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An investigation of the interaction patterns of Polynesian and Pakeha (New Zealanders of European extraction) children and teachers in school and play areas of Auckland, New Zealand was undertaken to discover possible ethnic differences in modes of social interaction relevant to learning. Observations of children (ages 2 to 11) and their supervisors at 26 preschools and primary schools were recorded. Analysis of the observational data revealed marked Polynesian - Pakeha differences in modal patterns of interaction. Two contrasting principles for the formation of social units with implications for cognitive functioning were observed; (1) the Polynesian "inclusive" style promoting the formation of integrated groups, feelings of social solidarity and cooperation, and (2) the European "exclusive" style resulting in parallel activities by individual units or intensely associated pairs. Variations by setting and ethnic mix were also reported. The relation of this study to recent research on group problem-solving was discussed, and the possible value for all children of introducing more group problem-solving techniques in the classroom was raised.

(Author)
INCLUSIVE VERSUS EXCLUSIVE INTERACTION STYLES IN POLYNESIAN AND EUROPEAN CLASSROOMS:

In Search of an Alternative to the Cultural Deficit Model of Learning

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ABSTRACT

Systematic observations of behavior in various school settings revealed marked Polynesian–Pakeha differences in modal patterns of interaction. These illustrate two contrasting principles for the formation of social units with implications for cognitive functioning. The Polynesian "inclusive" style promotes the formation of integrated groups, feelings of social solidarity and cooperation. The European "exclusive" style results in parallel activities by individual units or intensely associated pairs. Variations by setting and ethnic mix are also reported: in settings where they are a distinct minority, Polynesians less frequently display an inclusive style. The relation of this work to recent research on group problem-solving is discussed, and the possible value for all children of introducing more group problem-solving techniques in the classroom is raised.
Introduction

Study of the adaptation of non-Western, traditional peoples to the spread of modern, and especially industrial and urban, systems of economic and social life is a major problem-area in social science today (Graves and Graves, 1974a). Most commonly, the focus of the investigation is on the adaptive abilities of the traditional peoples in adjusting to modern society, and little interest is paid to the adaptations which are necessarily being made by the "host" or "majority" culture as well. This follows from the "assimilation" ethic which typically characterizes these contact situations: rarely are they seen as providing an opportunity for the dominant group to learn from the minority groups as well.

Nowhere is this assimilative policy more strongly espoused than in the educational institutions of modern society. If there are major differences in the values, socialization practices, or interaction styles between the various culture groups in an area, the schools are an arena where these contrasts are vividly revealed. The adaptive strategy generally taken by modern Western educators toward the problem of culture contrasts has been to consider "How can we best teach them to become more like us so that they can share the advantages we enjoy?"

In the 1960s such concerns with the "cultural deprivation" of migrant or minority groups led to compensatory education experiments. These were based on a "deficit model" which postulated a host of disadvantages in the traditional culture: lack of achievement motivation, lack of ability to delay gratification, lack of independent initiative, lack of an elaborated verbal code (Ausubel 1967; Bernstein, 1964; Chilman, 1966; Hunt, 1969; Irelan, 1966; Lewis, 1966 a and b; Miller, 1958; Moles, 1965; Moynihan, 1966; Pavenstedt, 1965; Rainwater, 1968; also see the review of deprivation studies by Jessor and Richardson, 1968). In the 1970s some of the maladaptive consequences of assimilist educational policies have been
recognised. Among social scientists dissatisfied with the cultural deficit model there has recently arisen a series of new strategies for investigating the learning of non-Western peoples (Boggs, 1973; Cole, 1973; Cole, et al., 1971; Gallimore and Howard, 1969; Howard, 1970, 1973; Leacock, 1971). These approaches involve understanding learning and performance of mental tasks in naturally occurring circumstances --- in their "cultural context", to adopt the phrase used by Cole. In the present climate of professional introspection, criticism and experimentation within education, this strategy of searching for what is there in a system of traditional learning, rather than for what is absent, would seem appropriate.

