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ACCULTURATION AND PERSONALITY AMONG JAPANESE-
AMERICAN COLLEGE STUDENTS IN HAWAII

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TABLE OF CONTENTS

	Page
LIST OF FIGURES	iv
LIST OF TABLES	v
ABSTRACT	vi
Chapter	
I. INTRODUCTION	1
II. BACKGROUND	9
III. FINDINGS	20
Study 1	20
Study 2	32
Study 3	43
Study 4	58
IV. DISCUSSION AND CONCLUSIONS	68
V. SUMMARY.....	79
APPENDIX	84
BIBLIOGRAPHY	90

LIST OF FIGURES

Figure	Page
1. Psychological distance between Japanese-American and Caucasian-American college students on extraversion and anxiety	38

LIST OF TABLES

Table	Page
1. Comparison of males on first-order personality factors of the 16 PF Questionnaire	23
2. Comparison of females on first-order personality factors of the 16 PF Questionnaire	25
3. Second-order personality comparisons on the 16 PF Questionnaire	28
4. Second-order and derivative personality comparisons on the 16 PF Questionnaire	36
5. Comparison of male groups on first-order personality factors of the 16 PF Questionnaire	47
6. Comparison of female groups on first-order personality factors of the 16 PF Questionnaire	50
7. Second-order personality comparisons on the 16 PF Questionnaire	53
8. Part-whole properties of the M-F Temperament Scale	62
9. Comparison of sex temperament scores of three ethnic groups	63

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AMERICAN COLLEGE STUDENTS IN HAWAII

By Gerald Marvin Meredith

A dissertation submitted to the Graduate Division
of the University of Hawaii in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

ABSTRACT

Despite the inroads of acculturation, personality differences have been found between third-generation (sansei) Japanese Americans and their Caucasian-American (CaucAm) counterparts. Four studies were initiated to explore personality trait and sex differences between these two ethnic groups at the University of Hawaii.

Study 1 was a reconnoitering investigation to locate first-order trait differences between sansei college students and their CaucAm counterparts. The 16 Personality Factor Questionnaire (16 PF) was administered to 60 CaucAm and 75 sansei subjects (Ss). The differences found were discussed in light of peer expectations and support for the stereotype of a "local" within the youth culture.

Study 2 replicated the findings of the previous study, and investigated the broad second-order factors of introversion-vs-extraversion and anxiety level. A sample of 154 sansei and 140 CaucAm Ss were compared

on the second-order and derived factors of the 16 P. F. Sansei males and females found to be more introverted and higher in anxiety level than CaucAm Ss. A parallel was traced between these results and Doi's concept of amae--a core dependency need.

Study 3 focused on language usage and its relationship to personality traits. A sample of 79 sansei Ss referred to remedial speech courses for severe Pidgin English usage was compared with 60 CaucAm and 75 sansei "controls" exempted from these courses. On the 16 P. F., remediation Ss appeared more psychologically "distant" from CaucAm and "control" Ss.

Study 4 compared the sex-role orientation of sansei and CaucAm Ss, along with another oriental group undergoing the process of acculturation. Sex temperament of 98 sansei, 65 CaucAm and 40 Chinese-American (ChiAm) Ss was measured with the Attitude-Interest Analysis Test (M-F Test). Regarding ethnic differences, there were no significant differences between male groups despite the male-dominant stance of traditional Japanese culture. Both sansei and ChiAm female Ss appeared more "feminine" than CaucAm female Ss. Findings were related to the acquisition of exploitative and accommodative sex-role strategies.

The four studies revealed a good deal of cultural sharing between the two major ethnic groups. The idea of an eth-gen-class model, based on the interaction of ethnic background, generation level and social class, was proposed for analyzing the acculturation pattern of the Japanese-American group. Several factors were considered related to the maintenance of personality differences in the Hawaiian milieu.

CHAPTER I

INTRODUCTION

A priest of the Jodo Shinshu sect confided that it takes 20 generations to mold a Japanese--to inculcate the essence of order, obedience, and conformity that constitutes the core personality (Silberman, 1962). At the center of this core, according to the psychiatrist Doi (1962) is amae, a basic dependency need. The converse problem, that of transforming the Japanese, is less an issue of philosophical speculation than a matter of empirical acculturation research. During the period 1963-68, this writer embarked on a series of interrelated studies in the area of acculturation and personality, and this dissertation represents the culmination of this research inquiry.

At the heart of the research is a "cultural pluralist" conception of Hawaiian life--a point of view which accepts the right of ethnic groups to maintain some degree of cultural difference and some degree of ethnic communality, and to regard this cultural variation as essentially beneficial for American culture as a whole. The study of ethnic groups in Hawaii needs little defense when one studies the contributions of the Romanzo Adams Social Research Laboratory at the University of Hawaii, as well as the myriad individual scholars who have addressed themselves to issues in the cultural life of Hawaii.

As viewed here, an ethnic group is based on a social-psychological sense of peoplehood stemming from history (Gordon, 1964). The study of

the personality structure, as well as personality differences, of acculturating groups, such as Japanese Americans, provides the social scientist with important clues for understanding human relationships both within Japanese-American society as well as between Japanese Americans and other ethnic groups in Hawaii.

Acculturation

An authoritative definition of "acculturation" was provided by a Subcommittee on Acculturation appointed by the Social Science Research Council in the middle 1930's to analyze and chart the dimensions of this field of study, so crucial to the field of cultural anthropology. This special group, consisting of distinguished anthropologists (Redfield, Linton & Herskovits, 1936), declared that acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original patterns of either or both groups. Gould and Kolb (1964) point out three important elements in the definition of acculturation, notably: (a) it is concerned with results of the contact and interaction of at least two distinct cultural groups, (b) it assumes a baseline of time from which the process commences, and (c) it makes one group's culture the point of reference, and focuses upon the events and processes by which that group responds to more or less continuous contact by variously accepting, reformulating, or rejecting elements of the other culture or cultures.

The general definition of acculturation does not imply a one-way street of complete assimilation or interpenetration by the dominant group

(Park & Burgess, 1921), nor does it pass value on the merits of movement by ethnic minorities toward the American Core Culture. However, the definition does leave the door open to a n-way interaction whereby a minority undergoing social change not only is affected by the dominant society, but serves in turn as a force for social influence upon both the dominant society and other ethnic minorities.

Kwan (1958) has sketched the stages of acculturation in Oriental minority groups, with emphasis on the Mainland pattern. The transient or sojourner may be characterized as looking backward to the homeland, or having as Kwan puts it "one foot always on the boat." The bound minority are those who have settled down and are tied to the life of the ghetto, "westernized" to the extent that they call America their home. The emerged minority are those who have attempted to move out into the community, both literally and figuratively. They are aware of their rights and express themselves in collective action. The converted minority have found acceptance among the majority group members, with a belief that ethnic origin does not mean that they will be treated differentially in the larger society.

At what stage are the Japanese in Hawaii? The question is academic in that the minority group is the dominant ethnic group in Hawaii's multicultural society. Dr. Robert C. Schmitt, Statistician with the State Department of Planning and Economic Development, reported (personal communication) that as of July 1, 1968, 29.8% of the population (comprised of 232,000 in an estimated total Hawaii population of 778,000) were of Japanese ancestry, compared with a corresponding figure of 28.4%

(comprised of 220,800) for the Caucasian group. If the standing military establishment is removed from these estimates (see Schmitt, 1968), the Japanese group increases to 34.3% and the Caucasian group declines to 19.0% of the resident population. Under these ecological conditions, the Japanese American group is not only a "minority" undergoing the process of acculturation--viewed from the wider national perspective--but serves as a reference group or "base" for the acculturation of other ethnic minorities within the State of Hawaii. Whether this unique ethnic arrangement sets the stage for the existence of a "third culture," an interstice between traditional Japanese culture and American Core Culture, will be deferred to the final section of this dissertation.

Personality

Numerous theoretical stances, as well as methodological preferences, exist in the field of personality (Freedman & Kaplan, 1967; Maddi, 1968). The present writer has been sympathetic to the multivariate approach of Professor Raymond B. Cattell (1946, 1957, 1965) and the view that the personality sphere may be regarded as "a sphere in hyperspace the surface of which contains areas corresponding to all forms of human behavior (Cattell, 1957, p. 898). Parenthetically it should be mentioned that this writer spent three years (1963-66) at Dr. Cattell's Laboratory for Personality and Group Analysis, University of Illinois, in the position of Research Associate in Psychology. The elements of a multivariate approach (see Cattell, 1966) are (a) recognition and acceptance of complexity in the personality domain, (b) commitment to a scientific and measurement-based

approach to personality, and (c) recognition of alternative modes of information and measurement.

With respect to sources of information, technically termed media of observation, Hundleby et al (1965) distinguish between three sources of personality information: objective (performance) test, behavioral ratings, and questionnaires. The present writer has depended on the questionnaire approach, not solely from the ease of data acquisition aspect, but from recognition of the vast accumulation of quantitative information that has accrued and may be utilized for comparative studies of personality. The objective approach based on performance measures (termed "objective-analytic" by Cattell), and espoused by Sarason (1966), remains a challenge both for personality measurement generally, as well as for personality research in Hawaii.

The Sansei

The present studies focused on the sansei, the third-generation group of Japanese ancestry in Hawaii. While a good deal of literature has accrued on acculturation patterns (Hormann, 1963; Matsuda, 1968; Kitano, 1969), with particular stress on the first-generation issei and their nisei offspring, a relatively small number of studies have dealt with the third-generation group. The sansei are the dominant eth-gen (Gordon, 1964) group at the college level, although precise statistics regarding the ethnic composition of the University of Hawaii are lacking. However, Dr. Earl Babbie of the Social Science Research Institute, University of Hawaii, reported (personal communication) that a careful sampling of undergraduate

students indicated 44% of Japanese ancestry and 32% of Caucasian ancestry in the academic year 1968-69. Comparing these figures roughly with those provided by Dr. Schmitt, there would appear that both ethnic groups are over-represented at the college level. Possibly this reflects both the affluence, as well as the achievement motivation, of both groups to seek higher education and training.

At this point it is pertinent to discuss the usage of the terms issei, nisei and sansei. First, the terms exist in the vocabulary of discourse to define the self (e.g., "I am a sansei"). Second, the terms may be taken as operational indices of acculturation since they specify the number of generations that the respondent has lived in the United States. As an operational measure, generation may be inferred by having a respondent trace the ethnic background and place of birth for himself, his parents and his grandparents. In the studies that are reported, the respondents were not directly asked if they referred to themselves as "Sansei." Generation level was defined in terms of reported family descent.

Purpose and Hypotheses

During the period 1963-68, a series of four studies was initiated to explore personality and attitudinal differences between Japanese-American and Caucasian college students on the Manoa Campus of the University of Hawaii. The four studies utilized independent samples of sansei Japanese Americans and Caucasian students enrolled in the undergraduate program during the aforesaid time span. The purpose of each study will be discussed along with the hypotheses that stimulated the investigations.

The first study planned and executed was considered a reconnoitering investigation to systematically locate areas of personality trait differences between sansei and Caucasian college students. The hypothesis was a broad one:

Hypothesis 1. Despite the inroads of acculturation, Japanese Americans will exhibit differences in personality traits when compared with Caucasian counterparts.

This led to two further hypotheses regarding ethnic differences in personality:

Hypothesis 2. Japanese-American males will differ in trait description from Caucasian males.

Hypothesis 3. Japanese-American females will differ in trait description from Caucasian females.

The second study was a refinement of the first and concentrated on the broader second-order personality factors of introversion-vs.-extraversion and anxiety level.

Hypothesis 4. Japanese-Americans will differ from Caucasians along the broad dimension of introversion-vs.-extraversion.

Hypothesis 5. Japanese-Americans will differ from Caucasians in terms of anxiety level.

The third study focused on language usage and its relationship to personality traits. The study attempted to confirm the findings of the previous two studies as well as to extend the research direction into an area of the University curriculum, in this case remedial speech.

Hypothesis 6. To confirm the previous studies, Japanese-Americans will differ from Caucasians on both first-and second-order dimensions of personality.

Hypothesis 7. Japanese Americans referred to remedial speech classes will differ in personality traits from Japanese Americans exempted from remedial speech classes.

Throughout the previous studies, the presence of sex differences was noted and discussed. In the last study a direct attempt was made to investigate differences in masculinity-vs.-femininity between the two ethnic groups.

Hypothesis 8. Japanese-American males will differ from Caucasian males with respect to masculine orientation.

Hypothesis 9. Japanese-American females will differ from Caucasian females with respect to feminine orientation.

CHAPTER II

BACKGROUND

One of the major problems in behavior theory concerns the nature of the relationship between acculturation and personality structure (Kluckhohn, 1954). As viewed here, the process of acculturation is directed toward the ultimate assimilation of the ethnic individual into American society (Broom & Kitsuse, 1955). The psychological problem, therefore, becomes one of specifying those mediating processes that relate culture change to personal organization. Ruesch (1948, 1951) has proposed the hypothesis that acculturation to "the American core culture" is a function of the number of cues and responses which an individual possesses in common with the dominant social group.

In support of this hypothesis, Caudill (1952) interpreted the rapid assimilation of the Japanese-American group in terms of the compatibility between the values of the Japanese culture and the value systems of the American middle class. However, Broom and Kitsuse (1955) point out that numerous factors create stress in inter-ethnic situations and provide for the prolonged survival of parallel ethnic institutions. Despite the direct continuity between the values of issei (first generation) and nisei (second generation) Japanese Americans, two recognizably different basic personality patterns emerge. DeVos (1954, 1955) has viewed these differences between generation levels in terms of the problem of achieving

greater self-differentiation.

Hawaii, with its peoples of varied national and racial backgrounds and its geographical insularity, is a natural laboratory for acculturation research. Of Hawaii's ethnic group, the Japanese constitute the largest segment (approximately one-third) of a population which has no majority group. While there has been sustained interest in nisei Japanese Americans (Caudill, 1952; DeVos, 1954, 1955; Fujita, 1956, 1957; Abe, 1958) recent attention has shifted to their third-generation offspring, the sansei. Arkoff (1959) found important differences in personality needs between third-generation Japanese-American college students and a mainland normative sample. In a corroborative study, Fenz and Arkoff (1962) found that sansei males expressed greater need for deference, abasement, nurturance, affiliation, order and exuberance, with a corresponding reduced need for dominance, aggression, autonomy, exhibition and heterosexuality. In a parallel manner, sansei females expressed an enhanced need for deference, nurturance and order, along with a diminished need for aggression, abasement, autonomy, exhibition and heterosexuality. These personality differences appear pervasive and cut across rural-urban boundaries (Arkoff, Meredith & Jones, 1961). Despite the inroads of acculturation, Japanese-American males were found to hold traditional male-dominant attitudes toward marriage that were out-of-step with those held by sansei females and Caucasian-American college students (Arkoff, Meredith & Dong, 1963), as well as those held by Motherland-Japanese groups (Arkoff, Meredith &

Iwahara, 1964).

