This annual report presents several articles related to the work of the Clinical Center for Child Development at Hokkaido University in Sapporo, Japan. The articles are: (1) "The Functional Uses of Infant-Directed Speech of Fathers and Mothers: A Comparison Study" (Katsuko Niwano); (2) "Are Children 'Among the Gods'? Parental Images of Children and Childrearing in Japan and the U.S." (David W. Shwalb, Shing-Jen Chen, Russell P. MacKay, and Brett A. Wilkey); (3) "Mastery as Sources and Results of Appropriation: A Coincidental Relation" (Nobumoto Tajima, Kayoko Uemura, Koichi Yamazaki, Yoshinori Wakao, and Miyako Kamei); (4) "Voices of TV Commercials as the Reflection of Cultural Mentality: A Japan-U.S. Comparison" (Nobumoto Tajima and Kojiro Asao); and (5) "Comparison of Evaluations on Behavioral Performance of Institutionalized Children by Their Primary Caregivers and School Teachers with Special Reference to Reactive Attachment Disorder" (Fumimoto Tadano, Soichiro Kawagoe, and Tsuyoshi Tatsuzawa). (HTH)
March 2003
Editors:
Shing-Jen Chen, Harumitsu Murohashi, Yuki Fujino
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THE FUNCTIONAL USES OF INFANT-DIRECTED SPEECH OF FATHERS AND MOTHERS: A COMPARISON STUDY

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Abstract
Infant-directed speech uttered by fathers and mothers was compared. Vocal interaction between 9 pairs of parents and their infant was recorded individually in natural setting. Utterances were classified in terms of function, syntactic forms, and referents utilizing written transcripts. There were significant differences in the use of function, syntactic forms, and referents between fathers' and mothers' speech. Fathers tended to use utterances to attract the infants' attention and elicit infants' vocalization more often than mothers did. On the other hand, mothers produced utterances expressing positive affection, imitating infant's vocalization, and involving play with vocalization more than fathers did. It is suggested that the difference in functional use of infant-directed speech between fathers and mothers reflects the difference in their attitude to interacting with the infants.

Key words: Infant-directed speech, Parent-infant vocal interaction, Infant, Prelinguistic period

Introduction
When caregivers speak to infants, they use characteristic speech: a higher pitch, greater pitch range, slower tempo, longer pauses, shorter phrases, higher exaggerated pitch contour, and more prosodic repetition compared with their speech to an adult (Bergason & Trehub, 1999; Fernald & Simon, 1984; Niwano & Sugai, 2002a, 2002b, 2002c). However, almost all reported studies on caregivers' infant-directed speech have focused on the mother's speech. Only a few attempts have so far been made to investigate the father's infant-directed speech.

Niwano and Sugai (in press-b) reported that fathers also use higher pitch, exaggerated pitch excursion, and shorter utterance duration when they speak to their infants than when they speak to adults. These acoustical features of fathers' infant-directed speech are very similar to mothers' infant-directed speech. This brings us to the question of whether the function of infant-directed speech is similar or different in mothers and fathers. It has been reported that mothers' infant-directed speech plays the roles of maintaining infants' attention and expressing positive affection (Bergeson & Trehub, 1999; Trainor, 1996; Trainor, Clark, Huntley, & Adams, 1997). Niwano and Sugai (2002c) found that Japanese mothers use a falling intonation contour more often than a rising or flat intonation contour when they speak to 3-month-old infants. Mothers use specific intonation contours for specific meaning (Niwano & Sugai, in press-a). A falling contour is used for soothing when American or German mothers communicate with their infants (Fernald,
1989; Papousek, 1992). Shimoda, Argyle, and Riccibitti (1978) noted that Japanese mothers use infant-directed speech to calm infants. Therefore, it seems that mothers tend to use infant-directed speech to soothe.

Niwano and Sugai (in press-b) reported that the infant's rate of vocal response to mothers and to fathers differed even if the acoustic features of the father's and mother's infant-directed speech were similar. It is likely that there is a difference not in acoustic features but in speech function between fathers' and mothers' infant-directed speech.

The purpose of the present study was to compare the utterance function, syntactic forms, and referents between mothers' and fathers' infant-directed speech utilizing written transcripts. It was hypothesized that the function, form, and reference of the fathers' speech would differ from that of the mothers.

Method

Participants

Nine Japanese mothers, their husbands, and their infants composed the final sample. The infants were 4 firstborn males and 5 firstborn females, born in 1999-2000, and 3-7 months old at the time data were collected. All were healthy with no history of hearing disorder or infection. All of the mothers were full-time housewives (M age at child birth = 29.4 years, SD = 3.57 years), and all of the fathers were full-time businessmen (M age at child birth = 32.0 years, SD = 3.35 years), primarily drawn from the middle socioeconomic classes and native-born citizens of Japan. Table 1 shows the participants' ages. The data were collected during home visits in a natural setting. A further additional 3 parent-infant dyads failed to complete the recording because of the infants' excessive crying (2) or few utterances (1).

Table 1 Participants' ages

<table>
<thead>
<tr>
<th>Participant</th>
<th>Infants</th>
<th>Participant</th>
<th>Father's age (Yr)</th>
<th>Mother's age (Yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sex</td>
<td>Age (Mo)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>F</td>
<td>3</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>B</td>
<td>F</td>
<td>3</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>C</td>
<td>M</td>
<td>3</td>
<td>31</td>
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</tr>
<tr>
<td>D</td>
<td>M</td>
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<td>E</td>
<td>F</td>
<td>5</td>
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<td>31</td>
</tr>
<tr>
<td>F</td>
<td>M</td>
<td>5</td>
<td>37</td>
<td>29</td>
</tr>
<tr>
<td>G</td>
<td>F</td>
<td>7</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>H</td>
<td>F</td>
<td>7</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>I</td>
<td>M</td>
<td>7</td>
<td>29</td>
<td>27</td>
</tr>
</tbody>
</table>

Procedure

Utterances during the mother-infant and father-infant interactions were tape-recorded. In order to compare the function of the parents' infant-directed speech, every utterance was written as transcripts. The parent was instructed to talk to her/his infant as she/he normally did at home without touching or rocking the infant. Each recording session lasted 15 minutes. Both subjects were seated in chairs or on the floor facing each other. I then sampled 3 consecutive minutes, selecting them so that many vocal interactions between the subjects were included. All meaningful communicative vocalizations were considered as words, e.g., back channels, such as ooh, aah, and mmm. Nonverbal sounds such as kisses, and laughter were excluded.
Coding

The fathers' and the mothers' utterances were scored in terms of three speech parameters: function, syntactic form and referent. The categories were decided according to Niwano (2003) and observation from the subjects' utterances in the present study. The categories and speech samples are summarized in Table 2, 3 and 4, following Morikawa, Shand, and Kosawa (1988). The author of the present study and a native speaker of Japanese who did not know the hypothesis of the present study coded the parents' utterances as to function, form, and referential category. The two coders independently coded 20% of the speech samples selected randomly. Intercoder agreement for each parameter of the speech samples was greater than 90%, so the rest of the samples were shared between the two coders and analyzed.

Table 2  Function category for utterance classification

<table>
<thead>
<tr>
<th>Function</th>
<th>Code</th>
<th>Definition/Example (words written in italics are Japanese)</th>
</tr>
</thead>
</table>
| Attracting infant attention    | AAT  | Attract infant's attention  
|                                 |      | e.g. Look at me. *Kocchi muite.*                                      |
| Eliciting infant vocalization  | ELV  | Elicit infant's vocal response.  
|                                 |      | e.g. What happened? *Doshitano.*                                       |
| Positive affection             | PAF  | Show positive affect toward infant.  
|                                 |      | e.g. Great! *Sugoi ne. / You are so cute. *Kawaii ne.*                |
| Negative affection             | NAF  | Show negative affect  
|                                 |      | e.g. Don't do that. *Dame desuyo.*                                    |
| Information                    | INF  | Give information  
|                                 |      | e.g. It's sunny day. *Otenki ga iidesuyo.*                             |
| Imitating infant vocalization  | IMI  | Imitate infant's utterance.  
|                                 |      | e.g. Au-au. (Infant's babbling sound.)                                |
| Playing with vocalization      | PLA  | Play with mimetic words or meaningless words.  
|                                 |      | e.g. Peep, peep. *Piyo, piyo.*                                        |
| Function unclear               | UNC  | Affect neutral utterance without apparent intention of eliciting infant's  
|                                 |      | attention or utterance.                                               |

Table 3  Form categories for utterance classification

<table>
<thead>
<tr>
<th>Form</th>
<th>Code</th>
<th>Example (words written in italics are Japanese)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
<td>QUE</td>
<td>Do you want to go out? <em>Osoto e ikitanoha.</em></td>
</tr>
<tr>
<td>Imperative</td>
<td>IMP</td>
<td>Say hello. <em>Konnichiwaatte itene.</em></td>
</tr>
<tr>
<td>Statement</td>
<td>STA</td>
<td>This is a cookie. <em>Kore wa kakki desuyo.</em></td>
</tr>
<tr>
<td>Greeting</td>
<td>GRE</td>
<td>Hello. <em>Konnichiwa.</em></td>
</tr>
<tr>
<td>Back channel</td>
<td>BCH</td>
<td>Uh-huh. <em>Uh, so.</em></td>
</tr>
<tr>
<td>Incomplete</td>
<td>INC</td>
<td>Oh, my goodness. <em>Arara.</em></td>
</tr>
<tr>
<td>Non-linguistic vocalization</td>
<td>NLV</td>
<td>Peep, peep. <em>Piyo, piyo.</em></td>
</tr>
</tbody>
</table>

Table 4  Referent categories for utterance classification

<table>
<thead>
<tr>
<th>Referent</th>
<th>Code</th>
<th>Example (words written in italics are Japanese)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant</td>
<td>INFA</td>
<td>You want to go out, don't you? <em>Osoto ni ikitanoha.</em></td>
</tr>
<tr>
<td>Parent</td>
<td>PAR</td>
<td>I want to go shopping. <em>Okaasan wa okaimono ni ikitanoha.</em></td>
</tr>
<tr>
<td>Infant and parent</td>
<td>BOT</td>
<td>We are going for a walk. <em>Osampo ni ikimasuyo.</em></td>
</tr>
<tr>
<td>Environment (object, person, etc)</td>
<td>ENV</td>
<td>Here's your doll. <em>Oningyo ga aruyo.</em></td>
</tr>
<tr>
<td>No referent</td>
<td>NRE</td>
<td>Oh, my goodness. <em>Arara.</em></td>
</tr>
</tbody>
</table>
Results

Function

All the sampled utterances were coded according to each function. Figure 1 shows the difference in the rate of appearance of each utterance function between the fathers and mothers. There was a significant difference in the rate of appearance of each utterance function ($x^2 = 45.3$, $df = 7$, $p < 0.001$). In the fathers' speech, the frequency of appearance of utterances attracting infant attention (AAT) was 18.7%, against 6.4% in the mothers' speech. The fathers produced speech with the aim of eliciting the infant's vocalization (ELV) 32.7% of the time, while the mothers did 14.2% of the time. The percentage of functionally unclear speech (UNC) was 9.4% in fathers' utterances, and 2.0% in mothers' utterances. On the other hand, the mothers produced utterances expressing positive affection (PAF) 24.1% of the time, imitating infant's vocalization (IMI) 28.3% of the time, and play with vocalization (PLA) 15.2% of the time, while the fathers did 12.3%, 6.9%, and 3.2% of the time, respectively.

![Graph showing the rate of appearance of each function category in infant-directed speech of fathers and mothers.]

**FIG. 1.** Difference in rate of appearance of each function category in infant-directed speech of fathers and mothers.

Syntactic form

As seen in Figure 2, the rate of appearance of the syntactic form of the parents' infant-directed speech also differed significantly between fathers and mothers ($x^2 = 36.7$, $df = 6$, $p < 0.001$). Questions (QUE) appeared in 8.4% of the fathers' infant-directed speech, imperatives (IMP) in 10.8%, and greetings (GRE) in 31.6%, while these forms appeared in 1.7%, 3.4%, and 11.6%, respectively, of the mothers' infant-directed speech. Greetings appeared the most often in fathers' speech, such as saying *hello* and calling the infant's name. The fathers tended to use QUE, IMP, and GRE as functions for attracting infant attention (AAT) and eliciting infant's vocalization (ELV). On the other hand, the mothers tended to use back channel (BCH) more than the fathers. The percentage of back channel among the mothers' utterances was 27.6%, but 5.8% in the fathers' utterances. The mothers produced more non-linguistic vocalizations (NLV) (32.3%) than the fathers did, (18.5%).
FIG. 2. Difference in rate of appearance of each syntactic form category in infant-directed speech of fathers and mothers.

Referent

Comparing the reference between fathers' and mothers' infant-directed speech, it was found that parent (PAR) and environment (ENV) appeared more often in the fathers' than the mothers' infant-directed speech, as Figure 3 shows. There was a significant difference in the appearance of referent between mothers' and fathers' infant directed speech \( (\chi^2 = 14.6, df = 5, p < 0.01) \). Both fathers and mothers tended to refer to the infants often (37.1 % in the fathers' utterances, and 43.4 % in the mothers' utterances). The fathers referred to themselves in 12.9 % of utterances and the mothers did in 3.4 %. From the observation of the fathers' speech, it was noticed that fathers often referred to themselves when they spoke to their infants, in phrases such as 'I am your father', or 'I am going to play with you'. On the other hand, when the mothers spoke to their infants, they tended to refer to the infants more often than did the fathers, e.g. 'you (the infant) want to go out', or to speak for the infants, e.g. 'I (the infant) am hungry'.

FIG. 3. Difference in rate of appearance of each referent category in infant-directed speech of fathers and mothers.
Discussion

The present study provides support for the hypothesis that there is a significant difference in the quality of father-infant and mother-infant vocal interaction. The results in the present study showed that the function of infant-directed speech is different between mothers and fathers.

When the mothers speak to the infants, positive affection (PAF) and imitating infant vocalization (IMI) appeared in the speech more often than in the fathers' speech. The mothers used back channel more than the fathers and tended to refer to their infants. One possibility to explain the result would be that mothers try to elicit infants' vocalization or communicative behavior. The mothers are patient in waiting for the infants' response or initiation of interaction. Once infants start to utter, mothers tend to maintain the infants' utterances with back channel. Furthermore, the mothers produced play with vocalization more than the fathers did. It seems that the mothers' aim is not to elicit the infants' vocal response but their spontaneous utterance or other communicative behavior.

Caudill (1972) reported that Japanese mothers produce infant-directed speech for the purpose of soothing when the infants are crying or unhappy. Our observations also indicated that mothers' attitudes while interacting with infants were passive. The mothers spend almost all day with their infants and have close interactions with them. It may be that it is important for the mother not to attract the infant's attention but also to show an attitude of acceptance of the infant's vocalization, and to show affection for the infant. This may be one reason why mothers use a lot of back channel.