We have begun an investigation along these lines by observing the interaction patterns of Polynesian and Pakeha (New Zealanders of European extraction) children and adults in schools and play areas of a modern city: Auckland, New Zealand. Our aim was to discover possible ethnic differences in modes of social interaction relevant to learning, how these differences are acquired, and what implications these might have for educational programs in a multi-ethnic society.

Methodology

In the initial, exploratory stages of social research, naturalistic observation is one of the most productive methods for generating theory. We chose therefore, to begin our investigations with open-ended, sequential narratives of on-going behavior in classrooms, playgrounds, or play centres: among children, between teachers and children, teachers and teachers, teachers and parents, and mothers and children. This method did not force us to assume that we knew beforehand which categories of behavior were appropriate to the situation. It also allowed categories which were frequent across settings or observers, or which varied in certain
systematic ways, to come to our attention inductively and thus to stimulate efforts toward theory construction (Glaser and Strauss, 1967). To maximize the possibility of discovering such systematic variation, we endeavoured to choose settings with different ratios of European and Polynesian children, teachers and mothers, as well as selecting from differing types of activities: indoor and outdoor situations, structured and unstructured tasks. From this material it is possible to conduct "controlled comparisons", where some factors are matched between schools while others are left to vary. To date we have purposively (rather than randomly) sampled 26 schools or play centres, in many of which we have observed in a number of different classrooms or play areas. Twenty-two observers have recorded narrative and/or systematic observations on 66 different occasions.

Initially, observers were instructed to choose settings where inter-ethnic contact was possible, and to describe, fully, in narrative sequence, all actions observed within a certain time span. (This varied from ten minutes to one hour with different observers, with the emphasis on naturally occurring incidents rather than strict time-sampling). Besides the usual concern with verbal and behavioral content, particular attention was also paid to non-verbal behaviors such as eye-contact, body orientation, distance from other people, touching, and facial expressions. After the initial set of observations, observers attempted, whenever possible, to observe three combinations of interacting dyads in the same setting: European-European, European-Polynesian, and Polynesian-Polynesian. Finally, with the emergence of major categories such as reported here, systematic observations were undertaken to establish their relative frequency in different settings.

The majority of these observations are of children (ages 2 to 11)
and their supervisors at preschools and primary schools in the Auckland metropolitan area. The narrative reports were content-analyzed for both qualitative and quantitative descriptions of frequently occurring behaviors. One contrasting set, which we call "inclusive versus exclusive" behavior, was observed in many different contexts, and seems to have wide-spread implications for normative patterns of problem-solving and work in Polynesian and English-based cultures.

Inclusive versus Exclusive Modes of Interaction

The individuals within any school setting do not randomly associate with each other. Nor are individual personalities the sole determinants of social choices. Rather, normative patterns provide a framework for interaction, and these norms may differ from culture to culture and between settings within a given culture (Hall, 1959; Watson and Gravest, 1966). In our observations two contrasting principles appear to govern the formation of social units within these settings. One involves interacting individuals in functioning, integrated groups, the other concerns the operation of individual units in parallel activities or intensely associated pairs. As we have come to define it, "Inclusion" is a principle for interaction which aims at perpetrating a sense of belonging, membership, or solidarity among persons, incorporating them into a group. A group is to be thought of as more than an assemblage of individual units; it has members, each of which is related to the others in some definable way. Acts of inclusion encompass such behaviors as greetings, welcomes, invitations to join an activity, and organized or spontaneous group activities with a single goal entered into by the participants. Group boundaries are generally flexible and loosely defined: stringent limitations or criteria for joining are not placed on entering members of the group when operating on an inclusion principle. "Exclusion", on the
other hand, is a standard for interaction whereby either solitary activities while in the presence of others (e.g. "parallel play") or a one-to-one intensive relation with a single other person is seen as an appropriate basis for personal relationships. In order to maintain such a state it is sometimes necessary to ignore or reject other persons and frequently the qualifications of someone with whom you may consider forming an exclusive relationship must be ascertained. Under such a principle of interaction, three very quickly becomes a crowd. Where this principle is operating, aggregations of children which at first glance appear to be groups with three or more members will often upon examination of the interaction prove to be conglomerations of two-somes, or several children vying for the exclusive attention of one popular member on a one-to-one basis.