Following up an exploratory study of expressed social distance among Island groups (Shim & Dole, 1965), Engebretson (1969) attempted to map out patterns of interaction distance within three cultural groups: native Japanese, Hawaii Japanese and American Caucasians. Of the independent variables in this research, culture was found to be a significant determinant of interaction distance. In the area of perception of cultural influence, the Hawaii Japanese differed significantly from the American Caucasians with the former perceiving a greater influence of traditional Japanese culture. It is the contention of this writer that an understanding of personality traits and dimensions is a necessary prerequisite to studies of social interaction among Japanese Americans.

SOME ECOLOGICAL CONSIDERATIONS

Although it is impossible to completely understand the array of forces (both synchronic and diachronic) acting on the Japanese Americans, an attempt will be made to partially understand these personality pattern differences in light of several dynamic factors operative within the Hawaiian milieu.

Geographic isolation

Possibly there has been too much stress placed on the geographical isolation of the Hawaiian Islands and their political insulation under territorial status as preconditioning factors for a structured ethnic community. To be sure an isolated cultural "knot" leads to patterns of ethnicity and persistence of folkways, but there appears to be little justification to

introduce the concept of "culture lag". Since W. W. II, however, there has been increasing communication (via news wire services and TV programming) between the mainland U. S. and Hawaii, an ever increasing influx of tourists, a substantial standing population of military personnel and their families, and intercultural exchange via the East-West Center at the University of Hawaii (Chun & Dole, 1963; Thaver, Arkoff & Elkind, 1964). In addition, the socialization patterns are influenced by a pervasive and centralized education system, uniform instructional materials patterned on mainland standards, the use of standard English as a vehicle for classroom instruction, and increased training of professionals at main-academic institutions. All of these factors tend to increase the communication channels between Hawaii and the mainland U. S. and indirectly erode ethnicity differences.

Ethnic structuring of the community

The strategic location of Hawaii in the Pacific has lead to the migration of five major groups to Hawaii (Japanese, Chinese, Filipino, Hawaiian and Caucasian). The Japanese group, constituting the largest segment (approximately one-third) of the present population came originally as pineapple plantation laborers with the intention (common to many migrant groups) of returning to their parent culture. Today the spread of generation levels is wide and the substantial size of the Japanese group itself is an important factor in maintaining group identity and social control (Vinacke, 1949; Smith & Vinacke, 1951). The use of the Japanese language is used almost exclusively by older issei, understood but spoken sparsely by nisei,

and virtually unknown to the third-generation sansei.

Early socialization

Caudill (1952) placed particular stress on early socialization experiences to account for modal personality differences between issei and nisei. Clearly, the issei in Caudill's study had their values rooted in the Japan of the late 19th and early 20th century, while the nisei was faced with the conflicting demands of two cultures. Although the central focus of the present paper concerns the sansei in the mid-20th century, one cannot dismiss the influence exerted by issei grandparents, older nisei relatives and parents on the early socialization of the present group. The roots of ethnic identity are deep and autobiographical accounts obtained from sansei college students reflect the fears, anxieties, irrational ideas, prejudices and historical animosities of parents and grandparents. Traditional values, such as parental obedience, respect for elders, and a "quiet, pliant and passive nature" are still held to be desirable characteristics by nisei parents. The trait of responsibility, especially among males, has persisted and is congruent with the traditional male-dominant culture of Japan. A number of corroborative studies (Linderfelt, 1949; Vinacke, Eindhoven & Engle, 1949; Bitner, 1954; Zald, 1955; Kitano, 1964) support this environmental hypothesis.

While the process of acculturation to "the American core culture" is desirable and necessary, it is not free of unpleasant concomitants. For example, Kitano (1962) has studied the decline in achievement moti-

vation among acculturating Japanese Americans and questions the value of this leveling process toward middle class norms.

Peer expectations

Aside from the family another strong force that contributes to personality molding among Japanese Americans in Hawaii is the peer group. Although the influence is early and gradual, it probably reaches its peak in adolescence. An important component of this influence is a strong in-group perception of being a "local" island resident. Since many non-residents are Caucasian (tourists, servicemen, students) a social polarity of "local" vs. "haole" (a semi-derisive term meaning "foreigner", but used synonymously for a Caucasian) is formed. A stereotype of a "local" is built and supported by the "youth culture" through symbols such as clothing fads, hair styles and use of Pidgin English. The "swell guy" image of the male and the "glamor girl" image of the female are Hawaii's own distinctive and multi-cultural counterpart of Talcott Parson's (1964) youth roles. Since it is difficult to direct aggression against parents in the Japanese tradition, a more vulnerable candidate is the "haole" or some other ethnic group. There is an interesting paradox here in that the young Japanese American must adopt many of the manners, morals and motivations that he may find objectionable in order to achieve upward social mobility. Like his mainland Caucasian-American counterpart, the sansei does not always find the transition from the "youth culture" to adulthood an easy path to traverse.

Language milieu

As an outcome of the various language influences (e.g., Japanese, Hawaiian, Cantonese, Korean, Ilocano, Mandarin, Viscayan, Tagalog, Samoan, Okinawan, Spanish and English) on the speech of the islanders and the remoteness of the islands from the mainland U. S., Hawaii developed its own characteristic speech. Island dialect (Pidgin English, or simply "pidgin") emerged to weld together a linguistically polyglot community. It is a language of action and expediency characterized by a distinctive vocabulary, syntax, articulation, rhythm and inflection. Pidgin English has been an enigmatic problem since its limited vocabulary and modes of expression give it a restricted sphere of usefulness (Lind, 1960). Initially it served the needs of multilingual plantation laborers as a vehicle of communication, but it has persisted across all strata of Hawaiian society. Today many sansei Japanese Americans (as well as other ethnic groups) are bilingual, speaking near-standard English in the classroom or to "haoles," and reverting to "pidgin" with their family and peer group (Carr, 1961). It is interesting that the use of this lingua franca has persisted despite the efforts of educators to "stamp out pidgin." One immediate outcome of usage has been a significant lowering of performance on standardized tests of language expression. At the academic level, the University of Hawaii maintains remedial speech courses to handle the approximately twenty-one per cent of the students who take a required fundamentals of speech course and are referred to remedial

speech improvement. The problem appears to be predominately a male one, indicating greater flexibility of females to acquire bilingual expression, or simply more concern by females to "speak properly." It has been observed that a strong sense of in-groupness surrounds the use of "pidgin," and it appears to be linked to the social expectations of peer. As one belligerent male phrased it, "Why you try change me? I don't want to speak like a damn haole!" A number of sociologists have attempted to link the "speech problem" to diminished classroom participation (Hutchinson, Arkoff, & Weaver, 1966), but strong personality interaction cannot be dismissed (Meredith, 1964).

Leadership and social participation

An important outcome of early socialization experiences and peer influences is a lowering of leadership potential, particularly among the sansei males. Bartos and Kalish (1961) found that at the University of Hawaii, "Japanese women and Chinese women are more likely to become leaders than the men of those groups, while the Caucasian women are shown to be approximately equally likely to become leaders as their male counterparts (p.68)." In other words, there appears to be an underrepresentation in leadership by sansei males, and greater social participation and leadership by sansei females. This finding is congruent with Kitano's (1962) observation of "social backwardness" among a sample of mainland acculturating Japanese-American males, and adds support to Burma's (1953) commentary on the leadership "crisis" among this ethnic group. Some have perceived a link here with the stress in (male-dominant)

Japanese culture of individual needs in the face of group and family expectancy (Fenz & Arkoff, 1962; Benedict, 1946). Earlier findings suggest that the introverted nature of the sansei male sets the stage for diminished social participation and the "leadership crisis" (Meredith & Meredith, 1965). While many sansei males move into positions of professional responsibility and leadership, the most psychologically comfortable and least stressful relationships involve the interaction with other "local" Japanese-Americans.

The traditional Japanese stereotype of a retiring and compliant female (see Benedict, 1946) is difficult to find in the sansei females. Indeed the evidence seems to indicate that the females may be acculturating more quickly or easily than males (Arkoff, Meredith & Iwahara, 1962; Caudill, 1952; DeVos, 1955; Fisher & Cleveland, 1958; Kitano, 1962). A heightened anxiety pattern is not unexpected in view of the demands and expectations placed on the sansei female (Meredith & Meredith, 1964). It is hypothesized that this elevation in anxiety is situationally induced and linked to the following: (a) parental stress on academic achievement in professional areas (such as teaching, nursing, etc.), (b) dependency-independency conflicts within the nuclear family, (c) familial pressure surrounding dating and courtship (which becomes particularly crucial in the case of inter-ethnic and inter-racial relationships--one is reminded here of Kinsley Davis' "sociology of jealousy"), and (d) social control exerted by the "youth culture". While it may cogently be argued that

sansei males are subjected to similar pressures, it would appear that the way anxiety is handled differs for each sex group and this itself deserves further scrutiny.

Constitutional determinants

In conclusion this writer would like to suggest a relatively overlooked factor related to differences in personality, specifically the constitutional (somatic) factor that forms the biological substrate upon which personality is built. While a limited number of sallies have been made in this direction in terms of racial psychology (Porteus & Babcock, 1926) and causes of inferiority feelings (Smith, 1938ab), little attention has been directed to the inter-relationship of "soma" and "psyche" in acculturating ethnic groups. Intensive longitudinal research is needed in personality development among acculturating groups, with particular attention directed toward the self (see Meredith, 1959; Iwawaki & Cowen, 1964) and the body image (Fisher & Cleveland, 1958; Arkoff & Weaver, 1966) and their relationship to overall personality and somatic development. For example, one cannot ignore a most obvious difference between Japanese Americans and their Caucasian counterparts and that difference concerns physical size and body configuration. While the petite, small body structure is socially desirable (and perhaps enhances femininity) among female sansei, we have little evidence of the role physical size plays in the self concept of the males. What is called for is a generic approach to acculturation that pays due respect to biological, psychological and sociological factors in personality organization.

Two recent lines of research endeavor have important and stimulating implications for acculturation study, one physiologically oriented and the other statistical. Presently Dr. David H. Crowell, University of Hawaii, is conducting neonatal research directed toward an understanding of early autonomic reactivity patterns. Since various ethnic groups are participating in this investigation, there should be ample opportunity to observe sex and ethnic differences in early nervous system functioning. A second line of development is the Multiple Abstract Variance Analysis (MAVA) technique developed by Dr. Raymond B. Cattell, University of Illinois, to ferret out the relative contribution to variance due to hereditary and environmental factors on continuous measures of personality traits (Cattell, 1953, 1960). Together, these methodological tools may contribute substantially to a more rigorous and architectonic theory of acculturation.

CHAPTER III

FINDINGS

During the period 1963-68, a series of four studies was initiated to explore personality and attitudinal differences between Japanese-American and Caucasian-American college students on the Manoa Campus of the University of Hawaii. The four studies utilized independent samples of students enrolled in the undergraduate program during the aforesaid time span. The purpose of each study will be presented along with the hypotheses that stimulated each succeeding investigation.

STUDY 1

Norms may be regarded as shared meanings in a culture that serve to provide the background for communication. Studies of Japanese social norms reveal a set of codified terms that have influence, in some degree, the acculturation pattern of Japanese in America. Historically, these codified norms were on (ascribed obligation); giri (contractual obligation); chu (loyalty to one's superior); ninjo (humane sensibility); and enryo (modesty in the presence of one's superior). While many of these terms have been forgotten or dropped from the language of discourse, Kitano (1969) has argued that the enryo concept helps to explain much of Japanese-American behavior. The inscrutable face, the noncommittal answer, the behavioral reserve can often be traced to this norm. Associated with the enryo syndrome is ha zu ka shi, manifested in terms of embarrassment and reticence in ambiguous social situations. The motive for this feeling is centered in "others" -- how other people will react to self so that there remains a feel-

ing of shame, a feeling that one might make a fool of himself in front of others.

Insofar that enryo influences nisei parental attitudes and practices, one might expect that the socialization outcomes will lead to differences in personality of their sansei offspring. The purpose of Study 1 was to determine the trait differences between sansei college students and a comparable group of Caucasian students on a set of basic personality dimensions (Meredith & Meredith, 1966). It was hypothesized that sansei exhibit differences in personality traits when compared with Caucasian counterparts (Hypothesis 1). Specifically, sansei males differ in trait description from Caucasian males (Hypothesis 2), and sansei females differ in trait description from Caucasian females (Hypothesis 3).

Method

Subjects (Ss) of the investigation were 60 Caucasian-American (30 male, 30 female) and 75 third-generation (sansei) Japanese-American (26 male, 49 female) undergraduate students enrolled in the introductory-psychology course at the University of Hawaii. The mean ages of the Caucasian-American and Japanese-American males were 19.2 and 19.1 years, while the corresponding values for the female groups were 18.6 and 18.7 years. None of the age differences was found to be statistically significant. A basic set of source traits in the "personality sphere" was measured with the 16 Personality Factor Questionnaire (16PF), Form A (Cattell & Eber, 1964).

Results

First-Order Analysis. The results of the Japanese-American and Caucasian-American groups on the 16 P. F. are summarized with respect to the above problem. Initially, means and standard deviations were computed on each scale for each of the four subgroups (Japanese-American males, Japanese-American females, Caucasian-American males and Caucasian-American females). Because the sex variable is not of major concern to the present problem, t tests of significance were computed only between the personality scores of Japanese-American and Caucasian-American males and between Japanese-American and Caucasian-American females. Within the male comparisons, summarized in Table 1, five of the personality differences exceed the .05 level of significance.

Within the female comparisons, summarized in Table 2, four of the personality differences exceed the .05 level of significance. Only one dimension, Factor E (submissiveness vs. dominance), consistently differentiated Japanese-American and Caucasian-American Ss within both sex groups.

In terms of primary-trait description (Cattell & Eber, 1964), the Japanese-American males are more reserved (A—), more humble (E—), more conscientious (G+), more shy (H—), and more regulated by external realities (M—) than are Caucasian-American males. Conversely, Caucasian-American males are more outgoing (A+), more assertive (E+), more expedient (G—), more venturesome (H+), and more imaginative (M+) than are Japanese-American males.