On the other hand, when the fathers spoke to the infants, they used questions and greeting words more than the mothers did. It seems that fathers believe using questions and greeting words would play the role of eliciting the infants' vocal response and attracting their attention during times of interaction. They referred to themselves more than to the infants. One possibility is that this reflects the fathers' desire to lead interactions with the infant. Another possibility is that the fathers are impatient in waiting for the infants' response and they try to elicit interactive behavior. Fathers might use infant-directed speech as a strategy for the regulation of arousal and attention in infants. Moreover, they might try to make the infants aware of their existence because they spend less time with the infants than the mothers do.

In conclusion, even though there are many similarities in acoustic characteristics between mothers' and fathers' infant-directed speech, the functional use of infant-directed speech is different, and it is suggested that the difference between fathers' and mothers' infant-directed speech reflects the difference in their attitudes while interacting with the infants.

The present study was a pilot study with a small sample. A larger sample of mothers' and fathers' infant-directed speech when they are interacting with infants is needed to confirm the results.

References
Infant-Directed Speech


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ARE CHILDREN "AMONG THE GODS?": PARENTAL IMAGES OF CHILDREN AND CHILDMEMARING IN JAPAN AND THE U.S.

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Brett A. Wilkey  
*Brigham Young University*

Abstract

This research focused on parental images of children, childhood, and childrearing among parents in middle class American (n = 85) and Japanese (n = 82) communities. Mothers and fathers of preschoolers completed a questionnaire about the proverb "Before seven, children are among the gods"; metaphors of childrearing as analogous to cultivating a plant vs. domesticating an animal; descriptors of children as requiring parental effort, robust, selfish, lonely, and pitiable; and about parent's likelihood to intervene in conflicts between children aged 5 or younger and elementary school-age children. More American than Japanese parents considered the traditional proverb to still be relevant, and majorities of parents in both cultural groups thought that the proverb reflected children's inherent purity. The majority of parents in both cultural groups preferred the plant metaphor over the animal metaphor, with Japanese parents rating it higher than did American parents. The Japanese parents also reported images of children as more lonely and selfish than did Americans, and Japanese mothers rated children as more robust and lonely than did Japanese fathers. Finally, more American than Japanese parents reported that they would intervene in the verbal disputes and physical fights of their children; Japanese fathers were particularly non-interventionist in orientations. The results showed that images, proverbs, descriptors, and parents' orientations toward intervention all varied between the cultural groups, and suggested that the study of child images provides a valuable window on cultural orientations toward child development.

Key words: Parental images, Proverbs, Metaphors, Japanese, American, Childrearing, Parental beliefs
Parental Images of Children and Childrearing in the U.S. and Japan

"Images," defined by Chen (1996, p. 114) as "visual or mental representations expressed in sayings, proverbs and symbols, or inferred from cultural practices," vary according to child characteristics, adult personality, and culture (Hwang, Lamb, & Sigel, 1996). This paper compares parental images of young children in middle class Japanese and American communities. Shwalb and Chen (1996) previously reported on the Japanese portion of the data.

Parental images are important influences on child development because how parents think about their children affects how parents treat their children (Goodnow & Collins, 1990). Parental cognition also forms an aspect of the "developmental niche" (Harkness, 2002), which structures child development in each culture. Scholars from several disciplines have been interested in parental thinking for many decades, but only recently have theorists drawn connections between parental thinking and child development (Harkness & Super, 1996). Hwang, Lamb and Sigel (1996) provided the best review to date of "parental images" as a specific research area. But their anthology of multidisciplinary reports on cultural images of children and childhood was more of a call for research and theory than a review of an established research domain or theory.

In Japan, there is a long tradition of understanding children in terms of parents' jidokan ("view of children"), and only in recent years have scholars begun to look systematically at parental views (Hendry, 1986). The present study reports data on a very specific set of parental images, as an exploration of small samples in two societies: Japan and the United States. Comparative studies between Americans and Japanese have been common (e.g., Azuma, 1996), perhaps because of the assumed differences in cultural values and traditions, shared modernism and material affluence, and availability of research funding.

Our study looked at four issues related to parents' images of children in Japan and the U.S. First, it considered the contemporary relevance of the traditional Japanese proverb, "before seven, among the gods" (nanatsu mae wa kami no uchi, or 七七前は、神のうち). This saying has been quoted by numerous scholars (Hara & Wagatsuma, 1974; Hendry, 1986; Hara & Minagawa, 1996) and is usually interpreted to mean that the Japanese have a positive image of young children as almost sacred (Chen, 1996). In analyzing proverbs about children from around the world, Palacios (1996, p. 77) stated that proverbs are images that are "marked by their relation to daily life, practical experience, common sense, and popular wisdom." Palacios concluded that proverbs tend to be more connected to "the past and to tradition" (p. 95) than to current thinking. Knowing that scholars to this day still assume that the "before seven, among the gods" proverb reflects Japanese values, we wanted to know how relevant the proverb is in contemporary Japan. Further, while we did not expect non-Japanese to know the proverb, by asking American parents about the proverb we were able to explore its trans-cultural relevance as common sense or wisdom.

The second topic of our study was about images of children as either plants to cultivate, or as animals to train. Chen (1996) discussed the plant metaphor as related to children's need to be nurtured and cared for, just as a young tree or garden plant requires attention. In addition, just as a tree may need to be pruned if it grows in the
Parental Images of Children

wrong direction or shape, the plant metaphor includes the need to correct children when they are misguided. Based on a content analysis of documents dating back several centuries, Chen concluded that the plant metaphor typifies traditional Japanese parental views of how to raise children. An alternative metaphor, which Chen believed would be more prevalent in the U.S. than in Japan, was that parents view childrearing as akin to training a domesticated animals, according to principles of learning and conditioning. To assess their ideas about the metaphors, we asked parents to rate the viability of each metaphor and to give a preference for either the plant or animal metaphor.

We next considered parental images of the "nature" of children. Chen (1996) had described Japanese children as being particularly prone to "loneliness," and the title of his article ("Positive Childishness") highlighted what he saw as a humanistic and benevolent view of the nature of Japanese children. At the same time, Japanese children go through a period of "negativism" (Ujiie, 1997, p. 467) and are as much of a challenge to raise as are children in the U.S. Past U.S./Japan comparisons have frequently emphasized the close physical and emotional relationship between Japanese mothers and children as "symbiotic harmony" (Rothbaum, Pott, Azuma, Miyake, & Weisz, 2000, p. 1121) and contrasted this harmony with American-style "generative tension." We chose the images of children as requiring adults' efforts, and as robust, selfish, lonely, and pitiable, to explore which images would be most relevant in each cultural group.

Finally, parents responded to a set of hypothetical situations by indicating how they would react to children's conflicts. These questions required parents to conjure up images of children of different ages (and of their own children vs. children in general) in either physical or verbal conflicts. We were most interested in whether the child's age group or the type of conflict would mediate parental intervention. The "until seven, among the gods" proverb had been interpreted as reflecting a hands-off parental view of children, in accordance with the traditional belief that young children should not be interfered with (Hara & Minagawa, 1996). That is, Japanese believed that children should be left to the gods to express their own positive nature. We anticipated some variability in response to these latter questions, but expected that Americans would be somewhat more interventionist, especially with preschool children, the traditional "among the gods" age group in Japan.

Method

Participants in the American sample were 52 mothers (mean age = 33.3 years) and 33 fathers (mean age = 34.2 years) of preschoolers (age range = 3-5 years) from the suburban middle-class communities of Provo and Orem, Utah. The Japanese participants were 53 mothers and 29 fathers, from a middle-class neighborhood in the city of Nagoya. A two-page questionnaire (see Table 1) first asked parents several questions about the traditional Japanese proverb: "Until age 7, children are among the gods." The second set of questions concerned two metaphors: childrearing as analogous to cultivating plants and as analogous to raising animals. Parents next rated five images of children, as "requiring a lot of work," "robust," "selfish," "lonely," and "pitiable." The fourth set of questions concerned intervention in verbal disputes and physical fights between children in either preschools or elementary schools. Parents completed the
Table 1 Questionnaire Items

1. Your age ________ 1B. Mother/Father (circle one)
2. Ages of your sons: __ __ __
3. Ages of your daughters: __ __ __
4. What town do you now live in? __________
4A. For how many years? ___________
5. Have you ever heard the proverb "Until age 7, children are among the Gods?"
   Yes/No
5A. If you answered "yes" to #5, when and from whom did you hear it? __________
6. What do you think this saying means?
   (please circle one choice)
   a. Young children are pure.
   b. Young children are more god-like than human.
   c. The fate of young children is unstable, as they are prone to accident and illness.
   d. Other __________
7. Do you think this proverb still applies today?
   Yes/No
7A. Why or why not? __________
8. If you know a similar saying to that in #5, please write it here: __________
9. How do these images apply to childrearing?

<table>
<thead>
<tr>
<th>Image</th>
<th>Doesn’t apply at all (0)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>(4) Applies perfectly</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Childrearing is like cultivating a plant</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Childrearing is like raising animals</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

9A. Which of these two images do you think applies more to childrearing?
   (choose only one)
   a. like raising animals
   b. like cultivating a plant

10. Please rate the following on a 5-point scale; 0 = "strongly agree" ; 4 = "completely disagree"

   In general, children to me:

<table>
<thead>
<tr>
<th>To me, children…</th>
<th>Strongly agree (0)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>(4) Completely disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. take a lot of work.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. are robust, not fragile.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. are selfish.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. are prone to be lonely.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. are pitiable.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

11. In general, do you think adults should intervene in children's fights or arguments?
   Yes/No

11A. Should somebody intervene in the following situations?

| a. verbal dispute among neighborhood children (infant/toddler or preschool age)? | Yes | No |
| b. verbal dispute among neighborhood children (school age)? | Yes | No |
| c. physical fight among neighborhood children (infant/toddler or preschool age)? | Yes | No |
| d. physical fight among neighborhood children (school age)? | Yes | No |
| e. verbal dispute among your own children (infant/toddler or preschool age)? | Yes | No |
| f. verbal dispute among your own children (school age)? | Yes | No |
| g. physical fight among your own children (infant/toddler or preschool age)? | Yes | No |
| h. physical fight among your own children (school age)? | Yes | No |
questionnaire in ten minutes at preschool PTA meetings, with a return rate exceeding 90% in both countries.

Results and Discussion
Young Children as “Among the Gods”

As presented in Table 2, equal numbers of American and Japanese parents reported having heard the traditional Japanese proverb. This was surprising because Americans presumably do not use this particular saying (Chen, 1996). In addition, more American parents than Japanese parents believed the proverb was “still relevant today.” A majority of both American and Japanese parents attributed the meaning of the proverb to children’s pure nature, although Japanese parents' responses varied more between children as “pure,” “god-like,” and “having an unstable fate.” These results indicated that the image of children as pure is strong in both the U.S. and Japan, and that while it may have had one traditional meaning in Japan, the proverb’s meaning now depends on the individual parent.

The findings that most Japanese parents did not know the proverb, and that most did not think it was currently relevant, confirmed the view of Palacios (1996) that proverbs are more about past traditions than about present thinking. But what accounted for the cross-cultural relevance of a proverb that was presumed to be unknown outside of Japan? As Palacios also noted, proverbs carry wisdom and common sense, and a proverb could be relevant across cultures or even universally without being used outside the originating culture. There may be something common to American- and Japanese-style parental beliefs that includes an image of purity in early childhood. For instance, some Western beliefs mark age 7 or 8 as the “age of reason” or “accountability” (Hart, Newell, & Sine, 2000), and in early childhood children are thought to be more innocent and lacking in responsibility for their actions.

Table 2 The “Among the Gods” Image, and the Plant and Animal Metaphors: Comparisons of Frequencies

<table>
<thead>
<tr>
<th>Item</th>
<th>American</th>
<th>Japanese</th>
<th>X^2</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has heard proverb: “Children are among the gods until age 7?”</td>
<td>12</td>
<td>73</td>
<td>0.01</td>
<td>NS</td>
</tr>
<tr>
<td>Thinks the proverb “Children are among the gods until age 7?” is still relevant</td>
<td>73</td>
<td>5</td>
<td>49.77</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Defines “Children are among the gods until 7” as “children are god-like”</td>
<td>1</td>
<td>81</td>
<td>26.91</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Defines “Children are among the gods until 7” as “children are pure”</td>
<td>74</td>
<td>8</td>
<td>26.91</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Prefers plant metaphor over animal metaphor</td>
<td>52</td>
<td>27</td>
<td>3.15</td>
<td>NS</td>
</tr>
</tbody>
</table>

Metaphors of Childrearing

As also shown in Table 2, two-thirds of parents in both the American and Japanese samples reported that childrearing was better depicted by a metaphor of plant cultivation (nurturing, guiding) than a metaphor of domesticating or raising animals (controlling, training). This similarity contradicts Chen’s (1996) speculation that the animal husbandry metaphor would be more appealing to Americans as relevant to behaviorist or “mecha-
nistic” childrearing. In fact, Table 3 shows that American parents agreed more strongly with the plant metaphor than did the Japanese, while there was no group difference in ratings of the animal-raising metaphor. Just as there are individual and intra-cultural differences in parent-child relationships (Azuma, 1996), the data showed variability in parental use of metaphors.

Parents are likely to invoke various metaphors of childhood and childrearing, which include but are not limited to the plant and animal metaphors studied here. For instance, Chen (1996) has suggested a metaphor of “river crossing,” in which parents who are emotionally close to their children cross a river together with their children and parents who are more detached from children urge them to cross the river alone. Elsewhere, Aronsson and Sandin (1996) discussed alternative metaphors including children as devilish and parenting as botany, which differs from the plant metaphor in allowing children to grow freely rather than correcting or guiding them. Our future research will focus on a wider range of childrearing metaphors.

Descriptors of Children

Almost all parents rated children as “a lot of work,” and parents in both the U.S. and Japan rated “pitiable” and “robust” as least descriptive of children (see Table 3). One difference between the American and Japanese samples was that American parents rated children as less selfish and lonely than did Japanese parents. This finding confirmed Chen’s (1996) prediction that Japanese would have a stronger image of children as “lonely” because they are highly empathetic, sensitive, and emotionally close toward their children. In addition, Japanese tended to rate children as more “selfish” than did Americans. This finding was not surprising given Ujiie’s (1996) observations of negativism and willfulness in young Japanese children.

