A Schema of Japanese Interpersonal Relationships: An Analysis Using the Personal Attitude Construct Method

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The primary purpose of this study was to investigate a foreign student's schema of Japanese interpersonal relationships. A schema of interpersonal relationships is so naturally embedded in our social life that we are hardly aware of it. We therefore made use of personal attitude construct (PAC) analysis (Naito, 1993, 1997, 2002). The subject was a female Chinese graduate student. Cluster analysis clarified her image and interpretation of the characteristics of Japanese interpersonal relationships. The first cluster, labeled "group activity with the virtue of modesty," involved positive feelings. The second cluster, labeled "surface interpersonal relationships and actual intentions," revealed self-alienation. The third cluster, labeled "self-restraint and hidden real intentions," revealed negative feelings accompanying self-alienation. This study confirmed the applicability of PAC analysis to a schema of human relationships.

Key words: schema of Japanese interpersonal relationships, student from abroad, analysis of personal attitude construct

All of us, in our daily lives, have theories about ourselves and the surrounding social world. These theories play significant roles in how we understand and interpret ourselves, other people, and the interactions and social settings in which we find ourselves. Our theories about the world are called schemas (Bartlett, 1932; Markus, 1977; Taylor and Crocker, 1981). Schemas are cognitive constructs with which we organize our knowledge about the world around themes or subjects. A schema of interpersonal relationships is so naturally embedded in our social lives that we are hardly aware of it.

Fiske and Taylor (1991) summarized schema acquisition and development as follows (pp. 147–149). Schemas are developed as a result of encounters or abstract communication about related general characteristics. When people generalize a schema from experience, it typically becomes more abstract. The critical shift to abstraction may occur after only two exposures, at which point people begin to perceive the common-

alities between the two experiences. The more one knows, the more one can describe the details of the schema. Schemas also become more tightly organized as they develop: an expert's schema is well-developed, accessible (easy to remember and use), and richly interconnected (with an organized internal structure). As schemas develop and are unitized with practice, they take up less mental capacity, thus freeing one to attend to other matters. For a person to function adaptively, added knowledge must increasingly fit the stimulus world, at least well enough, if not perfectly.

According to Fiske and Taylor, the cognitive frame of interpersonal relationships is a schema that powerfully indicates how to behave in a situation. We do not typically recognize the existence of interpersonal relationship schemas: they are subtle, implicit, and carried out automatically. In contrast, when we come into contact with a foreigner, we notice the cultural differences between interpersonal relationship schemas. When

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we try to apply our social schemas to foreign people, we may become angry or puzzled at their protest or rejection. The use of maladapted schema can be costly, so it behooves us to be alert to the possibility of being wrong. We may even change our schemas. When we have difficulty with a person from another country, we mainly use a subtyping model because we can easily perceive that person as foreign.

We Japanese do not easily recognize our schemas of interpersonal relationships. However, when students from abroad encounter the Japanese culture and style of interpersonal relationships, they may experience culture shock. Watanabe (2002) suggested that culture shock is a schema shock from the standpoint of cognitivism. International students at a Japanese university confront many different standards and styles of Japanese interpersonal behavior and may even experience a mental health crisis (Ohashi, 2008). However, they gradually become accustomed to Japanese standards and styles, and at the same time obtain and develop a schema of Japanese interpersonal relationships. Thus, foreign students are appropriate subjects for investigating Japanese interpersonal relationships. Foreign subjects easily notice differences, but they are hardly cognizant of the schema. Because a schema is subtle and implicit, it is necessary to have a technique for assembling and constructing information. Recently, Greenwald, McGhee, and Schwartz (1998) created the implicit association test (IAT) to measure implicit attitudes (e.g., prejudice), or the implicit association between concepts and attributes (e.g., race). However, it is not suitable for measuring a structure (construct) of various personal association items. Because a schema is fundamentally a personal cognitive framework of theory, a personal measurement such as the personal attitude construct (PAC) analysis (Naito, 1993, 1997, 2002) is more appropriate. PAC involves a subject's free association and interpretation. It is suitable for the discovery of factors, and it can be used for a single case.

The purpose of this research is to investigate a foreign student's schema of Japanese interpersonal relationships and to confirm the suitability of PAC analysis for such a schema. The subject was a Chinese student, for Chinese are well known as people with whom we must negotiate (e.g., Lucian, 1992). The Chinese and Japanese differ greatly in terms of flexibility, groupism (collectivism), virtue, privacy, reliability, manners, and intimacy (Leung and Inoue, 2003; Nakamura, 2002; Ri, 2005; Sueda, 1995). Thus, a Chinese student encounters many difficulties when negotiating with the Japanese, and easily notices differences in interpersonal behavior. Consequently, we inferred that a Chinese student in Japan acquires Japanese interpersonal schema, though sciously.