TABLE 1
 Comparison of Males on First-Order
 Personality Factors of the 16 P. F. Questionnaire

Symbol	Personality factor	Japanese-American		Caucasian-American		t
		Mean	SD	Mean	SD	
A	Schizothymia vs. Cyclothymia	7.6	2.70	9.6	2.97	2.64*
B	Low "g" vs. High "g"	8.6	1.94	8.5	1.98	0.38
C	Low Ego Strength vs. High Ego Strength	17.8	3.46	17.4	3.40	0.44
E	Submissiveness vs. Dominance	13.2	3.61	16.6	3.34	3.61**
F	Desurgency vs. Surgency	15.7	3.86	16.3	3.78	0.52
G	Low Super Ego Strength vs. High Super Ego Strength	12.0	2.52	10.2	3.40	2.27*
H	Threctia vs. Parmia	10.1	3.82	14.1	4.27	3.70**
I	Harria vs. Premsia	8.0	3.62	9.1	2.70	1.23
L	Inner Relaxation vs. Protension	9.7	3.48	8.8	3.75	0.96
M	Praxernia vs. Autia	9.4	3.37	11.4	3.30	2.24*
N	Naivete vs. Shrewdness	11.0	2.24	11.5	2.53	0.78
O	Confidence vs. Timidity	11.2	3.79	9.5	3.07	1.83
Q ₁	Conservatism vs. Radicalism	10.1	3.25	10.4	3.75	0.32
Q ₂	Group Dependence vs. Self-Sufficiency	9.5	3.11	10.4	3.30	1.05
Q ₃	Low Integration vs. Self- Sentiment Control	9.3	2.97	8.8	2.76	0.65

TABLE 1
Con't.

Comparison of Males on First-Order
Personality Factors of the 16 P. F. Questionnaire

Symbol	Personality factor	Japanese-American Mean	SD	Caucasian-American Mean	SD	t
Q ₄	Low Ergic Tension vs. High Ergic Tension	13.0	4.24	11.7	4.22	1.15

* df= 54, significant at the .05 level.

** df= 54, significant at the .01 level.

TABLE 2
Comparison of Females on First-Order
Personality Factors of the 16 P. F. Questionnaire

Symbol	Personality factor	Japanese-American		Caucasian-American		
		Mean	SD	Mean	SD	t
A	Schizothymia vs. Cyclothymia	9.1	2.97	10.2	2.88	1.64
B	Low "g" vs. High "g"	7.8	2.01	8.1	2.15	0.69
C	Low Ego Strength vs. High Ego Strength	15.0	3.87	16.8	3.71	2.15*
E	Submissiveness vs. Dominance	12.0	3.80	13.9	4.13	2.04*
F	Desurgency vs. Surgency	15.7	3.37	15.4	3.57	0.37
G	Low Super Ego Strength vs. High Super Ego Strength	12.5	2.69	12.8	2.76	0.47
H	Threctia vs. Parmia	11.8	4.24	13.4	5.02	1.46
I	Harria vs. Premsia	12.0	2.34	11.1	2.36	1.65
L	Inner Relaxation vs. Protension	9.5	2.99	7.7	3.23	2.47*
M	Praxernia vs. Autia	12.8	3.24	11.5	3.47	1.66
N	Naivete vs. Shrewdness	8.3	2.75	8.5	2.50	0.33
O	Confidence vs. Timidity	12.4	3.94	9.9	4.08	2.68**
Q ₁	Conservatism vs. Radicalism	9.2	2.12	9.5	2.84	0.51
Q ₂	Group Dependence vs. Self-Sufficiency	9.9	2.44	9.4	2.74	0.82
Q ₃	Low Integration vs. Self- Sentiment Control	9.3	2.81	9.5	3.18	0.28

TABLE 2
Con't.

Comparison of Females on First-Order
Personality Factors of the 16 P. F. Questionnaire

Symbol	Personality factor	Japanese-American Mean	SD	Caucasian-American Mean	SD	t
Q ₄	Low Ergic Tension vs. High Ergic Tension	14.7	4.93	13.8	4.53	0.83

* df= 77, significant at the .05 level.

** df= 77, significant at the .01 level.

Japanese-American females are more affected by feeling (C—), more obedient (E—), more suspicious (L+), and more apprehensive (O+) than are Caucasian-American females. Conversely, Caucasian-American females are more emotionally stable (C+), more independent (E+), more trusting (L—), and more self-assured (O—) than are Japanese-American females.

Second-Order Analysis. A higher-order factor in the questionnaire domain is a source trait that contributes to the variance of several primary-source traits and is broader in its influences (Pawlik & Cattell, 1964; Tsujioka & Cattell, 1965). Recently, Gorsuch and Cattell (1964) factor analyzed the intercorrelations among the 16 primary factors of the P. F. test and delineated a set of second-stratum source traits, the most salient ones being introversion-extraversion and anxiety. Standard weights for estimating S's endowment on these second-order factors were applied to transform S's sten scores on the primaries to sten scores on the derived secondaries.

A comparison of the ethnic groups on the second-order introversion-extraversion and anxiety factors is presented in Table 3. Clearly, the Japanese-American males appear more introverted than do Caucasian-American males. The female groups did not differ on this higher-order dimension.

The Japanese-American male appears to show "inhibition of external reactivity (in terms of past discouragement and present timidity) and greater attention to inner stimuli and ideas" (Cattell, 1957, p. 268).

TABLE 3
 Second-Order Personality
 Comparisons on the 16 P. F. Questionnaire

Sex and second-order factor	Japanese-American		Caucasian-American		
	Mean	SD	Mean	SD	t
Males					
Introversion-					
Extraversion	4.8	1.99	7.5	1.73	5.35**
Anxiety	6.3	1.89	5.6	1.68	1.45
Females					
Introversion-					
Extraversion	5.2	2.02	6.0	2.24	1.66
Anxiety	6.5	2.19	5.4	2.20	2.32*

* Significant at the .05 level.

** Significant at the .01 level.

Caucasian-American males may best be described at this level of analysis as "socially outgoing, uninhibited persons, good at making contacts" (Cattell & Eber, 1964).

The second-order anxiety factor has been found to be the basis of clinical judgments of anxiety; therefore it can be interpreted, in general, as clinical anxiety (Gorsuch & Cattell, 1964). The factor score is essentially an index of the degree of dynamic integration of the total personality, under the Self-sentiment Q_3 , utilizing Ego Strength C. Cattell and Scheier (1961) hypothesize that "poor integration permits anxiety through conflict (C—), through id pressure (Q_4), through Protension L (paranoid maladjustment in relation to external realities), and lack of control of fear impulses" (Cattell & Scheier, 1961, p. 319). In comparing the present groups, the Japanese-American females scored significantly (but not dramatically) higher than the Caucasian-American females. The male groups did not differ on this higher-order dimension.

Discussion

Aside from the early socialization patterns of the family, the adolescent-peer group contributes substantially to the personality molding of Japanese Americans in Hawaii (Bitner, 1954; Fenz & Arkoff, 1962; Linderfelt, 1949; and Zald, 1955). An important component of peer influence is a strong ingroup perception of being a "local" island resident, as opposed to being a "mainlander." Since many nonresidents are Caucasian (e.g., tourists, servicemen, and students) a social polarity of "local" versus "haole" (a semiderisive Hawaiian term meaning "foreigner" but used

synonomously for a Caucasian) is formed. A stereotype of a "local" is built and supported by the "youth culture" (Parsons, 1964) through symbols, such as clothing fads, hair styles, and the use of Pidgin English speech patterns (Carr, 1961; and Lind, 1960). The resultant swell-guy image of the adolescent male and the glamor-girl image of the adolescent female are Hawaii's own distinctive and Japanese-American counterpart of Talcott Parsons' youth roles.

An important outcome of early socialization experiences and peer influences is a lowering of leadership potential, particularly among the sansei males. Bartos and Kalish (1961) found that (at the University of Hawaii) there appears to be an underrepresentation in leadership by sansei males and greater-than-expected social participation and leadership by sansei females. This finding is congruent with Kitano's observation of "social backwardness" among a mainland sample of acculturating Japanese-American males (Kitano, 1962) and supports Burma's commentary on the leadership "crisis" among this ethnic group (Burma, 1953). Some have perceived a link here with the stress in (male-dominant) Japanese culture of individual needs in the face of group and family expectancy (Fenz & Arkoff, 1962). It is hypothesized that the introverted nature of the sansei males sets the stage for diminished social participation and the "leadership crisis."

The traditional stereotype of a retiring-and-compliant Japanese female, as depicted by Benedict (1946), is difficult to find among sansei females. Indeed, the evidence seems to indicate that females may be accult-

urating more rapidly or easily than males (Arkoff, Meredith & Iwahara, 1962, 1964; Caudill, 1952; and DeVos, 1955). While the present study reveals several first-order personality differences, there is a great deal of identification with the "core American culture" (especially indicated on the second-order introversion-extraversion factor. The heightened anxiety pattern is not unexpected, in view of the demands and expectations placed on the sansei female. It is hypothesized that this elevation in anxiety is situationally induced and linked to the following: (a) parental stress on academic achievement, (b) dependency-independency conflicts within the Japanese-American family, (c) familial and peer pressures surrounding dating and courtship (which becomes particularly crucial in the case of interethnic or interracial relationships--one is reminded of Kingsley Davis' "sociology of jealousy"), and (d) social control exerted by the "youth culture." While it may be argued that sansei males are subjected to similar pressures, it appears that the way anxiety is handled differs for each sex group, and this difference deserves further scrutiny.

STUDY 2

Although such terms as issei, nisei, and sansei are used in the language of discourse in a discrete manner by Japanese Americans to specify generation level, it is generally recognized that there is a considerable overlap between the groups in their degree of commitment to shared patterns and values. As indicated previously, the research interest in second-generation nisei Japanese American (Abe, 1958; Bitner, 1954; Caudill, 1952; DeVos, 1954, 1955; Fujita, 1956, 1957; Linderfelt, 1949; Smith, 1938ab; Smith & Vinacke, 1951; Vinacke, 1949; and Vinacke, Eindhoven & Engle, 1949) has shifted recently to their third-generation offspring, the sansei, with explorations of such variegated topics as body imagery (Arkoff & Weaver, 1966), need and trait structure (Arkoff, 1959; Arkoff, Meredith & Iwahara, 1962; Arkoff, Meredith & Jones, 1961; Fenz & Arkoff, 1962; and Meredith, 1959), social attitudes (Arkoff, Meredith & Dong, 1963; and Arkoff, Meredith & Iwahara, 1964), and correlates of classroom participation (Hutchinson, Arkoff & Weaver, 1966) and student leadership (Bartos & Kalish, 1961). In Hawaii, where the Japanese constitute the largest segment (approximately 29.8% by recent population projections) in a population that has no clear majority group, the sansei represent the predominant generation group at the college level.

The results of the first study were encouraging and stimulated a follow-up investigation. The purpose of Study 2 was twofold: (a) to replicate the previously found trait differences, and (b) to concentrate on the broad second-order factors of the personality instrument (Meredith, 1966).

With respect to the latter, it was hypothesized that sansei college students differ along the broad dimension of introversion-vs.-extraversion (Hypothesis 5).

Method

Ss of the investigation were 154 (82 male, 72 female) third-generation Japanese Americans (and hereafter referred to simply as sansei enrolled in introductory psychology and speech courses at the University of Hawaii. A comparison group consisted of 140 (68 male, 72 female) Caucasian-American college students enrolled at the University of Hawaii (N=60; 30 male, 30 female) and the University of Illinois (N=80; 38 male, 42 female). The inclusion of Caucasian subjects from the Midwest was intended to broaden the comparative base of the study. The average age of the entire sample (N=294) was 19.5 years, with slight deviation of the subgroup means from this value. A basic set of source traits in the "personality sphere" (13) was measured with the 16 Personality Factor (P. F.) Questionnaire, Form A (Cattell & Eber, 1966).

Results

First-Order Analysis. The analysis of the results was carried out both at a first-order or primary factor level, and at a higher-order or secondary level. Initially, means and standard deviation were computed on each scale for each of the major subgroups (i.e. sansei males and females, and Caucasian males and females). Since the ethnicity variable is of principal interest, t-tests of significance were computed between the personality

scores of sansei and Caucasian males, and between sansei and Caucasian females.

With respect to the male ethnic comparisons, 11 of the 16 personality differences were statistically significant, while for the female comparisons, eight of the differences were significant. Six of the factor dimensions of the 16 P. F. consistently differentiated sansei from Caucasians in the same direction within each sex group.

When the overall findings are ordered from most salient ($p < .001$) to least salient ($p < .05$), sansei males may be described as more submissive (E—), regulated by external realities (M—), diffident (H—), reserved (A—), serious (F—), apprehensive (O+), tense (Q_4+), affected by feelings (C—), conscientious (G+), socially-precise (Q_3+), and more unpretentious (N—) than Caucasian-American males. Sansei females, on the other hand, are more apprehensive (O+), suspicious (L+), submissive (E—), reserved (A—), tense (Q_4+), diffident (H—), group-dependent (Q_2-), and more affected by feelings (C—) than are Caucasian-American females. Since the dimensions of description are bipolar, Caucasians may be characterized in converse terms.

Second-Order Analysis. The factors of the 16 P. F. are oblique (or correlated) and, when factored, reduce to several broad second-order structures, the most stable ones being introversion-extraversion (also termed invia-exvia to distinguish it from the Eysenck usage), anxiety, tough poise vs. responsive emotionality, and independence vs. dependence (Gorsuch & Cattell, 1966). As viewed here, a higher-order factor in the

questionnaire domain is a source trait that contributes to the variance of several primary source traits and is broader in its influences. Standard weights for estimating each subject's endowment on these second-order factors were applied to transform the subject's sten (standard 10 point) scores on the primaries to sten scores on the secondaries. In addition, empirical research with the 16 P. F. has led to the development of specification (regression) equations to predict "real life" criteria, such as neuroticism (Cattell & Scheier, 1961), leadership (Cattell & Stice, 1954), and creativity (Cattell & Drevdahl, 1955). Technically, these are termed "derived secondaries," since they stem from empirical use of the instrument. Specification equations for computing second-order and derived personality scores were furnished by the Institute for Personality and Ability Testing, Champaign, Illinois.

A comparison of the ethnic groups on the higher-order factors (both second-order and derived) is presented in Table 4. Clearly, the sansei may succinctly be described as more inhibited, higher in intrapsychic tension, closer in proximity to clinically-diagnosed neurotics, and lower in leadership potential in face-to-face situations than Caucasians. The reader is referred to the prewar work of Smith (1938ab) on the causes of inferiority feelings among Island youth. In the case of the sansei male, a more passive and dependent personality must be added to this picture.