The adults in a learning setting (teachers, supervisors, or parents) often set the tone for appropriate interpersonal relations in that setting. To be more specific, a schoolroom or play centre can be seen primarily as a social setting: a place where people come together to interact freely, learn to work and play together, exchange knowledge and opinions, and form new social ties. Or it can be seen mainly as a physical location for the collection of individuals who have come to learn individual skills from other individuals, with the aid of appropriate objects and materials. According to the latter view, some of this learning may take place in groups, but much of it can proceed on its own under the trained direction of adults in the setting. These two different views entail quite different approaches to interaction and to the imparting of learning skills. Under the first assumption, that school is a social grouping where participation is important, efforts will be made to integrate children into the group, help them feel a part of on-going activities, teach them to contribute to a group effort. Under the second principle, most of the adults' energy will go into providing physical
facilities with materials from which the children may learn on their own, under expert guidance. The ultimate in this approach is the use of individually programmed, computerized, learning machines. One-to-one tutoring is encouraged and group activities allowed only under certain circumstances. Children are expected to be mainly self-directed, choosing their own activities during free time, accepting and following through on tasks given them by adult authority at others. Social integration, while perhaps essential to the total well-being of the child, is not considered especially relevant to the educational process.

While either Polynesian or Pakeha teachers may display one or the other of these approaches to the learning experience, the exclusive mode predominates among European teachers, perhaps due to the emphasis on individual achievement in most modern Western-oriented school systems. Since the child's first pre-school experience may pattern much of his attitudes toward and behavior in school, we will begin by illustrating these principles as they contrast between Polynesian-run and European-run pre-schools.4

The Play Centre in our first example is situated in an area of Auckland which has a mixture of Polynesian and European residents; and the Centre, which was founded to service Polynesian families, now draws half its members from each ethnic group.5 The Kindergarten used in these illustrations is in a Western suburb of Auckland with a fairly small proportion of Polynesians, and only a few Polynesian children were enrolled. In the first examples we have chosen two incidents from each setting involving children entering the school for the first time. These make clear the supervisor's contrasting approaches to the preschool experience.
Example 1: Polynesian-run Play Centre

A. A well-dressed, young European mother with her four year old boy, also neatly outfitted, arrived at the door. She looked round at the mothers but did not smile. Noticing one mother breast-feeding her baby, she quickly looked the other way and went to sit in a chair near the play-house, holding her son's hand. She sat with her back to the group of mothers near the door. Looking up from where she was playing with the children, the Polynesian supervisor, casually dressed, noted the entrance of the new mother and child. Walking up to where they sat she smiled and said "Hello" brightly. The mother smiled briefly, and immediately looked down to get out a cigarette and light it. The Supervisor then turned to the boy, saying "Hello, Michael. Come and play with the other children." She took him by the hand and led him toward the trolley, bending close to his head and talking all the while. She played with the children on the trolley for about ten minutes.

B. On another occasion, the same supervisor, after seeing a new four-year old boy working on solitary tasks near his mother, came over to the table where they sat and said, "Come on, Peter, shall we go build something?" She directed him to the block corner and helped him make a road. She directed him warmly, saying "Let's make a bridge, honey. Can you bring me some of those long blocks?" Soon a Polynesian girl came to look, and the Supervisor invited her to join in: "You want to build, too, Mary? Come on, now!" Seeing a European boy at the doorway with his mother, the Supervisor again invites, "Come on, John, you want to build, too?" A group activity begins to form around the Supervisor.

Example 2: European-run Kindergarten.

