretations compared and examined in III is finally narrowed down to one, and the direction of the response is determined after being evaluated in the light of the internal criteria. It is reflection that creates the inner standards. This dimension is the phase of comprehensive evaluation and decision making.

The above four dimensions are the basic divisions that form the basis of this book. The analytical power of system ethics depends solely on this basic four-dimensional correlation. When analyzing various phenomena and concrete scenes in the world of ethics, the four basic dimensions are transformed for each object and problem, and their names also have various variations.

For example, in the communication system of the mind, it is converted into four dimensions of "performative", "sentimental", "negotiating", and "reflective". Similarly, in mutual communication, in the four dimensions of "practical," "mutual assistant," "integrated," and "transcendental," and in the region of social systems, in the four dimensions of "economic," "communal," "public," and "cultural." In the ideological communication, it is transformed

into four dimensions of "individual", "solidary", "holistic", and "ideal". The above will be described in detail in Chapters 3 and 4.

### **Order of four-dimensional correlation**

There is a certain order in the four-dimensional correlation. That is, the movement from the external dimension I to the internal dimension II is reproduced and repeated in the movement from the other-oriented dimension III to the self-oriented dimension IV. After that, the movement from the self-oriented dimension IV to the other-oriented dimension III folds back to the movement from the internal dimension II to the external dimension I.

This is the basic order of four-dimensional correlation, but once it is established, the four dimensions are connected vertically and horizontally, and each dimension moves relatively autonomously. At that time, it is the self-oriented dimension IV that controls the overall movement. This dimension corresponds to the pattern of meaning-interpretation in mutual communication. For example, in mind-communication, it is a belief, and in organizational communication, it is the purpose of establishment. This position does not change under any circumstances.

When the above four-dimensional correlation is converted to the same plane so that it is easy to see, as foretold in the introduction, a figure similar to the coordinate axes in which the double lines are orthogonal can be obtained (Fig. 5). The double line delimiter represents four-dimensional relative autonomy. Note that Fig. 1 in the "Preface" shows that the system has a four-dimensional correlation.

### **The actuality of four-dimensional correlation**

There are various ways of four-dimensional correlation. In the extreme case, if the movements of the four dimensions are smoothly connected, on the surface, communication can be performed only by a shortcut, that is, a reflexive oscillation between the external dimension I and the self-

dimensional dimension IV. Most of the daily communication goes on with this kind of shortcut.

Let's give an example of personal experience. There is a patient interview in the examinations of the sixth year-student of Japanese medical school, and at that time, a simulated patient called SP deals with the medical student. It was when I happened to be an SP.

The task on the day was appendicitis. Some students treated me as a patient and asked me a doctor-like interview. Eventually it was one student's turn. The student who listened to my explanation suddenly decided, "It is Appendicitis." No matter who listens to it, he must think so. That is what the pathology textbook says. However, in this situation, it is necessary to avoid assertions and consider all possibilities as a doctor. Unfortunately, we cannot expect a high score on him. After the end, when I told the teachers about this story, everyone laughed a lot.

What has been clarified through the discussion so far is that the mutual communication that people face each other is logically constructed as a four-dimensional correlation. But why is it a four-dimensional correlation? Even if four-dimensional correlation is the logic of mutual communication, does it hold universally for humankind? And if the logic of four-dimensional correlation applies not only to mutual communication, but to all human communication systems, what is the rationale? In the next chapter, let's consider the necessity and basis of <four-dimensional correlation>. That is to answer "what is human being" within the scope of this book.