Since the second-order extraversion and anxiety factors are the most pervasive of the secondaries (Gorsuch & Cattell, 1966), and the focus of several ongoing cross-cultural research projects (Tsujioka & Cattell, 1965),

TABLE 4
 Second-Order and Derivative Personality
 Comparisons on the 16 P. F. Questionnaire

Sex and higher-order factor	Japanese-American		Caucasian-American		
	Mean	SD	Mean	SD	t
Males					
Extraversion	4.0	1.83	6.4	2.47	6.72***
Anxiety	6.4	1.76	5.4	1.82	3.32**
Tough poise	5.6	1.84	5.8	1.73	.63
Independence	5.4	1.48	6.8	1.96	4.89***
Neuroticism	6.6	2.12	4.7	1.98	5.72***
Leadership	4.6	1.76	5.6	1.90	3.15**
Creativity	6.6	1.86	6.3	2.09	.91
Females					
Extraversion	5.0	1.77	5.9	1.94	3.05**
Anxiety	6.7	1.86	5.3	1.93	4.30***
Tough poise	5.7	1.55	6.0	1.93	1.15
Independence	6.3	1.56	6.7	1.88	1.51
Neuroticism	6.1	2.02	4.7	2.08	4.26***
Leadership	4.6	1.73	5.7	1.81	3.78***
Creativity	6.6	1.76	6.5	2.05	.30

** Significant at the .01 level.

*** Significant at the .001 level.

Figure 1 depicts the means of the four subgroups located in the space defined by these two factors. The Caucasians clearly fall in close proximity in the E+A— quadrant, while the sansei fall in the E—A+ quadrant (centered on the population sten mean of 5.5).

Discussion

The findings of the present study suggest a mode of adjustment for the sansei that represents a "coming to terms" with the social environment. Although the E—A+ pattern is parallel for both sexes, sansei males tend to accentuate the introverted style (analogous to Horney's "moving away from others"), while sansei females exhibit a heightened anxiety (ergic tension) pattern.

There is an interesting parallel between these acculturation findings and L. Takeo Doi's theory of amae (Doi, 1962, 1963; Norbeck & DeVos, 1961). The Japanese concept of amae can be thought of in Western terms (if there is an accurate transcultural equivalency) as a basic need to be cherished and loved. The thwarting of this core dependency need, according to Doi (1962, p. 2), leads to serious behavioral consequences, such as kodawaru ("to be inwardly disturbed over one's personal relationships") and sumanai ("to feel guilty or obligated"). It is hypothesized that the E—A+ pattern of the sansei represents a nonpathological manifestation of these typically Japanese reaction patterns. An application of this model suggests that sansei are more disturbed than Caucasians over personal relationships (kodawaru) and there is an early resolution of frustrated amae by a psychological "turning inward." It is provocative that Cattell (1957) describes

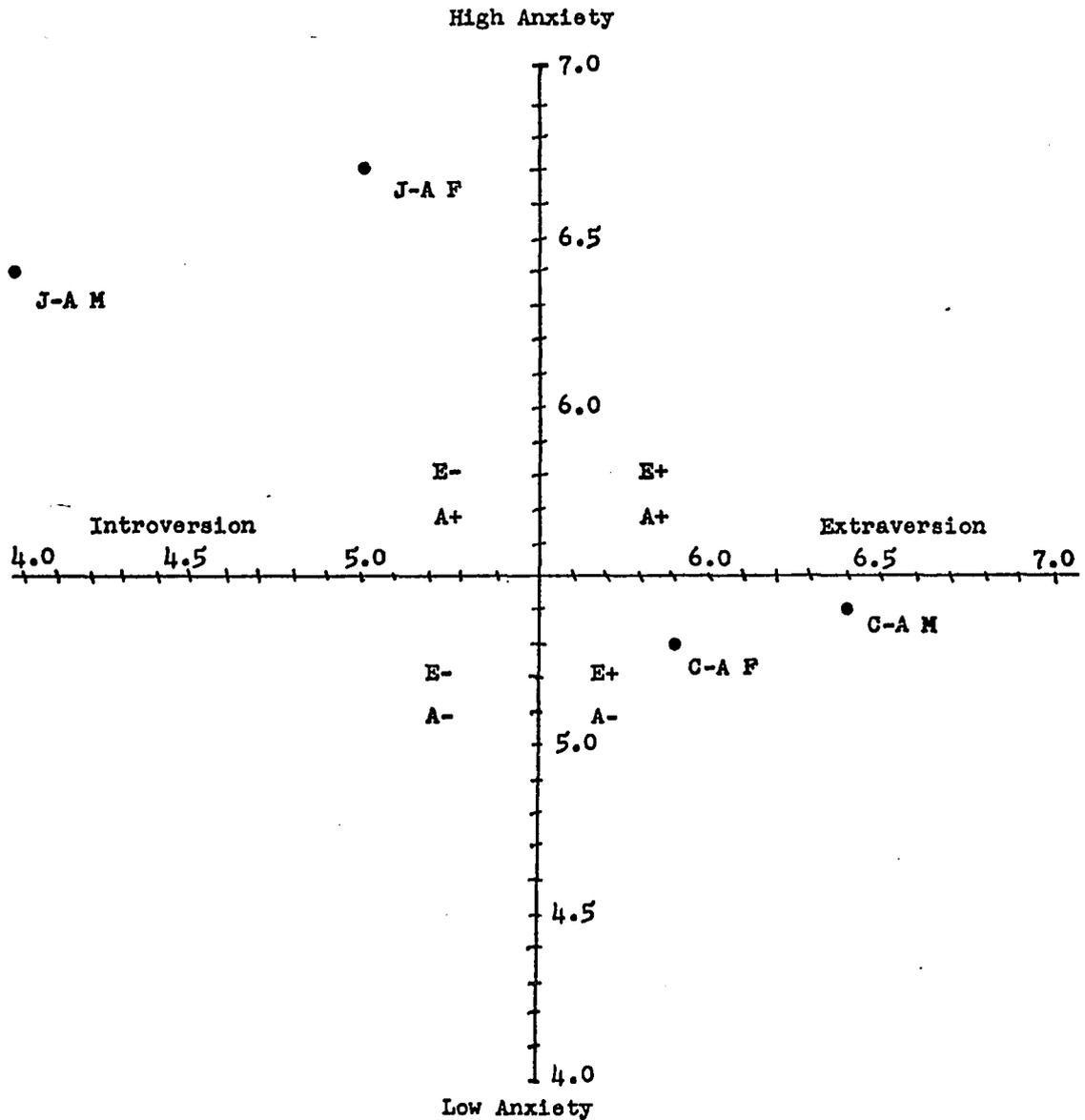


FIGURE 1
PSYCHOLOGICAL DISTANCE BETWEEN JAPANESE-AMERICAN AND CAUCASIAN-AMERICAN COLLEGE STUDENTS ON EXTRAVERSION AND ANXIETY
 C-AM = Caucasian Males; C-AF = Caucasian-American Females; J-AM = Japanese-American Males; J-AF = Japanese-American Females; E+A+ = Extraversion, High Anxiety Quadrant; E+A- = Extraversion, Low Anxiety Quadrant; E-A+ = Introversion, High Anxiety Quadrant; and E-A- = Introversion, Low Anxiety Quadrant.

introversion as inhibition to social stimuli and the social self-concept. Consequently, Cattell (personal communication) feels that an enduring trait (rather than a transient state) predictive of seeking or avoiding social interaction is being measured.

An important outcome of kodawaru is a lowering of leadership potential--particularly marked in the sansei male. Research work by Bartos and Kalish (1961) found that, at the University of Hawaii, there appears to be an underrepresentation in campus leadership by sansei males, and greater social participation and leadership by sansei females. The findings of the present study are congruent with Kitano's (1962) observation of "social backwardness" among a sample of mainland acculturating Japanese-American males, and adds support to Burma's (1953) earlier commentary on the "leadership crisis" in this ethnic group.

Although there is a component of guilt (sumanai) in the anxiety concept, notably through the operation of Factor O, anxiety is viewed here as a global index of the degree of dynamic integration of the total personality system (Cattell & Scheier, 1961). A heightened anxiety pattern is not unexpected in light of the demands and expectations placed on the sansei. It is hypothesized that this elevation is linked to (a) parental stress on academic achievement, (b) dependency-independency conflicts within the nuclear family, (c) familial pressure surrounding dating and courtship (which becomes particularly crucial in the case of interethnic and interracial relationships--one is reminded here of Kingsley Davis' "sociology of jealousy"), and (d) social control exerted by the "youth culture" (Parsons,

1964). Only in extreme cases, however, where there is a disruption of interpersonal adjustment, does this particular personality reaction pattern warrant therapeutic attention. The elevation in anxiety level, in fact, may function to enhance academic performance. Dr. Arthur Dole (personal communication) has consistently found high standards of achievement orientation in the sansei group, both in terms of expressed values and in subject-matter performance.

At present, there are two areas of much needed acculturation research, notably early socialization and peer group expectations. For example, Caudill (Caudill, 1952) placed particular importance on early socialization experiences to account for modal personality differences between issei and nisei. Clearly the issei in Caudill's study had their values firmly rooted in the Japan of the late nineteenth and early twentieth century, while the nisei were faced with the resolution of two sets of cultural demands. Kimura (1940) has presented an interesting historical account of early Japanese immigration patterns. Although the present study dealt with the sansei in the midtwentieth century, the subtle influences exerted by issei grandparents, as well as older nisei relatives on the early socialization of the present group, cannot be dismissed. The roots of ethnic identity are deep and autobiographical accounts obtained from sansei college students (by this writer) reflect many of the anxieties, irrational ideas, prejudices, and historical animosities of parents and grandparents. For example, one sansei male presented a "social justification" for his dislike of Caucasians by citing the way his immigrant grandparents were treated on a pineapple

plantation. Traditional values, such as parental obedience, respect for elders, impulse control, and restraint (Kaplan, 1961), are still held to be "socially desirable" by nisei parents. The trait of responsibility, especially stressed for males, has persisted and is congruent with the traditional male-dominant culture of Japan (Arkoff, Meredith & Iwahara, 1964; Iwawaki & Cowen, 1964).

Aside from the family, another strong force that contributes to personality molding among Japanese Americans in Hawaii is the peer group. Although the influence is early and gradual, it reaches its peak in adolescence. An important facet of this influence is a strong ingroup perception of being a "local" island resident. Since many nonresidents are Caucasian (e.g. tourists, servicemen, students), a social polarity of "local" vs. "haole" (a semiderisive Hawaiian term meaning "foreigner," but used synonymously for a Caucasian) is formed. A stereotype of a "local" is built and supported by the "youth culture" through symbols, such as clothing, fads, hair styles, and the use of Pidgin English. The "swell guy" image of the male and the "glamor girl" image of the female are Hawaii's own distinctive and multicultural counterparts of Talcott Parsons' "youth roles." Kitano (1962) has proposed that the achievement pattern of acculturating Japanese Americans exhibit a middle-class "leveling." This hypothesis remains to be substantiated in Hawaii.

Because of the paucity of existing information, one can only speculate concerning the ontogenetic history of the E—A+ pattern in the sansei and the fate of this pattern in forthcoming generational groups. It was

concluded that Doi's theory of amae and its potential implications for acculturation research among transitional Japanese groups offers a significant contribution to East-West psychology.

STUDY 3

As a result of various language influences on the speech of the islanders and the remoteness of the islands from the mainland, Hawaii has developed its own characteristic speech, Island Dialect (Pidgin English, or simply "pidgin"). In its most divergent form the island speech may have four or five vowel substitutions, consonant problems such as substitutions, consonant problems such as substituting t and d for the th sounds, n for ng, and un-voicing of final consonants (Carr, 1960). Rhythm and inflection patterns also differ from standard English patterns of expression.

Historically, island dialect evolved from the "pidgin" which was used during the first half of the nineteenth century as a means of communication between traders and sailors who visited the islands and the natives (Lind, 1955). The language was carried over to the plantations when the large groups of immigrants arrived. The language in this milieu became the "language of command" used by the haole (a semi-derisive Hawaiian term meaning "foreigner," but used synonymously for a Caucasian) bosses to the laborers. At this point "pidgin" took on a lower class identification.

New ethnic groups were brought to the plantations and each added words and developed their own version of "pidgin." In time "pidgin" became the language of communication between the worker and his children born in Hawaii. When used within the group the language became one of warmth. Gradually, the language emerged into a common lingua franca which permitted easy communication across diverse racial, cultural and linguistic lines (Aspinwall, 1960).

Because the modern island dialect developed from the plantation "pidgin," it carries the stigma of its earlier lower class status. If a person is confined solely to its use he is looked down upon by polite society. Moreover, its limited vocabulary and modes of expression, as well as the virtual lack of any literature, give to his language a restricted sphere of usefulness (Lind, 1960). In spite of, or perhaps at times because, the island dialect is disapproved by the "elite," teachers, the press, and other groups, the youth of Hawaii seem to cling to their characteristic speech. Clearly, island dialect has become a mark of being "one of the gang"--a symbol of in-group acceptance by the "youth culture" (Meredith & Meredith, 1964).

Congruent with the recent shift in interest to the acculturation of third-generation sansei Japanese Americans in Hawaii (Arkoff, 1959; Arkoff, Meredith & Jones, 1961; Arkoff, Meredith & Iwahara, 1962; Arkoff, Meredith & Dong, 1963; Arkoff, Meredith & Iwahara, 1964; and Fenz & Arkoff, 1962), the purpose of Study 3 was to investigate the personality characteristics of college-level Japanese Americans referred to remedial speech courses because of severe Pidgin English usage (Meredith, 1964). It was hypothesized that the findings would support the previous studies, notably that Japanese Americans differ from Caucasian Americans on both first- and second-order dimensions of personality (Hypothesis 6), and that Japanese-American college students referred to remedial speech classes differ in personality traits from sansei exempted from remedial speech classes (Hypothesis 7).

Method

Ss consisted of 79 Island-born Japanese Americans (56 males, 23 females) enrolled in remedial speech courses at the University of Hawaii. Ss were referred individually by a board of speech instructors and each S exhibited the typical constellation of impediments associated with Pidgin English expression, specifically, deviations in articulation, inflection and rhythm. Comparison groups consisted of 60 Caucasian Americans (30 males, 30 females) and 75 Island-born third-generation (sansei) Japanese Americans (26 males, 49 females), all undergraduate students enrolled in the introductory psychology course at the University of Hawaii. The three groups were designated RS (Remedial Speech), CS (Caucasian Americans) and 3G (Sansei Japanese Americans) for ease of discussion. Groups 3G and CS were relatively free of chronic "pidgin" usage. The mean age of the RS, CS and 3G males were 19.2, 19.2 and 19.1 respectively. The corresponding values for the females were 18.6, 18.6 and 18.7. None of the age differences was found to be statistically significant. A basic set of source traits in the "personality sphere" based on the multivariate model of Cattell (1946) were measured with the 16 P. F. (Personality Factor) Questionnaire, Form A (Cattell & Eber, 1964).

