

# Japanese-English Differences in Aggressive Responses of English Learners

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## ABSTRACT

A sample of 63 English learners at two universities was taken to discover any differences in response between English and Japanese language versions of the Picture-Frustration Study (PF Study), a projective psychological measurement device designed to determine aggressive behavioral patterns of individuals. Results showed that these Japanese subjects tended to be less expeditive, more impulsive and more imitative in their Japanese responses to frustration causing situations than in their English responses. Implications toward behavior expectation with language were made, as well as behavior differences attributable to incompetence in one language relative to the other.

Bilinguals are often seen to have two distinct "personalities", or "split personalities" as Adler (1977) puts it. Arguments against such distinction in what are relatively stable psychological constructs have been made, on the other hand. Ervin-Tripp (1964) notes that for bilinguals, a shift in language coincides with a shift in social roles and emotional attitudes. Grosjean (1982), likewise, attributes this dual personality phenomenon to a shift in attitudes and behavior corresponding to a shift in situation or context, independent of language. In other words, it can be interpreted that bilinguals do not respond to language, but rather they change their attitudes according to the change they perceive in the situ-

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ation they are in, i.e., the linguistic environment.

Given the Sapir-Whorf hypothesis (Sapir, 1929) is valid, language change, then, can be interpreted as a change in cultural environment. Along with this change, it can be assumed that persons would recognize a transition in the social environment, and that they would be required to react in a certain way as to adjust themselves to this change. A cognitive shift, therefore, accompanies a language shift, resulting in a change in behavior corresponding to the norms of the new environment.

In order to empirically determine the extent to which bilinguals distinguish their cognitive styles between languages, psychologists have resorted to a variety of projective techniques. Kolers (1963) experimented with a word association test on German, Spanish and Thai English bilinguals. In a classic study, Ervin-Tripp (1964) employed the Thematic Apperception Test (TAT) on French-English bilinguals. Ervin-Tripp (1968) also investigated Japanese-English subjects on the word association and sentence completion tests.

Out of these bilingual studies and cross-national comparison studies, such as Kodama (1953) on Japanese vs. Americans on the Rorschach test, Caudill (1959) on a similar comparison using the TAT, and DeVos (1955) on Japanese Issei vs. Nissei on the Rorschach, it can be determined that the trait of aggression is one which is clearly distinguishable between the English (American) and Japanese cultures.

The Picture-Frustration Study is a projective assessment technique devised by Rosenzweig (1967), originally to determine aggressive reactions in children. Because it is projective, it minimizes cultural bias and distortion in responses, and thus, allows for an effective cross-cultural comparison (see Method for details of the PF). The PF is based on the frustration-aggression hypothesis (Dollard et al., 1939), which claims that aggression is a reaction to frustration.

In a study of Japanese-English bilinguals (Japanese citizens) using the PF, Takai (1986) discovered that the subjects, in their

Japanese responses, were more obstacle dominant, i.e. concerned with the aggression causing agent or object, and less need persistent, i.e. concerned with acting or being acted upon to deal with the frustration causing matter. These results, in reference to Barnlund's (1975) Japanese vs. American reactions to threat imposing situations, seem to reinforce the tendency for Japanese to avoid direct interpersonal confrontation by taking on a passive-withdrawal stance over an active aggressing one.

The purpose of this study is to investigate the case of the advanced English learner, who does not have the proficiency of the bilingual in the second language, using two PF versions: Japanese and English. It is hypothesized that these English learners, although not fully competent in that language, will be able to recognize the social expectations that are implied within the English language. Specifically, the hypotheses to be tested here are as follows:

1. Subjects will tend to be more imaggressive (impunitive, impeditive and impersistive) in Japanese.
2. Subjects will tend to be more extraggressive (extrapeditive, extrapunitive and extrapersistive) in English.
3. Subjects will tend to be more need persistent (extrapersistive, intropersistive and impersistive) in English.

