A Re–Interpretation of Double Bind from the Viewpoints of Sociology of Emotions and Group Dynamics (A Draft)

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Abstract

In scientific research on emotions, phenomena on them has been considered to be mental ones in individuals. Even in the traditional sociology, emotions have actively not been dealt with because social phenomena and organizations have been analyzed based on the assumption that important decision should rationally be made. Thus, influence of societies and cultures in emotions has not explicitly been dealt with. Recently, however, socilogy of emotions has augued sociality of emotions based on a concept "feeling rules" defined as a set of socially shared guidelines that direct how we want to try to feel and not to feel emotions according to given situations. Based on this concept, several sociological analysis for social phenomena such as problems on emotional workers and a cultural trend in the modern societies have been done. In addition, a sociologist suggests that the concept of "double bind" can be explained from the viewpoint of feeling rules.

This paper gives a re-interpretation of double bind from the viewpoints of the sociology of emotions and group dynamics in social psychology. In partitular, we propose a formalization of double bind situations based on feeling rules and cognitive consistency theory.

Introduction

Double Bind Theory was proposed as a source of schizophrenia from the viewpoint of social interactions in the 1950s (Bateson, 1972). This theory argues that sources of schizophrenia are on not only mental level of individuals such as trauma but also inconsistency in human communication. As shown in humor, human communication is done across several logical types. Although normal people can partition messages from others into the appropriate modes, a person in double bind situations is always given messages inconsistent in lower and higher levels and is prohibited from running away from this inconsistency. As a result, the person becomes be unable to partition messages into the appropriate modes and schizophrenic symptoms happen as a defensive response. The conditions for double bind are formalized as follows:

- 1. The existence of one victim (a child in many cases) and some assailants (the mother in many cases).
- 2. The custumization of cogition for double bind structures through the repeated experiences.
- 3. The first prohibition message with punishment.
- 4. The second prohibition message inconsistent to the first one at another level.
- 5. The third message that prohibits the victim from stepping out of the inconsistent situation.

Although it is said that double bind theory has largely not developed in the theoretical sence since 1970s, it has been applied to a clinical field

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with family system theory (Ciompi, 1982; Okado, 1992). Moreover, there are some researches that aim to re-formalizing double bind theory based on nonlinear dynamical systems (Koopmans, 1998).

In this paper, we propose a formalization of double bind situations by using concepts of sociology of emotions (Kemper, 1990; Okahara et al., 1997) and group dynamics, in particular, feeling rules (Hochschild, 1979; 1990) and the theory on triad in social psychology.

Sociology of Emotions

Sociology of emotions (Kemper, 1990) is an attempt to develop a new perspective in sociology by focusing on emotions. In the traditional sociology, emotions have not been actively dealt with. The reason is because social phenomena and organizations have been analyzed based on the assumption that important decisions should rationally be made. Moreover, because analogical models from natural sciences such as physics have succeeded in explaining phenomena even in sociology, emotions have been regarded as those parameters which are impossible to objectively observe.

Okahara argued that there are three reasons why emotions can be a subject in sociological research under the above situation (Okahara et al., 1997). First, focusing on emotions leads to a more realistic understanding of social actions. Second, it can become a strategy to develop a new perspective for a paradigm change in sociology. Third, there has been a variety of emotional phenomena that cannot be neglected in modern societies, such as excess and/or deficiency of feelings in families, commoditization of feelings, mental fatigue due to emotion management, and so on. Under this situation, the sociology of emotions appeared to satisfy the requirement of practical efforts.

One of the important concepts in the sociology of emotions is "feeling rules" proposed by Hochschild (1979; 1990). From the perspective of symbolic interactionism that Hochschild adopts, an actor generates his emotions after cognitive evaluation and interpretation of his internal state and given situations. However, this interpretation cannot be done based only on subjective arbitrariness. Regularity that exists in emotional experiences and expressions is socially shared and reconstructed beyond individual situations. Feeling rules are a set of socially shared guidelines that direct how we want to try to feel and not to feel emotions according to given situations. They are often refered to in the form of rights and duties (for example, we often speak of "having the right" to feel angry at someone, or we say that we "should feel more grateful" to a benefactor). Based on feeling rules and given situations, emotion management is executed. Emotion management means to evoke an emotion appropriate for a feeling rule but not being felt, or to suppress an emotion inappropriate for a rule but being felt.