A. A casually dressed European mother enters with her four year old son. She goes up to the Kindergarten Supervisor who is standing near the painting easels watching a child paint. The Supervisor is fashionably dressed in a white skirt and blouse, stockings, and dressy shoes. The mother greets the teacher first saying "Hello," with a smile. She replies with a smile and says "Hello, Tommy" to the child. The child does not respond but looks away, embarrassed. The mother prompts, "Tommy, this is your teacher." "Carol," says the Supervisor, smiling. The mother and teacher then sort out the proper time for arrival at kindergarten in the future, while the child looks cautiously around the room. The Supervisor then says to Tommy, "If you need any help, just ask." The boy looks at the floor. The Supervisor continues to smile but does nothing further. Tommy looks up at his mother and suggests "Let's look around the school, Mummy", pulling at her hand.
B. Tommy then chooses the one solitary area where there are no other children playing at present, the block rug. Later when he goes to the toilet he comes back to find other children also playing there. He complains to his mother, who encourages him to continue playing. He does so, but ignores the other children and they ignore him. After this goes on for a while the Supervisor comes over to a European boy near Tommy, and says, "Bobby, this is Tommy. Tommy, this is Bobby." Both boys look down and ignore the Supervisor's statement. She begins to explain Tommy's situation: "Do you remember when you first came, Bobby? You didn't know anyone did you? Remember how alone you felt? That's how Tommy feels." She continues this for a while, crouching beside Bobby, but touching neither child. Bobby ignores Tommy and vice versa. Soon the teacher leaves, without speaking to two Polynesian boys also playing on the rug, and Tommy, evidently feeling exposed and uncomfortable, goes outside.

In Example 1, the Polynesian supervisor used a technique for integrating the child into the group which was often observed among Polynesian adults at this play centre: that of placing him physically in a group and then interacting with all the children as a group. A second method, which she used in instance B, was to involve the child in some fascinating activity in which she herself participated whole-heartedly (this was possible since she dressed in casual clothing) making loud comments and enthusiastic remarks the while. She then began to invite in other children who were enticed into this obviously enjoyable game. Since she used everyone's name frequently and spoke in a medium-loud, clear tone, formal introductions were unnecessary. Peter was never confronted directly with his "new boy" status, and the other children came to know him in the context of a group activity with a person they admired and loved, their teacher. The Polynesian supervisor was often seen encouraging children into activities away from their own mothers, with whom they were likely to maintain exclusive, intensive interactions. The mothers, in turn, were encouraged to help out with all the children. The Supervisor's own son also attended the Play Centre, but he was seldom seen engaged in exclusive interaction with her.
In the second example, the European Supervisor was friendly and welcoming, but somewhat formal and distant. She was extremely pretty and neat looking, but not dressed for play with the children. During the morning's observation she mainly watched the children at their activities, once grooming the guinea pig while the children clustered around. Her techniques for integrating new persons were formal introductions, verbal explanations, and a courteous, smiling manner. She did not touch the children, and did not physically reduce herself to their level by playing with them. Rather, she expected them to choose their own activities and to express to her a need for help if they wanted attention. Left on their own, children feeling shy and out-of-place did not choose group activities but wandered alone from area to area. The teacher's request for empathy from Bobby for Tommy was laudable, but the formal introduction and long-winded explanation only seemed to embarrass both boys. When it did not produce the desired results (presumably she wanted Bobby to take Tommy under his wing rather than to encourage a group activity, since she did not speak to the other two boys on the rug), the teacher let the matter drop.

It is doubtful whether either supervisor consciously was putting into practice her private principles of appropriate interaction. However, her ideas of the atmosphere appropriate to a school as well as her customary social behavior toward persons in general surely influenced her choice of actions. Other aspects of the European-run setting seem to indicate that children are viewed as individual units operating essentially on their own. The Kindergarten is equipped with separate cubbyholes for personal possessions and separate wash-cloths and
towels for each child. Each child is expected to serve himself milk and apples at a little table, picking out his own glass from a tea-tray, whenever he chose. Children were praised by the supervisors for good individual work ("That's a nice necklace you strung!", "Oh, look at your painting"), but cooperative efforts, such as the joint building of a block structure, were often ignored.

By contrast, at the Play Centre cited above all the children used a common basin and towel (one each placed near the dough table and the painting easles). They were fed a snack of milk and apples or biscuits in a group at the time of the most inclusive group activity: singing and dancing. All the mothers and children, drawn together by the serving of food, stayed to participate in singing until the younger children grew bored and drifted away. While many of the arrangements for caretaking (cleanliness, feeding) may be largely determined in both settings by practicality and monetary considerations, they also incidentally may reflect a different attitude toward the school experience and the placement of the individual child within it.