Table 3  Plant and Animal Metaphors, and Five Descriptors of Children: Mean Rating Comparisons

<table>
<thead>
<tr>
<th>Item</th>
<th>American Mean (SD)</th>
<th>Japanese Mean (SD)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metaphor of childrearing as like cultivating a plant</td>
<td>2.60 (1.08)</td>
<td>2.60 (1.08)</td>
<td>4.538</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Metaphor of childrearing as like raising animals</td>
<td>1.43 (1.05)</td>
<td>1.43 (1.05)</td>
<td>1.193</td>
<td>NS</td>
</tr>
<tr>
<td>Children as robust</td>
<td>1.99 (1.01)</td>
<td>1.99 (1.01)</td>
<td>1.305</td>
<td>NS</td>
</tr>
<tr>
<td>Children as lot of work</td>
<td>2.76 (1.56)</td>
<td>2.76 (1.56)</td>
<td>-1.424</td>
<td>NS</td>
</tr>
<tr>
<td>Children as selfish</td>
<td>1.72 (1.19)</td>
<td>1.72 (1.19)</td>
<td>-5.155</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Children as lonely</td>
<td>1.48 (1.38)</td>
<td>1.48 (1.38)</td>
<td>-6.004</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Children as pitiable</td>
<td>1.28 (1.50)</td>
<td>1.28 (1.50)</td>
<td>1.784</td>
<td>.086</td>
</tr>
</tbody>
</table>

1Ratings are for 5-point scale (0 = “strongly disagree”; 4 = “strongly agree”)

For the two descriptors, “Children are robust,” $F(1, 163) = 4.16, p < .05$, and “Children are lonely,” $F(1, 163) = 7.16, p < .001$, there were significant gender-by-nationality interactions. Specifically, Japanese fathers (1.45) perceived children as less robust
than did mothers (1.92), whereas there was no difference between these perceptions by American fathers and mothers. For loneliness, Japanese mothers (2.87) perceived children as more lonely than did fathers (2.31), whereas among the Americans fathers (1.81) perceived children as lonelier than did mothers (1.28). Given the psychological and physical absence of many Japanese men from their families (Makino, Nakano, & Kashiwagi, 1996), we would expect men to be relatively less aware of or sensitive to children's loneliness and robustness.

**Intervention in Children's Conflicts**

Table 4 presents a consistent pattern: more American parents than Japanese parents reported that they would intervene in children's fights or disputes, regardless of the child's age or parent's relationship to the child (own child vs. children in general). The Japanese non-interventionist mentality, particularly among fathers, was predictable in light of their often noted non-confrontational approach to parenting (Chen, 1996; Makino, Nakano & Kashiwagi, 1998).

In the American sample there were no mother/father differences in likelihood to intervene in children's verbal disputes or physical fights. However, among the Japanese, mothers were more interventionist than fathers. Specifically, more mothers (20 of 53) than fathers (3/29) reported that they intervene in verbal disputes of children ages 5 or under, $X^2 (1) = 6.97 \ p < .01$; fights between children ages 5 or under (mothers = 40/53, fathers = 14/29, $X^2 (1) = 6.17 \ p < .05$); fights among school-age children (mothers = 32/53, fathers = 9/29, $X^2 (1) = 6.46 \ p < .05$); and in verbal disputes involving their own children ages 5 or under (mothers = 14/53, fathers = 2/29, $X^2 (1) = 4.55, \ p < .01$). Again we must consider the Japanese detachment of fathers and closeness of mother-child relations to understand why Japanese fathers were so non-interventionist. If Japanese fathers tend to lack responsibility for their children in daily life, it is not surprising that they

<table>
<thead>
<tr>
<th>Item</th>
<th>American</th>
<th>Japanese</th>
<th>$X^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would intervene in children's fights and verbal disputes</td>
<td>52</td>
<td>16</td>
<td>66</td>
<td>40.51</td>
</tr>
<tr>
<td>Would intervene in preschool children's verbal disputes</td>
<td>51</td>
<td>23</td>
<td>59</td>
<td>17.92</td>
</tr>
<tr>
<td>Would intervene in preschool children's fights</td>
<td>82</td>
<td>54</td>
<td>28</td>
<td>25.88</td>
</tr>
<tr>
<td>Would intervene in elementary school children's verbal disputes</td>
<td>30</td>
<td>6</td>
<td>76</td>
<td>17.32</td>
</tr>
<tr>
<td>Would intervene in elementary school children's fights</td>
<td>82</td>
<td>41</td>
<td>41</td>
<td>46.45</td>
</tr>
<tr>
<td>Would intervene in own preschool child's verbal disputes</td>
<td>62</td>
<td>16</td>
<td>66</td>
<td>47.87</td>
</tr>
<tr>
<td>Would intervene in own preschool child's fights</td>
<td>84</td>
<td>1</td>
<td>51</td>
<td>36.15</td>
</tr>
<tr>
<td>Would intervene in own elementary school child's verbal disputes</td>
<td>46</td>
<td>11</td>
<td>71</td>
<td>31.46</td>
</tr>
<tr>
<td>Would intervene in own elementary school child's verbal disputes</td>
<td>81</td>
<td>45</td>
<td>37</td>
<td>31.17</td>
</tr>
</tbody>
</table>
would report standing back and allowing others to intervene in their children's conflicts.

Finally, it was notable that while more American parents thought the proverb of "until seven among the gods" was relevant than Japanese parents, they were also more interventionist in responding to questions about children's daily life. We had assumed that parents who thought the proverb was relevant would take a hands-off approach to childrearing, since the saying had implied to us that children were pure and somewhat under the control of the gods. But the Americans were both interventionist and agreed with the relevance of the proverb. Further research should examine the meaning of terms like "pure" and "intervention" in different languages, because parents in different cultures may interpret the meaning of proverbs, images, and situations differently.

Conclusions

There were limitations in this research with regard to sampling and instrumentation. The sample was middle-class, small, and limited to parents of young children in two highly modernized societies. More complex statistical analyses were precluded by the simplicity of the questionnaire, and the choice of items focused on limited sets of images, metaphors, and situations. However, the results confirmed the potential value of cross-cultural studies of parental images of children and childrearing.

Future research should consider a wider variety of metaphors, images, and situational variables, sample parents with children of various ages and in several societies, and develop measurements amenable to multivariate analysis. It will also be useful to study how images and the relevance of proverbs change as children get older. Even with its deficiencies, the present study showed that traditional proverbs about children can have contemporary relevance, that metaphors of childrearing transcend culture, that images of children vary between cultures and also between mothers and fathers, and that parents' tendency to intervene in the daily activities of their children may depend on cultural values and differ between mothers and fathers.

References


MASTERY AS SOURCES AND RESULTS OF APPROPRIATION: A COINCIDENTAL RELATION

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Abstract

The purpose of the present research is to identify the characteristics of discussion in the classroom as an open system education where no goal is readily set and to clarify the relationship between "mastery in learning" and "appropriation in learning," considering the significance of introducing discussion, and the effect of discussion on knowledge acquisition by pupils. Our observation revealed that, in a discussion session, several cultural tools were adopted for the purpose of creating a collaborative work through "mastery" and "appropriation" in learning. One of them was a "decision by majority" to facilitate pupils to express and exchange their own opinions, and to have them accept the absolute opinion positively. Several "formal or formulated phrases," a kind of catchword, were introduced to help pupils negotiate with peers, and also to put their own products of discussion into practice effectively. It was also found that the teacher's wording varied between formal or polite style and informal or casual/plain style depending on the form of discussion and the content of her utterances. This "speech style-switching" was carried out to impart what kind of situation is currently going on to the pupils indirectly to help them regulate their own behavior. Those cultural tools, however, impel "mastery in learning." The "decision by majority" requires pupils to obey the agreed opinion, the "formulated statement" forces pupils to acquire a certain pattern of speech genre, and the "differentiation of the use of speech styles" controls the pupils' behavior in the collaborative activity. This suggests that "mastery in learning" causes "conflicts" among pupils of minority side. However, conflict might impel development. "Mastery in learning" impels pupils themselves to the dialogue where voices of their own collision, then to their own knowledge, which may lead to "appropriation in learning." Appropriated knowledge also impels conflict in another situation of "mastery in learning" due to its variety. Furthermore, the conflict activates the dialogue with many voices colliding, and gives rise to appropriating knowledge. In conclusion, it can be suggested that "mastery in learning" and "appropriation in learning" are two sides of the same coin and play a great role in a process of pupil's acquiring knowledge through situated activities.

Key words: Mastery, Appropriation, Classroom discussion, Cultural tool, Decision by majority, Catchword, Speech style-switching
Classroom activity between teacher and pupils is often characterized as "I-R-E" or "instructional questions" (e.g., Mehan, 1985). A teacher usually asks his/her pupils some questions, although he/she knows the answers to them, then answers given by pupils are evaluated. A typical pattern of such questioning is as follows: "What is this?" - "It is A." - "That's right!" or "This is ...." - "A!" - "Yes! This is A." Though it occurs sometimes at home or in occupational societies, the point here is that most teacher-pupil interaction patterns in the classroom predominates in teacher-initiated interaction as shown above. This kind of closed communication pattern (closed system) seems to be based on the transmission model, the univocal function of "functional dualism of texts" (Lotman, 1988) and forces the pupils to do "mastery in learning" (Wertsch, 1998).

However, this instructional question pattern is said to have little positive impact on pupils' learning and achievement (Nystrand, 1993). So other systems, such as the open system, based on the dialogical model, multivocal function or "thinking device" (Lotman, 1988) is required for the attainment of "appropriation in learning" (Wertsch, 1998).

On observing a classroom activity, multivocal interactions undoubtedly can be seen even in the subject-matter lesson. This is discussion. In the discussion session, pupils are facilitated to express their own opinions rather freely, and to solve problems collaboratively.

This can be taken as a collaborative interaction in multivocal open system. There is also a special activity in the classroom mainly carried out by discussion, called the homeroom activity. In Japan, a short homeroom time is held usually every morning before class and a full period session, once a week. There, pupils themselves decide what to do, think how to solve an on-going problem in class, how to participate in school activities, and so on. They discuss matters without intended answers, or sometimes decide what to discuss. This activity is introduced as early as possible in school life.

However, the discussion in the classroom seems to be set by the teacher in order to proceed "mastery in learning" effectively. In fact, though the discussion is carried out searching for the consensus of many voices of pupils colliding, the teacher finally leads pupils to the univocal consensus readily given along with the school curriculum (Tajima & Uemura, 1998).

Here arises a question. Is it the only reason for setting discussion sessions in the classroom to proceed "mastery in learning" effectively? What relationship can be seen between "mastery in learning" and "appropriation in learning"?

The purpose of the present research is, through the discourse analysis of the homeroom discussion in one first grade class in Japan, to identify the characteristics of discussion as an open system where no goal is readily set and to clarify the relationship between "mastery in learning" and "appropriation in learning," considering the significance of introducing discussion, and the effect of discussion on knowledge acquisition by pupils.
Method
Subjects
Twenty-nine first graders (15 boys, 14 girls) and a female teacher participated in this study. This class belongs to a public school located in downtown Tokyo.
Procedure
Two observers visited the class and videotaped activities in and out of class during one whole school day.
Transcripts of the activities, mainly speech, were prepared for the analysis. The excerpt analyzed for this study was that of a homeroom discussion in the 45-minute-period.
Results
Cultural tools
In the discussion, three cultural tools were mainly observed as follows.
One of them was a “decision by majority” to facilitate the pupils to express and exchange their own opinions (see 4, 5, 7, 8, 10), and to have them accept an absolute opinion positively (see 12, 13).

1. Teacher: So, let's discuss the plans for homeroom of September and October. Then I'd like you to begin the homeroom. Thursday is singing day. So, let's discuss what we are going to sing on Thursday.
2. (Some pupils raise their hands saying “me.”)
3. Teacher: So, first (putting a finger to the mouth as to say “shh!”) I'll give you some time to think. You may talk to your neighbors (putting a finger to the mouth) quietly.
   (The boy puts a finger to the mouth but imitates to talk loudly and excitedly to the girl next to him.)
5. .......[during this time, pupils suggest various kinds of songs and simultaneously express the feelings of likes and dislikes. Finally they decide by majority]......
6. Teacher: OK. I'll give you some time. Please select two songs.
9. Teacher: All right. Please raise your hand silently. Anyone likes the sports festival song?
11. Teacher: (Looking around the classroom) 2. (writes it on the blackboard.)
12. .......[during this time, two songs were chosen but the pupils express their feelings of satisfaction and dissatisfaction]......
13. Teacher: (Considering the disappointed pupils) Actually, I don't really like to decide in this way.

Several “formal or formulated phrases,” a kind of catchword (see 16), were intro-
duced for helping pupils to negotiate with peers, and also to put their own products of discussion into practice effectively.

14. Teacher: .... Last time, we decided like this, do you remember? Please have a look.

15. (The teacher moves to the corridor side and points at the paper on the wall.) The person who is responsible says this green part. Everybody says, um... the white part.

16. (Teacher reads out the letters on the paper by pointing them.)

“Good morning everyone. We are going to start the homeroom now. Today is the blah, blah, blah day. (Pupils laugh.) Let's enjoy it together.” We say in this way.

It was also found that the teacher's wording varied between formal or polite style (shown as the single-underlined sentences in the above instances) and informal or casual/plain style (double-underlined ones) depending on the form of discussion and the content of her utterances. The formal and informal utterances are clearly distinguishable by special grammatical markers in Japanese. This “speech style-switching” seems to be carried out for imparting what kind of situation (e.g., formal/polite style for the presentation of task and informal/casual/plain style to impel the pupils' expression of an active and free opinion or choice) is currently going on to the pupils indirectly for helping them to regulate their own behavior. In fact, our experimental study (Tajima & Uemura, 1998) controlling only the teacher's wording in small group discussion in a fourth grade classroom revealed a strong effect of the teacher's wording such as “formal language style” and “informal language style” on his own communication style and also the process and results of discussion among his pupils. In “informal language style session,” forth-graders themselves tended to use informal speech style, showed equal-stand interaction with their teacher, expressed their opinions freely and also had more fruitful results of discussion compared with “formal language style session”.

Active Participation of Pupils

Throughout the discussion, pupils' active and positive participation was observed. Active hand-raising (see 2), spontaneous statements (7, 8, 10), private discussion (5), and compliance and discontent (12) were evident.

Discussion

The discourse analysis of the homeroom discussion among first graders suggests as follows:

The aim for introducing a collaborative interaction of “discussion” in the homeroom is to let pupils form a creative attitude such as creating their or his/her own aim through an equal-stand interaction and identify themselves to the whole class. This is shown from the pupils' expression of their strong motivation to participate and their expressed emotion toward the shared result. In this sense, it can be said that the discussion provides a situation for “appropriation in learning”.
The "decision by majority" is the main cultural tool adopted in the discussion, which presupposes a free demonstration of the participants' own opinions. This makes the pupils participate in the collaborative activity, or in other words, makes them participate actively and "decide their opinion as a whole by themselves," while it also induces the pupils to interact with one another and asks for their consent to the shared decision.