Results

First-order analysis. The results of the Japanese-American and Caucasian-American Groups on the 16 P. F. are summarized with respect to the above problem. Initially, means and standard deviations were computed on each scale for each of the six sub-groups (RS males, 3G males,

CS males, RS females, 3G females and CS females). Since the sex variable is not of major concern to the present problem, t tests of significance were only computed between the personality scores within sex groups (i.e., RS vs. CS, RS vs. 3G, 3G vs. CS). Male comparisons are summarized in Table 5.

The comparison of RS and CS Ss indicates the ethnic disparity accentuated by the effects of language impediment on personality. In terms of primary trait description (Cattell & Eber, 1964) the RS males are more reserved (A—) affected by feelings (C—), humble (E—), serious (F—), conscientious (G+), timid (H—), practical (M—), apprehensive (O+), controlled (Q₃+) and tense (Q₄+) than CS males. Conversely, CS males are more outgoing (A+), emotionally stable (C+), assertive (E+), happy-go-lucky (F+), expedient (G—), venturesome (H+), imaginative (M+), placid (O—), casual (Q₃—) and relaxed (Q₄—) than RS males.

The comparison of RS and 3G Ss indicates the relatively "pure" effect of language difficulty on personality with ethnic background held constant. In terms of primary trait description, RS males are more affected by feeling (C—), humble (E—), serious (F—), and tenderminded (I+) than 3G males. Conversely, 3G males are more emotionally stable (C+), assertive (E+), happy-go-lucky (E+) and tough-minded (I—) than RS males.

The comparison of 3G and CS Ss indicates the influence of ethnic background on personality relatively independent of language handicap. In terms of primary trait description, 3G males are more reserved (A—), humble (E—), conscientious (G+), timid (H—) and practical (M—) than CS

TABLE 5

Comparison of Male Groups on First-Order
Personality Factors of the 16 P. F. Questionnaire

First-Order Personality Factor	16 P.F. Question- naire Mean Scores			Significance of the difference between means <u>t</u> Values		
	RS	3G	CS	RS/3G	RS/CS	3G/CS
A: Sizothymia vs. Cyclothymia	7.5	7.6	9.6	0.10	2.78**	2.64*
B: Low "g" vs. High "g"	8.9	8.7	8.5	0.66	0.96	0.38
C: Low Ego Strength vs. High Ego Strength	14.0	17.8	17.4	4.58**	4.38**	0.44
E: Submissiveness vs. Dominance	11.0	13.2	16.6	2.63*	7.46**	3.61**
F: Desurgency vs. Surgency	12.3	15.7	16.3	3.59**	4.40**	0.52
G: Low Superego vs. High Superego	13.1	12.0	10.2	1.87	4.01**	2.27*
H: Threctia vs. Parmia	10.2	10.1	14.1	0.07	3.98**	3.70**
I: Harria vs. Premsia	10.1	8.0	9.1	2.80**	1.89	1.23
L: Alaxia vs. Protension	9.0	9.7	8.8	0.93	0.26	0.96
M: Praxernia vs. Autia	9.6	9.4	11.4	0.28	2.48*	2.24*
N: Artlessness vs. Shrewdness	10.3	11.0	11.5	1.05	1.90	0.78
O: Assurance vs. Guilt Proneness	12.5	11.2	9.5	1.49	4.05**	1.83

TABLE 5
Con't.

Comparison of Male Groups on First-Order
Personality Factors of the 16 P. F. Questionnaire

First-Order Personality Factor	16 P.F. Question- naire Mean Scores			Significance of the difference between means t Values		
	RS	3G	CS	RS/3G	RS/CS	3G/CS
Q ₁ : Conservatism vs. Radicalism	10.8	10.1	10.4	1.02	0.53	0.32
Q ₂ : Group Adherence vs. Self-Sufficiency	10.5	9.5	10.4	1.51	0.22	1.05
Q ₃ : Low Integration vs. High Self-Concept	10.3	9.3	8.8	1.52	2.46*	0.65
Q ₄ : Low Ergic Tension vs. High Ergic Tension	14.8	13.0	11.7	1.82	3.44**	1.15

* Significant at .05 level.

** Significant at .01 level.

males. Conversely, CS males are more outgoing (A+), assertive (E+), expedient (G—), venturesome (H+) and imaginative (M+) than 3G males.

A parallel analysis was applied to the female Ss and the results are presented in Table 6. In terms of primary trait description, the RS females are more affected by feelings (C—), humble (E—), serious (F—), timid (H—), tender-minded (I+), shrewd (N+), apprehensive (O+) and tense (Q₄+) than CS females. Conversely, CS females are more emotionally stable (C+), assertive (E+), happy-go-lucky (F+), venturesome (H+), tough-minded (I—), forthright (N—), placid (O—), and relaxed (Q₄—) than RS females.

Regarding the language handicap comparison, RS females appear more abstract-thinking (B+), humble (E—), serious (F—), timid (H—), shrewd (N+) and critical (Q₁+) than 3G females. Conversely, 3G females are more concrete-thinking (B—), assertive (E+), happy-go-lucky (F+), venturesome (H+), forthright (N—) and conservative (Q₁—) than RS females.

The ethnic comparison indicated that 3G females are more affected by feelings (C—), humble (E—), suspicious (L+) and apprehensive (O+) than CS females. Conversely, CS females are more emotionally stable (C+), assertive (E+), trusting (L—) and placid (O—) than 3G females.

Second-order analysis. A higher-order factor in the questionnaire (Q) domain is a source trait which contributes to the variance of several primary source traits and is thus broader in its influences (Pawlik & Cattell, 1964; Tsujioka & Cattell, 1965).

TABLE 6
 Comparison of Female Groups on First-Order
 Personality Factors of the 16 P. F. Questionnaire

First-Order Personality Factor	16 P.F. Question- naire Mean Scores			Significance of the difference between means t Values		
	RS	3G	CS	RS/3G	RS/CS	3G/CS
A: Sizothymia vs. Cyclothymia	10.0	9.1	10.2	1.11	0.27	1.64
B: Low "g" vs. High "g"	9.1	7.8	8.1	2.42*	1.60	0.69
C: Low Ego Strength vs. High Ego Strength	13.4	15.0	16.8	1.45	2.99**	2.15*
E: Submissiveness vs. Dominance	9.3	12.0	13.9	2.83**	4.16**	2.04*
F: Desurgency vs. Surgency	12.3	15.7	15.4	3.29**	2.78**	0.37
G: Low Superego vs. High Superego	12.3	12.5	12.8	0.16	0.59	0.47
H: Threctia vs. Parmia	8.9	11.8	13.4	2.94**	3.77**	1.46
I: Harria vs. Premsia	13.0	12.0	11.1	1.53	2.77**	1.65
L: Alaxia vs. Protension	8.7	9.5	7.7	1.01	1.27	2.47*
M: Praxernia vs. Autia	11.7	12.8	11.5	1.38	0.16	1.66
N: Artlessness vs. Shrewdness	11.2	8.3	8.5	4.64**	4.11**	0.33
O: Assurance vs. Guilt Proneness	13.3	12.4	9.9	0.97	3.34**	2.68**

TABLE 6
Con't.

Comparison of Female Groups on First-Order
Personality Factors of the 16 P. F. Questionnaire

First-Order Personality Factor	16 P.F. Question- naire Mean Scores			Significance of the difference between means t Values		
	RS	3G	CS	RS/3G	RS/CS	3G/CS
Q ₁ : Conservatism vs. Radicalism	10.6	9.2	9.5	2.09*	1.37	0.51
Q ₂ : Group Adherence vs. Self-Sufficiency	9.7	9.9	9.4	0.29	0.27	0.82
Q ₃ : Low Integration vs. High Self-Concept	9.9	9.3	9.5	0.58	0.35	0.28
Q ₄ : Low Ergic Tension vs. High Ergic Tension	16.1	14.7	13.8	1.43	2.20*	0.83

* Significant at .05 level.

** Significant at .01 level.

Recently, Gorsuch and Cattell (1966) factored the intercorrelations between the 16 primary (oblique) factors of the 16 P. F. and extracted a set of second-order source traits, the most salient ones being introversion-extraversion (also termed *invia-exvia*) and anxiety. Standard weights for estimating S's endowment on these second-order factors were applied to transform S's sten scores on the primaries to sten scores on the derived secondaries (Cattell & Eber, 1964).

A comparison of the RS, 3G and CS groups on the second-order introversion-extraversion and anxiety factors is presented in Table 7. Clearly both Japanese-American male groups (RS and 3G) appeared more introverted than Caucasian-American males. The Japanese Americans exhibit what Cattell (1957), has described as "inhibition of external reactivity (in terms of past discouragement and present timidity), and greater attention to inner stimuli and ideas (p. 268)." At this level of analysis CS males are best described as "socially outgoing, uninhibited persons, good at making contacts (Cattell & Eber, 1964)." Within the Japanese-American group itself, RS males demonstrated a greater introvertive tendency than their 3G counterpart. In a parallel manner, RS females are significantly more introverted than 3G and CS females. However, 3G females are not as disparate from CS females as their male counterpart.

The second-order anxiety factor has been found to be the basis of clinical judgments of anxiety and, therefore, can be interpreted, in general as clinical anxiety (Gorsuch & Cattell, 1966). The factor score is essentially an index of the degree of dynamic integration of the total personality, under

TABLE 7
 Second-Order Personality
 Comparisons on the 16 P. F. Questionnaire

Sex	Second-Order Factor	16 P.F. Questionnaire Mean Scores			Significance of the difference between means t Values		
		RS	3G	CS	RS/3G	RS/CS	3G/CS
Males	Introversion vs. Extraversion	3.7	4.8	7.5	2.50*	9.40**	6.08**
	Low Anxiety vs. High Anxiety	7.0	6.3	5.6	1.49	3.49**	1.45
Females	Introversion vs. Extraversion	3.6	5.2	6.0	3.34**	4.33**	1.66
	Low Anxiety vs. High Anxiety	7.1	6.5	5.4	1.19	3.21**	2.32*

* Significant at .05 level.

** Significant at .01 level.

the self-sentiment Q_3 , utilizing ego strength C (Cattell & Scheier, 1961). RS males stand out as exhibiting greater anxiety than CS males. Among the females, both Japanese-American groups (RS and 3G) indicated higher anxiety levels than CS females.

Discussion

Today many sansei Japanese-American students are bilingual, speaking near-standard English in the classroom or to haoles, and reverting to "pidgin" with their family and peer group (Carr, 1961). The present study focused on a sub-group of Japanese-American college students referred to remedial speech classes because of their inability to effect a transition to standard English expression. If the process of acculturation is directed toward the ultimate assimilation of the ethnic individual into American society (Broom & Kitsuse, 1955), then the remedial speech Ss appear "farther away" from Caucasians than do the sansei "control" group. Possibly the discrepancies are most dramatically seen in terms of the second-order 16 P. F. factors. Remedial speech Ss exhibit a strong introvertive tendency coupled with an elevation of anxiety level. Some recent (but as yet unpublished) cross-cultural comparisons suggest that the first-and second-order performance of "pidgin"-speaking Ss is closer to the Motherland-Japanese results of Tsujioka and Cattell (1965) than to either Caucasians or sansei "controls". Admittedly the "pidgin problem" is multi-casual, and several classes of variable (e.g., physiological, educational and socio-cultural) have been proposed to "explain" the Island Dialect phenomenon and its relationship to personality structure.

Physiological factors include the ability to discriminate sounds and sound patterns, sensitivity to auditory stimuli, the ability to mimic, and audio-motor vs. visual-motor imagery (Kaplan, 1960; VanRiper & Irwin, 1958). Unpublished evidence indicates greater hearing loss among remedial speech Ss than Standard English-speaking Ss, but the present writer concurs with Gray and Wise (1959, p. 434) that the relationships between speech mechanisms and personality are not clearly understood and that a great deal of research is needed in this general area.

Educational influences include training in phonics, ear (or listening) training, poor methods employed in speech training, and foreign language training. With regard to bilingual home background, Murashige (1950) found that the language first spoken seemed to have an effect on accuracy of auditory discrimination for English sounds. Students who spoke two or more languages before entering school made fewer errors in discriminating sounds often confused in the islands than did students who spoke only one language in the home. It is interesting that the "pidgin problem" is predominantly a male problem. Fewer females are referred to remedial speech courses and the ones that are referred have been found far superior to males in their ability to change their speech patterns. This greater flexibility, imitative skill, and readiness to change on the part of females is congruent with the findings of Penfield and Roberts (1959).

Socio-cultural influences include economic status and locality of residence of the family, peer-group expectations and personal attitudes.

Merritt and Shaver (1961) have observed that students are fiercely defensive about their voices and their way of speaking. They may insist that they speak like everyone else and that any attempt to change their speech patterns will only result in artificiality and hence laughter and social disapproval. As one belligerent male in remedial speech phrased it, "Why you try change me? I no want to speak like damn haole!" There is hostility, disinterest and resistance to change among remedial speech students. A number of sociologists in Hawaii have attempted to link the "pidgin problem" with diminished classroom participation and leadership. For example, Lewis (1949) reports that students required to study remedial speech had significantly less favorable speech attitudes toward speaking in general and had done less of it in the school, home and in the community.

Two hypotheses are proposed--not to "explain" the present findings--but to suggest future lines of investigation. First, it is proposed that the elevation in anxiety level characteristic of the remedial speech sample is situationally-induced, rather than neurotic in origin (Cattell & Scheier, 1961). There is visible confrontation with authority and substantial pressure exerted for individuals to change. The university has stipulated that failure to remove a speech deficiency constitutes failure to meet graduation requirement--a severe consequence for speech deviancy.

Second, it is proposed that the strong introverted behavior pattern is linked to peer-group expectations and social control. As Parsons (1964) has observed, the "youth culture" places severe demands for conformity and Hawaii has developed its own distinctive Japanese-American "youth

culture" places severe demands for conformity and Hawaii has developed its own distinctive Japanese-American "youth roles." A constellation of symbols, such as clothing fads, hair styles and use of Pidgin English speech patterns form the nucleus of the "swell guy" image of the adolescent male and the "glamor girl" image of the adolescent female (Meredith & Meredith, 1964). It is concluded that excessive use of Pidgin English handicaps the individual socially (and possibly neurologically) from accepting the challenge for upward mobility and positions of responsibility within Japanese-American society.