METHOD

Subject: The subject was a 34-year-old Chinese female who was a first-year student in a Master's program. She lived with her 34-year-old Chinese husband (a company employee), her six-year-old daughter, and her two-year-old son.

Procedure: First, the researcher outlined the method of PAC analysis to the subject and informed her that she could cancel her participation in the study whenever she wanted. The researcher requested her permission to report her data during an academic meeting and in a journal, provided that the researcher protected her privacy. The researcher then presented the following stimulus sentences for free association and read them aloud to the subject.

"What image do you have about Japanese interpersonal relationships? What are the characteristics of Japanese human relationships? Write each of your associated items on the card."

Next, the researcher asked the subject to rate intuitively the pairs of associated items she had listed, indicating the order of importance, without regard to positive or negative perceptions. The instructions for estimating the association between items were: "Please

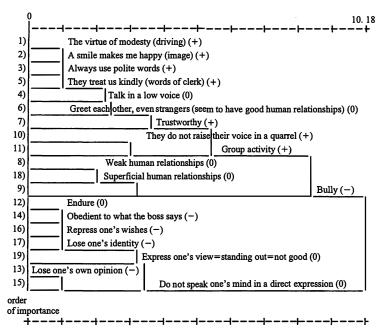


Figure 1 Cluster Analysis about Japanese Interpersonal Relationships

rate the association between each pair of items you listed, according to a seven-point scale: (1) extremely close, (2) very close, (3) relatively close, (4) neither close nor distant, (5). *felatively distant, (6) very distant, (7) extremely distant. Evaluate intuitively, and do not evaluate in terms of the accuracy of meaning in the dictionary."

After a matrix of association between each pair of items was obtained, cluster analysis by Ward's method was conducted. The subject was then asked to describe the image or interpretation of each cluster. Finally, she was asked to indicate single-item images (positive [plus], negative [minus] or neutral [zero]).

RESULTS

The subject understood that she could cancel her participation in the study whenever she wanted and consented to our reporting her data during an academic meeting and in a journal, provided that we protected her privacy. The result of the cluster analysis is presented in Figure 1. The item number on the left side indicates the intuitive order of importance.

Subject's images and interpretations of clusters

The subject's image or interpretation of each cluster was as follows.

First cluster

Question: Look at your copy. Beginning at the top, you wrote, "The virtue of modesty (driving)," "A smile makes me happy (image)," "Always use polite words," "They treat us kindly (words of clerk)," "Talk in a low voice," "Greet each other, even strangers (seem to have good human relationships)," "Trustworthy," "They do not raise their voice in a quarrel," "Group activity." These nine items look like one group. What images are you picturing? What are you feeling?

The Japanese are kind. They have very good manners in traffic. For example, when a little child raises his/her hand and walks across the road, drivers stop their cars immediately. So I am not really afraid when my daughter goes alone for after-school care. They greet each other, even strangers, in Japan; and that makes me happy. I imagine that their modesty makes group activity easier. Clerks are warm at every supermar-

ket. This is the best thing in Japan, I believe. The Japanese always use polite words, talk in low voices, and seem to have good human relationships.

Second cluster

Question: Now let's look at the next group: "Weak human relationships," "Superficial human relationships," and "Bully." These three items look like one group. What images are you picturing? What are you feeling?

This word "Bully" is often used in Japan. I have heard it many, many times. Comparing it with the first group (cluster), I can't believe Japanese bully so often. I have doubts about it. If, according to the first group, they have modesty and virtue, smile, use polite words, show warm feelings, and greet strangers, why do they bully so often? Maybe I doubt their good human relationships and think they are weak. The heart of the second group is "Weak human relationships."

Third cluster

Question: Look at the last group: "Endure," "Obedient to what the boss says," "Repress one's wishes," Lose one's identity," "Express one's view=standing out=not good," "Lose one's own opinion," "Do not speak one's mind in a direct expression."These seven items fit in the same group. What images are you picturing? How are these items similar?)

I think the Japanese endure too much. Especially in a company, they automatically follow what the boss says. The boss is superior. Even if they have a good idea, they do not express it. They repress their wishes and lose their identity. The last item is "Do not speak one's mind in a direct expression." Why? I do not understand. My opinion is we might speak "not so good," in that case.

Comparison of clusters

Comparison of first and second clusters

Question: Now compare the two groups. For the first group, you wrote, "The virtue of

modesty (driving)," "A smile makes me happy (image)," "Always use polite words," "They treat us kindly (words of clerk)," "Talk in a low voice," "Greet each other, even strangers (seem to have good human relationships)," "Trustworthy," "They do not raise their voice in a quarrel," "Group activity." The second indicates "Weak human relationships," "Superficial human relationships," and "Bully." What is similar? What is different?)