The "formulated phrase" facilitates pupils to acquire the shared product. It also offers them "speech genre" (Bakhtin, 1986) in class or in school.

And the "differentiation of the use of speech styles," using formal / polite style-for the presentation of task and using informal / casual-plain style to impel the pupils' expression of an active and free opinion or choice, is adopted to imply what situation the discussion is in, how they are supposed to participate and act, so that the pupils can control the discussion process by themselves.

Here, the cultural tools shown above which constitute the collaborative interaction in discussion seem to show the tendency to "mastery in learning." The "decision by majority" requires the conclusion of the univocal, agreed opinion. The "formulated statement" forces pupils to acquire a certain, univocal pattern of speech genre, and the "differentiation of the use of speech styles" controls the pupils' behavior in the collaborative activity. This suggests that discussion in the homeroom, which seems to be a free dialogical interaction, is controlled by the cultural tools with the tendency to "mastery in learning".

Coincidentally, this also suggests that the tendency to "mastery in learning" provides pupils with the starting point for the collaborative activity. The typical forms, such as mottoes, formulated dialogue, and manners, are supposed to be acquired according to social demand. In this way, we can say that a burden on pupils to get accepted for participating in society is reduced.

However, the problem here is that reducing the burden is one thing and whether it is comfortable for pupils is another. This is shown by compliance or discontent by pupils who ended up being on the minority side about the result. Hence "mastery in learning" causes "conflicts" in pupils. Under the circumstances of squeezing them into a certain mold or forcing "mastery in learning," conflicts emerge. Nevertheless, the conflict produces a situation where pupils challenge it with their own voices, then, in this way, leads to "appropriation in learning."

Collision of many voices during discussion is the situation of conflict. Many opinions collide which are consensus-oriented. The "decision by majority," the "formulated statement," and the "differentiation of the use of speech styles" which control the discussion show the tendency to "mastery in learning," and pressure of these tools also causes conflict. However, the notion that conflict impels development (Smolka, de Goes, & Pino, 1995) is especially important for identifying the relationship between "mastery in learning" and "appropriation in learning."

"Mastery in learning" as a starting point impels pupils themselves to the dialogue where voices of their own collide, then to their own knowledge, which may lead to "appropriation in learning." Appropriated knowledge conversely impels the shift to the new situation of "mastery in learning" due to its variety, generating new conflict. Then, the conflict activates the dialogue with many voices colliding, and gives rise to the new
stage of appropriating knowledge. It could be said that "mastery in learning" coincides with "appropriation in learning," that is, "mastery in learning" might be both sources and results of "appropriation in learning."

The coincidental relation shown above occurs not only among pupils, but also in the teacher. In our excerpt, the teacher confesses her own negative feeling toward the tool of "decision by majority" in response to the resistance of pupils against it (see 13). That is, conflict caused by "mastery in learning" also impels the teacher to "appropriation in learning."

In conclusion, it can be suggested that the coincidental relation of "mastery in learning" to "appropriation in learning" seen in the discourse of homeroom discussion with open task plays a great role in a process of pupils' acquiring knowledge through situated activities. It is also suggested that early introduction of this sort of activity in school life plays an important role in a process of pupils' adaptation to school culture.

Finally, this conclusion implies that the tendency to "mastery in learning" seen in the classroom with closed tasks is needed to be redirected to "coincidental system" which can be described as a collaboration of "mastery in learning" and "appropriation in learning." In fact, the effective discussion coincides with the classroom lesson characterized as "instructional questions."

References
VOICES OF TV COMMERCIALS
AS THE REFLECTION OF CULTURAL MENTALITY:
A JAPAN-U.S. COMPARISON

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Abstract
The purpose of this study is to identify some of the salient features of Japanese persuasive communication as exemplified in TV commercials through a contrastive analysis of Japanese and American ones. The protocol analysis indicated that there was a marked difference in the strategy of persuasion employed in TV commercials in Japan and the United States. The Japanese strategy is to approach consumers in an indirect way by appealing to the Pathos by loading the greatest part of information in the visual message. The American strategy, on the other hand, is the direct approach to consumers by repeating basic information and reasoning logically in the spoken message. The Japanese strategy might be termed "indirect persuasion through affective visual information," while the American strategy will be summarized as "direct persuasion through verbal reasoning." The origin of this difference as a reflection of the cultural mentality of the people of the two countries was discussed.

Key words: Persuasive communication, Intercultural communication, Multivoicedness, Cultural mentality

One of the fundamental issues in developmental psychology is how social processes are related to psychological processes (Wertsch, 1998). In fact, human cognitive activity has been considered to be both embedded and constituted within sociocultural activities, and most of us seem to agree that the analysis of social factors play an important role in attempts to explain the emergence of individual psychological phenomena. In spite of that notion, we have often failed to comprehend the psychological processes as the result of their interaction with social factors.

The purpose of this study is to examine and identify some of the salient features of persuasive communication as exemplified in TV commercials through a contrastive analysis of Japanese and American TV commercials. It will also lead to some insights about the cross-cultural communication between Japan and the United States (or more broadly the Western countries).

TV commercials are mode of persuasive communication in its most sophisticated form. They are intended to achieve the greatest effect with minimum cost. Within a limited amount of time TV commercials attempt to communicate manufacturers' messages to consumers in a most impressive manner. TV commercials are a powerful medi-
um of persuasion, but expensive. For this reason advertising agencies responsible for creating TV commercials use utmost care in their analysis of consumer behavior. This means that the persuasive approach used in TV commercials reflects the cultural values and orientations of the people in the society.

Consequently, we would get insights about the features of persuasive communication in each culture in its most distinctive form by analyzing TV commercials in different countries.

**Method**

**Data Collection**

A total of six-hour programming from a major nation-wide network was videotaped from 5:00 p.m. through 11:00 p.m. on a weekday respectively in Japan and the United States. This resulted in the collection of approximately seventy commercials in each country. From this collection of data, commercials that advertised the same type of product were picked out so that they would make a pair between Japan and the United States. Five sets of commercials, i.e. five commercials from each country, were finally selected for analysis: (1) credit card, (2) public message, (3) automobile, (4) wristwatch, and (5) cosmetics.

**Procedure of Data Analysis**

1. **Transcription**

   Messages communicated in TV commercials are three-fold: Visual, Spoken, and Written. The visual message is information that is imparted on the TV screen. This, however, does not include linguistic messages that appear as words. The spoken message is the kind of information that is transmitted aurally. This includes songs and instrumental music for convenience. The written message appears on the screen as linguistic representation.

   The three types of information that was transcribed for each commercial made the data for our research. This information is provided in the Table 1 to 5.

2. **Formulating Categories for Analysis:**

   After viewing each TV commercial several times the two researchers shared their overall impressions and discussed their observations. During this process a list of features that should contribute to our impressions was formulated to exhaust possible categories for analysis. From this list the following four major categories were set up for our analysis. The first three dimensions of categories are compatible to Aristotle's rhetoric of persuasion.

   **Ethos:** appealing to the authority of the speaker.
   
   AU: Professional Authority
   
   CE: Celebrated People
   
   FO: Foreigners
   
   GO: Group Oriented

   **Pathos:** appealing to the sentiments and emotions.

   PA: Appeal to Emotions
ME: Metaphor  
MU: Music (including songs)  
BA: Background Information  
FA: Fantasy  
IM: Impression of Product  
IN: Indirect Message  
Logos: appealing to logical reasoning.  
LO: Logical Reasoning  
OR: Ordinary People  
C1: Comparison with the Company's Previous Products  
C2: Comparison with Other Company's Products  
RE: Realistic Situation  
FE: Features of Product  
CR: Credibility  
DI: Direct Message

In addition to the three dimensions above the Basic was set up to accommodate the types of information that are likely to appear in every commercial.

**Basic:** product name, company name and related announcements

NA: Product Name  
PI: Picture of Product  
CO: Company Name and Logo  
AN: Announcement (of Phone Number, Address, etc.)

### 3. Coding Procedure

According to the schematic categories set up above, codes were assigned to each unit of information respectively for visual, spoken and written messages. Then the number of codes were counted for each category. Specifically the procedure was divided in the following steps:

**A) Unitization**

The smallest unit of information was identified for each protocol. This served as the basic unit of analysis.

**B) Categorization and Comparison**

Categories for analysis were assigned to each unit. A single unit may be categorized in more than one way.

**C) Counting of Codes**

The number of codes were counted for each category of persuasion after being classified according to the type of messages. Codes that relate to overall feature like [Realistic Situation], [Background Information], [Ordinary People] and [Fantasy] were counted only once for each category of Visual, Spoken, and Written. In order to compare the number of direct and indirect messages the Ethos and the Pathos were grouped together to represent indirect messages. The Logos was used to represent direct messages. The number of codes that appeared in each category was used as an index to represent directness and indirectness of persuasion.

The coding was independently done by the two researchers and this procedure was
repeated until they agreed in more than 90% of the total coding.

Results

OVERALL ANALYSIS

After coding each unit of the message, the number of codes were compared between Japanese and US commercials for all the cases in order to view the general tendency. The comparison was made according to the medium of information, the modes of persuasion, and directness and indirectness. The length of commercials differed in Japan and the United States. For making comparisons the number of codes was transformed to percentages.

Medium of Information

Fig. 1 shows the amount of information as measured by the number of category codes communicated in visual, written, and spoken messages. Japanese commercials communicate the greatest amount of information in the visual message (38.6%) even though the difference from the spoken message (35.1%), the second highest, is small. The written message communicate 26.3% of information. This contrasts sharply with the American TV commercials, where the greatest amount of information is communicated in the spoken message (54.7%). The visual and written message communicate respectively 27.7% and 17.6% of information. American TV commercials rely heavily on the spoken information whereas in Japanese commercials this tendency is not as clear and it seems to rely more on the visual side.

Mode of Persuasion

Fig. 2 shows the result of comparison in terms of the mode of persuasion. American TV commercials provide more information (35.8%) than Japanese commercials (19.3%) about the Basic, which is the basic requirement of commercials covering the names of manufactures and products. Excepting the Basic, the amount of information for the mode of persuasion for the Japanese commercials is, in the descending order, the Pathos (41.2%), the Logos (19.3%), and the Ethos (11.4%). The American data, on the other hand, is 35.8% for the Logos, 22.3% for the Pathos, and 6.1% for the Ethos. The emphasis in the Japanese TV commercials is in the Pathos while it is in the Logos in the
American commercials. This tendency will become more marked when we compare dimensions including the Basic side of information.

![Total of Five Cases](chart)

**Fig. 2** Proportions of Means of Persuasion

**Directness of Persuasion**

Fig. 3 is the result of comparison in terms of directness and indirectness of persuasion. The difference between Japan and the United States is also marked here. The Japanese TV commercials rely heavily on indirect persuasion (73.2%) whereas the American persuasion is more inclined to direct orientation (55.8%).

The observation above indicates that there is a difference in the persuasive approach as used in the TV commercials in Japan and the United States. The Japanese strategy is to appeal to visual impression and affective side of communication in an indirect manner whereas in the United States TV commercials are intended to be more direct, appealing to logical reasoning by means of spoken messages.

![Total of Five Cases](chart)

**Fig. 3** Proportions of Indirect-Direct Messages

**CASE ANALYSIS**

The following sections present the result of analysis of each commercial used for our data. Refer to the Table 1-5 for the details of protocols and their coding.

**Credit Card**

This is one of the most typical examples that represent the overall tendency. The
result of analysis is shown in Fig. 4, 5, 6, and Table 1. The Japanese commercial is intended to project the internationality and "strength" of the card by presenting visual information depicting the practice of Kungfu. It does not provide any practical information, i.e. the Logos, as to how the card is international and strong. Instead it appeals to the Ethos and Pathos by entering a well-known actor and emphasizing the visual effect of communication.

The American commercial, on the other hand, is more direct, appealing primarily to the Logos. The situation presented here is realistic, something everybody experiences in their shopping. It provides detailed information and reasoning about the utility of the CITIBANK card by means of spoken messages.

Table 1  CREDIT CARD

<table>
<thead>
<tr>
<th>Visual Information</th>
<th>Written Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese Case: DC Card (15 sec)</td>
<td></td>
</tr>
<tr>
<td>MALE: International!</td>
<td></td>
</tr>
<tr>
<td>(S) Music</td>
<td></td>
</tr>
<tr>
<td>(V) A group of American men and women with Kiichi Nakai (Japanese actor) in front practicing Kungfu on a street in New York City. Everybody has a DC Card on their fists.</td>
<td></td>
</tr>
<tr>
<td>ALL: Ha, ha, ha, ha, ha! (Shouts in Kungfu)</td>
<td></td>
</tr>
<tr>
<td>(V) Everybody practicing Kungfu.</td>
<td></td>
</tr>
<tr>
<td>ALL: Ha, ha, ha, ha!</td>
<td></td>
</tr>
<tr>
<td>(V) A DC Card lands on a fist in a close-up.</td>
<td></td>
</tr>
<tr>
<td>(V) Nakai shows his left fist on which we see a DC Card.</td>
<td></td>
</tr>
<tr>
<td>MALE: International!</td>
<td></td>
</tr>
<tr>
<td>(V) Nakai puts his fists on his eyes. We see two DC Cards on top of Nakai's fists.</td>
<td></td>
</tr>
<tr>
<td>MALE: Hahahaha. (Laugh)</td>
<td></td>
</tr>
<tr>
<td>(V) Nakai runs on the street with his right fist on his left shoulder. Three bombs exploding after him. Smoke.</td>
<td></td>
</tr>
<tr>
<td>(W) International.</td>
<td></td>
</tr>
<tr>
<td>(V) Nakai raises his right arm with his hand holding a DC Card with skyscrapers in the background.</td>
<td></td>
</tr>
<tr>
<td>NAKAI: International Card. The name is ...</td>
<td></td>
</tr>
<tr>
<td>(V) Nakai about to fly up in the air.</td>
<td></td>
</tr>
<tr>
<td>FEMALE: DC Card. (in a jingle).</td>
<td></td>
</tr>
<tr>
<td>(V) DC Card with skyscrapers in the background.</td>
<td></td>
</tr>
<tr>
<td>(W) WHAT'S NEXT? DC CARD!</td>
<td></td>
</tr>
<tr>
<td>(V) Visual Message</td>
<td></td>
</tr>
<tr>
<td>(W) Written Message</td>
<td></td>
</tr>
</tbody>
</table>

<Visual Information>

(V) A group of American men and women with Kiichi Nakai (Japanese actor) in front practicing Kungfu on a street in New York City. Everybody has a DC Card on their fists. Everybody practicing Kungfu. (ME/PA/CE/FO/FA/GR)

(V) A DC Card lands on a fist in a close-up. (PI)

(V) Nakai shows his left fist on which we see a DC Card. (PI)

(V) Nakai puts his fists on his eyes. We see two DC Cards on top of Nakai's fists. (PI/ME)

(V) Nakai runs on the street with his right fist on his left shoulder. Three bombs exploding after him. Smoke.

