

What is “Communication” ?

—Beyond Shannon & Weaver’s Model—

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Abstract: The purpose of this paper is to propose rethinking the concept of communication in terms of semiotics. Especially I would like to suggest the benefit of arranging signals along a continuum of sign arbitrariness instead of categorizing signs by following a certain code system. Scientific definition of communication generally refer to the process of information transmission between a source and a receiver who share signs in common, based on cybernetic tradition. However, social communication is occurred without following the exact code system. My argument will benefit to analyze the students’ centered learning or active learning where the quality of communication between the students and the teachers is needed to redefine.

Keywords: Communication, information study, semiotics, textbook

INTRODUCTION

The purpose of this paper is to propose rethinking the concept of communication in terms of semiotics. Especially I would like to suggest the benefit of arranging signals along a continuum of sign arbitrariness instead of categorizing signs as signifiant and signifié as Saussure (1960) suggested. The word ‘communication’ is used in a variety of the field. For example, as the 21st century skills, communication and collaboration are important skills as working tools. Communication competence is the most important factor at the job interview in Japan, according to ministry of economy, trade and industry. Communication education is emphasized by ministry of education, culture, sports, science and technology (MEXT).

However, it is not clear what is ‘communication’ and how it should be viewed. Without clarifying the concept of communication, it will be difficult to nurture the communication skill or competence of the students.

CYBERNETIC TRADITION

The communication scholar, Craig (1999) proposed seven traditions of communication theories and suggest to discuss dialogically among the traditions. The seven traditions are cybernetic, semiotic, rhetorical, phenomenological, sociopsychological, sociocultural, and critical tradition. Depending on the

tradition, ‘communication’ is viewed in a different ways. For example, in the sociopsychological tradition, communication is defined as expression, interaction & influence. In the cybernetic tradition, communication is defined as information processing. Among these seven tradition, cybernetic tradition is the one where the well-known Shannon & Weaver model or Schramm’s model is based on. In Shannon & Weaver model, the process of information transmission from a source to a receiver is examined thoroughly and the importance of reducing noise and the concept of channel that mediate the information is proposed (Figure.1).

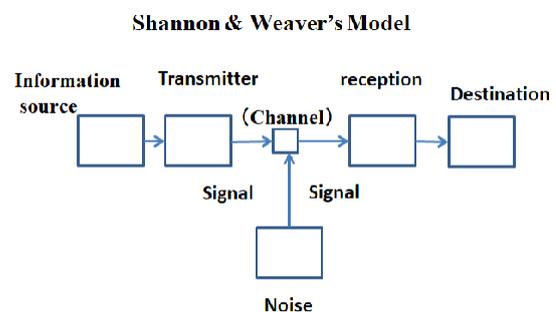


Figure 1. Shannon & Weaver’s model

(Based on Shannon & Weaver, 1949)

Based on this model, scientific definition of communication generally refers to the process of information transmission between a source and a

receiver who share signs. However, as I mentioned before, Craig (1999) proposed seven tradition of communication theories, and cybernetic tradition is not the only way to view the communication phenomena.

SEMIOTIC TRADITION

In the semiotic tradition, communication theories are approached as “intersubjective mediation by signs” (Craig, 1999). A ‘sign’ will be ‘viewed as that which in some sense, stands for something else—its significate’ (Cronkhite, 1984, p.53). Liska (1994). is proposing the continuum that consists of sign behaviors that she describes as “symptom”, “semblance”, or ‘symbols’ depending upon the degree of arbitrariness of the particular sign.

Three signs

The followings are the definition of each sign given by Liska (1994). ‘Sign that are symptoms bear a natural, functional, or physiological relationship to their significate, and these signs define one end of the continuum” (p. 235). “Symptomatic signs directly achieve their effects or, put another way, directly satisfy biological needs” (Liska, 1986, p.172).

The signs that define another end of the continuum is symbol. “A pure symbol is a sign that bears no conceivable natural or functional relation to its significate” (p.172). In other words, symbols are totally arbitrary signs. With the exception of onomatopoetic words, all words are symbols.

Semblance are signs “that either resemble the symptoms of the conditions on which they are based or bear a perceptual similarity or resemblance to their significates. Ritual semblance have their origins in symptoms but become exaggerated and transplanted into other contexts. Iconic semblance resemble their significates, as in the case of a line drawing of a person, a map of a territory, or a photograph of a gorilla” (Liska, 1994, p.238). Onomatopoetic words appear to be a mixture of symptom and symbol; that is, they are to some extent arbitrary but the choices are restricted to mimicry.