The operation of the inclusion-exclusion principle may also be seen in the way in which the parents are related to the school and how they behave once they are in it. Polynesian parents who do not encounter a group-oriented approach to social interaction when they visit a school may often feel unwelcome and uncomfortable, even if no directly excluding acts occur. Observations at a number of Parent-Teacher meetings in different schools indicate that Pakeha in charge of such meetings tend to present agenda without much explicit welcoming behavior beyond perhaps one simple phrase. The procedure is formal and restrained and usually focused on specific
tasks or activities (a new reading program or change in curricula, sports events, money-raising activities) rather than relationships. After the meeting, parents must initiate contact with teachers or principals, who often stand as though at the head of a class, while the formal procedure during the meeting discourages participation and discussion.

On the other hand, a Maori woman, helping to organize a parent meeting around school issues, found that she was highly successful in encouraging parent participation by simulating the situation to be found on a Maori marae, with all the traditional roles and ceremony. Under these circumstances Polynesian parents felt appropriately welcomed and secure in the knowledge of their proper social roles. A marae in New Zealand Maori culture is technically the space or courtyard in front of the communal meeting house and stands as the symbol of the home territory of the sub-tribal group. More importantly, however, the marae is, in an interpersonal sense, the "stamping ground" (tuuranga wae wae) where matters of significance to the group are thrashed out in lengthy discussion. No one is excluded from this process and decisions are arrived at gradually by group consensus. It is also significant that rules of inclusion and exclusion are incorporated in Polynesian languages in the delineation of personal pronouns. Salmond (1974) notes that only after the welcoming ceremonies for visitors are over is the use of maatou (exclusive "we") by the home group (tangata whenua) ceremonially changed to an honorific taatou (inclusive "we") when referring to everyone present during the after-dinner songs in the meeting house. Having thus been ceremonially included both verbally and nonverbally (norms of spatial use and physical posture accompany
the acceptance rituals), the visitors can participate in the activities of the marae and even welcome the next group of visitors who may arrive.

Similarly, at the Polynesian-run Play Centre, parents' meetings focus on welcoming activities encouraging full participation. Formal procedures, such as reading of the minutes, are discarded and the Polynesian Supervisor, aware of European meeting standards, warned me "You may not find it quite orderly. People get quite involved and carried away". Europeans, on the other hand, may feel embarrassed and uncertain in the unfamiliar structure of a Polynesian-dominated situation. The following examples illustrate differences in behavior towards parents in Polynesian and European-run educational settings:

Example 3: Polynesian-run Play Centre

A. After integrating the new child Michael (Example 1A) into the group of children, the Supervisor returned to Michael's mother, sitting alone on her chair. She walked up to her and said loudly and cheerfully, "Have you got a cigarette?" The European mother looked up with a startled expression. Noting her discomfort, the Supervisor quickly changed the request, continuing "Have you got a menthol?" Obviously flustered, the mother looked down at the packet in her hand and quickly said "No, I haven't. It's filter." The Supervisor laughed and remarked, "That's no good to me, then", and moved on to a Polynesian mother, calling out clearly "Have you got a menthol?" The European mother, quite flushed, looked away.

B. Fifteen minutes after the observer had arrived, the Supervisor told her that several of the mothers had inquired whether someone had "taken care of the new mother", as she was presumed to be, and whether she needed a cup of tea.

Example 4: European-run kindergarten

A. After Tommy's mother had spoken to the Head Supervisor she took a chair near the block rug while Tommy played. The second Supervisor, also European, sat at a table nearby helping a child string objects. She ignored the mother until the Head Supervisor brought her over and formally introduced her to the mother. A few polite words were exchanged and the Supervisor went back to her work. Two
teacher-trainees were also in the room when the mother entered. One looked up briefly when the mother looked her way, but quickly looked down again at the work she was preparing for the children. Later on the mother introduced herself to the only other mother in the room and exchanged a few words. It appeared that this mother often helped out at the kindergarten, but mainly because she had no transport and needed to stay to walk her sons home afterwards.