STUDY 4

The differences between the two sexes is one of the important conditions upon which we have built the many varieties of human culture that give human beings dignity and stature (Mead, 1968). With the acculturation of oriental minorities in America from the status of "emerged minority" to "converted minority" orientation (Kwan, 1958), there are corresponding changes in the definition of masculinity and femininity.

In traditional Japanese culture, good behavior for the sexes was defined primarily in terms of obedient, conforming, and responsible behavior. The prolongation of customs in acculturating Japanese groups, such as Hina Matsuri (Girls' Day celebrated on March 3) and Shobu no Sekku or Tango no Sekku (Boys' Day celebrated on May 5), reinforce differential sex role behavior. For the female, particular stress has been placed on poise, grace, and control (symbolized by the peach blossom of Hina Matsuri). For the male, stress has been placed on manliness, determination, perseverance, and the will to overcome all obstacles in the path to success (symbolized by the flying carp of Boys' Day).

In the process of acculturation to American life, several areas of difference have been noted in the Japanese-American group. With respect to broad personality patterns, Meredith (1965, 1966) has found that third-generation Japanese Americans (termed "sansei") demonstrate a profile of introversion linked with heightened anxiety level. The group manifests greater deference and submissiveness (Arkoff, Meredith & Iwahara, 1962;

Fenz & Arkoff, 1962; and Hutchinson, Arkoff, & Weaver, 1966), with a tendency for the Japanese-American female to express greater body-dissatisfaction than her Caucasian counterpart (Arkoff & Weaver, 1966).

In terms of attitudes toward the marital role, the Japanese-American female has adopted an equalitarian orientation while the Japanese-American male persists in a more tradition-directed orientation (8).

The purpose of the present study was twofold: first, to compare the sex-role orientation of Japanese-American college students with the dominant group; and second, to compare the sex temperament of Japanese Americans with Chinese Americans, another oriental group that is undergoing the process of acculturation (Meredith, 1969). It was hypothesized that Japanese-American college males differ from Caucasian males with respect to masculine orientation (Hypothesis 8), and that Japanese-American college females differ from Caucasian females with respect to feminine orientation (Hypothesis 9).

Method

Subjects of the investigation consisted of 98 Japanese-American (29 male, 69 female) and 65 Caucasian-American (31 male, 34 female) undergraduate students enrolled in the introductory-psychology course at the University of Hawaii. For comparative purposes, a sample of 40 Chinese-American (20 male, 20 female) were included, since they represent an oriental minority in Hawaii (approximately 6 per cent of the population) that have shared many of the socialization experiences of the Japanese-American group. The mean age of the total group (N= 203) was 21.1 years, with slight

variation of the ethnic groups around this value.

Sex temperament was measured with the Attitude-Interest Analysis Test, Form A (Terman & Miles, 1936)--hereafter referred to simply as the M-F Test. The instrument was originally developed as a measure of "mental masculinity and femininity" and provides a quantitative estimate of the amount and direction of S's deviation from the mean of his or her sex group in interests, attitudes, and thought trends. A modified version of the test using five of the original subscale was employed: Word Association, Information, Emotional and Ethical Responses, Interests, and Personalities and Opinions. Two subtests were omitted, Ink-Blot Association and Introvertive Response, because of low scale reliability (Terman & Miles, 1936, 1938) and the accumulated evidence concerning the introvertive pattern of Island ethnic groups. Each item of the subtests was scored +1 for a "masculine" response and -1 for a "feminine" response; total sex temperament represented the algebraic sum of all positive and negative weights achieved on the 396 scored items of the M-F Test.

Results

Correlational Properties of the M-F Test. Initially it was hypothesized that if the M-F Test is measuring differential degrees of "masculinity" and "femininity," then there should be significant relationships between the subtests of the scale and Total Test performance. This should hold not only for the total sample, but also when the group is divided into male and female samples. The part-whole relationships between the five

M-F scales and Total Score, expressed as Pearson r 's, are presented in Table 8. In addition, three person variables were included: Age (in years), Sex (F=0; M=1), and Ethnicity (Oriental background = 0; Caucasian background = 1).

Inspection of Table 8 indicates that all the scales of the M-F for the entire sample correlated moderately well with Total M-F Score. The Sex variable correlated .80 which suggested a high degree of relationship between sociological group membership and sex temperament. The significant and positive relationship between Ethnicity and Total M-F performance clearly indicated that cultural background influenced test behavior, and served as a rationale for a more detailed analysis by the ethnic groups.

In addition, the intercorrelation matrix between the five scales of the M-F and the three person variables were factor analyzed and yielded a single "massive" centroid factor that accounted for most of the variance in the original R-matrix. The factor was clearly identified as a "sex orientation" component in performance on the M-F Test.

Ethnic Group Comparisons. The M-F means for each of the three ethnic groups are presented in Table 9, along with t -test comparisons for both sex differences and ethnicity differences. Inspection of the sex differences within ethnic groups on all component scores of the M-F Test demonstrates that 17 of 18 t -tests were statistically significant. Despite the age of the instrument, the M-F Test functioned well to differentiate the performance of male and female S s. Parenthetically, it should be noted that

TABLE 8
Part-Whole Properties
of the M-F Temperament Scale

Variable	r_{xy} with M-F Total Scores			Centroid factor loading ^a
	Males	Females	M+F	
M-F: Word association	.48**	.27**	.55**	.47
M-F: Information	.39**	.53**	.68**	.73
M-F: Emotional and ethical response	.67**	.79**	.81**	.65
M-F: Interests	.66**	.48**	.83**	.73
M-F: Personalities and opinions	.49**	.12	.40**	.32
Sex	N.A.	N.A.	.80**	.83
Ethnicity	.17	.37**	.26**	.32
Age	-.06	.13	.05	.08
Sample size	80	123	203	203

^aM-F Total Score omitted from factor analysis
**Significant at the .01 level.

TABLE 9

Comparison of Sex Temperament
Scores of Three Ethnic Groups

M-F Scale	Sex	Ethnic group means			<u>t</u> -test comparison between means		
		Jap-Amer	Chin-Amer	Cauc-Amer	Jap-Amer/ Cauc	Jap-Amer/ Chin/Cauc	Chin
Word association							
	Male	- 8.62	- 6.40	- 4.19	2.22*	n.s.	n.s.
	Female	- 13.72	- 12.95	- 14.41	n.s.	n.s.	n.s.
	Sex diff.	<u>t</u>	3.18**	3.42**	5.56**		
Information							
	Male	2.55	- 1.85	6.45	2.12*	3.39**	2.39*
	Female	- 10.86	- 10.65	- 4.97	3.68**	2.59*	n.s.
	Sex diff.	<u>t</u>	7.38**	3.08**	7.02**		
Emotional and ethical response							
	Male	27.69	33.25	34.29	n.s.	n.s.	n.s.
	Female	- 2.28	2.00	15.94	3.99**	2.13*	n.s.
	Sex diff.	<u>t</u>	7.55**	4.90**	3.53**		
Interests							
	Male	15.72	19.00	15.42	n.s.	n.s.	n.s.
	Female	- 19.90	- 22.70	- 17.59	n.s.	n.s.	n.s.
	Sex diff.	<u>t</u>	10.26**	9.93**	8.99**		

TABLE 9
Con't.

Comparison of Sex Temperament
Scores of Three Ethnic Groups

M-F Scale	Sex	Ethnic group means			t-test comparison between means		
		Jap-Amer	Chin-Amer	Cauc-Amer	Jap-Amer/ Cauc	Jap-Amer/ Chin/Cauc	Chin
Personalities and opinions							
	Male	- 2.69	- 1.20	- 2.77	n.s.	n.s.	n.s.
	Female	- 6.87	- 6.35	- 5.12	n.s.	n.s.	n.s.
Sex diff.	<u>t</u>	3.30**	2.65*	n.s.			
Total score							
	Male	34.66	42.80	49.19	n.s.	n.s.	n.s.
	Female	- 53.62	- 50.65	- 26.15	4.49**	3.02**	n.s.
Sex diff.	<u>t</u>	13.32**	9.66**	9.75**			
Sample size		98	40	65			

*Significant at the .05 level.

**Significant at the .01 level.

n.s. = not statistically significant.

the mean Total Score for male Ss was in the predicted positive direction, while the corresponding scores for female Ss were in the negative direction. This did not hold for each of the subtests. On the Word Association and Personalities and Opinions subtests, there was a tendency for males to be displaced in the "feminine" direction, while on the Emotional and Ethical Response section there was displacement of the females in the "masculine" direction. Possibly this was attributable to the selective nature of the sample, or to changes in the college population since the test was originally standardized.

With respect to ethnicity differences, the mean Total Score for Caucasian-American males is highest in the "masculine" direction, while the mean performance score for the Japanese-American males is lowest for "masculinity." The Chinese-American males occupy an intermediate position. However, the mean differences are not statistically significant and indicate that there is a good deal of common sharing of the masculine orientation by oriental and Caucasian males. On two of the subtests, Work Association and Information, there is evidence of greater "femininity" for Japanese-American Ss. On the latter subtest, the Chinese-American males score most "feminine" of the three male groups.

Regarding the female Ss, the Japanese-American group score highest in the "feminine" direction, followed closely by the Chinese-American group. The Caucasian females were the least "feminine" of the three groups compared. The difference between the mean score of the Caucasians and each oriental group is statistically significant. The difference between

the two oriental groups is not significant and suggests a good deal of sharing with respect to feminine orientation. The Information and Emotional and Ethical Response subtests appeared to account for the areas of difference between the oriental and Caucasian Ss.

Discussion

The results of the study support the earlier findings of Arkoff (1964) that despite undeniable pressure and social change, oriental females in Hawaii still demonstrate an essential core of qualities which appear to be classically feminine. The male Ss have adopted an "exploitative" strategy, while the female Ss--and especially the Japanese Americans--have adopted an "accommodative" strategy (Bond & Vinacke, 1961). In the case of the Japanese Americans, the influence of early socialization experiences and maternal attitudes toward differential treatment of the sexes (Kitano, 1964) play an important role in sustaining the "feminine mystique." The adolescent "youth culture" of the Islands reinforces a stereotype of a typical female (Meredith, 1965). Among Japanese-American males, for example, there is a polarity formed between "Meiji-type" and "Haole-type" females. The "Meiji-type," taking its label from the Meiji Restoration which covered the period 1868-1912 and marks the early immigration of Japanese to Hawaii, refers to the "traditional" shy, obedient, impulse-bound coquette of the Meiji Period. The "Haole-type," derived from the semiderisive Hawaiian word for foreigner or outsider, is associated with the dominant, assertive, verbal Caucasian stereotype. In the language of discourse there is recognition of changes in sex-linked behaviors within the Japanese-American group.

With respect to the Chinese American, the picture is less clear (Fong, 1965; Klineberg, 1940; and Kwan, 1958). There is some indication, however, that acculturating Chinese-American females are more dominant than their Japanese-American counterpart. Related to Japanese-American socialization procedures, Chinese Americans are taught by their parents to live up to a role of detachment and self-control; this leads to a strong control over the expression of affective impulses. Therefore it is not surprising to observe the similarity of performance by the two oriental groups. Both groups appear high on the "accommodative" strategy dimension.

It is interesting to note that oriental males have moved rapidly toward an American "masculine" orientation, despite a lag in certain traits of personality. Definitions of masculinity and responsibility are related to "acting-out" behavior. The traditional Japanese and Chinese male role has controlled the impulsive "acting-out" which has been thought of as more characteristically American male behavior. With pressure toward acculturation (i.e., movement from "emerged minority" to "converted minority" status), both Japanese-American and Chinese-American males have adopted the "exploitative" strategy of American society.

CHAPTER IV

DISCUSSION AND CONCLUSIONS

To recapitulate the principal findings: (a) Sansei Japanese-American college students appeared to differ on a number of Cattell's first-order personality dimensions; (b) At a second-order level of personality description, both Japanese-American males and females are more introverted and higher in anxiety than their Caucasian counterparts; (c) Those Japanese-American students referred to remedial speech classes for treatment of "pidgin English" usage appeared to accentuate those traits of personality that differentiate the Japanese group from the Caucasian--possibly indicating greater psychological "distance" from the Caucasian group; (d) While there was no significant difference between Japanese and Caucasian males with respect to overall "masculinity," the Japanese-American females performed more in a more "feminine" direction than their Caucasian counterparts; and (e) Overall, the similarity in performance across the four studies outweighed the differences between the two major ethnic groups.

Critique of Amae and National Character

The concept of amae introduced as an explanatory concept for the finding of personality trait differences between the two ethnic groups is probably an oversimplification. The original notion was introduced in Western Psychology by the Japanese psychiatrist L. Takeo Doi (1962, 1963). The concept was derived from the Japanese verb amaeru meaning

"to depend and presume upon another's love," or "to indulge in another's kindness." The derived concept of amae can be thought of in Western terms, if there is an accurate and acceptable transcultural equivalency, as a basic need to be cherished and love. Doi has expounded the thesis that an understanding of amae furnishes a key to comprehending Japanese personality structure, as well as an understanding of the psychodynamics of neurotic patients. The thesis is basically that warped desire to be loved and cared for plays a central role in many areas of psychology (Caudill & Doi, 1963).

The thwarting of this core dependency need, according to Doi, leads to serious behavioral consequences, such as kodawaru ("to be inwardly disturbed over one's personal relationships") and sumanai ("to feel guilty or obligated"). In discussion of the personality differences between acculturating Japanese Americans and Caucasians, a conceptual parallel was drawn between the Cattell's introversion-extraversion and anxiety dimensions and Doi's writings. However, it must be emphasized that it is premature to suggest that there is empirical support for anything more than a loose conceptual linkage.

The penchant for simple and sovereign theories in cross-cultural ethnic studies is appealing, but has questionable value for the business social science research, namely the generating of testable hypotheses. Amae, as one of a number of attempts to understand the Japanese core or national character (Moloney, 1954), offers one avenue for further attempts to build a bridge between the psychology of East and West.

Eth-gen-class Concept

In an attempt to provide some order to questions of acculturation and assimilation, Gordon (1964) provided a general model that analyzes some of the factors that influence this process. The four principal variables are: ethnic group, social class, rural or urban residence, and geographical location. There are, in addition, two sets of stratification structures-- social status gained largely through economic and/or political power, and race-nationality-religion structures. From the interaction of these variables, one can attempt to predict such behavior as social participation, cultural behavior, and group solidarity.