(ME)

(V) Nakai raises his right arm with his hand holding a DC Card with skyscrapers in the background. Nakai about to fly up in the air. (PI/ME/PA)

(V) DC Card with skyscrapers in the background. (PI/ME)

<Written Message>

(W) International. (FO)
<table>
<thead>
<tr>
<th>(W) WHAT'S NEXT DC CARD (C1/FO/NA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;Spoken Message&gt;</td>
</tr>
<tr>
<td>MALE: International! (FO)</td>
</tr>
<tr>
<td>MUSIC: (MU/PA)</td>
</tr>
<tr>
<td>ALL: Ha, ha, ha, ha, ha, ha! (Shouts in Kungfu) (ME/PA)</td>
</tr>
<tr>
<td>ALL: Ha, ha, ha, ha! (ME/PA)</td>
</tr>
<tr>
<td>MALE: International! (FO)</td>
</tr>
<tr>
<td>MALE: Hahahaha. (Laugh)</td>
</tr>
<tr>
<td>NAKAI: International Card. The name is ... (NA)</td>
</tr>
<tr>
<td>FEMALE: DC Card. (in a jingle). (MU)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>U.S. Case: CITIBANK Card (15 sec.)</td>
</tr>
<tr>
<td>(At a camera shop)</td>
</tr>
<tr>
<td>(V) Customer looking at a camera on the counter with a hesitating look.</td>
</tr>
<tr>
<td>MALE STORE OWNER: You can see the hesitation in my customers' faces.</td>
</tr>
<tr>
<td>(V) Store owner showing a camera to his customer.</td>
</tr>
<tr>
<td>OWNER: I mean I know I'm giving them the best prices. But how can I prove it?</td>
</tr>
<tr>
<td>So I suggest the use of CITIBANK VISA.</td>
</tr>
<tr>
<td>OWNER: Just a moment.</td>
</tr>
<tr>
<td>(V) Smile on the customer's face reflected on the glass.</td>
</tr>
<tr>
<td>(V) CITIBANK VISA card returned to the customer.</td>
</tr>
<tr>
<td>(W) CITIBANK Price Protection (MUSIC)</td>
</tr>
<tr>
<td>OWNER: Here you go, Walter.</td>
</tr>
<tr>
<td>Enjoy your camera.</td>
</tr>
<tr>
<td>OWNER: When they see they could have purchased at approved ad or for less, CITIBANK refunds the difference up to one hundred and fifty dollars.</td>
</tr>
<tr>
<td>(V) Female customer inspecting a camera.</td>
</tr>
<tr>
<td>(V) Store owner looks toward his customer.</td>
</tr>
<tr>
<td>OWNER: May I help you?</td>
</tr>
<tr>
<td>(V) Customer asking for help of the store owner.</td>
</tr>
<tr>
<td>FEMALE CUSTOMER: Yes, please.</td>
</tr>
<tr>
<td>OWNER: That's CITIBANK price protection. If getting the right price is important, this is the right card.</td>
</tr>
<tr>
<td>(V) Store owner shows a CITIBANK VISA card to us.</td>
</tr>
<tr>
<td>MALE: Not just VISA, CITIBANK VISA.</td>
</tr>
<tr>
<td>(V) CITIBANK VISA card.</td>
</tr>
<tr>
<td>(W) NOT JUST VISA, CITIBANK VISA.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>&lt;Visual Message&gt;</td>
</tr>
<tr>
<td>(OR/MU/RE/BA/IM/PI/BA/CO)</td>
</tr>
<tr>
<td>(V) Customer looking at a camera on the counter with a hesitating look.</td>
</tr>
<tr>
<td>(V) Store owner showing a camera to his customer.</td>
</tr>
<tr>
<td>(V) Smile on the customer's face reflected on the glass.</td>
</tr>
<tr>
<td>(V) CITIBANK VISA card returned to the customer.</td>
</tr>
<tr>
<td>(V) Female customer inspecting a camera.</td>
</tr>
<tr>
<td>(V) Store owner looks toward his customer.</td>
</tr>
<tr>
<td>(V) Customer asking for help of the store owner.</td>
</tr>
<tr>
<td>(V) Store owner shows a CITIBANK VISA card to us.</td>
</tr>
<tr>
<td>(V) CITIBANK VISA card.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>&lt;Written Message&gt;</td>
</tr>
<tr>
<td>(W) CITIBANK Price Protection (FE/CO)</td>
</tr>
<tr>
<td>(W) NOT JUST VISA, CITIBANK VISA. (CO/NA/C2)</td>
</tr>
</tbody>
</table>
<Spoken Message>
(BA/NA/LO/FE/CO/FE/CO/FE/LO/CO/NA/C2)
MALE STORE OWNER: You can see the hesitation in my customers' faces.
OWNER: I mean I know I'm giving them the best prices.
   But how can I prove it?
   So I suggest the use of CITIBANK VISA.
OWNER: Just a moment.
(MUSIC)
OWNER: Here you go, Walter.
   Enjoy your camera.
OWNER: When they see they could have purchased at approved ad or for less, CITIBANK refunds
   the difference up to one hundred and fifty dollars.
OWNER: May I help you?
FEMALE CUSTOMER: Yes, please.
OWNER: That's CITIBANK price protection.
   If getting the right price is important, this is the right card.
MALE: Not just VISA, CITIBANK VISA.

CASE 1 : CREDIT CARD

![Proportions of Visual, Written & Spoken Messages](image1)

Fig. 4 Proportions of Visual, Written & Spoken Messages

CASE 1 : CREDIT CARD

![Proportions of Means of Persuasion](image2)

Fig. 5 Proportions of Means of Persuasion
Public Message

This is another example that typically exemplifies the overall tendency. Fig. 7-9 and Table 2 are the result of analysis. The topic of the Japanese public message is the illegal parking that might result in a loss of life. The American public message emphasizes the danger of alcoholism and drugs. In both announcements the greatest amount of information is communicated by the spoken message probably because they are intended to be informative. They also show the same tendency in the amount of information used in the Visual and Written (Fig. 7). Yet they show a marked difference in the mode of persuasion (Fig. 8).

In the Japanese work the face or the body of a patient is not shown on the screen. Instead the film shows anxious faces of the members of the rescue crew and the neighbors in order to imply the emergency of the situation. In the end of the story we know from the happy faces of the doctors and the patient's family that the patient was saved. During this process the message “If it had been fifteen minutes late, ...” is repeated. The message does not say what would have happened if it had been fifteen minutes late. It tells us in an indirect way that the patient's life might have been lost. It does not directly touch upon the theme of death. Both the Visual and Written messages are intended to be indirect and more affective.

In the American film the focus of attention is the patient himself, who dies at the end of the short story. He repeatedly tells the viewers that he failed to listen to other people's advice and how he is sorry about it. At the end of the story a white piece of cloth is place over the patient's face, telling that he is dead. It directly deals with the theme of death. The strategy used here is the logic and direct approach to the theme.

Table 2  PUBLIC MESSAGE

<table>
<thead>
<tr>
<th>Japanese Case: Illegal Parking (30 sec.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(V) A doctor, two nurses and a patients family look down (at a patient who is not shown on the screen) with a relieved look and smile.</td>
</tr>
</tbody>
</table>
MALE: If it had been fifteen minutes late, ...

(V) An ambulance speeding on a city street.
MUSIC: Warning signal from the ambulance and music that makes you uneasy.
(V) The ambulance stops. Concerned look on the driver.
(V) The ambulance obstructed by an illegally parked automobile.
(V) Close-up shot of the illegally parked automobile.
Chalked line on the street and a sticker on the side rearview mirror indicating illegal parking.
(V) Pedestrian looking around the illegally parked automobiles with a concerned look on his face.
(V) Officer in the ambulance with a concerned look.
MALE: If it had been fifteen minutes late, ...
(V) Door to an operation room
MALE: Due to illegal parking, a life that could be saved ...
It might happen to you tomorrow.
(V) A doctor talking to a patient and his family on the lawn of the hospital yard. Smiles on everybody.
MALE: AC Public Message Organization.
(V) An ambulance speeding on the street with cars parking on each side.
(W) Stop Illegal Parking
FEMALE: AC. (in a jingle)
(W) Consideration for Everybody.
AC Public Message Organization.

<Visual Message>
(PA/OR/RE/BA/LO/IN)
(V) A doctor, two nurses and a patients family looks down (at a patient who is not shown on the screen) with a relieved look and smile.
(V) An ambulance speeding on a city street.
(V) The ambulance stops. Concerned look on the driver.
(V) The ambulance obstructed by an illegally parked automobile.
(V) Close-up shot of the illegally parked automobile.
Chalked line on the street and a sticker on the side rearview mirror indicating illegal parking.
(V) Pedestrian looking around the illegally parked automobiles with a concerned look on his face.
(V) Officer in the ambulance with a concerned look.
(V) Door to an operation room
(V) A doctor talking to a patient and his family on the lawn of the hospital yard. Smiles on everybody.
(V) An ambulance speeding on the street with cars parking on each side.
(W) Stop Illegal Parking
(W) Consideration for Everybody.
AC Public Message Organization.

<Written Message>
(W) Stop Illegal Parking (NA)
(W) Consideration for Everybody. (PA)
AC Public Message Organization. (CR)

<Spoken Message>
MALE: If it had been fifteen minutes late, ... (PA/LO/IN)
MUSIC: Warning signal from the ambulance and music that makes you uneasy. (MU/PA)
MALE: If it had been fifteen minutes late, ... (PA/LO/IN)
MALE: Due to illegal parking, a life that could be saved ...
It might happen to you tomorrow. (NA/PA/LO)
MALE: AC Public Message Organization. (CR)
FEMALE: AC. (in a jingle) (CR/MU)
Voices of TV Commercials

U.S. Case: COALESCE (30 sec.)

(W) I THOUGHT I HAD CONTROL.

PATIENT (MALE): I thought I had control.

(V) A patient taken in on a stretcher to an operation room of a hospital.

PATIENT: I drank some. I smoked now and then.

First I lost my job.

They offered help, but I thought I had control.

(W) I THOUGHT I HAD CONTROL.

PATIENT: Then my wife left.

I didn't care because I thought I had control.

(W) I THOUGHT I HAD CONTROL.

PATIENT: I needed money. Anywhere I can get it.

(V) The patient given treatment in the operation room.

PATIENT: I learned a valuable lesson.

I didn't have control.

(V) A white piece of cloth is put on the face of the patient, indicating that he died.

MALE: Drugs and alcohol destroy lives.

COALESCE restores them.

If you know anyone you know has problems with drugs and alcohol, call COALESCE at 874-CARE.

(V) An ambulance speeding on the street.

(W) 874-CARE

PATIENT: I thought I had control.

Man, I was wrong.

(W) COALESCE

Drug & Alcohol Treatment Facility 874-CARE

<Visual Message>

(BA/PA/OR/RE/DI)

(V) A patient taken in on a stretcher to an operation room of a hospital.

(V) The patient given treatment in the operation room.

(V) A white piece of cloth is put on the face of the patient, indicating that he died.

(V) An ambulance speeding on the street.

<Written Message>

(W) I THOUGHT I HAD CONTROL. (BA)

(W) I THOUGHT I HAD CONTROL. (BA)

(W) I THOUGHT I HAD CONTROL. (BA)

(W) 874-CARE (FE/AN)

(W) COALESCE (CO/AN)

<Spoken Message>

PATIENT (MALE): I thought I had control. (BA)

PATIENT: I drank some. I smoked now and then.

First I lost my job.

They offered help, but I thought I had control.

(BA/ DI)

PATIENT: Then my wife left.

I didn't care because I thought I had control. (BA/ DI)

PATIENT: I needed money. Anywhere I can get it. (BA/ DI)

PATIENT: I learned a valuable lesson.

I didn't have control. (BA/ DI)

MALE: Drugs and alcohol destroy lives.

COALESCE restores them.

If you know anyone you know has problems with drugs and alcohol, call COALESCE at 874-CARE. (CO/FE/AN)

PATIENT: I thought I had control.

Man, I was wrong. (BA/ DI)
Automobile

This example shares a number of similarities with the overall tendency. The result of analysis is presented in Fig. 10-12, and Table 3. In the Japanese commercial the focus of attention is a graceful woman who stands on the dune. She is modeled after a woman that appears in the well-known ukiyoe painting by Utamaro. Two automobiles gracefully pass her on the dune. The pictures presented here are a fantasy intended to be affective. Through this fantastic description the commercial projects the image of graceful-
ness of the automobile. The most dominant feature here is the emotional, indirect approach to the theme. The total amount of information is small and the greatest part of information is communicated by the Written message.

The American commercial is a story about a rich gentleman who is stranded on a desert road and given a ride. He is fascinated by the car he happens to ride and craves to have it himself. The focus of the commercial is the luxurious equipments, which are ordinarily mounted on an expensive automobile. It tells the viewers how they can enjoy the luxury with a limited amount of money. The approach of persuasion is direct and logical. The total amount of information is not large. Except the Basic elements of information, there is no marked difference between the Pathos and the Logos and also between the directness and indirectness of persuasion.