The continuum of three signs

Figure 2 was drawn by the author based on Liska (1986; 1994) and Yashima & Kubota (2012) in order to grasp the concept of three signs easily.

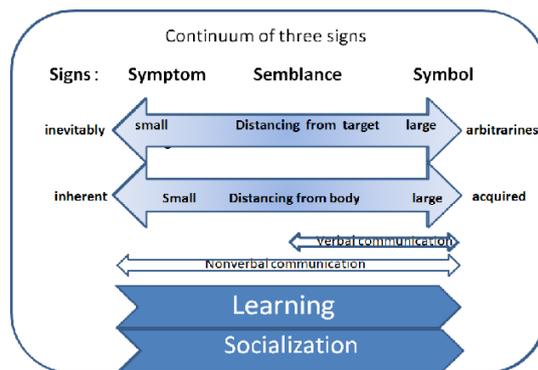


Figure 2. The continuum that consists of three signs

Liska (1994) ‘refers to ‘social communication’ as an organism’s response to non-symbolic signs and use the term ‘symbolic communication’ to refer to an organisms’ response to a symbol’ (p.172). Thus, social communication occurs to the extent that an organism responds to nonarbitrary signs, that is ‘symptoms’ here. Liska (1994) emphasizes the semblance as the missing link between symptom and symbol sign and interested in more on symbolic communication (including semblance) in order to understand human communication in relation to animals. In other words, Liska (1994) is interested in the development of symbol communication of human communication in relation to animal communication. However, my argument is that the emphasis of ‘social communication’ where an organism’s response to non-symbolic signs (symptom) as well as semblance will shed light on the communication problem for the global world.

DEVELOPMENT OF COMMUNICATION MEDIA

I will explain about coding in relation to the development of ‘media’ by referring Kujiraoka (1997), who investigate the human development of communication by researching the relationship between an infant and a caregiver thoroughly.

According to Kujiraoka (1997), the caregiver is always instinctively in tune with her baby. Therefore, the caregiver will easily notice the infant who expresses his feelings through the vitality affects (Stern, 1985). In the case of communication between an infant and his caregiver, Kujiraoka says that it is quite natural that communication occurs not from the sender’s side but from the receiver’s side (caregiver’s) since the infant cannot intentionally send any meaningful verbal message to his caregiver. Thus, Kujiraoka (1997) calls this kind of communication Prelingual Affective Communication. Prelingual Affective Communication is defined as various non-verbal interactions that happen mainly when two psychologically connected persons discover a common ground for their feelings and establish a

relationship. It can be observed not only between caregiver and infant but also between a husband and wife, a boyfriend and girlfriend and between any two people who are close. Once we acquire a language, we tend to forget this pre-verbal ability of Prelingual Affective Communication; however, we all have this ability (Kujiraoka, 1997).

Figure 3 shows the development of communication media given by Kujiraoka (1997, p.177).

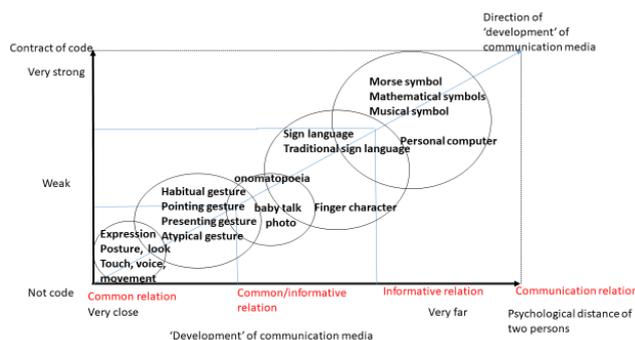


Figure 3. The development of communication media

The vertical axis shows the degree of contract of coding, while the horizontal axis shows the degree of psychological closeness between two persons as well as the type of communication.

The information study textbook based on cybernetics tradition emphasized the communication mainly occurred the upper right side in Figure 3. It means that information can be transmitted without mistaking although two persons are apart physically, since the contract of code is rigid.

However, I would like to suggest the importance of observing the communication phenomena occurred in the lower left side.

METHOD

In order to examine how ‘communication’ is viewed, first, I will analyze four Japanese textbooks of information study used in high schools to clarify the usage of terms like ‘communication’ and ‘information’. In the Japanese high school, two kinds of textbooks are used: Information Study by Scientific Approach and Information Study for Participating Community. Thus, I have chosen two textbooks of each title to analyze.