Based on the concepts of feeling rules and emotion management, Hochschild showed a problem of emotional workers such as flight attendants who are required to have a high degree of emotion management. Moreover, Yamada pointed out the fact that emotions have become a strategy for social control in modern society. Furthermore, Okahara claimed a cultural trend of extreme desire for emotions and its evil practice in modern society (Okahara et al., 1997).

Moreover, we are aiming to verifying the validity of computational approach to the sociology of emotions from the perspective of group dynamics in social psychology (Nomura, 2000).

Theories on Triad in Social Psychology

In 1950s, some theories on triad in human relations were proposed in the context of socal psychology (Newcomb, 1953; Osgood & Tannenbaum, 1955; Heider, 1958).

In the A-B-X system by Newcomb(1953), one person (A) transmits information to another person (B) about something (X). The sysem consists of A's orientation (quivalent to "attitude" in its more inclusive sense of referring to both cathectic and cognitive tendencies) toward X, A's orientation toward B, B's orientation toward X, and B's orientation toward A. Each orientation can have positive (+) or negaive (-) value, and there is an interdependency between the states of $A \rightarrow B, A \rightarrow X$, $B \rightarrow X$, and $B \rightarrow A$. That is, when both A's and B's orientation toward X is symmetiric and the orientations both from A to B and from B to A are positive (as shown in figure 1 (a)), the state is balanced. In addition, if the state of the system is not balanced (as shown in figure 1 (b)), the system is oriented toward a balanced state though certain forces. In the inbalanced state shown in figure 1 (b), this is done by convincing B of positive orienation toward X by A, changing A's orienation toward X as negaive, and changing A's orientation toward B as negative.

In the congruity theory by Osgood and Tannenbaum(1955), the triad consists of an attitude from one person (P) to a source (S), an attitude from the person to a concept (C), and an assertion



Figure 1: Examles of Balanced and Inbalanced States in the A–B–X System

about the concept by the source. Each attitude and assertion can have a numerical value from -3 to +3. The congruity theory predicts the change of attitudes of P when an assertion about C by S is given, based on the principle that "changes in evaluation are always in the direction of increased congruity with the existing frame of reference." (Osgood & Tannenbaum, 1955, p. 43). As shown in figure 2, if the attitude value of P toward S (PS) is positive and that toward C (PC) is negative, an inconsistency happens in P when S positively asserts about C. Then, the values PS and PC are re-assigned to reduce the inconsistency. The equations for prediction of attitude chagne are as follows:

when S positively

asserts about C,

The change of $PS = \frac{|PC|}{|PC| + |PS|}(PC - PS)$

The change of PC =

when S negatively

asserts about C,

The change of
$$PS = \frac{|PC|}{|PC| + |PS|}(-PC - PS)$$

The change of $PC = \frac{|PS|}{|PC| + |PS|}(-PS - PC)$

 $\frac{|PS|}{|PC| + |PS|}(PS - PC)$

In the balance theory by Heider(1958), the triad consists of a relation from one person (P) to the other (O), a relation from P to an object (X), and the relation from O to X. Each relation has a positive (+) or negative (-) value. In the P–O–X system, the situation is balanced if the product of the signs of the three relations $P \rightarrow O$, $P \rightarrow X$, and $O \rightarrow X$ is positive, and inbalanced if it is negative (as shown in figure 3. In addition, if the situation is inbalanced, P feels displeasure or strain, and then modifies the $P \rightarrow O$ or $P \rightarrow X$ relations or tries to change the $O \rightarrow X$ relation so that the situation is balanced.