Hypothesis 1 is based on Barnlund's (1975) passive-withdrawal note, as well as Nagayama et al.'s (1988) cross-national traffic accident causal attribution survey, which reveals the Japanese tendency to avoid blaming the other person in the event of a traffic mishap. Hypothesis 2 is also based on Nagayama et al. (1988), who found that Americans and Canadians were far more ready to attack the other person for blame attribution. Finally, Hypothesis 3 is founded on Stewart's (1972) notion of activity orientation of Americans (whom the source of English is most common to the subjects, i.e., American instructors, American cultural content in textbooks, etc.). Stewart (1972) noted that Americans were highly activity oriented, implying that subjects will perceive a norm of direct action and problem solving over passive

withdrawal.

For comparison purposes, a small sample of native English speakers on the English version of the PF was also taken, to test whether the subjects' English responses were in fact typical of English speakers.

## METHOD

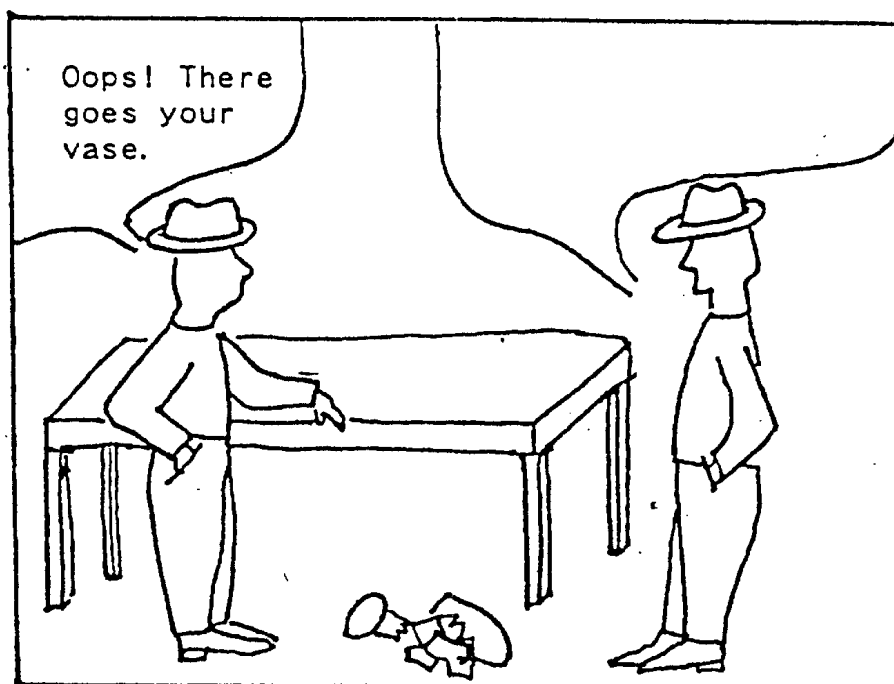
**Subjects:** The subjects (S's) were first year undergraduate students at two universities in the Nagoya area ( a class of 30 students majoring in business and a class of 33 English majors). The S's were freshmen ranging in age from 18 to 20. None were bilingual. A sample of ten American students at a university in Tokyo was also taken as a control group.

**Apparatus:** Test items were derived from the Japanese version of the PF Study (Adult Version), devised by Sumida et al. (1964). The first 12 items (first half) of the test was used. The English version was back-translated from this Japanese test by two bilingual and bicultural translators, employing phrases that were not beyond the comprehension of the subjects, while capturing the important connotations and adjusting for culturally biased parts. This adjustment was done not just for the English, but for the Japanese test as well, to assure equivalence.

The PF Study is essentially a series of single box cartoon items consisting of a frustrating event in which a person is saying something to another person, whose response is left blank for the S to fill in. S's are asked to write in the blanks just how they would normally respond if they were in the position of the person in the cartoon. (see Figure 1) The "other" person may be an "offender" or "frustrator", or he/she could be a "co-frustratee". Responses are characterized into nine types on a 3×3 matrix, described in Figure 2.