Secondly, I will illustrate the process of Japanese conversation by presenting the example of conversation from the information study textbook and TV drama in order to present the missing points of communication signals.

RESULTS AND DISCUSSION

Analysis of four textbooks

Table 1 and Table 2 show the results of four textbooks analysis. There are definitions of information in three textbooks while there are only one definition of communication in one textbook (Table 1). It says that “communication is to exchange information expressed with the letters, sounds, still pictures and movies, through media such as telephone and e-mail, and to interact each other”(p.106). This definition is based on cybernetic tradition.

In addition, the word ‘communication’ is used several times in the textbooks: in ‘Information Study by Scientific Approach,’ Latest/Information Study by Scientific Approach, ‘NEW Edition/Information Study for participating community’, and ‘Latest/Information Study for participating community,’ 20, 22, 11, and 30 respectively (Table 1 & 2). For example, communication tools, a variety of communication, communication on the network, means of communication, and lack of communication etc. As for the characteristics of communication, several important points when the students communicate through Internet are written. Thus, it is obvious that the usage of the word ‘communication’ in the textbooks of information study is definitely based on cybernetic tradition. The components of communication, such as a sender, receiver, message or information, channel or media, noise, encoding, and decoding are highlighted in the textbooks.

Table 1. Analysis of four textbooks (1)

Textbook title	NEW Edition/Information Study for participating community	Latest/Information Study for participating community
the Publisher	Tokyo Shoseki	Jikkyou Shuppan
Total number of pages	171	175
Published DATE	2018	2018
Definition of information	Information is the notice about events and the knowledge about the world, and that is useful to judge appropriately. The mere recodes of temperature is not information, but if those data was arranged by the certain purpose, then it becomes information like weather reports. Thus, information should be arranged for the sender and the receiver to understand clearly.	p.6 Information is the fact or the things that become the evidence to judge the behaviors or intention. The data is the one that were expressed in number, letters or signs.
Definition of communication	none	p.106 Communication is to exchange information expressed with the letters, sounds, still pictures and movies, through media such as telephone and e-mail, and to interact each other.
	communication tool	variation of communication
	Characteristics of communication	interpersonal communication
	communication on the network	cominication on the network
number of sentence that include the word 'communication'	11	30

Table 2. Analysis of four textbooks (2)

Textbook title	Information Study by Scientific Approach	Latest/Information Study by Scientific Approach
the Publisher	Tokyo Shoseki	Jikkyou Shuppan
Total number of pages	171	175
Published DATE	2018	2018
Definition of information	none	p.6 Information is what the data, that consists of number and letters, is purposefully collected and arranged.
Definition of	p.90 not a definition but a title	none
	p.90 a variety of communication	communication tools
	characteristics of communication etc	lack of communication
		means of communication
number of sentence that include the word 'communication'	20	22

Daily conversation

Case 1

In the information study textbooks called 'Latest/Information Study by Scientific Approach', there is one manga (Figure 4. p.8) that indicates the difficulty of 'communication.' The title is "let's start!-my feeling, wishing to communicate." This manga appears in the section of 'mechanism of transmission' where analog data and digital data were explained as information transmission through a computer.



Figure 4. One example of daily conversation

In this manga, the girl received the message from the boy, through a smart phone. The message says 'I like you'. However, the first impression of the boy by the girl is that he is looking down at the smart phone only, and that makes her irritated. Finally, she got

angry and said that "talk to me, since I am next to you!" in the second frame.

Let us analyze the first frame. How do you explain this situation with the Shannon & Weaver model? The boy did not send any message verbally to her, but the girl interpreted some message from him. The distance between the girl and the boy is very close and that helps her to interpret the situation. Hall (1970) classified the personal space into four, and defines that the close distance is from 0 to 0.46 meter and the two person will talk the private topic in that distance. Thus, the girl and the boy can talk the private topic in this situation. Of course, the relationship between the boy and the girl also helps to interpret the situation (Watzlawick, Beavin, & Jackson, 1967). In order to talk the private topic, they should not be unknown each other but they must be close friends.

In this situation, the boy might avoid eyes-contact with the girl because of shyness, thus he looks down the smart phone. Sitting on the bench might afford two persons not to look each other. Silence might tell the girl easily about his shyness, however, he was busy typing something with the smart phone in this situation. This behavior irritated the girl, I think. Her assumption is the close distance is the situation where two person can talk directly instead of using any media.