An Initial State

Figure 2: Attitude Dynamics in the Congruity Theory



Figure 3: Balanced and Inbalanced Situations in the P–O–X System

Common in the above theories is that they are based on the idea of cognitive consistency: that is, humans have a basic requirement to maintain consistency in their beliefs, attitudes, and actions for objects, and if inconsistencies exist, they cause displeasure. Humans are motivated to reduce displeasure. Our proposal in this paper is that double bind situations can be described as a combination of several triads consisting of one person (a victim), other persons (assailants), and some feeling rules, and thus symptoms in double bind situations can be interpreted as things caused by inconsistencies in these triads. We provide a concrete model in the next section.

Double Bind as Triads with Inconsisitent Feeling Rules

Yamada suggested that concept of "double bind" can be explained from the viewpoint of feeling rules (Okahara et al., 1997). According to his suggestion, double bind leads to the problem of gaps between emotions "being felt" in a given situation and "to be felt" according to a feeling rule for the situation. In our model, some triads including feeling rules as nodes are considerd.

Triad Including One Person and Inconsistent Feeling Rules

Let us assume that there is a feeling rule (e.g., "mothers must not hate her family menbers"). Now, we consider the feeling rule represented as the negation of it (e.g., "mothers may hate her family members"). We assume that this negation rule indicates the opposite emotion to the emotion which the original rule indicates. Moreover, we consider relations that a person has to these rules. In our model, these relations also have positive or negative values, corresponding to "orientations" in the A–B–X systems, "attitudes" in the congruity theory, and "relations" in the P–O–X systems mentioned in the previous section. The existence of these relations mean that the person executes emotion management according to the rules. Furthermore, positive relations mean that the mental resistance of the person for the corresponding emotion management is small, and negative relations mean that it is large.

Figure 4 shows all the possible situations of the triad consisting of a person P_1 , a feeling rule R and the negation rule $\neg R$. Here, note that Rand $\neg R$ deny each other and the relation between them $(R \leftrightarrow \neg R)$ is considered as negative. In the sense of the P–O–X system, the situations where the relations $P_1 \rightarrow R$ and $P_1 \rightarrow \neg R$ have the different signs are balanced (figure 4 (a)). In the inbalanced situations (figure 4 (b)), the person P_1 has an inconsistency in the sense that when only one of the two emotion managements should be done, the opposite emotion managements are done or any emotion management is refused.

Triads Including Two Persons and Inconsistent Feeling Rules

Now, let us assume that there is another person P_2 that has relations to the rules R, $\neg R$, and the person P_1 . In this situation, we consider what situations are balanced in the relations of P_2 to R, $\neg R$, and P_1 . In order to measure the balance in this situation including P_1 , P_2 , R, and $\neg R$, we should check the balance of all the triads including P_2 $(P_2-R-\neg R, P_2-P_1-R, \text{ and } P_2-P_1-\neg R)$. Thus, we can measure the balance in the relations of P_2 to R, $\neg R$, and P_1 by checking the signs of the product of $P_2 \rightarrow R$, $P_2 \rightarrow \neg R$, and $R \leftrightarrow \neg R$, that of $P_2 \rightarrow P_1$, $P_2 \rightarrow \neg R$, and $P_1 \rightarrow R$.

Table 1 shows the balance of each triad in all the possible situations of the relations between P_1 , P_2 , R, and $\neg R$. Here, we assume that all the tirads equally affect on the total balance of P_2 . In cases



Figure 4: All the Possible Situations of the Triad Consisting of a Person P_1 , a Feeling Rule R, and the Negation Rule $\neg R$

that P_1 has no inconsistency for the rules, that is, cases of $P_1 \rightarrow R = +$ and $P_1 \rightarrow \neg R = -$, or $P_1 \rightarrow R = -$ and $P_1 \rightarrow \neg R = +$, the most balanced situations of P_2 on the relations are cases that P_2 has a positive relation to P_1 and the same relations for the rules as those of P_1 , or a negative relation to P_1 and the opposite relations for the rules to those of P_1 . In these situations, all the triads are balanced. Moreover, any inbalanced situation can be tranfered to one of these balanced situation by changing only one relations of $P_2 \rightarrow P_1$, $P_2 \rightarrow R$, and $P_2 \rightarrow \neg R$. In this sense, these balanced situations are considered as stable in the dynamics of relation change. Furthermore, as shown by relplacing P_2 with P_1 in table 1, if P_1 has the same relation to P_2 as that of P_2 to P_1 then all the triads from the view of P_1 are also balanced. As a result, all the relations including the diad between P_1 and P_2 are balanced in the sense of both the P–O–X and A–B–X systems. Figure 5 shows these completely balanced situations. We consider that these situations are the most sound ones in human communication through feeling rules.