The first group was constructed from actual experiences in my life. The second group has no relationship to my own experiences.

Comparison of first and third clusters

Question: Now compare the first and third groups. The third group includes "Endure," "Obedient to what the boss says," "Repress one's wishes," "Lose one's identity," "Express one's view=standing out=not good," "Lose one's own opinion," "Do not speak one's mind in a direct expression." Which ones are similar? Which ones are different?

I guess there is a relationship. The first group shows that Japanese have the virtue of modesty, but if they always repress their wishes and are too modest, they lose their identity. This is my image; I don't know if it is right or not.

Comparison of second and third clusters

Question: What are the similarities and differences between the second and third clusters?

The Japanese lose their own opinions, and human relationship between them and their boss becomes weak because they always follow what the boss says! It is not easy for me to understand.

+, - and 0 image of each item

Question: Now I will ask you about the image of each item. Plus? ···Minus? ···Zero, which means neutral? Regardless of the literal meaning, report your actual feelings. How about the one at the top: "The

virtue of modesty (driving)"?—It's plus.

Question: What about "A smile makes me happy (image)"?—It's plus.

Question: How about "Always use polite words"?—It's plus.

Question: "They treat us kindly (words of clerk)"?—It's plus.

Question: "Talk in a low voice"?—It's zero.

Question: "Greet each other, even strangers (seem to have good human relationships)"? -Zero.

Question: "Trustworthy"?—Plus.

Question: "They do not raise their voice in a quarrel"?—Plus.

Question: "Group activity"?—Plus.

Question: "Weak human relationships"?—
Zero.

Question: "Superficial human relationships"?—Zero.

Question: "Bully"?—Minus.

Question: "Endure"?—Zero.

Question: "Obedient to what the boss says"?
—Minus.

Question: "Repress one's wishes"?—Minus.

Question: "Lose one's identity"?—Minus.

Question: "Express one's view=standing out=not good"?—Zero.

Question: "Lose one's own opinion"?—Minus.

Question: "Do not speak one's mind in a direct expression"?—Zero.

Importance of items and percentage of +- image

Subjectively important items (about 1/3) in order of importance were as follows. 1) The virtue of modesty (driving) (+). 2) A smile makes me happy (image) (+). 3) Always use polite words (+). 4) Talk in a low voice (0). 5) They treat us kindly (words of clerk) (+). 6) Greet each other, even strangers (seem to have good human relationships) (0). The important items emphasized the modesty of the Japanese. While four were plus items, the other two were zero items; therefore, the plus image was stronger. The subject perceived Japanese human relationships as good.

Overall, the subject rated seven items (36.8%) as plus, five items (26.3%) as minus, and seven items (36.8%) as zero. The zero-item percentage, which means self-alienation from acceptance of any kind of feelings, amounts to 26.3%, and number of plus and minus items are the same (36.8%). These results indicate that the subject superficially perceived the modesty in Japanese human relationships as good; however, on a deeper level she doubted the virtue of such modesty, and felt conflict and self-alienation.

General interpretation

Next, we attempted to interpret the subject's schema of Japanese interpersonal relationships. Analysis revealed three clusters. The first cluster involved positive feelings (77.7% plus and 0.0% negative ratings) toward modesty in Japanese human relationships. Her ratings were based on her own experience. Because she assumed that Japanese modesty facilitated group activity, we labeled this cluster "group activity with the virtue of modesty."

The second cluster revealed a negative aspect. On a deeper level, the subject perceived subtle and sinister bullying as a part of Japanese human relationships. The fact that she gave 66.7% of the items a zero rating implied the lack of acknowledgement of any feeling. We labeled this cluster "surface interpersonal relationships and actual intention."

The third cluster involved concrete problems at a Japanese company. Perhaps a large part of them came from communication with her husband (a company employee). She indicated that Japanese employees endure too much and must obey the boss. The subject could not comprehend why they repress their wishes and do not speak their mind. They lose their own opinion and their identity. The subject's rating of 57.1% of the items as minus and 0.0% as plus indicated her disappointment. We labeled this cluster "self-restraint and hidden real intention."