Table 3 AUTOMOBIL

<table>
<thead>
<tr>
<th>Japanese Case: Pressea by NISSAN (15 sec.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMALE: Pressea. (Song as in an opera)</td>
</tr>
<tr>
<td>(V) A young woman in a kimono with her back toward us standing on a dune. A Pressea gracefully appears in the upper right hand corner.</td>
</tr>
<tr>
<td>(W) NISSAN.</td>
</tr>
<tr>
<td>MALE: The most graceful sedan.</td>
</tr>
<tr>
<td>(W) The most graceful sedan.</td>
</tr>
<tr>
<td>(W) Options Equipped Version.</td>
</tr>
<tr>
<td>(V) The sedan gracefully passes the screen.</td>
</tr>
<tr>
<td>(V) The young woman gracefully looks back over her shoulder toward us (just like the beautiful woman in Utamaro's ukiyo e masterpiece &quot;Woman Looking Back over her Shoulder&quot;).</td>
</tr>
<tr>
<td>MALE: NISSAN Pressea.</td>
</tr>
<tr>
<td>(V) Two Presseas coming from right and left gracefully pass the woman.</td>
</tr>
<tr>
<td>(W) Fasten Seat Belts.</td>
</tr>
<tr>
<td>MALE: A debut.</td>
</tr>
<tr>
<td>(W) A debut. Utmost grace. STYLISH 4 DOOR (in English).</td>
</tr>
<tr>
<td>Presea.</td>
</tr>
<tr>
<td>MALE: Visit your NISSAN dealer this weekend.</td>
</tr>
<tr>
<td>(W) Meet the Pressea this weekend. 6/30 Sat., 7/1 Sun.</td>
</tr>
<tr>
<td>Preview. Visit your Sunny/Laurel dealer.</td>
</tr>
</tbody>
</table>

<Visual Message>

(V) A young woman in a kimono with her back toward us standing on a dune. A Pressea gracefully appears in the upper right hand corner. (PA/FA/PI)
(V) The sedan gracefully passes the screen. (PI)
(V) The young woman gracefully looks back over her shoulder toward us (just like the beautiful woman in Utamaro's ukiyo e masterpiece "Woman Looking Back over her Shoulder"). (ME/PA/CE)
(V) Two Presseas coming from right and left gracefully pass the woman. (PI)

<Written Message>

(W) NISSAN. (CO)
(W) The most graceful sedan. (ME/PA)
(W) Options Equipped Version. (CR)
(W) Fasten Seat Belts. (CR)
(W) A debut. Utmost grace. STYLISH 4 DOOR (in English).
Presea. (NA/IM/PA/AN)
(W) Meet the Pressea this weekend. 6/30 Sat., 7/1 Sun.
Preview. Visit your Sunny/Laurel dealer. (NA/AN)
<Spoken Message>
FEMALE: Presea. (Song as in a opera) (MU/PA)
MALE: The most graceful sedan. (ME/PA)
MALE: NISSAN Presea. (NA)
MALE: A debut. (AN)
MALE: Visit your NISSAN dealer this weekend. (AN)

U.S. Case: NISSAN Sentra (15 sec.)
(MUSIC) Music intended to incite uneasiness.
(V) A gentleman standing beside his car that is stranded on the road in the desert due to some mechanical trouble.
(V) A Sentra comes by and he gets a ride.
(V) The Sentra runs swiftly on the desert road.
(V) The CD player functions automatically.
(V) The sun roof opens automatically.
GENTLEMAN: What kind of car is this?
(V) A close-up shot of the brief case on the lap of the gentleman.
DRIVER (MALE): A Sentra.
(V) A shot of the Sentra running swiftly on the desert road.
GENTLEMAN: Do you consider selling it?
DRIVER: No.
(V) The man opens his briefcase. It is full of bank notes.
GENTLEMAN: Do you sell it for a hundred and fifty thousand dollars?
DRIVER: Ah ...
(V) The gentleman looks at the driver.
GENTLEMAN: OK. Two fifty ...
(Loud sound of horn)
(V) A woman extending her hand. She has two one-dollar bills and two quarters in her hand.
WOMAN: Two fifty. Two fifty, sir, for your change.
(V) The Sentra beside the ticket booth of the toll gate.
MALE: Nissan Sentra GX-E because rich guys shouldn't have all the fun.
(W) NISSAN
BUILT FOR THE HUMAN RACE

<Visual Message>
(V) A gentleman standing beside his car that is stranded on the road in the desert due to some mechanical trouble. (BA/BA)
(V) A Sentra comes by and he gets a ride. (PI/BA)
(V) The Sentra runs swiftly on the desert road. (PI/BA)
(V) The CD player functions automatically. (FE)
(V) The sun roof opens automatically. (FE)
(V) A close-up shot of the brief case on the lap of the gentleman. (BA)
(V) A shot of the Sentra running swiftly on the desert road. (PI)
(V) The man opens his briefcase. It is full of bank notes. (BA)
(V) The gentleman looks at the driver. (BA)
(V) A woman extending her hand. She has two one-dollar bills and two quarters in her hand. (BA)
(V) The Sentra beside the ticket booth of the toll gate. (BA/PI/ME)

<Written Message>
(W) NISSAN (CO)
BUILT FOR THE HUMAN RACE (CR)

<Spoken Message>
(MUSIC) Music intended to incite uneasiness. (MU/PA)
GENTLEMAN: What kind of car is this?
DRIVER (MALE): A Sentra. (BA/NA)
**Voices of TV Commercials**

**CASE 3: AUTOMOBIL**

![Graph](image)

**Fig. 10** Proportions of Visual, Written & Spoken Messages

![Graph](image)

**Fig. 11** Proportions of Means of Persuasion

![Graph](image)

**Fig. 12** Proportions of Indirect-Direct Messages

GENTLEMAN: Do you consider selling it?
DRIVER: No. (BA)
GENTLEMAN: Do you sell it for a hundred and fifty thousand dollars? (BA)
DRIVER: Ah ...
GENTLEMAN: OK. Two fifty ... (ME)
   (Loud sound of horn)
WOMAN: Two fifty. Two fifty, sir, for your change. (ME)
MALE: Nissan Sentra GX-E because rich guys shouldn't have all the fun. (NA/PR/PA)
Wristwatch

This example also show a close tendency to the overall result of comparison. The result of analysis is shown in Fig. 13-15 and Table 4. The two commercials are by the same manufacturer. In the Japanese commercial a young woman is the focus of attention. She is energetic and leads her colleagues in her office. No explanation is provided about the product. The only information about the product they provide in this commercial is the picture of the watch that appears in the background and the name of the watch that appears as the Written information. It does not tell the features of the product. Instead it tells us that it is a watch that is made for a young woman with a new vision and new look on life. The persuasive approach is affective and it is intended to appeal to the group-oriented mentality of Japanese. There is not marked difference observed among the Visual, Written, and Spoken.

The American commercial directly appeals to the advanced technology with which the watch is made. It projects the high-tech image by showing a computerized picture of a future plane. It also provides spoken information about the “intelligence” and advanced features of the watch. It relies on the Ethos by telling us that the manufacture is the authorized sponsor of the Olympic Games. This commercial is typically American in the sense that it directly describes the product. In terms of the mode of persuasion there is not much difference between the Ethos, Pathos, and Logos. The amount of direct persuasion is smaller than that of indirect use. For this reason this commercial also shares certain features with most other Japanese commercials.

Table 4 Wristwatch

<table>
<thead>
<tr>
<th>Japanese Case: Creo by SEIKO (15 sec.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(W) SEIKO</td>
</tr>
<tr>
<td>(V) Japanese actress Washio Isako's face looking toward us in a close up.</td>
</tr>
<tr>
<td>FEMALE: Handsome career, SEIKO Creo.</td>
</tr>
<tr>
<td>Handsome career, SEIKO Creo.</td>
</tr>
<tr>
<td>Handsome career, SEIKO Creo.</td>
</tr>
<tr>
<td>(in a jingle)</td>
</tr>
<tr>
<td>FEMALE: How should I say? You are modern.</td>
</tr>
<tr>
<td>WASHIO: OK. Let me do the job.</td>
</tr>
<tr>
<td>(V) Conference room with ten or so male employees sitting at a table. Washio stands in front of the people, looking toward us and smiling.</td>
</tr>
<tr>
<td>MALE: I am always impressed with your enthusiasm you show in your work.</td>
</tr>
<tr>
<td>(V) Close-up shot of Washio's face.</td>
</tr>
<tr>
<td>Washio with her hands on the back of her head with a coy look on her face.</td>
</tr>
<tr>
<td>WASHIO: Handsome career, SEIKO Creo.</td>
</tr>
<tr>
<td>(V) A watch appears on the screen with Washio's face in the background.</td>
</tr>
<tr>
<td>(W) CREO. SEIKO. ¥37000 ¥40000.</td>
</tr>
<tr>
<td>(V) Illustration of John Lenon and Yoko Ono.</td>
</tr>
<tr>
<td>(W) Something to choose with your lover. SEIKO WATCH GIFT.</td>
</tr>
</tbody>
</table>

<Visual Message>

| (V) Japanese actress Washio Isako's face looking toward us in a close up. (CE) |
| (V) Conference room with ten or so male employees sitting at a table. Washio stands in front of the people, looking toward us and smiling. (BA) |
| (V) Close-up shot of Washio's face. Washio with her hands on the back of her head with a coy look on her face. (BA) |
| (V) A watch appears on the screen with Washio's face in the background. (PI) |
| (V) Illustration of John Lenon and Yoko Ono. (FO/CE) |
Voices of TV Commercials

<Written Message>
(W) SEIKO (CO)
(W) CREO. SEIKO. ¥37000 ¥40000. (NA/CO/PR)
(W) Something to choose with your lover. SEIKO WATCH GIFT.
(FO/ME)

<Spoken Message>
FEMALE: Handsome career, SEIKO Creo. Handsome career, SEIKO Creo. Handsome career, SEIKO Creo. (in a jingle) (MU/ME)
FEMALE: How should I say? You are modern. (BA)
WASHIO: OK. Let me do the job. (BA)
MALE: I am always impressed with your enthusiasm you show in your work. (BA)
WASHIO: Handsome career, SEIKO Creo. (FO/PA/NA)

U.S. Case: SEIKO (15 sec.)
(W) SEIKO FLIGHT COMPUTER
(V) A close-up shot of the face of a watch.
(MUSIC)
MALE: You can fly.
With your feet on the ground, you can soar.
The most advanced type of technology on earth has an IQ.
SEIKO Intelligent Quarts.
(V) A shot of the watch in its whole view.
MALE: So functions never dreamed of in a single watch are amazingly simple to understand.
(V) A computer graphic image of a future airplane.
MALE: SEIKO.
(W) SEIKO THE FUTURE OF TIME.
MALE: The future of time and the official timer of the games of the 25th Olympiad.
(W) SEIKO THE OFFICIAL TIMER OF THE XXVth OLYMPIAD.
(W) SEIKO.
(V) Logo of the Barcelona Olympic Games.

<Visual Message>
(V) A close-up shot of the face of a watch. (PI)
(V) A shot of the watch in its whole view. (PI)
(V) A computer graphic image of a future airplane. (ME)
(V) Logo of the Barcelona Olympic Games. (CE)

<Written Message>
(W) SEIKO FLIGHT COMPUTER (CO/ME)
(W) SEIKO THE FUTURE OF TIME. (CO/ME/CI)
(W) SEIKO THE OFFICIAL TIMER OF THE XXVth OLYMPIAD. (CE)
(W) SEIKO. (CO)

<Spoken Message>
MUSIC: (MU)
MALE: You can fly. (ME)
With your feet on the ground, you can soar. (ME)
The most advanced type of technology on earth has an IQ. (FE)
SEIKO Intelligent Quarts. (CO/FE)
MALE: So functions never dreamed of in a single watch are amazingly simple to understand. (FE)
MALE: SEIKO. (CO)
MALE: The future of time and the official timer of the games of the 25th Olympiad. (PA/C1/CE)
**Cosmetics**

This is the only example that deviates from the overall tendency of the Japanese and American approach. The result of analysis is presented in Fig. 16-18 and Table 5. In the Japanese commercial a young woman tell the features of the product. From the viewpoint that it depicts a young girl floating comfortably in the water, it is affective and indirect in impression. Yet the overall effect of the commercial is more inclined to the logical side. For this reason, in the persuasive mode we observe a number of similari-
ties with the American approach to commercials.

The American commercial describes a personified perfume bottle coming out of a luxurious car and walks into a hotel, which is probably the site of the Academy Award presentation. It tells us that she is often mistaken for an Italian movie star (which is actually a brand name of Italian perfume). The focus of the commercial is the quality of the product and the low price. This information is given in the spoken message. For this reason in terms of the medium it relies heavily on the spoken message, and in terms of the mode of persuasion the logical aspect is emphasized. It is a common feature observed in the American commercials. Yet in terms of directness and indirectness of persuasion the Japan-US difference is not clear because it uses the Ethos as an important part of persuasion.

Table 5  COSMETICS

<table>
<thead>
<tr>
<th>Japanese Case: She's Cleansing Cream by SHISEIDO (15 sec.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JINGLE: &quot;She's&quot; !</td>
</tr>
<tr>
<td>(V) A young lady looks up at the blue summer sky.</td>
</tr>
<tr>
<td>(W) SHISEIDO</td>
</tr>
<tr>
<td>FEMALE: Make-up does not come off easily in summer.</td>
</tr>
<tr>
<td>(W) Make-up does not come off easily in summer.</td>
</tr>
<tr>
<td>(V) Young lady standing on a city street.</td>
</tr>
<tr>
<td>MALE: But &quot;She's&quot; mixes well with make-up and lets it wash off.</td>
</tr>
<tr>
<td>(V) Woman puts cleansing cream on her finger and washes her face.</td>
</tr>
<tr>
<td>FEMALE: Feels wonderful like this.</td>
</tr>
<tr>
<td>(W) Feels wonderful like this.</td>
</tr>
<tr>
<td>(V) Young woman on a float bathing in the sea with her arms spread out, expressing her delight.</td>
</tr>
<tr>
<td>MALE: &quot;She's&quot; Make-up Cleansing.  It washes away everything.</td>
</tr>
<tr>
<td>(V) Picture of product.</td>
</tr>
<tr>
<td>(W) Gentle to the skin. Contains Seaweed Extract. &quot;She's&quot; Make-up Cleansing.  ¥1000.</td>
</tr>
<tr>
<td>&lt;Visual Message&gt;</td>
</tr>
<tr>
<td>(V) A young lady looks up at the blue summer sky. (OR/RE/BA)</td>
</tr>
<tr>
<td>(V) Young lady standing on a city street. (RE/BA)</td>
</tr>
<tr>
<td>(V) Woman puts cleansing cream on her finger and washes her face. (RE/PI/FE)</td>
</tr>
<tr>
<td>(V) Young woman on a float bathing in the sea with her arms spread out, expressing her delight. (IM/PA)</td>
</tr>
<tr>
<td>(V) Picture of product.                                (PI)</td>
</tr>
</tbody>
</table>

| <Written Message>                                      |
| (W) SHISEIDO (CO)                                     |
| (W) Make-up does not come off easily in summer. (FE)   |
| (W) Feels wonderful like this. (IM)                    |
| (W) Gentle to the skin. Contains Seaweed Extract. "She's" Make-up Cleansing.  ¥1000. (FE/NA/PR) |

| <Spoken Message>                                       |
| JINGLE: "She's" ! (MU/NA)                             |
| FEMALE: Make-up does not come off easily in summer. (FE) |
| MALE: But "She's" mixes well with make-up and lets it wash off. (FE/C1/LO) |
| FEMALE: Feels wonderful like this. (IM)                |
| MALE: "She's" Make-up Cleansing.  It washes away everything. (FE/NA) |
CASE 5: COSMETICS

Fig. 16  Proportions of Visual, Written & Spoken Messages
Discussion

What the result of the analysis indicates is that there is a marked difference in the strategy of persuasion employed in the TV commercials in Japan and the United States. The Japanese strategy is to approach consumers in an indirect way by appealing to the Pathos by loading the greatest part of information in the visual message. The American strategy, on the other hand, is the direct approach to consumers by repeating basic information and reasoning logically in the spoken message. The Japanese strategy might be termed "indirect persuasion through affective visual information" while the American strategy will be summarized as "direct persuasion through verbal reasoning."