For example, the subsociety developed from the interaction between ethnicity and social class (Gordon's term ethclass), is illustrated by the upper-class white Anglo-Saxon (WASP), or the lower-class white Irish Catholic, or the middle-class Negro Protestant, and so on. One can further analyze these groups in terms of geographical location--the New York City WASP as contrasted to the Des Moines, Iowa WASP, and from such analysis one can often predict friendship, dating and marital patterns, and even broad styles of life.

Gordon's model has relevance for the Japanese group in America. Kitano (1969) has proposed to add a third variable, generation, to the ethclass concept. Thus the idea of an eth-gen-class becomes the basic framework for analyzing the Japanese group.

Eth-gen-class and Acculturation

Eth-gen class terms have overlapping functions. Each refers to an identity: an ethnic identity--"I am Japanese"; a generational identity--"I am a Sansei"; and a social class identity--"I am middle-class." And each refers to a particular social structure or network of social institutions: an ethnic structure--the Japanese community; a generational structure--the sansei "youth culture"; and a social class structure--the country club set. Finally, each term relates to a "culture" or set of values and preferred behaviors: the ethnic or Japanese culture; the generational or age-related culture; and the social class culture. Thus the variables of identity, social structure, and culture interact with those of the eth-gen-class.

Ethnicity, the most clearly defined variable, is a vertical structure in that it is generally restricted to its own members of whatever class. The generation and social class variables are horizontal in that they cut across ethnic lines and provide a theoretical link with similar segments in the larger American society. Therefore, according to Kitano, it may not be unreasonable that a sansei college student may have more values and feeling in common with WASP college students than with older Japanese. Likewise a nisei professional man may identify more closely with others in his professional group than with the Japanese gardener.

In the Gordon model, the critical variable for full-scale assimilation is structural assimilation, which means entrance into the clubs, cliques, and institutions of the host society. The almost inevitable by-

product of structural assimilation is marital assimilation, which, if complete, means that the minority group begins to lose its ethnic identity. We then have identificational assimilation. Prejudice (as cognitive structure) and discrimination (as behavioral structure) are no longer problems since all become members of the "in group."

Observations on Mainland Japanese

Kitano (1969, p. 6) contends that Japanese assimilation is closest to that of the middle-class Negro and Jew. Structural separation has meant that structural assimilation has been minimal. However, within the structure of his own ethnic group, the Japanese is highly acculturated to American models, especially the newer generations. Referring back to the Gordon model, if we divide Japanese Americans along cultural, structural, marital, and identificational lines, the following pattern emerges.

None of the identified Japanese groups has achieved widespread structural assimilation (primary friendship, dating, and marital patterns outside the ethnic community and in the larger "American community"). Finally, identificational assimilation, which refers to the hyphenated American has also been limited. Identificational assimilation in Gordon's model refers to primary identification as an "American," without regard to nationality, race, or religion. For some groups such as the Japanese, it is a long-term process--starting off as Japanese; then to a Japanese-American, and possibly ending up in the future with the American label.

Kitano (1969, p. 136) contends that neither the Issei nor the Nisei have fully achieved an American identification. Only the Sansei have

moved significantly in this direction. The Sansei as a group have few ties with Japan, nor do they retain a broader ethnic identification of being oriental, nor do they identify with skin color.

But there are built-in structural factors that will literally force a change in Japanese-American society. The increased differentiation and stratification among the Japanese will inevitably lead to increased interaction with non-Japanese groups at all levels. If we fall back on the eth-gen-class model, it might easily be understood why the bright up and coming Ph.D sansei might balk at the parental dictum to marry anyone "just so long as she is Japanese. Geographically, the change with the Japanese society will be slower in the West, where Japanese-American institutions are strongest and where resistance to structural crossing is probably the highest.

Observations on Japanese in Hawaii

Although there appears to be a good deal of communality between the acculturation patterns of West Coast and Hawaii Japanese, generalizations about Hawaii present certain problems. Several factors distinguish the Hawaiian group: (a) one of the most obvious differences between the areas relates to majority-minority proportions, in Hawaii the Japanese are the largest group (29.8% according to State Statisticians) in a diverse population that has no clear cut majority; (b) there has been greater cultural continuity in Hawaii, not having gone through the "relocation" process and the hostile alienation of the larger society; (c) greater attention devoted to retaining "Japanese ways," probably attributable to the large

numbers of elderly Issei in the community as well as to the continuous influx of immigrants (obviously both of these aforesaid groups have different definitions of what are "Japanese ways"); and (d) political interest and activism in local as well as national politics (the State of Hawaii is represented in the U. S. Senate and the House of Representatives by Japanese Americans), that contrast sharply with the passivity toward political activity among Mainland Japanese Americans.

Over the years there has been a gradual shift in value orientation toward collectivism and individualism (Iga, 1966). Self needs for the Japanese have traditionally been deemed to have a lesser priority than group needs, beginning within the family and extending outward into the sphere of friendship relations. Not too many years ago subgrouping were open virtually to everyone, no matter what his degree of talent, success, rank, or personality. If he was Japanese, he belonged. This was best seen in amateur athletics where teams included excellent, good, mediocre, and poor players who "belonged" and felt the same degree of club loyalty and acceptance. However, the inroads of individualism have even influenced some of these smaller social groupings. Emphasis on winning brings with it selective criteria--high athletic ability, selectivity, and small squads. Thus in a number of areas the American goal-orientation that values efficiency, success, winning, is taking over from a system more oriented toward ethnic interaction.

The question was posed earlier in this dissertation concerning the Japanese in Hawaii as a "third culture." If one thinks of a "third culture,"

or any "culture", as coherent and uniform, then obviously the answer is negative. Application of Gordon's eth-gen-class model would suggest numerous groupings within the Japanese-American community. With increasing professional aspirations of younger Japanese Americans, it is not unreasonable that more values and feeling might be shared with Chinese, Caucasian and other businessmen than with Japanese parents and grandparents. Structural assimilation through inter-ethnic marriage has probably been one of the most significant factors in eroding an extended sense of "Japanese community" in Hawaii.

A social division that is horizontal and cuts across ethnic, generation, and class lines concerns the distinction between "local" and "non-local." Being a "local boy" may have greater social consequence within the peer "youth culture" or within the business community than one's ethnic background.

Areas of Future Social-Psychological Research

The finds of the four studies indicate significant areas of difference in personality traits and attitudes of Japanese American college students when compared with Caucasians. While the sansei are highly acculturated in Hawaii, the evidence indicates that they are still a transitional group. The personality findings indicates several areas of immediate investigation and these will be sketched briefly.

Early socialization practices and parental attitudes. A paucity of information is presently available dealing with early child rearing practices,

particularly mother-child relationships. Obviously the "mechanics" of child maintenance--feeding and toilet training--may not differ considerably from the American pattern, but what is the nature of the affectional relationship between mother and child? Several years ago, Kitano (1964) found differences in maternal attitudes as measured by Parental Research Attitude Inventory (PARI). This area is relatively uncharted in Hawaii. Recently, Caudill and Weinstein (1969) found significant differences in patterns of maternal care and infant behavior in Japan and America. Scant evidence exists concerning differences between sansei and Caucasians regarding attitudes toward socialization practices.

Social control within the family. The nature of control within the family system deserves consideration. Arkoff et al (1964) found evidence that sansei males and females had rather diverse attitudes toward the marriage role, with Japanese males exhibiting a "male-dominant" position. Gallimore (personal communication) has proposed that the way parental concern and physical rewards are handled may differ in the Japanese family from the American pattern. Possibly the "male-dominant" stance of Japanese American families contributes to the relatively low incidence of delinquency within this ethnic group.

Peer influences. Previously, considerable attention was devoted to the role of the peer groups as a source of social control in the maturing Japanese American in Hawaii. Recently a small number of "activists" have emerged from the sansei group and these students seem from all overt appearances to be quite congruent with the Mainland representatives

of the "New Left Movement." The issue of how activists and alienated youth emerge from the Japanese-American community deserves further inquiry.

Manpower utilization and vocational aspiration. Kitano (1969) has proposed that the Japanese have been a "success" because (a) they've had high achievement motivation, (b) they've selected "safe and secure" professions (this writer is reminded of a bright Japanese student who selected a graduate program in Social Work since it would lead to a degree in two year, rather than an unsure fate in Psychology!) and (c) they've been "good" because they conform and don't "make waves." As Hawaii increases in modernization, new demands are being made of the college student, and an increasing number of academic choices and vocational options are available. Study is needed in the area of attracting students both into new fields of endeavor, as well as dissuading students from "safe" curricula (e.g., the preoccupation of sansei females with entering the teaching field), particularly where parental pressures buttress the vocational choice.

Future of Ethnic Study at the University

There is cause for optimism concerning the future of ethnic study and research at the University of Hawaii, not only for the Japanese but also for the numerous other cultural groups that contribute to the cultural pluralism of Hawaii. In the Academic Development Plan II (Kamins, et al, 1969), a document that attempts to chart the course of institutional plan-

ning and development to the academic and fiscal year 1975-76, a baccalaureate program in ethnic studies has been proposed in the College of Arts and Sciences. This will be an interdisciplinary approach to the study of ethnic groups designed to stimulate interest in the undergraduate student in the social world of Hawaii. In the naturalist tradition of Darwin, there is sheer pleasure in observation and recording of observation. It is hoped that a repository will be established in conjunction with the ethnic studies program to preserve the transient ethnic phenomena that has contributed to the richness of Hawaiian life.

Possibly this paper should end where Kitano (1969) begins by noting that America likes success stories--the bigger, the better. Therefore, America should enjoy the story of the Japanese in the United States, unfinished as it is, for it is a story of success Japanese-American style. In Hawaii, the ability to look beyond self and to act in relation to others is an admirable quality, and the sense of ethnic identity has helped the Japanese achieve a degree of cohesion and group loyalty that appears important for a meaningful life. Hopefully the fourth-generation yonsei will continue to integrate the best of the Japanese and the American cultures.

CHAPTER V

SUMMARY

During the period 1963-68, a series of four studies was initiated to explore personality and attitudinal differences between sansei Japanese-American and Caucasian-American college students on the Manoa Campus of the University of Hawaii.

The concept of enryo (modesty in the presence of one's superior) served as a point of departure for Study 1. It was hypothesized that despite the inroads of acculturation, sansei Japanese Americans exhibit differences in personality traits when compared with Caucasian-American counterparts (Hypothesis 1). Further, it was hypothesized that these differences hold both for males (Hypothesis 2), as well as for females (Hypothesis 3). The 16 Personality Factor Questionnaire (16 PF) was administered to 60 Caucasian-American and 75 sansei Ss. Within the male comparisons, five of the first-order personality differences exceeded the .05 level of significance. Within the female comparisons, four of the personality differences exceeded the .05 level. At the second-order level, the sansei males appeared more introverted than Caucasian-American males. With respect to the female comparisons, sansei females exhibited significantly higher anxiety level than their Caucasian counterparts. These findings were discussed in light of peer group expectations and support for the stereotype of a "local" within the youth culture.

Although such terms as issei, nisei and sansei are used in the

language of discourse in a discrete manner by Japanese Americans to specify generation level, it was recognized that there is a considerable overlap between the groups in their degree of commitment to shared patterns and values. Study 2 attempted to replicate the findings of Study 1, as well as extend the analysis to the broad second-order factors of the personality instrument. It was hypothesized that sansei college students differ from Caucasian-American students along the personality dimensions of introversion-vs-extraversion (Hypothesis 4) and anxiety level (Hypothesis 5). A sample of 154 sansei and 140 Caucasian Ss were compared on the second-order and derived factors of the 16 PF. Sansei males and females were found to be more introverted and higher in anxiety level than Caucasian Ss. The sansei males stressed the introverted style of adjustment, while the sansei females exhibited a heightened anxiety or tension pattern. A parallel was drawn between these findings and Doi's theory of amae. The behavior of the sansei male was conceptually linked to the concept of kodawaru, while that of the sansei female was associated with the concept of sumanai. Several factors, such as early socialization and peer group expectations, were discussed as possible variables that condition and maintain the observed patterns.

As a result of various language influences on the speech of the islanders and the remoteness of the islands from the mainland, Hawaii developed its own characteristics speech, Island Dialect (Pidgin English, or simply "pidgin"). While many sansei are bilingual, speaking standard

English in the classroom or to haoles and reverting to "pidgin" usage with family and peers, a small number lack flexibility in language usage.

Study 3 focused on language and its relationship to personality traits. The study attempted to confirm the previous series of findings regarding ethnic differences in personality (Hypothesis 6), as well as to test the hypothesis that sansei referred to remedial speech classes differ in personality from sansei exempted from remediation (Hypothesis 7). A sample of 79 sansei Ss referred to remedial speech courses for severe Pidgin English usage was compared with 60 Caucasian-American and 75 sansei "controls" exempted from these remediation courses. On the 16 PF, the remediation Ss appeared more psychologically distant from Caucasian, as well as from sansei "control" Ss. Sansei Ss referred to remedial speech classes were more introverted than sansei Ss exempted from these courses. These findings were interpreted in light of youth culture expectations.

In traditional Japanese culture, good behavior for the sexes was defined primarily in terms of obedient, conforming, and responsible behavior. The prolongation of customs in acculturating Japanese groups, such as Girls' Day and Boys' Day, reinforce differential sex role behavior. For the female, stress has been placed on poise, grace and control. For the male, stress has been placed on manliness, determination, perseverance, and the will to overcome all obstacles in the path to success. Study 4 compared the sex-role orientation of sansei and Caucasian-American Ss, along with another oriental group undergoing the process of acculturation.

It was hypothesized that sansei males differ from Caucasian-American males with respect to masculine orientation (Hypothesis 8), and that sansei females differ from Caucasian-American females with respect to feminine orientation (Hypothesis 9). Sex temperament of 98 sansei, 65 Caucasian-American, and 40 Chinese-American Ss was measured with the Attitude-Interest Analysis Test (M-F Test). Regarding total M-F scores on the instrument, there were no significant differences between the three male groups with respect to measure "masculine" orientation. Both sansei and Chinese-American female Ss appeared more "feminine" than Caucasian-American female Ss. There was scant difference between the sansei and Chinese-American total M-F scores, both for males and females, that suggests a "local" pattern of sex-role orientation than may cut across ethnicity boundaries. The findings were related to the acquisition of exploitative and accommodative sex-role strategies.