B. The Supervisor told the observer that the occasional mother would help out at kindergarten from time to time, but that it was just as well not to have too many. The previous year, another Supervisor assisted the observer by telephoning and arranging for a Polynesian mother to help out since these mothers rarely attended. The mother came but had no interaction with the other mother present, a European.

In the first example it seems that the Pakeha mother did not know how to respond to the informally inclusive behavior of the Polynesian Supervisor. The cigarette request, intended to make the mother feel a part of the group by giving her a chance to help someone out, may have seemed overly presumptuous or forward by the Pakeha mother. Seeing her reaction, the Supervisor quickly made it possible for her to refuse the request gracefully.

European mothers who had been at the Play Centre for some time, recounted to the observer how the Supervisors had often smoothed the way for them in difficult social situations, making them feel at home and helping them to become more at ease with the Polynesian mothers. The Play Centre this year has from eight to ten mothers attending almost every day. They interact freely and plan social events to raise money for the centre.

Even among the mothers in Polynesian-run play centres a cultural difference in patterns of interaction of mothers with children was found. In the Play Centre cited above, an equal number of Polynesian and European mothers were observed systematically for the extent to which they interacted exclusively with one child (whether or not their own), versus interacting with a number of children in a group
(of which their own child might or might not be a member). During twenty play centre sessions recorded over a six month period, 75% of the episodes of mother-child interaction rated as "inclusive" involved a Polynesian mother, while only 25% of such episodes involved a European mother. Of the episodes of "exclusive" interaction, 83% was accounted for by European mothers, while Polynesian mothers acted exclusively in only 17% of such episodes (Denée, 1973: 27). The following examples illustrate these differing socialization techniques among Polynesian and European mothers:

Example 5: Polynesian mother

Polynesian mother helps Claire and Hayley to draw. She draws something for them. They listen as she talks about her drawing. European mother enters with daughter. Polynesian mother calls out "Hello!" She comments on a toy telephone that Takai holds out to her, with a grin on his face. She takes the telephone and pretends to hold a conversation with Takai. Then she turns again to drawing....Ioapa (her son) is doing a puzzle. Polynesian mother says: "Gee, you're a smart little thing. Do you want to do another one?...No?..." She lifts him off the chair and says: "Come on", as she heads in the direction of the blocks. She calls out to David (on a tricycle), "Come on, David". Ioapa says: "The slide! The slide!" so the mother heads for the slide instead. She calls to David again, but David just stares back. Takai runs over to her and Ioapa at the slide. The mother says, "Wheee...", every time one of the two boys comes down the slide. She calls to Elizabeth to come, but Elizabeth continues to draw. Then she calls to Samantha, who shakes her head and continues to play with the blocks. Suddenly the mother grabs Takai and says "Stand there and I'll get something for you". She fetches two tires from the stage nearby. She rolls one to Takai and Takai rolls it back, jumping up and down as he does so. Hayley joins them and so does Ioapa, who has been watching from the top of the slide. The mother arranges them in a circle and fetches more tires. Samantha and Claire join in too. The Polynesian mother continues rolling, calling "Here's one for you...and here's one for you. Wheee... That's the girl...Ohhh...Here it comes!" Five more children are encouraged by the mother to join in the fun.

Example 6: Pakeha mothers

A European mother plays with her son, David, at the puzzle table. "Will it go in there?...Pick up the pieces...Go on...pick them up". David loses interest in the puzzle and climbs
up into his mother's lap. They sit like that for about ten minutes.

Another European mother is sitting at the side of the hall. Her daughter, Christina, is playing nearby with a pram. Four other children are playing near this mother too. Christina runs to her mother and pulls her hand. The mother gets up, goes to the pram, comments on how nice it looks, then returns to her seat... Later the mother calls Christina and takes her to the milk table. She gets one cup of milk and one apple and feeds these to her, putting the child on her lap. She then takes Christina to the dough table and seats herself on a chair nearby.

In the above illustrations, the Polynesian mother overcomes an attempt by her son Ioapa to engage her in exclusive interaction. She makes repeated efforts to involve other children with her son, and when the activity he has chosen fails to attract the others, she invents a new game which is highly successful. At other times this mother was seen to divert her son from crying over an injury by placing him in the center of a group activity in the same fashion. The European mother, on the other hand, when her son tires of a game, does not begin a new one or relate him to other children, and the European mother ignores children playing near her and her child. Neither of these mothers participates much in the children's activities.