- tion, and motivation. Psychological Bulletin, 98, 224–253.
- Naito, T. 1993 About analysis of personal attitude construct. *Studies in Humanities*, 27, 43–69. (in Japanese)
- Naito, T. 1997 How to use PAC analysis: An invitation to new scientific method for single cases. Kyoto: Nakanishiya-shuppan. (in Japanese)
- Naito, T. 2002 How to use PAC analysis: An invitation to new scientific method for single cases (Revised). Kyoto: Nakanishiyashuppan. (in Japanese)
- Nakamura, T. 2002 *Practice about "Chinese."*Tokyo: Japan Broadcast Publishing Co.,
 Ltd. (in Japanese)
- Ohashi, T. 2008 Mental health and crisis intervention for foreign students. Kyoto: Kyoto University Press. (in Japanese)
- Ri, K. 2005 Eternal rift between Japanese and

- Chinese: How to avoid disagreement. Tokyo: Kodansha, Ltd. (in Japanese)
- Saito, I. 2006 Social psychological study of Japanese self-presentation: Empirical study about real intention and statement. Tokyo: Seishinshobo. (in Japanese)
- Sueda, K. 1995 Differences in the perception of face: Chinese mien-tzu and Japanese mentsu. *World Communication*, 24, 23–31.
- Taylor, S. E. & Crocker, J. 1981 Schematic bases of social information processing. In E. H. Higgins, C. P. Herman, & M. P. Zanna (Eds.) Social cognition: The Ontario Symposium (Vol. 1, pp. 89-134). Hillsdale, NJ: Erlbaum.
- Watanabe, F. 2002 Psychology of Relationships with Other Cultures: For Living in the Age of Globalization. Tokyo: Saiensu-sha. (in Japanese)

The first cluster, which was derived from Japanese culture, raised the third cluster and caused the second cluster. "Group activity" in the first cluster, which involved regard for other persons, was connected to "Bully" in the second cluster, which was connected to the extreme of modesty ("Do not speak one's mind in a direct expression") in the thivord cluster. The key item in this cluster analysis was "Bully" in the second cluster, since it simultaneously connected with the first and third clusters.

DISCUSSION

The subject was a Chinese female graduate student. Cluster analysis clarified her image and interpretation of the characteristics of Japanese interpersonal relationships. The first cluster, labeled "group activity with the virtue of modesty," involved positive feelings. The second cluster, labeled "surface interpersonal relationships and actual intention," revealed self-alienation. The third cluster, labeled "self-restraint and hidden real intention,"revealed negative feelings accompanying self-alienation. It is well known that all three clusters are derived from collectivism. Markus and Kitayama (1991) insisted that collectivism brings about interdependence of human relations, which involves harmonizing with one another instead of competing and standing out. However, Saito (2006) suggested that interdependence causes instability of selfesteem and thus an imbalance of human relationships. He proposed that the instability of one's self-esteem invites defensive behavior, aggressive response, and the bullying of others.

The subject reported free association of the characteristics of Japanese interpersonal relationships. She described her image of each cluster. She was able to search her own inner world and find meaning to share with the researcher. Although the researcher provided her no explanation or counseling about Japanese human relationships in advance, she had unconsciously grasped more than she realized. She had developed an

abstract, complex, tightly organized, compact, resilient, and accurate schema of Japanese interpersonal relationships from encounters and abstract communications about related general characteristics.

Though focusing on only a single case, this study clarified typical characteristics of Japanese interpersonal relationships. Many researchers have revealed similar results with multi-sample surveys. Nevertheless, the structure of the cluster analysis in this study is not the mean of a group, but a personal structure (i.e., schema). A schema should be measured individually, for it is a personal cognitive framework of theory, and accessed items are unique for each individ-This single-case study of a Chinese student's schema of Japanese interpersonal relationships is the first finding based on the scientific operational procedure of PAC analysis, and the results confirmed the applicability of PAC analysis to a schema of interpersonal relationships.

REFERENCES

Bartlett, D. C. 1932 *Remembering*. Cambridge: Cambridge University Press.

Crocker, J., Fiske, S. T., & Taylor, S. E. 1984 Schematic bases of belief change. In J. R. Eiser (ed.) *Attitudinal judgment* (pp. 197–226). New York: Springer-Verlag.

Fiske, S. T. & Taylor, S. E. 1991 *Social cognition* (2nd ed.). New York: McGraw-Hill.

Greenwald, A. G. McGhee, D. E., & Schwartz, J. K. 1998 Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74, 1464–1480.

Leung, K. & Inoue, Y. 2003 Chinese social behavior: Group dynamics in Chinese culture. In S. Ymaguchi (Ed.) Social psychology: An asian approach, pp. 173–191.

Lucian, W. Pye. 1992 Chinese negotiating style: Commercial approaches and cultural principles. New York: Quorum Books.

Markus, H. 1977 Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, **35**, 63–78.

Markus, H. & Kitayama, S. 1991 Culture and the self: Implications for cognition, emo-