A pilot study revealed the infeasibility of allowing S's to freely respond, since their English ability did not quite offer the freedom of response relative to Japanese. In order to make the task easier, multiple choice responses were provided, using simple and cultu-

Figure 1. An example PF Study type item



\*Note: This is not an actual item.

Figure 2. Response types of the PF Study corresponding to Fig. 1.

DIRECTION OF AGGRESSION	TYPE OF AGGRESSION		
	OD obstacle- dominance	ED ego- defensive	NP need- persistence
EA extrag- gression	extrapeditive (E') Oh no.	extrapunitive (E) You idiot.	extrapersistive (e) Buy me a new one.
IA intrag- gression	intropeditive (I') Oh, well.	intropunitive (I) Oh, it's my own fault.	intropersistive (i) I'll just get a new one.
MA imag- gression	impeditive (M') It's nothing.	impunitive (M) It's nobody's fault.	imperistive (m) Somebody will give me another one.

rally equivalent English and Japanese phrases, that still took on the characteristics of each of the matrix categories. Therefore, for each item, S's were asked to choose from nine responses, the one closest to what they would actually say if they were in the situation in question.

The response categories were based on the type of aggression and the direction of aggression. Each dimension consisted of three classes, forming a  $3 \times 3$  matrix when brought into interaction. Table 1 shows the nine response types and their positions on the matrix, as well as some example response patterns.

**Procedure:** One class of subjects was administered the Japanese version first, followed by the English six weeks later, while the other class received the opposite treatment. This measure was taken to ensure balancing to counter any order effects of language. Testing was conducted in class as a group session, with a supervisor present to answer questions. Subjects were encouraged to ask questions of any item or response to which they could not fully comprehend. Only a few questions were raised in the English session regarding language, but otherwise, no problems were seen in comprehension. The six week intersession period was intentionally allotted such that subjects would not remember how they responded to an item in the prior session. The item and response presentation orders were also changed to avoid response bias. The raw scores for each of the nine matrix squares were simple frequency means, while each row and column were tallied to give direction scores and type scores, as well as mean frequencies.

The control group consisting of American students responded only to the English version, for comparative purposes. All testing, for both Japanese and American groups, was conducted between April and June of 1989.

## RESULTS

Language was taken as an independent variable with two con-

ditions-- Japanese and English. A total of 15 independent variables (9 response types + 3 direction scores + 3 type scores) were observed. The means for the response scores are in Table 1.

Tests of significance were conducted using a paired t-test for differences between languages for each variable.

Scores for each column (aggression type) and for each row (aggression direction) are listed in Tables 2 and 3 respectively. These are also the mean raw scores tallied from each column or row.

Statistically significant differences between languages were seen for three of the 15 variables. S's tended to score higher in extra-

Table 1. Raw score means for each PF Study score and between language differences.

Variable	English	Japanese	Difference	p<
extrapeditive	0.60 (0.83)	0.98 (0.94)	-0.38	.01
intropeditive	1.62 (1.26)	1.40 (1.07)	0.22	—
impeditive	0.48 (0.69)	0.51 (0.67)	-0.03	—
extrapunitive	0.84 (1.07)	0.90 (1.20)	-0.06	—
intropunitive	1.79 (1.00)	1.94 (1.21)	-0.14	—
impunitive	2.06 (1.26)	1.70 (1.24)	0.37	.05
extrapersistive	1.76 (1.21)	1.62 (1.16)	0.14	—
intropersistive	1.68 (1.25)	2.00 (1.28)	-0.32	.10
impersistive	1.16 (0.95)	0.95 (0.99)	0.21	—

\* Figures in parentheses denote standard deviation. N=63

Table 2. Raw score means and between language differences for aggression direction

Variable	English	Japanese	Difference	p<
extraggression	3.21 (1.52)	3.51 (1.82)	-.30	—
intraggression	5.10 (1.51)	5.33 (1.59)	-.24	—
imaggression	3.70 (1.38)	3.16 (1.39)	.54	.05