This situation suggests us to observe the contradiction of assumptions hold by the boy and the girl. In other words, the boy's behaviors can be observed in the upper right, while the girl expects to communicate in the lower left manner in the Figure 3. The boy insists to use symbol (rigid code), while the girl relies on symptom or semblance (not code).

Case 2

I will show another example of daily conversation from TV drama to present the phenomena where the Shannon & Weaver model cannot explain the process of communication.

The story occurred about 1990' era. It is about the Nire's family, where there are grandfather, father, younger brother and heroine called Suzume.

At the coffee shop, the clerk explain to the Nire's family (her father, her grandfather and her brother) about the situation of Suzume, whom she saw last evening in her coffee shop.

The clerk: "The last evening, I just wonder what she does, however, she brought out the name card of Mr.Akikaze,"

Father: "Name card?"

The clerk: "Yeah, It seems she always carries it in her pocket, and she called (with the public phone). Sorry for her, it seems that no one answered, so, she called every ten minutes.

Poor, Suzume, her hands were shaking, maybe she was so nervous, I think.”

This scene shows the clerk’s interpretation of Suzume’s situation from Suzume’s shaking hands. She knows the person to whom Suzume was talking on the phone and how the phone call to Mr. Akikaze was important for her. However, without asking anything to Suzume, she interpreted the situation from Suzume’s shaking hands as nervous. How do you explain this situation with the Shannon & Weaver model? Suzume did not intentionally send any message to the clerk, but the clerk received some message from her shaking hands, and report it to Nire’s family on the following day. In case of interpretation, the sender does not send any message, however, the receiver receives some information from the sender like the caregiver interprets the situation of infant. Because the caregiver cares the infant, she can catch any signs from infant. In the same manner, the clerk cares for Suzume, she could catch some signs from Suzume. Caring for others is the important factor to catch any signs from others.

Suzume was nervous or anxious thus her hands were shaking. This is the symptom. The clerk could notice this symptom of Suzume, because she cares for Suzume.

In cybernetic tradition, the information or message is sent from the sender, however, as shown in Figure 4, the receiver can interpret some meaning from the sender if the receiver cares for the sender. Information is transmitted according to the code system in cybernetic tradition. Thus, the sender and receiver need to share the common code to understand each other mistakenly. That occurs mainly in the upper right in the Figure 3. However, coding means segmenting the phenomena into several parts, and that did not fit to express the feeling (symptom) shared among the sender and the receiver. For example, if two persons were in the cold place and felt cold, then one will say, ‘cold, isn’t it?’ then the other will say, ‘un’. Before exchanging the words, they need to feel ‘cold’ together. In Japan, this kind of social communication is very common as a greeting.]

Affection need to occur before saying something (action) for prelingual affective communication. However if a person are trained enough in a society (socialization) then, you greet because you believe a greeting is important to keep the good relationship with your neighborhood or a friend, or a greeting might become just a habit (semblance). In other words, you think first before reacting to the symptom.

If you place the continuum of three sign along the vertical axis in Figure 3, you can find the reason why nurturing social communication competence is important in the global world. Again, Social communication occurs to the extent that an organism responds to nonarbitrary signs, that is ‘symptoms’ (Liska, 1999). The reason is that as the media of

communication develops, the more prelingual affective communication is disregarded.

CONCLUSION

The purpose of this paper is to propose rethinking the concept of communication in terms of semiotics. Especially I suggested the benefit of arranging signals along a continuum of sign arbitrariness instead of categorizing signs as signifiant and signifié as Saussure (1960) suggested. In the process of communication, unconsciousness and interpretation are the key to nurture social communication. The sender might present some information unconsciously, in other words, the sender might just respond to symptom such as blushing, shaking, or brining etc. However, the receiver can interpret something from it, if the receiver cares for the sender. This kind of social communication will become more important.

The reasons are three holds. One is that the receiver instead of sender can initiates communication in social communication. The second is that interpretation of signs becomes important to initiate social communication. In order to interpret symptom, a person need to care for others and observe the others. The third is that the relationship between the sender and the receivers often becomes asymmetry in social communication.

In order to nurture the social communication, I urge to cultivate emotion in relation to cognitive and behavior in order to grasp the communication phenomena from the variety of the perspectives and enhance not only the students’ but also the teachers’ communication competence.

A workshop of improvisation will be one of the technic to enhance the quality of communication. The quick response from the body must be trained through improvisation. I hope my argument will benefit to analyze the students’ centered learning or active learning where the quality of communication between the students and the teachers need to redefine.

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