Since it was hypothesized that placing the child in a group or relating to him as an individual might be reflected in the values surrounding the conception of the "good" or ideally desirable child, Denée interviewed Polynesian and European mothers from the Play Centre, asking them to describe the three-year-old child they would like best for themselves. Polynesian mothers tended to give responses which reflected a concern for getting along in the community or social group: two-thirds (67%) of their responses described a child that was well-behaved, obedient, non-aggressive, sociable, or sharing. The European mothers, on the other hand,
more often chosen descriptions which would be categorized as individual or child-centered: 80% of their responses indicated a child who was happy, healthy, independent or enquiring. (Denée 1973:30).

We have seen how inclusive or exclusive styles of interaction are socialized by teachers or mothers. It is also important to understand how the children themselves express these interaction modes in the school situation. In general, we found both Pakeha and Polynesians expressing both styles, but Polynesian children were more likely than Europeans to be observed in inclusive acts. This was particularly true when the observations were made in schools where the student body was predominantly Polynesian. In this example from a central Auckland school, situated in an area with a heavy concentration of Pacific Islanders, the following scene took place during morning break on the playground:

Example 7: Inclusive behavior exhibited by Polynesian children

Two Polynesian girls, Sally and Venetta, both aged about six, were walking along, holding hands, giggling, and talking together. Sally laughs, and places her arm around the neck of Venetta, giving her an affectionate hug. Suddenly, they both stop walking. Sally has seen a European girl, Wendy, standing silently alone, looking very sad. Sally goes up to her and asks, "What's the matter?" She moves to put her arm around the European girl while still maintaining her relation with Venetta by keeping her other arm around Venetta's neck. The European child does not respond, however. She turns her head away and avoids visual contact.

Sally then releases her hold on her Polynesian friend and places both arms around Wendy. She turns her head toward Venetta, however, and remarks, "I think she's lost that other girl." Wendy remains very rigid in Sally's arms. She is continuing to look at the ground.

Venetta then suggests, "She's over there. Come on!" At this Wendy looks up and appears to relax a bit, although she is still upset. Sally and Venetta arrange themselves on either side of her and, putting their arms around her, turn and walk together with Wendy toward the jungle gym.
As the trio approaches, a European girl playing on the jungle gym looks up, jumps off, and moves quickly away. Wendy follows her departure with her eyes for a moment, then seems to undergo a change of mood. Turning toward the two Polynesian girls, she smiles, and takes Sally's hand. Venetta moves closer to Sally, who gives her a playful push. All three girls laugh together and begin to play.

Here we have seen two Polynesian girls engaged in what might be considered an intensive, exclusive relationship. Yet they are sensitive to the plight of another child who has just been abandoned by a playmate and immediately include her in their group. They also try to solve her social problem by finding the girl who has left her. When this girl rejects her once more, the European child turns to her Polynesian friends and accepts their warm inclusion whole-heartedly for the first time. If there is any jealousy on the part of Venetta as might be indicated by her approach toward Sally after the European girl has taken her hand, it is handled lightly with a joke and a push and quickly forgotten. This solution to the threesome situation is quite different from that encountered by a Maori boy in an otherwise all-European kindergarten situated in an upper middle-class European neighborhood:

Example 8: .Exclusive behavior exhibited by Pakeha children

A European girl, Susie, has been playing for some time with a Maori boy, James, when the observation begins. Susie tends to flit from activity to activity, seemingly using this device to keep James under her influential leadership. After initiating play on the climbing frame, she runs off, calling for him to follow, and sits down at the rear of a group listening to the Supervisor reading a story. After climbing a bit more, James approaches the group, and Susie greets him with a loud "Hi, James!"