\* Figures in parentheses denote standard deviations. N=63

Table 3. Raw score means and between language differences for aggression type

Variable	English	Japanese	Difference	p<
obstacle-dominance	2.70 (1.84)	2.89 (1.68)	-.19	—
ego-defensive	4.70 (1.66)	4.54 (1.70)	.16	—
need-persistence	4.60 (1.93)	4.57 (1.85)	.03	—

\* Figures in parentheses denote standard deviations. N=63

Table 4. Comparison of raw score means for Japanese and American subjects under the English condition

Variable	Japanese	American	p<
extrapeditive	0.60 (0.83)	0.40 (0.52)	—
intropeditive	1.62 (1.26)	1.80 (1.40)	—
impeditive	0.48 (0.69)	0.10 (0.32)	.01
extrapunitive	0.84 (1.07)	1.20 (1.03)	—
intropunitive	1.79 (1.00)	1.10 (1.29)	.10
impunitive	2.06 (1.26)	2.10 (0.99)	.10
extrapersistive	1.76 (1.21)	1.70 (1.33)	—
intropersistive	1.68 (1.25)	2.90 (1.79)	.01
impersistive	1.16 (0.95)	0.70 (0.82)	—
obstacle-dominance	2.70 (1.84)	2.30 (1.25)	—
ego-defensive	4.70 (1.66)	4.40 (1.42)	—
need-persistence	4.60 (1.93)	5.30 (2.26)	.10
extraggression	3.21 (1.52)	3.30 (2.11)	—
intraggression	5.10 (1.51)	5.80 (1.81)	—
imaggression	3.70 (1.39)	2.90 (1.10)	.10

\* Figures in parentheses denote standard deviations. N=63 for Japanese and N=10 for Americans.

peditiveness with the Japanese test, while scoring lower for impunitiveness and imaggression in the same language. The difference for intropersistiveness was near significance ( $p<.07$ ), tending to be higher in Japanese.

In comparison to the control group, it was seen that in the



English condition, the Japanese S's scored significantly higher in impeditiveness and lower in intropersistiveness. Because of a great imbalance in the number of S's for the groups, however, a truly worthwhile comparison could not be afforded (N=63 vs. N=10). Table 4 lists the cross-cultural comparison under the English condition.

For the Japanese group, between sex comparisons revealed no significant differences in any of the variables. Likewise, between institution tests showed no differences, suggesting that it is justified to treat the whole group as originating from the same population, although the universities were different.

## DISCUSSION

In summary of the results, it was discovered that advanced English learners tended to be more impunitive and more imaggressive in the English language, while being more extrapeditive in Japanese. First, higher impunitiveness implies that S's respond with choices that concede fault for a frustration causing event on the part of another person, yet expressing forgiveness or denial of inconvenience. Phrases such as, "That's OK." or "Don't worry about it", are typical of this type of reaction. Next, higher imaggression means that S's refrain from asserting blame on any party. Responses such as, "What's to worry about?", "That's OK." (given above for impunitiveness) and "Time will mend the wound.", are illustrative of this type of reaction. Finally, extrapeditiveness is a reaction in such a manner as to attribute fault on another person or the situation itself, while avoiding direct confrontation of the matter. Frustration is expressed, but a direct attack is avoided. An obvious hint of being upset or inconvenienced is voiced, yet no confrontation toward the frustrator agent is made. Typical responses include, "This is a real disappointment.", "After all the effort I put in, this has to happen." and "Oh no!".

The hypotheses set in the beginning were that S's would be more imaggressive, less extraggressive and less need persistent in

Japanese as compared to English. Considering the results, all of the hypotheses must be rejected.