Double Bind as a Cycle of Structure Change of Triads

On the other hand, as shown in table 1, there is no balanced situation of P_2 in cases that P_1 has an inconsistency for the rules. In other words, P_2 has an inconsistency whatever relations to the rules and P_1 are selected. By regarding P_1 as an assailant and P_2 as a victim, we consider these situations as

			$P_1 \rightarrow R = + \text{ and } P_1 \rightarrow \neg R = -$			$P_1 \rightarrow R = - \text{ and } P_1 \rightarrow \neg R = +$		
$P_2 \rightarrow P_1$	$P_2 \rightarrow R$	$P_2 \rightarrow \neg R$	$P_2 \neg R \neg R$	$P_2 - P_1 - R$	$P_2 - P_1 - \neg R$	$P_2 - R - \neg R$	$P_2 - P_1 - R$	$P_2 - P_1 - \neg R$
+	+	+	-	+	-	-	-	+
+	+	-	+	+	+	+	-	-
+	-	+	+	-	-	+	+	+
+	-	-	-	-	+	-	+	-
-	+	+	-	-	+	-	+	-
-	+	-	+	-	-	+	+	+
-	-	+	+	+	+	+	-	-
-	-	-	-	+	-	-	-	+
			$P_1 ightarrow R$ =	$=$ + and P_1 -	$\rightarrow \neg R \equiv +$	$P_1 \rightarrow R$	$=$ $-$ and P_1 $-$	$\rightarrow \neg R \equiv -$
$P_2 \rightarrow P_1$	$P_2 \rightarrow R$	$P_2 \rightarrow \neg R$	$P_1 \rightarrow R = P_2 - R - \neg R$	$= + \text{ and } P_1 - P_2 - P_1 - R$	$ \neg R = + $ $P_2 - P_1 - \neg R$	$\begin{array}{c} P_1 \rightarrow R = \\ P_2 \neg R \neg R \end{array}$	$= - \text{ and } P_1 - P_2 - P_1 - R$	$ \neg \neg R = - $ $P_2 - P_1 - \neg R$
$\begin{array}{c} P_2 \rightarrow P_1 \\ + \end{array}$	$P_2 \rightarrow R$ +	$\begin{array}{c} P_2 \rightarrow \neg R \\ + \end{array}$	$\begin{array}{c} P_1 \rightarrow R = \\ P_2 - R - \neg R \\ - \end{array}$	$= + \text{ and } P_1 - P_2 - P_1 - R +$		$\begin{array}{c} P_1 \rightarrow R = \\ P_2 \neg R \neg R \\ \hline \end{array}$	$= - \text{ and } P_1 - P_2 - P_1 - R$	
$\begin{array}{c} P_2 \rightarrow P_1 \\ + \\ + \end{array}$	$\begin{array}{c} P_2 \rightarrow R \\ + \\ + \end{array}$	$\begin{array}{c} P_2 \rightarrow \neg R \\ + \\ - \end{array}$	$\begin{array}{c} P_1 \rightarrow R = \\ P_2 - R - \neg R \\ \hline - \\ + \end{array}$	$= + \text{ and } P_1 - P_2 - P_1 - R + + + + + + + + + + + + + + + + + +$		$\begin{array}{c c} P_1 \rightarrow R = \\ P_2 - R - \neg R \\ \hline \\ - \\ + \end{array}$	$= - \text{ and } P_1 - P_2 - P_1 - R$ $ $	
$\begin{array}{c} P_2 \rightarrow P_1 \\ + \\ + \\ + \\ + \end{array}$	$\begin{array}{c} P_2 \rightarrow R \\ + \\ + \\ - \end{array}$	$\begin{array}{c} P_2 \rightarrow \neg R \\ + \\ - \\ + \end{array}$	$\begin{array}{c} P_1 \rightarrow R = \\ P_2 - R - \neg R \\ - \\ + \\ + \end{array}$	$= + \text{ and } P_1 - P_2 - P_1 - R + P_2 - P_1 - -$		$\begin{array}{c c} P_1 \rightarrow R = \\ P_2 - R - \neg R \\ \hline \\ - \\ + \\ + \\ \end{array}$	$= - \text{ and } P_1 - P_2 - P_1 - R$ $= -$ $+$	