This difference might be a reflection of the cultural mentality of the people of the two countries. TV commercials are a form of social persuasion directed to an indefinite number of people. For TV commercials to be effective they should appeal to the sentiments that are most vulnerable. For this purpose creators of TV commercials often make a large-scale marketing. The result of production is therefore a gist of psychology packed in a short program. In this sense TV commercials are a form of persuasion in its most sophisticated mode.
What are the features that characterize Japanese society? First we will explore this theme by reviewing the work in sociology. Japanese society is often called a “network society” (Masuda Foundation, 1992). According to this view, Japanese society is defined as an insider society that bases its foundation on the mutual dependency among the members who shares common knowledge. Features that characterize a society like this are (1) autonomously distributed decision-making through concomitant communication and (2) corporationism. It will eventually lead to the principle of internal goals based upon “najimi” or familiarity. It is a society with situationism orientation characterized with homogeneity, closedness to outsiders, and flexibility.

In a society like this persuasive communication tends to be more subjective and affective in its value judgment rather than being objective and logical. People prefer to be use empathy in their communication because most of the communication takes place between people who can read other peoples’ mind easily and comfortably. This mentality in turn helps to consolidate the sense of community and social solidarity. It is from these observations that Japanese society is defined as a society that consists of contextual rather than individual and regulate itself through information manipulation.

The United States and Europe, on the other hand, are societies that regulate themselves through “mutual control” by contract, which ultimately derives from individualism and legal control of mutual relations defined by rights and obligations, and authority and subordination (Masuda Foundation, 1992).

Japanese Society and its Mechanism of Formulation

We will now make a review of psychological findings concerning how the affective communication civilization is formulated in Japan.

Azuma (1991) reviews comparative studies on moral judgment, parent-child relations, and other social interactions in Japan and the United States. The study of moral judgment is pertinent to our present topic. For Japanese high school and college students the standard of moral judgment is primarily the sentiments of the person. For American students, however, it is the facts. From these observations Azuma defines Japanese culture as a society of “sentiments” that values consideration to other members. This mentality is formulated in the process of socialization such as mother-child relations. In such a society the most important principle is to read other peoples' mind and apply empathy.

This process first begins with the parent-child relations, where the parents create a feeling of one-ness. For this purpose parents avoid confrontation and even concede to or pamper their children in rearing them. Parents use this in-circle relationship in expressing their wish, expectations and values to their children. A typical approach is the persuasion which will be formulated as “You are a good boy (girl). A good boy (girl) doesn't do that.” In this way parents attempt to transfuse the core image of a “ii-ko” or good child (White & LeVine, 1986).

The child, in turn, tries to regulate himself or herself using this image as a role model. He or she accommodates his or her behavior according to the expectations of the people important to them. This tendency, according to Azuma, is also observed in
the out-circle outside the mother-child relations. Japanese children already learn how to identify themselves with other people at the outset of their development. In the process of their development they extend and consolidate this mentality through interacting with teachers, friends, and all the people in the society. What is indispensable living in the Japanese society is “sashii” or empathy which enables the members to share other people's thoughts and feelings.

On the other hand, Americans cope with child rearing in a different manner. Parents in the United States do not identify themselves with their children. They keep a certain distance apart from their children and thus attempt to regulate their behavior by exerting authoritative influence and imparting their expectations. American parents attempt to make their children conscious of the parental control and thus help make them independent.

These relations also hold in education (Azuma, 1991). For Japanese education is another symbiotic relation of teachers and students rather than communication from teachers to students as in the United States and Europe. In such interaction educations is osmosis rather than instruction.

What the above discussion suggests is that the dominant mode of communication in Japan is empathy that is actualized in the affective and indirect manner. In the United States, however, communication is the imparting of logical reasoning through verbal exposition.

Japanese Society in Intercultural Communicative Perspective

The discussion above was mainly concerned with the features of groups that socio-logically and psychologically characterize Japan and the United States. It does not necessarily indicate that the difference is greater than similarity in the two countries. Yet such difference is certainly an important element that might hinder intercultural communication between the two countries. Thus understanding the difference will help facilitate communication across cultures.

The factors that might hinder or facilitate communication between Japan and the United States should be summarized in the following two points. The Japanese empathy can be a source of trouble in intercultural communication. Such mentality as “I am certain that other people are aware of my need and expectation” does not work outside the Japanese society. In the same way Japanese might misunderstand Americans and Europeans when they attempt to understand them as they do in Japan. The second factor is the mutual dependence in the closed circuit. In a society like Japan tacit understanding is an important means of communication. However, outside Japan, this can cause unnecessary misunderstanding.

These factors are sources of miscommunication for Westerners. Yet they derive from the structure of Japanese society where mutual dependence and reliance is highly valued. In this sense these factors could be both sources of hindrance and facilitators of communication. The Western mode of communication is not the only solution to understanding. It is also one of the communicative modes that is based upon the social structure. In this sense it is important to bear in mind that the value of the communicative mode should be judged in the context of society.
Universal Mechanism of Communication

We have so far concerned ourselves with the difference in the communicative mode. We will now turn to the similarities in both modes of communication. The Russian linguist Mikhail Bakhtin presents a model of basic mechanism that describes how people's mentality is formed through social, cultural, and institutional/organizational communication (Wertsch, 1991).

Bakhtin notes the importance of the "voices" of utterance. According to Bakhtin the voices represent not only the speaker's intention (voice) but the intention (voice) of the listener (the target) and situation (context and social milieu). In this sense an utterance is always "multivoicedness" rather than a single voice. An utterance is not arbitrarily determined by the speaker but first begins by ventriloquating or borrowing another people's voice. The voice of the speaker meets the voice of another people and there begins a confrontation. Through this process of internal dialogicality the speaker's own voices are formulated.

Thus the speaker depends on another people and the context that surrounds him or her, and becomes one that is indivisible. The voices include not only the voice of the listener but more important voices originating from social language or social dialect, that is, usage and new words used by sources of authority such as certain social classes, circles, schools or governments. It also contains "speech genre" based on certain activities such as greetings or dialogue at table. The process of dialogicality that takes place between the speaker's voice and the social dialect helps the speaker to relate to social, cultural, and historical factors of the society he or she lives in.

Bakhtin's theory suggests that even in a context of a school where most of the information moves from the teacher to the students, the student's voice interact with the voice of the school and the dialogicality helps formulate knowledge in the students. In this sense what takes place when teachers interact with their students is actually osmosis rather than instruction. For education to take place in a most effective manner it is important to motivate the student to wish to belong to the world of school and to learn. The same process takes place when TV commercials are broadcast.

The discussion above indicates that the persuasive approach used in TV commercials should be judged in the context of the society. The Japanese approach of TV commercials are an example along with child-rearing practice and education that reflects the mentality of the society. However, as Bakhtin implied in his theory, it also shares similarities with the orientation in the Western culture in the deeper strata of cultural mentality. The superficial difference should not mislead us in the understanding of the Japanese and Western cultures.

References
COMPARISON OF EVALUATIONS ON BEHAVIORAL PERFORMANCE OF INSTITUTIONALIZED CHILDREN BY THEIR PRIMARY CAREGIVERS AND SCHOOL TEACHERS WITH SPECIAL REFERENCE TO REACTIVE ATTACHMENT DISORDER

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Miyagi Prefectural child Mental & Developmental Clinic
Soichiro KAWAGOE
Miyagi Prefectural Rehabilitation Counseling Center for Physically disabled and Mentally retarded
Tsuyoshi TATSUZAWA
Miyagi Prefectural child Mental & Developmental Clinic

Abstract
The purpose of this study was to compare the behavioral performances of institutionalized children without and with Reactive Attachment Disorder of ICD-10 criteria by primary caregivers and school teachers. Fifty 4- to 10-year-old institutionalized children were assessed. Their primary caregivers completed the Child Behavioral Checklist and Social-Maturity Skill Scale for each children. School teachers completed the Teacher's Report Form. Semi-structured interviews with caregivers were conducted to obtain information on the children. The consistent behavioral patterns of children without and with RAD were not shown between in school and in institution. Two possible inferences were suggested: (1) Behavioral patterns in most of children are different depending on environments. (2) Viewpoints & judgements of severity on behavioral problems of same children are different between primary caregivers in institutions and school teachers. Though developmental changes on behavioral problems were not indicated, it was proved that children with RAD easily show aggressive and delinquent behaviors more than children without RAD as they grows. Social maturity skills showed a tendency to decline when such externalizing problems became severer.

Key Words : Reactive attachment disorder, CBCL, TRF, Behavioral problems, Social skill development, Institutionalized children

Introduction
Recently, the number of guidance cases for maltreated children in Japan has increased. In 2000, 174 child guidance centers in all of Japan accepted 17,725 guidance cases for maltreated children out of 362,655 cases in all. The number was 16 times as large as that in 1990 (1,101 cases), when government agency had started to collect statistics on child abuse in first. As process of care program, 2,530 children were admitted to child welfare institutions in 2000. This number was about 2 times as large as that in 1998 (1,391 cases). The same tendencies were observed in Miyagi prefecture. In 2001, three child guidance centers accepted 619 guidance cases for maltreated children, which was about 16 times as large as that in 1991 (39 cases). Through investigation of institutionalized children in Miyagi prefecture, Tadano, F., et al. (2000) suggested that parent's
mental health is one of the most important factors for nursing children.

For young children, the experiences to live separately from family or be suffered maltreatment influences on the developmental patterns of attachment. Zeanah and Emde (1994) reviewed literature and reported that clinically disordered attachment patterns were derived from data on the social behavior of maltreated children and of institutionalized children. Therefore it is important for all clinicians to be familiar with the clinical dimensions of attachment, techniques for assessment of attachment, and risk factors for disturbances of attachment which may require more in-depth assessment (Boris, et al., 1997).

The construct of attachment has been researched since Bowlby first investigated the relationships on the social and emotional development. The patterns of attachment were measured in a standardized laboratory procedure reliably (Ainsworth, et al., 1978). These researches contributed to investigating of relationship patterns between children and primary caregivers. But laboratory assessments of attachment patterns are not easily transferable to the clinical realm (Boris, et al., 1997).

Boris, N.W., & Zeanah, C.H. (1999) suggested that attachments between young children and their caregivers exist along a clinical continuum ranging from secure attachment to attachment disorder (refer to Figure 1). The least adaptive level of attachment was assumed as Disorder of Non-Attachment/RAD.

Reactive attachment disorder (RAD) was introduced for the first time in DSM-III. At present, this construct is used both in DSM-IV (American Psychiatric Press, 1994) and

![Proposed Continuum of Levels Attachment in Young Children](image)

**Figure 1.** Proposed continuum of levels attachment in young children (quotation from Boris, N.W., & Zeanah, C.H., 1999)
ICD-10 (World Health Organization, 1992). However, its definition of RAD differs across the two diagnostic systems.

In DSM-IV, two criteria are suggested for Reactive Attachment Disorder of Infancy or Early Childhood. First, the young child exhibits strongly contradictory or ambivalent social responses, emotional distress or unresponsiveness, and fearfulness or hypervigilance. Second, the child exhibits lack of selected or preferred attachments, instead seeking comfort, nurturance, or affection indiscriminately. These criteria subtyped into two: inhibited and disinhibited. Inhibited type child is generally withdrawn and hypervigilant and seeks proximity to potential caregivers in ambivalent or odd ways. Disinhibited type child seeks proximity and contacts with any available caregivers, known as indiscriminate sociability.

In ICD-10, Disorders of Social Functioning with Onset Specific to Childhood and Adolescence are divided into five subtypes: Elective mutism, Reactive attachment disorder of childhood, Disinhibited attachment disorder of childhood, Other childhood disorders of social functioning and Childhood disorder of social functioning, unspecified. The definition of RAD in ICD-10 matches to the inhibited type of Reactive attachment disorder in DSM-IV. The definition of Disinhibited attachment disorder of childhood in ICD-10 matches to the disinhibited type of Reactive attachment disorder in DSM-IV. These criteria refer to persistently disturbed social relatedness of the child that is extensively demonstrated across social situations. Especially as to RAD, it is mentioned that this disorder probably occurs as a direct result of severe parental neglect or abuse, and that this is associated with emotional disturbances like poor social interactions and frequent aggression towards self and others.

By the way, does children diagnosed as RAD behave in the same pattern in any places? Karen, M., et al. (2001) suggested the possibility that different contexts of interactions elicit distinct patterns of dyadic behaviors. When we diagnose the behavioral problem patterns of children, it is important to observe them in several places. The reason is that the behavioral problem patterns with primary caregiver always may not be the same with school teacher. Especially for institutionalized children, school and institution are important places to spend most of their time. It is important to investigate behavioral problems in institutionalized children both in institution and in school from this standpoint that behaviors depend on contexts.

This study mainly focused on the behavioral problem patterns of institutionalized children with and without RAD. The purpose was two-fold: (1) to compare the behavioral problem patterns of children, diagnosed with and without RAD across school and institution; and (2) specially to investigate behavioral problems in school. First purpose was focused on developmental comparison as more detailed investigation. Second purpose was focused from three perspectives: (1) comparison of behavioral problems between children with RAD and without RAD, (2) comparison of those among each age group and (3) relationship between those and social skills.

Four hypotheses were suggested: (1) The significant correlation between behaviors in school and those in institution would not be detected because behavioral problems in institution would be severer than in school for most children, whether they had been diagnosed as RAD or not. (2) Children with RAD would exhibit severer internalizing
and externalizing behavioral problems in both institution and school as compared to children without RAD. (3) Behavioral problems in school would decrease as children grow, whether they had been diagnosed as RAD or not. (4) In school situation, the social skill development would be negatively correlated to the severity of behavioral problems in children with RAD.

Method
Participants

Demographic characteristics of the samples are presented in Table 1. Eighty-four 4 to 10 year-old children were assessed in the current study. They had been placed to 6 Child Welfare Institutions in Miyagi Prefecture because of their family problems; for example abandonment, child abuse, arrest of parent and so on. Sixteen children were excluded from those children in there, because they had been diagnosed as several disorders by a child psychiatrist using ICD-10 criteria before: 2 children with pervasive development disorder, 9 with disinhibited attachment disorder, and 5 with mental retardation. Eighteen children were also excluded because of data deficits. Then, these 50 children were classified into 3 groups: Group A, preschoolers, 4-to 6-year-olds, n=15; Group B, 1st and 2nd grade students, 7-to 8-year-olds, n=19; and Group C, 3rd and 4th grade students, 9-to 10-year-olds, n=16. For further research each group was divided into two subgroups, depending on whether children have RAD or not, such as GA-R; group A children with RAD, and GA-NR; group A children without RAD.