It was assumed that Japanese norms toward repression of aggression for the sake of maintaining interpersonal harmony would be operational here, but the data proves otherwise, as extrapeditiveness was higher in Japanese. Perhaps this may be owing to the lack of confidence in the foreign language, but what is more likely is that extrapeditiveness is a response that is actually typically Japanese. It is a means by which discontent can be communicated to the other person without directly attacking him/her. However, compared to the "hiniku" (sarcastic remark) strategy, which is even more subtle and effective toward making one realize his/her shame or guilt, it is more straightforward (incidentally, the hiniku cannot be detected by the PF Study, as its denotative sense would classify it as one of any response excluding the three extraggression types). Because the S's were composed of young people, old traditional norms may have not been operating, being replaced by a more open form in what could be a gradual transition toward a more Western model of behavior.

As for impunitiveness, once again, English responses showed a higher degree of this orientation than Japanese, invalidating prior prediction. Impunitiveness implies forgiveness toward an act, an expression of what could be a form of "gaijin complex", the inferiority complex held by Japanese of Westerners. S's may have perceived a need to act tolerantly toward others in the English condition, thereby repressing blame toward frustration causing. In a sense, this trait could also be considered a Japanese norm, one which concerns "being nice" to visitors, provided the use of the foreign language in this context can be equated as a cross-cultural contact situation.

Imaggression was one aspect that was totally unexpected of English responses, the language in which assertion and standing up for one's rights is valued over skillful aversion of conflict. Once again, as for impunitiveness, lack of confidence in the language and the English complex may have deterred direct confrontation.

In order to check just how "typical" the S's English responses were to those of native English speakers, a small sample of Americans was taken. Results showed that the Japanese were significantly higher on impeditiveness, while being lower on intropersistiveness. Impeditive responses avoid blaming any party, while concentrating on the frustration causing event, not the agent. They may even deny the existence of frustration, as illustrated by such statements as, "What's to worry about?" and "There's no need to get upset.". Intropersistiveness, on the other hand, is the tendency to solve the frustration problem by one's own actions. Responses, such as, "I'll fix it right away." and "Let me see what I can do.", are typical of this category. Other response types that showed differences on the verge of significance included impunitiveness and need persistence, higher for Americans, and intropunitiveness and imaggression, higher for the Japanese. The higher occurrence of impunitive responses for Americans may imply a cultural accommodation process, where the subjects, after being in Japan for ten months, may opt for behavior that is more typical of the culture in which they live.

This may imply a social learning process, in which subjects become accustomed to what type of behavior is expected under a given social environment. Triandis (1975) calls this phenomenon isomorphic attribution, where cross-cultural sojourners learn to make the correct attributions to certain behaviors exhibited by natives. Need persistence, however, is more characteristic of Americans, as has already been mentioned. Finally, the higher score on intropunitiveness and imaggression on the part of Japanese is perhaps reflective of the culture, as a means to avert conflict. In their study, Nagayama et al. (1988) asked drivers who or what would be the prime cause if they were ever in an accident. Nearly 45% of the Japanese drivers nominated themselves as the prime cause, as compared to less than 10% of American drivers. By admitting fault, direct confrontation can be avoided between persons, and a passive-withdrawal strategy to a frustration event can be exercised. Although they were using English, the Japanese S's

were still in their native cognitive mode, unable to adopt the English style, perhaps because of ignorance or perhaps out of inability to act in another way even if they were conscious of it.

Overall, the results did not turn out as expected. In comparison to Takai's (1986) bilingual experiment, aggressive tendencies of English learners are not concurrent with those of bilinguals. Whereas the latter has two distinct cognitive sets that are brought into operation by code-switching, the former must rely on a single set or venture into uncertainty. S's probably perceived that the PF Study was a sort of a test to investigate English ability, thus being aware of the need to make different responses. However, they may just not have been informed enough on what are the proper behaviors and consequently, they may have opted for safer, less assertive, and less involved responses in the English language.

The tendency for Japanese to worship Westerners and Western culture cannot be neglected of mention. Tsuda (1989) coined the term "English conversation syndrome" to describe what can be considered an inferiority complex of the Japanese toward Western culture. His concept was constructed of three elements: "angloholism", allergy to English and inferiority complex to Caucasians. All of these elements had potential influence in this particular study, resulting in tendencies characterized by withdrawal and conflict aversion. S's may be expected to behave in similar manners in actual interactional situations, perhaps to an even greater extent.