$ \begin{array}{c} P_2 \rightarrow P_1 \\ + \\ + \\ + \\ + \\ + \\ + \end{array} $	$\begin{array}{c} P_2 \rightarrow R \\ + \\ + \\ - \\ - \end{array}$	$\begin{array}{c} P_2 \rightarrow \neg R \\ + \\ - \\ + \\ - \\ - \end{array}$	$\begin{array}{c} P_1 \rightarrow R = \\ P_2 - R - \neg R \\ - \\ + \\ + \\ - \end{array}$	$= + \text{ and } P_1 - P_2 - P_1 - R$ + + -	$ \begin{array}{c} \rightarrow \neg R = + \\ P_2 - P_1 - \neg R \\ + \\ - \\ + \\ - \\ - \end{array} $	$\begin{array}{c} P_1 \rightarrow R = \\ P_2 - R \neg R \\ - \\ + \\ + \\ - \end{array}$	$ \begin{array}{c} = - \text{ and } P_1 - \\ P_2 - P_1 - R \\ - \\ - \\ + \\ + \\ + \end{array} $	$ \begin{array}{c} \rightarrow \neg R = - \\ P_2 - P_1 - \neg R \\ - \\ + \\ - \\ + \end{array} $
$ \begin{array}{c} P_2 \rightarrow P_1 \\ + \\ + \\ + \\ + \\ + \\ - \end{array} $	$\begin{array}{c} P_2 \rightarrow R \\ + \\ + \\ - \\ - \\ + \\ + \end{array}$	$\begin{array}{c} P_2 \rightarrow \neg R \\ + \\ - \\ + \\ - \\ + \\ + \\ + \end{array}$	$\begin{array}{c} P_1 \rightarrow R = \\ P_2 - R - \neg R \\ - \\ + \\ + \\ - \\ - \\ - \end{array}$	$=$ + and P_1 - $P_2 - P_1 - R$ + + - - - -	$ \overrightarrow{P} = + $ $ P_2 - P_1 - \neg R $ $ + $ $ - $ $ + $ $ - $ $ - $ $ - $	$\begin{array}{c} P_1 \rightarrow R = \\ P_2 - R - \neg R \\ - \\ + \\ + \\ - \\ - \\ - \end{array}$	$ \begin{array}{c} = - \text{ and } P_1 - P_2 - P_1 - R \\ \hline P_2 - P_1 - R \\ - \\ - \\ + \\ + \\ + \\ + \\ + \end{array} $	$ \overrightarrow{P} = -$ $P_2 - P_1 - \neg R$ $-$ $+$ $-$ $+$ $+$ $+$
$\begin{array}{c} P_2 \rightarrow P_1 \\ + \\ + \\ + \\ + \\ - \\ - \\ - \end{array}$	$\begin{array}{c} P_2 \rightarrow R \\ + \\ + \\ - \\ - \\ + \\ + \\ + \end{array}$	$\begin{array}{c} P_2 \rightarrow \neg R \\ + \\ - \\ + \\ - \\ + \\ - \\ + \\ - \\ - \end{array}$	$\begin{array}{c} P_1 \to R = \\ P_2 - R - \neg R \\ - \\ + \\ + \\ - \\ - \\ + \\ + \\ - \\ + \\ +$	$=$ + and P_1 - P_2-P_1-R + - - - - -	$rightarrow \neg R = +$ $P_2 - P_1 - \neg R$ + - + - - + - + - + + - + + - + + + - + + + - + + + - + + - + + + - + + - + + - + + - + + - - + + - - + + - - + + - - + + - - + - - + + - - + + - - + + - - + + - - + + - - + + - - + + - - + + - - + + + - - + + + - - + + + + + - + + + + + + + +	$\begin{array}{c} P_1 \to R = \\ P_2 - R - \neg R \\ - \\ + \\ + \\ - \\ - \\ - \\ + \\ + \\ \end{array}$	$=$ - and P_1 - P_2-P_1-R - + + + + +	$ \overrightarrow{P} = -$ $P_2 - P_1 - \neg R$ $-$ $+$ $-$ $+$ $+$ $-$
$ \begin{array}{c} P_2 \to P_1 \\ + \\ + \\ + \\ - \\ - \\ - \\ - \\ - \\ - \end{array} $	$\begin{array}{c} P_2 \rightarrow R \\ + \\ - \\ - \\ + \\ + \\ + \\ - \\ - \\ \end{array}$	$\begin{array}{c} P_2 \rightarrow \neg R \\ + \\ - \\ + \\ - \\ + \\ - \\ + \\ + \\ + \\ +$	$\begin{array}{c} P_1 \to R = \\ P_2 - R - \neg R \\ - \\ + \\ + \\ - \\ - \\ - \\ + \\ + \\ + \\ +$	$=$ + and P_1 - P_2-P_1-R + - - - - + + - - +	$rightarrow \neg R = +$ $P_2 - P_1 - \neg R$ + - + - + - + - - + -	$\begin{array}{c} P_1 \to R = \\ P_2 - R - \neg R \\ - \\ + \\ + \\ - \\ - \\ - \\ + \\ + \\ + \\ +$	$ \begin{array}{c} = - \text{ and } P_1 - \\ P_2 - P_1 - R \\ - \\ - \\ + \\ + \\ + \\ + \\ + \\ - \end{array} $	$rightarrow \neg R = -$ $P_2 - P_1 - \neg R$ - + + + + + + + +