The ratio of boys and girls and the percentage of children with RAD within each age group were approximately equal. In children with RAD, the overall rate of the past history of maltreatment experiences was apparently higher than those without RAD ($x^2(2)=37.71, p<.01$).

Measures

1. Child Behavioral Checklist / 4-18 (Japanese version)

The Child Behavioral Checklist (Achenbach, 1991) is a 113-item parent report

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Demographic Characteristics of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group A (N=15)</td>
</tr>
<tr>
<td></td>
<td>age: 4-6year-old</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>or n</td>
</tr>
<tr>
<td>Age (months)</td>
<td>73.8</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Boys: n, %</td>
<td>7</td>
</tr>
<tr>
<td>Girls: n, %</td>
<td>8</td>
</tr>
<tr>
<td>Maltreated children: n, %</td>
<td>12</td>
</tr>
<tr>
<td>RAD diagnosis</td>
<td></td>
</tr>
<tr>
<td>(-): n, %</td>
<td>7</td>
</tr>
<tr>
<td>name of subgroup</td>
<td>GA-NR</td>
</tr>
<tr>
<td>(+): n, %</td>
<td>8</td>
</tr>
<tr>
<td>name of subgroup</td>
<td>GA-R</td>
</tr>
</tbody>
</table>

Note: ICD-10=International Classification of Mental and Behavioral Disorders; RAD=Reactive Attachment Disorder; GA (B or C)= Group A (B or C); -R=subgroup of children with RAD; -NR=subgroup of children without RAD
mesure of children's competencies and behavioral problems. The respondent endorses each item as "very true or often true", "somewhat or sometimes true" or "not true" of the child by using 0-1-2 scale at present or within the past six months. It is a commonly used measure with good reliability and validity. This measure is used in many clinical or experimental situations by previous clinicians or researchers in Japan (Sugawara, M., et al., 1999, Yamada, H., et al., 2002). In this study, standardized Japanese version of CBCL / 4-18 was used (Itani, T., et al., 2001), whose broad-band scales analyze children's behavioral problems; Internalizing T scores (anxious/depressed, somatic and withdrawal symptoms), Externalizing T scores (aggressive and delinquent behavior) and Total T scores (overall problems). Based on the standardization process of the original version, it was calculated T score for eight Syndrome Scales as well as for Internalizing and Externalizing, together with Total Scores and then made out a list of profiles showing criteria for normal, borderline and clinical range. T score of 64 and over was considered a clinically significant level for broad band scales, which indicates the 95th percentile. Internal consistency reliability, construct validity and criterion-related validity were also confirmed in Japanese version.

2. Teacher's Report Form / 4-18 (Japanese version)

The Teacher's Report Form (Achenbach, 1986) is a measure that consists of 113 problem items. Each teacher endorses each item in the same method as CBCL. In this study, standardized Japanese version of TRF / 4-18 was used, whose broad-band scales analyze children's behavioral problems; Internalizing T scores (anxious/depressed, somatic and withdrawal symptoms), Externalizing T scores (aggressive and delinquent behavior) and Total T scores (overall problems). T score of 64 and over was considered a clinically significant level for broad band scales, which indicates the 95th percentile.

3. Social-Maturity Skill Scale (new version)

Social-Maturity Skill Scale (Nihon Bunka Kagakusha, 1980) is a standardized measure of social skills for 1- to 13-year-old children. The Vineland Social Maturity Scale (Doll, E.A., 1935) was translated into the Japanese version in 1959, and in 1980 it was revised. It is one of the most commonly used adult-report developmental questionnaires in Japan, in which items are matched to typical developmental trajectory of children's social skills in the context of Japanese culture. Based on the standardization process, internal consistency reliability and coefficient of stability were confirmed in this scale. Social skill ages (SA) for six social skill areas (self-help, locomotion, occupation, communication, socialization, self direction) and that for general social skills (total SA) are obtained. Social skill quotient (SQ: total SA/chronological age ×100) is also figured out, that represents the percentage of general acquisition of age appropriate social skills. In this study, SQ was used to assess the general development of each child's social skills.

Procedure

This study was done as a part of follow-up consultations for the institutionalized children. The CBCL, TRF and Social-Maturity Skill Scales were completed by primary care staffs and school teachers for each child. Individual semi-structured interviews on
children with primary care staff were done by a child psychiatrist and five clinical psychologists from January to March, 2002. The interview was focused on behavioral problems, social skill performance, social interaction with peers and child-adult relationships of their caring children. The Child psychiatrist diagnosed mental and behavioral disorders using ICD-10 criteria including reactive attachment disorder and ascertained the disorders that had already been diagnosed for each child. After the assessments were completed, all participating primary caregivers received a summary report on their child’s behavioral problems and social skills to provide them further understanding of their child.

Analytic Procedure

Although the Leven test for homogeneity of variance didn’t reveal significant differences between the groups, the data were not regarded as normally distributed. Therefore, in intergroup comparisons, the collected data were analyzed by nonparametric test (Kruskal Wallis-H-test) to examine the differences of the scores (three kinds of TRF T scores) between age groups of sample children. Mann-Whitney U test was used in multiple comparison and in comparison of scores between two subgroups of the same age group. Because of small size, in multiple comparison exact tests were conducted with Bonferroni’s inequality. And Spearman correlation coefficients were used to compute the relationship between the scores within each age group. In order to find the demographic characteristics of samples, categorical data were analyzed by $x^2$. Differences were assessed with two-sided tests. Adequate sample sizes were assured for each statistical method. Data were analyzed with SPSS 10.0 for Windows.

Result

1. Relationship between three types of CBCL T scores and three types of TRF T scores of each age group

To investigate the behavioral problem patterns of children with and without RAD across school and institution, relationship between three types of CBCL T scores and three types of TRF T scores were examined. Medians and ranges of CBCL, TRF and, SQ scores are shown in Table 2.

<table>
<thead>
<tr>
<th>Table 2 CBCL T scores, TRF T scores and SQ score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child group of sample</td>
</tr>
<tr>
<td>Group A</td>
</tr>
<tr>
<td>GA-NR (n=7)</td>
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<tr>
<td>Median Range</td>
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<tr>
<td>CBCL Total T</td>
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<tr>
<td>Internalizing T</td>
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<tr>
<td>Externalizing T</td>
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<tr>
<td>TRF Total T</td>
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<td>Internalizing T</td>
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<tr>
<td>Externalizing T</td>
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<tr>
<td>SQ</td>
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<tr>
<td>Group B</td>
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<tr>
<td>GB-NR (n=5)</td>
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<tr>
<td>Median Range</td>
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<tr>
<td>CBCL Total T</td>
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<tr>
<td>Internalizing T</td>
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<tr>
<td>Externalizing T</td>
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<tr>
<td>TRF Total T</td>
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<td>Internalizing T</td>
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<tr>
<td>Externalizing T</td>
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<tr>
<td>SQ</td>
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<tr>
<td>Group C</td>
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<tr>
<td>GC-NR (n=6)</td>
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<tr>
<td>Median Range</td>
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<tr>
<td>CBCL Total T</td>
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<tr>
<td>Internalizing T</td>
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<tr>
<td>Externalizing T</td>
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<tr>
<td>TRF Total T</td>
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<tr>
<td>Internalizing T</td>
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<tr>
<td>Externalizing T</td>
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<tr>
<td>SQ</td>
</tr>
</tbody>
</table>

Note: CBCL Child Behavior Checklist; TRF=Teacher’s Report Form; SQ=Social Skill Quotient
Children without RAD

In GB-NR, there were two significant positive correlations between CBCL total T scores and TRF internalizing T scores \((r=0.994, p<.01)\) and between CBCL externalizing T scores and TRF total T scores \((r=0.938, p<.05)\). Also in GC-NR, a significant positive correlation between CBCL externalizing T scores and TRF internalizing T scores \((r=0.887, p<.05)\).

Children with RAD

In GC-R, a significant positive correlation between CBCL externalizing T scores and TRF total T scores was indicated \((r=0.628, p<.05)\).

Some correlations between CBCL T scores and TRF T scores were shown here in children without or with RAD of GB and GC. But there were no significant correlation between the same broad-band scales of each three CBCL T score and TRF T score at all: e.g. between CBCL internalizing T score and TRF internalizing T score of GB-R.

2. Differences between three types of CBCL T scores and TRF T scores among each age group

To obtain more information about the behavioral patterns of children, differences between three types of CBCL T scores and TRF T scores were analyzed.

Children without RAD

I GA-NR

TRF internalizing T scores were significantly higher than CBCL internalizing T scores \((U=3.5, p<.01)\). TRF externalizing T scores were also significantly higher than CBCL externalizing T scores \((U=8.0, p<.05)\).

II GB-NR

TRF total T scores were significantly higher than CBCL total T scores \((U=2.5, p<.05)\). TRF internalizing T scores were also significantly higher than CBCL internalizing T scores \((U=2.0, p<.05)\).

III GC-NR

TRF internalizing T scores were significantly higher than CBCL internalizing T scores \((U=7.5, p<.05)\).

Children with RAD

There were no significant differences between three types of CBCL T scores and TRF T scores among each age group.

It was shown that TRF T scores of children without RAD were apt to be higher than CBCL T scores. Though both internalizing and externalizing problems were apt to be apparent in nursery school and kindergarten in preschool age, internalizing problems were apt to be apparent in school in school age. In contrast with that, significant differences were not found in children with RAD.

3. Differences of three types of TRF T scores between children without RAD and children with RAD

To analyze the influence of RAD on behavioral problems in school, differences of three types of TRF T scores between children without RAD and children with RAD were examined among each age group.
There were no significant differences of three types of TRF T score between children without RAD and children with RAD.

Similarly there were no significant differences of those.

TRF total T scores of children with RAD were significantly higher than those of children without RAD ($U=5.5, p<.01$). TRF externalizing T scores of children with RAD were also significantly higher than those of children without RAD ($U=6.0, p<.01$).

It was proved that children with RAD were apt to show behavioral problems in school than children without RAD, especially in 3rd and 4th grade.

4. Differences in three types of TRF T scores between the age groups

To look for the probable children's developmental process of behavioral problems in school, TRF T scores of children with and without RAD between the age groups were examined.

There were no significant differences of three TRF T scores between the age groups.

As a result, children's developmental changes of behavioral problems in school were not detected in children without and with RAD.

5. Relationship between three types of TRF T scores and SQ scores of each age group

To research the influence of behavioral problems in school on social skill development, relationships between TRF T scores and SQ scores of children with and without RAD of each age group were analyzed.

In GC-NR, a significant negative correlation between TRF externalizing T scores and SQ scores was indicated ($r=-0.875, p<.05$).

In GA-R, a significant negative correlation between TRF externalizing T scores and SQ scores was indicated ($r=-0.711, p<.05$). Also in GB-R, a significant negative correlation between TRF externalizing T scores and SQ scores was indicated ($r=-0.620, p<.05$).

It was found that TRF externalizing T scores was a key negative variable related to social skill development whether children have RAD or not.

Discussion

1. The relationship of behavioral problem patterns across contexts

There were no significant correlation between same category of each three CBCL T score and TRF T score in any grades of children, whether children with RAD or not. Therefore our hypothesis was ensured that the significant correlation between behaviors in school and in institution would not be detected. This result can be interpreted in two ways as follows.

(1) One possibility is suggested that most of children without or with RAD behave differently at institutions and schools. Because of different environments and the rela-
tionships with different primarily familiar adults, their behavioral patterns might be changed.

(2) The other possibility is suggested that viewpoints & judgements of severity on behavioral problems of same children are different between primary caregivers in institutions and school teachers. Through comparison of primary school children's estimated behavioral patterns between by parents and by teachers, Yamashita, et al. (2002) suggested that different coders may have different evaluations on same children. It was suggested that their evaluations are different because recognized behavioral problems are changed in different environments.

In comparison of differences between each three type of CBCL T scores and TRF T scores, it was shown that TRF T scores of children without RAD were higher than CBCL T scores. Though both internalizing and externalizing problems were apt to be apparent in nursery and kindergarten in preschool age, internalizing problems were apt to be apparent in school in school age. In contrast with that, children with RAD demonstrated behavioral problems in same severe level both in institution and in school. Because we hypothesized that behavioral problems in institution would be severer than them in school in the most of children, this result is contrary to our expectations.

Children without RAD may demonstrate their behavioral problems in school easily. Or they may be evaluated easily by teachers as demonstrating behavioral problems. But we can hardly find children with clinically significant level of problems, except for TRF T scores in GB-NR. Therefore we probably may not need to worry about behavioral problems of children without RAD seriously, nevertheless we should pay attention to the progress of clinical outcome.

2. The comparisons of children's behavioral problems in school between children without RAD and children with RAD

From preschoolers to 2nd grade's students, there were not significantly differences on behavioral problem in school between children without RAD and children with RAD. However in 3rd and 4th grade's students, children with RAD were apt to show overall behavioral problems & externalizing behavioral problems in school than children without RAD. Therefore this result suggested children with RAD more frequently show aggressive and delinquent behaviors than children without RAD as they grows.

3. Developmental processes of behavioral problems in school

In this study, we couldn't detect developmental changes of behavioral problems in children without and with RAD. But this result does not necessarily prove that the changes don't exist. Though investigation of CBCL T scores of institutionalized children with and without RAD, Tadano. (2002) suggested that 1st and 2nd grade students with RAD demonstrated significantly severer behavioral problems than preschoolers. He estimated that primary grade children with RAD have more difficulties to obtain information in new social situations after the entrance to primary school, (so problematic behaviors may be observed more visible and more frequently.), so problematic behaviors may be observed more visible and more frequently.
4. The relationships between behavioral problems in school and social skill development

Social Maturity skills showed a tendency to decline when externalizing problems became severer. Therefore it was suggested that aggressive and delinquent behaviors are related with Social Maturity skills. This tendency was observed whether children have RDA or not.

5. Limitation

Several limitations of this research should be mentioned. First, because we utilized small samples, it was impossible to analyze more complex variables such as specific behavioral problems. We need to investigate in more big samples. Second, in this research only institutionalized children were dealt with. If we reach the general conclusion, it will be needed to compare to homed children without and with RAD. Third, this research mainly depended on information obtained from clinical records on each child, three questionnaires and semi-structured interviews with primary caregivers. For more detailed analysis, we need to collect more data such as direct-observations or questionnaires from children themselves. It is needed for future study to develop clinically useful method to assess disordered attachment behaviors. And if possible, we want to interview teachers directly in the future.

Through daily clinical activities and research investigation, we want to contribute more to child welfare.

References


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