In conclusion, advanced English learners can be said to be able to identify some tendencies of the language, yet fail to grasp others. The fear of uncertainty in interactions liable for confrontation combined with a lack of competence may result in resorting to avoidance of the matter in favor of more reserved responses.

#### REFERENCES

- Adler, M. *Collective and Individual Bilingualism*. Helmut Buske Verlag, 1977.

1992. 1 J-E Aggressive Responses (Miyamoto & Takai) 219 (987)
- Barnlund, D. C. *Public and Private Self in Japan and the United States*. Tokyo: The Simul Press, 1982.
- Caudill, W. The relationship of anthropology to psychiatry in the study of culture and personality, *Seishin Bunseki Kenkyuu*, 1956, 6, 57-65.
- DeVos, G. A quantitative Rorschach assessment of maladjustment and rigidity in acculturating Japanese-Americans, *American Anthropologist*, 1956, 58, 1102-1126.
- Dollard, J., Doob, L. W., Miller, N. E., Mowrer, O. H. and Sears, R. R. *Frustration and Aggression*. New Haven: Yale Univ. Press, 1939.
- Ervin-Tripp, S. Language and TAT content in biliguals, *Journal of Abnormal and Social Psychology*, 1964, 68, 500-507.
- Ervin-Tripp, S. An analysis of interaction of language, topic and listener, in J. Fishman ed. *Readings in the Sociology of Language*. Mouton, 1968.
- Grosjean, F. *Life With Two Languages*. Cambridge: Harvard Univ. Press, 1982.
- Haga, J. *Nigengo Heiyo no Shinri* (Psychology of the Bilingual). Tokyo: Asakura Shoten, 1979. (in Japanese)
- Hayashi, K. *PF Study Manual*. Kyoto: Sankyo Shobo, 1987. (in Japanese)
- Kodama, H. Nihonjinn no Rorschach Hanno no Kenkyuu (Japanese Responses to the Rorschach). *Shinrigaku Kouza*, 1953. (in Japanese)
- Kolers, P. Interlingual word associations, *Journal of Verbal Learning and Verbal Behavior*, 1963, 2, 291-300.
- Nagayama, Y., Suzuki, H., Renge, K. and Lee, S. C. Koutsu ni okeru bunkateki shoyoin no kokusai hikaku (An international comparative study on cultural factors in transportation, in Japanese), *IATSS Review*, 1988, 14, 4, 230-248.
- Rosenzweig, S. Rosenzweig Picture-Frustration Study, in A. Weider ed., *Contributions Toward Medical Psychology: Volume 2*. New York: Ronald Press, 1953.
- Rosenzweig, S. The Rosenzweig PF Study, Form for Adults, 1948.
- Rosenzweig, S. *Adult Form Supplement to the Basic Manual of the Rosenzweig Picture-Frustration Study*. St. Louis: Rana House, 1978.
- Sapir, E. A study of phonetic symbolism, in D. Mandelbaum ed., *Selected Writings in Language, Culture and Personality*. Univ. of California Press, 1929.
- Stewart, E. C. *American Cultural Patterns: A Cross-Cultural Perspective*.

- Chicago: Intercultural Press, 1972.
- Sumida, K., Hayashi, K. and Ichitani, Y. *PF Study Manual*. Kyoto: Sankyo Shobo, 1963.
- Takai, J. The effect of language on the personality assessment of Japanese-English bilinguals. Unpublished manuscript, International Christian Univ., 1986.
- Triandis, H. Culture training, cognitive complexity and interpersonal attitudes, in R. W. Brislin ed. *Cross-Cultural Perspectives on Learning*. New York: Sage Publications, 1975.
- Tsuda, Y. Nihonjin no eikaiwa shokogun ni tuite no ichi kosatsu. (A study of the English conversation syndrome of Japanese in Japanese), in *Human Communication Studies*, 17, 150-161, 1989.