Table 1: The Balance of Each Triad in All the Possible Situations of the Relations between P_1 , P_2 , R, and $\neg R$



Figure 5: The Completely Balanced Situations in Cases That P_1 Has No Inconsistency for the Rules

a formalization of the initial state of double bind where inconsistent messages are given. In other words, these situations mean that since the assailiant has the inconsistency for the feeling rules the victim are forced to have the inbalanced relations to the rules and the assilant. However, this formalization does not represent the whole nature of double bind since it does not include the third message that prohibits the victim from stepping out of the inconsistent situation. In order to represent the thrid prohibition message, we propose a scinario on dynamics of structures of relations as below.

Figure 6 shows our scenario through which the victim reaches to double bind situations. This scenario formalizes double bind as a cycle of structure change of triads from the view of the victim P_2 .



Figure 6: Our Scenario through Which the Victim P_2 Reaches to Double Bind Situations

First, the victim P_2 conceptualizes these situations where the assilant P_2 has the inconsistent relations for the feeling rules R and $\neg R$ at a higer level. If P_1 has positive relations to both the inconsistent rules, P_2 conceptualizes it as a situation where these two rules inconsistent each other should be accorded at the same time (R and $\neg R$ in the upper figure of figure 6), and then has a negative relation to the situation. If P_1 has negative relations to both the inconsistent rules, P_2 conceptualizes it as a situation where only one of these two rules inconsistent each other should be accorded (R or $\neg R$ in the lower figure of figure 6), and then has a positive relation to the situation.

Then, P_2 has a negative relation to P_1 , and these new triads are balanced since P_1 has the opposite relation to those of P_2 to the conceptualized situations. This represents a process that P_2 obtains a balanced situation from view in a meta level to avoid displeasure caused by the inbalanced situations at the first level.