The findings of the four studies were interpreted in light of Kitano's (1969) modification of Gordon's (1964) eth-class model. It has been proposed that a third variable, generation, be added to the eth-class concept, thus producing an eth-gen-class paradigm for analyzing the acculturation of the Japanese group. Kitano (1969) has observed that the sansei have moved substantially toward an American identification, both in terms of structural and identificational assimilation. Two factors, according to Kitano, appear to limit or inhibit full assimilation by the sansei group: (a) visibility of the Japanese Americans, and (b) attitudes and cognitive

stereotypes found in the larger society. The present series of studies would indicate another set of factors, notably those pertaining to personality traits and attitudes toward self, function to set the sansei apart from Caucasian Americans. As indicated previously, however, the similarity in performance across the four studies outweighed the differences between the two ethnic groups. A good deal of behavioral research is needed to understand the interpersonal and family structures that initiate and sustain these personality differences.

APPENDIX

ABOUT THE 16 PF

INTRODUCTION

The Sixteen Personality Factor Test (16PF) is a factor analytically developed personality questionnaire, designed to measure the major dimensions of human personality comprehensively, in young adults and adults from sixteen or seventeen years to late maturity. Parallel younger-age versions of the test take systematic personality evaluation down through adolescence to six or seven years of age (the HSPQ, CPQ, and ESPQ tests). The 16PF is virtually self-administering to groups as well as individuals, designed to be intelligible to a wide range of educational levels, and available in some fifteen languages. Forms A and B of the test (187 items long, requiring about 50–60 minutes each) assume a high school reading level, Forms C and D (105 items) are suitable for substantially lower levels and even briefer administration times, and the "Low Literate" Form E, for culturally-disadvantaged and intellectually limited persons is available for experimental use. Test authors are Drs. Raymond B. Cattell and Herbert W. Eber.

WHAT THE TEST MEASURES

The sixteen primary dimensions of the 16 PF are briefly indicated below.

A person with a low score on is described as: ↓ Factor	A person with a high score is described as:
A RESERVED , detached, critical, cool	OUTGOING , warmhearted, easy-going, participating
B LESS INTELLIGENT , concrete-thinking	MORE INTELLIGENT , abstract-thinking, bright
C AFFECTED BY FEELINGS , emotionally less stable, easily upset	EMOTIONALLY STABLE , faces reality, calm
E HUMBLE , mild, obedient, conforming	ASSERTIVE , independent, aggressive, stubborn
F SOBER , prudent, serious, taciturn	HAPPY-GO-LUCKY , heedless, gay, enthusiastic
G EXPEDIENT , a law to himself, by-passes obligations	CONSCIENTIOUS , persevering, staid, rule-bound
H SHY , restrained, diffident, timid	VENTURESOME , socially bold, uninhibited, spontaneous
I TOUGH-MINDED , self-reliant, realistic, no-nonsense	TENDER-MINDED , dependent, over-protected, sensitive
L TRUSTING , adaptable, free of jealousy, easy to get on with	SUSPICIOUS , self-opinionated, hard to fool
M PRACTICAL , careful, conventional, regulated by external realities, proper	IMAGINATIVE , wrapped up in inner urgencies, careless of practical matters, bohemian
N FORTHRIGHT , natural, artless, sentimental	SHREWD , calculating, worldly, penetrating
O PLACID , self-assured, confident, serene	APPREHENSIVE , worrying, depressive, troubled
Q₁ CONSERVATIVE , respecting established ideas, tolerant of traditional difficulties	EXPERIMENTING , critical, liberal, analytical, free-thinking
Q₂ GROUP-DEPENDENT , a "joiner" and good follower	SELF-SUFFICIENT , prefers own decisions, resourceful
Q₃ CASUAL , careless of protocol, untidy, follows own urges	CONTROLLED , socially-precise, self-disciplined, compulsive
Q₄ RELAXED , tranquil, torpid, unfrustrated	TENSE , driven, overwrought, fretful

Four composite "second-order" scores, from combination of the primary factors (above) are also routinely available. While they are rougher, and lose some information, they nevertheless provide an even more convenient capsule-description of personality, frequently in meaningful categories closer to everyday parlance. The four principal second-order 16 PF composites are:

ANXIETY:	The score shows the level of anxiety in the commonly accepted sense, which may be either manifested for normal situational reasons or may be neurotic in origin, correlated with psychiatric evaluations of anxiety level.
EXTRAVERSION-VS.- INTROVERSION:	A high score indicates a socially out-going, uninhibited person, good at making contacts, while the low score indicates an introvert, both shy and self-sufficient.
TOUGH POISE-VS.- RESPONSIVE EMOTIONALITY:	High "tough poise" scores indicate an enterprising, decisive, imperturbable personality. The low score points to a person more deeply emotionally sensitive, guided by emotions, and liable to more frustration and depression.
INDEPENDENCE-VS.- DEPENDENCE	High scores betoken an aggressive, independent, self-directing person; low scores, a group-dependent, agreeable, passive personality.

DEVELOPMENT OF THE 16 PF

The background of the 16 PF is documented in some four or five books and over one hundred journal articles, the essential information being drawn together in the *Technical Handbook* for the test, and a less technical *Manual* for test administrators. Only the highlights are touched upon here.

The test is based on some twenty-five years of published research in which every item has been subjected to factor analytic investigation, thus providing an unusually sound foundation of proof that the sixteen personality scales are stable and independent. The 16 PF is thus sixteen tests in one. It has been revised, modernized in scoring, and intensified in validity several times since its initial publication in 1950, the latest revision having been completed in the past eighteen months.

ADMINISTRATION, SCORING, NORMS

The test is easily administered in anywhere between thirty or forty minutes to two hours, depending on the number of forms used. It is objectively scored by stencil key in a few minutes, or very rapidly in quantity by machine (National Computer Systems). The "telescopic principle" of test construction, in four separate but comparable test forms (A, B, C, D) provides a number of important administrative options, e.g., shorter testing times at some sacrifice of reliability (one form), or longer testing time with increased reliability (two, three, or four forms at once). The existence of four comparable forms also makes possible repeated testing of personality, no matter how short the interval, without contamination by repetition of the same items.

Norms for the test are separately published and regularly updated in a "16 PF Supplement of Norms." Constantly being expanded, they are presently based on a total of between six and seven thousand representative cases, with separate tables depending on the sex of the examinees and the Form of the test being scored. Separate norms exist for such distinct social groups as college students and the general adult population. There are also separate norms for high school seniors on Forms A and B. Each table is tailored to accuracy in particular needs and situations.

RELIABILITY AND VALIDITY

Split-half reliabilities for each of the sixteen factor scales range from +.71 to +.93, averaging about +.83 or +.84. Internal construct validities range from +.73 to +.96, averaging approximately +.88. (See Handbook for details.) Numerous "external" concrete validities are known, as indicated below. Generally, the test has proven itself unusually flexible and powerful in the prediction of various life criteria. For example, multiple correlations of the test scores run typically 0.75 with school achievement, 0.50 with clinically-judged neurotic trend, 0.70 with earnings in salesmanship, and so on. *The possibility of weighting for multiple correlations with a variety of criteria influenced by the total personality means that a single full-length administration of the test, once recorded, can be used thereafter to predict any number of different educational, occupational, or clinical criteria.* That is, one simply re-weights the person's (or group's) scores on the sixteen personality factors for each situation and selection need. The same set of scores serves for all selection and evaluation purposes.

USES OF THE 16 PF: INTERPRETATION AND PREDICTION

Each of the sixteen dimensions on which the full profile is based has its own lore and intrinsic meaning from extensive research and practice, plus a known set of predictive relations made all the more powerful when combined in multiple correlation with other 16 PF factors. In vocational guidance and industrial selection, 16 PF optimum job profiles exist to guide the psychologist, and such precise statistics as pattern similarity coefficients or "specification equations" can be applied objectively to index a candidate's fitness (see Handbook). The 16 PF profile is already known for some fifty vocations, including those of salesmen, electricians, ministers, airplane pilots, nurses, clinical workers, the staffs of hospitals, teachers, aircraft workers, firemen, and others listed later. There are also weights established by research to give the best prediction of practically important criteria, e.g., school achievement, leadership, creativity, etc.

The 16 PF is used clinically for initial screening and diagnosis, as an independent check for projective, misperception tests, and in the etiological investigation of clinical disorders. The 16 PF's wide range of use stems from its comprehensive coverage of personality at various ages and various educational levels, plus the fact that research has related it clearly to fundamental personality structures. Since it is designed to measure the total personality, normal and abnormal, its predictions have the widest possible applicability in school, vocation, clinic, etc., without needing separate tests for each area of life prediction.

Any given individual or group 16 PF profile is interpretable in terms of known standard social profiles in a large number of different occupational and clinical groups in the test publisher's files. Statistically or visually, the examiner can determine how close the individual's measured 16 PF profile is to that of, say, a neurotic, a top executive, a policeman, a successful athlete, etc.

All in all, standard 16 PF profiles are now on record and available, for such comparative-interpretive purposes, for some eighty occupational and clinical criterion groups, a total of approximately ten thousand cases.

The clinical criterion groups include:

Alcoholics	Exhibitionists	Parents of Diabetic Children
Anxiety Reaction Neurosis	Homosexuals	Physical Disability Interfering with Locomotion
Blind, or Seriously Disabled Visually	Inadequate or Immature Personality	Psychopaths
Conversion Reaction Neurosis	Marital Problems, Unsuccessful Marriages	Psychosomatic Disorders, Somatization Symptoms
Convicted Criminals, in Prison	Narcotics Addicts	Psychotics
Deaf, or Seriously Hard of Hearing	Neurotics (General)	Schizophrenics
Delinquents	Obsessive-Compulsive Neurotics	Sex Crime Convicts
Depressive Reaction Neurosis	Parents of Children Attending a Child Guidance Clinic	Speech Problems
Disabled Male Veterans in VA Home	a) Fathers	Sociopaths
Epileptics	b) Mothers	

The occupational criterion groups include:

Accountants	Electricians	Painters
Administrators	Engineers	Personnel Department Workers
Advertising Personnel	Farmers	Policemen
Aircraft Engineering Apprentices	Firemen	Priests (Catholic)
Air Force Enlisted Men	Hairdressers	Prison Officers
Air Force Pilot Cadets in Training	Housewives	Psychiatric Technicians
Anti-Union Labor Union Members	Industrial Supervisors and Foremen	Purchasing Agents
Athletes	Janitors	Researchers
Business Executives	Leaders (Effective)	Retail Salesmen
Chemists	Leaders (Elected)	Salesmen (All types together)
Clerks (Female)	Leaders (Problem Solvers)	Salesmen (On the road)
Clerks (Male)	Mechanics	Salesmen (Wholesale)
College Students	Medical Assistants	Sales Manager or Sales Supervisor
Cooks and Kitchen Help	Navy Midshipmen (U.S.)	Secretaries and Stenographers
Counselors	Navy Underwater Demolition Men (U.S.)	Store Managers (Supermarket)
Editorial Workers	Nurses	Teachers
Efficiency Experts	Office Managers or Supervisors	Waitresses

16 P.F. TEST PROFILE

FACTOR	Standard Score	LOW SCORE DESCRIPTION	STANDARD TEN SCORE (STEN)										HIGH SCORE DESCRIPTION		
			1	2	3	4	→ Average ←		7	8	9	10			
A		RESERVED, DETACHED, CRITICAL, COOL (Sizothymia)													OUTGOING, WARMHEARTED, EASY-GOING, PARTICIPATING (Cyclothymia)
B		LESS INTELLIGENT, CONCRETE-THINKING (Lower scholastic mental capacity)													MORE INTELLIGENT, ABSTRACT-THINKING, BRIGHT (Higher scholastic mental capacity)
C		AFFECTED BY FEELINGS, EMOTIONALLY LESS STABLE, EASILY UPSET (Lower ego strength)													EMOTIONALLY STABLE, FACES REALITY, CALM (Higher ego strength)
E		HUMBLE, MILD, OBEYDIENT, CONFORMING (Submissiveness)													ASSERTIVE, INDEPENDENT, AGGRESSIVE, STUBBORN (Dominance)
F		SOBER, PRUDENT, SERIOUS, TACITURN (Desurgency)													HAPPY-GO-LUCKY, HEEDLESS, GAY, ENTHUSIASTIC (Surgency)
G		EXPEDIENT, A LAW TO HIMSELF, BY-PASSES OBLIGATIONS (Weaker superego strength)													CONSCIENTIOUS, PERSEVERING, STAID, RULE-BOUND (Stronger superego strength)
H		SHY, RESTRAINED, DIFFIDENT, TIMID (Threctia)													VENTURESOME, SOCIALLY BOLD, UNINHIBITED, SPONTANEOUS (Parmia)
I		TOUGH-MINDED, SELF-RELIANT, REALISTIC, NO-NONSENSE (Harria)													TENDER-MINDED, DEPENDENT, OVER-PROTECTED, SENSITIVE (Premia)
L		TRUSTING, ADAPTABLE, FREE OF JEALOUSY, EASY TO GET ON WITH (Alaxia)													SUSPICIOUS, SELF-OPINIONATED, HARD TO FOOL (Protension)
M		PRACTICAL, CAREFUL, CONVENTIONAL, REGULATED BY EXTERNAL REALITIES, PROPER (Praxernia)													IMAGINATIVE, WRAPPED UP IN INNER URGENCIES, CARELESS OF PRACTICAL MATTERS, BOHEMIAN (Autia)
N		FORTHRIGHT, NATURAL, ARTLESS, SENTIMENTAL (Artlessness)													SHREWD, CALCULATING, WORLDLY, PENETRATING (Shrewdness)
O		PLACID, SELF-ASSURED, CONFIDENT, SERENE (Untroubled adequacy)													APPREHENSIVE, WORRYING, DEPRESSIVE, TROUBLED (Guilt proneness)
Q ₁		CONSERVATIVE, RESPECTING ESTABLISHED IDEAS, TOLERANT OF TRADITIONAL DIFFICULTIES (Conservatism)													EXPERIMENTING, CRITICAL, LIBERAL, ANALYTICAL, FREE-THINKING (Radicalism)
Q ₂		GROUP-DEPENDENT, A "JOINER" AND SOUND FOLLOWER (Group adherence)													SELF-SUFFICIENT, PREFERS OWN DECISIONS, RESOURCEFUL (Self-sufficiency)
Q ₃		CASUAL, CARELESS OF PROTOCOL, UNTIDY, FOLLOWS OWN URGES (Low integration)													CONTROLLED, SOCIALLY-PRECISE, SELF-DISCIPLINED, COMPULSIVE (High self-concept control)
Q ₄		RELAXED, TRANQUIL, TORPID, UNFRUSTRATED (Low ergic tension)													TENSE, DRIVEN, OVERWROUGHT, FRETFUL (High ergic tension)

A sten of 1 2 3 4 5 6 7 8 9 10 is obtained
by about 2.3% 4.4% 9.2% 15.0% 19.1% 19.1% 15.0% 9.2% 4.4% 2.3% of adults

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