Then, P_1 has a positive relation to P_1 . This causes an inbalanced situation in the diad relation between P_1 and P_2 and P_2 are forced to change the relation to P_1 . As a result, P_2 are also forced to change the relation to the conceptualized situation mentioned above in order to balance the triad, and return to the first inconsistent situations. This represents the thrid message prohibiting P_2 from stepping out the inconsistent situations.

Furthermore, we can consider an influence of the repetition of this cycle as follows. If we assume that the cycle reinforces the positive relation of P_2 and the triads including P_2 (P_2 - P_1 -R and P_2 - $P_1 \neg R$ have stronger influences than the triad not including P_2 (P_2 -R- $\neg R$), as shown in table 1, P_2 has the same relations to the rules as those of P_1 to obtain more balanced situation. That is, P_2 shares the inconsistent situations with P_1 . This represents the custumization of cogition for double bind structures through the repeated experiences. As a result, when only one of the two emotion managements should be done, P_2 are forced to do the opposite emotion managements or to refuse any emotion management in the same way as P_1 does.

The above scenario on double bind has an important implication: that is, a person having an inconsistency forces others to have the same inconsistency.

Double Bind by More Than Three Persons

In our model of double bind, we can consider influences of more than two persons on a victim. Let us assume the third person P_3 . The first case we consider important is a situation where P_3 has the same inconsistency as those of P_1 for the feeling rules, P_3 is in cooperation with P_1 for double bind on P_2 . As shown in figure 7 (a), when P_1 and P_3 are in a double bind situation, P_2 are influenced by not only the triads P_2-P_1-R and $P_2 P_1-\neg R$ but also P_2-P_3-R and $P_2-P_3-\neg R$. In addition, the diad P_1-P_3 influences the diads P_2-P_1 and P_2-P_3 by balancing the triad $P_1-P_2-P_3$. As a result, the inconsistency of P_2 is reinforced and the double bind is maintained more strongly.

The second case is, it may be more important and realistic, a situation where both P_1 and P_3 have no inconsistency for the feeling rules but the opposite relations to them as shown in the lower figures in figure 5. As shown in figure 7 (b), the opposite relations are given to each rule from the view of P_2 . Although P_2 is not in double bind for either P_1 or P_3 , all the triads and diads cannot be balanced at the same time, that is, P_2 is forced to be in at least one inbalanced situation.





(b) Inconsistency by Presons Opposing Each Other

Figure 7: Influences of More Than Two Persons on a Victim

Discussion and Conclusion

As shown in the previous sections, our model of double bind is based on the theories on triad in social psychology and is simple. Its components are summurized as follows:

- 1. Mental instability in the victim by inbalanced triads including the assilant and feeling rules inconsistent each other.
- 2. Construction of a new triad at higher level and change of the relations by positive feedback caused by the instability.
- 3. Supression of change of the relations by negative feedback caused by the balance of the newly constructed triad.

4. Loop of change of the relations by the positive feedback and suppression of the chage by the negative feedback.

However, our model has some problems. First, we must investigate whether it completely covers properties in double bind. In order to solve this problem, we must analyze many cases of double bind to find feeling rules and structures on relations of persons to them.

Second, we must find new implications on double bind, in particular, on the methodology for treatment, from our model. For the purpose, we consider an attempt to re-interpret the conventional methods for treatment based on our model and find a new form of treatment from the viewpoint of family system theories (as another usage of our model for treatment, it is considered that a treating person make a treated person change his world view by telling him that he is interpreted even in this artificial and simple model, and making him resist it).

Third, we used discrete values to represent dynamics in the relations. However, it may be more realistic to represent the relations with continuous values such as in Osgood & Tannenbaum(1955). We should extend our model to a nonlinear differential/difference equation including the structures of triads at both lower and higher levels.

Finally, as far as we refer to feeling rules in constructing our model, we should apply our model to the conventional works in the sociology of emotions, in particular, those in symbolic interactionism, in order to investigate the validity of our model. As one of attempts for the purpose, we consider representation of emotional workers in Hochschild (1979; 1990) as shown in figure 8.





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