The Supervisor stops reading and looks up at James, as do all the children, turning round in their seats on the mat. The Supervisor looks annoyed. James drops his eyes and moves away from the group. Susie then follows him, and the supervisor resumes her story.
After this, James begins to play in a large box, inviting Susie to join him. Susie cries, "Wait for me, James" as she runs up to him. James calls across to another girl, "Julie, come on! We'll let you in; enough room!" Susie asserts herself then by calling "Hurry up Julie!" But when the girl arrives, Susie blocks her entrance to the box, crying "There's no room!" Following Susie's lead, James also says, "There's no room for you." But Julie pushes her way into the box anyway, and the other two move over to make room for her.

Subsequently the game changes to hide-and-seek, instigated by Susie who calls "Come find us" to a nearby boy and then ducks down inside the box. This boy has been digging in the sandpit and approaches with a heavy shovel-ful of sand held threateningly in his hands. All three children, alarmed, stand up in the box, and James says quickly, "Don't hurt me, will you, because I'm your friend!" The boy stops and watches the children.

The three children leave the box, and as they do so, Julie says to James, "I'm going to be Susie's friend!" James ignores this remark and follows Susie to the swings. Susie retorts to Julie, "No, I'm James' friend!", and James echoes "She is." Whereupon Julie kicks James in the shin, and he ignores her.

This sequence of incidents illustrates the way in which a Polynesian child, highly motivated by a need for inclusion, learns the exclusive style of interaction which calls for an intense involvement with one person to the exclusion of others. James has learned that his playmate wants this sort of relationship and avoids offending her by adopting it himself, although his own tendency was to invite other children into the activity. James' first reaction under threat of attack is also to respond with an inclusive act, as when he says to the boy with the shovel, "Don't hit me; I'm your friend." (Other observations have shown Polynesian children attempting to mollify hostile European children by offers of assistance with school work or the loan of a piece of equipment, such as a pencil or rubber eraser). Note also, however, that Susie twice follows James' inclusive lead: seeming to allow Julie in (though later barring her when she arrives) and calling to the other boy. Still her natural tendency seems to be
to form an exclusive relationship, keeping James to herself.

Judging from the limited data we have available at higher level schools, by the time children reach teen-age, their patterns of interaction with others at school may be fairly well set. In a high school with a high concentration of Polynesians in a South Auckland suburb, for example, the Physical Education teacher commented to the observer that she finds the Polynesian girls much more interested in team sport, more cooperative with her and the other children, and less "catty" and "cliquey" than the European girls in general. During the gym period observed at this school, the Form III girls who chose basketball, a team sport, were all Polynesian with the exception of one immigrant European of Dutch background. Friendly conversation, joking, and encouragement, both among team members and between teams, was the general pattern during the game. The rest of the girls in the class, all Europeans, chose patterball — a rather unenergetic game played by two persons and little friendly interchange occurred between pairs.

These examples of modal differences in the behavior of Polynesians and Europeans should not be taken to mean that these ethnic differences were uniformly displayed either within or between settings. Both individuals and schools varied in their amount of inclusive and exclusive behavior. But in over 1500 acts recorded on this dimension at 13 preschools and 11 primary schools, Europeans were overwhelmingly exclusive in their behavior while Polynesians were overwhelmingly inclusive. (See Table 1.) Furthermore, whereas the proportion of Polynesians in the school had no large or consistent effect on the modal pattern of Pakeha behavior, Polynesian behavior showed a dramatic shift: in schools where Polynesians constituted a majority, about three-quarters of
Table 1

<table>
<thead>
<tr>
<th>School Level</th>
<th>Polynesians Inclusive - Exclusive</th>
<th>Pakehas Inclusive - Exclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschools</td>
<td>64%</td>
<td>31%</td>
</tr>
<tr>
<td>Primary Schools</td>
<td>63%</td>
<td>20%</td>
</tr>
</tbody>
</table>

* Based on over 1500 acts observed on this dimension within 24 school settings

their behavior on this dimension was inclusive, but in schools where there were only a few Polynesian students, the majority of their acts were exclusive. (See Table 2.) By contrast, in

Table 2

<table>
<thead>
<tr>
<th>Proportion of Polynesians in Setting</th>
<th>Polynesians Inclusive - Exclusive</th>
<th>Pakehas Inclusive - Exclusive</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 50%</td>
<td>74%</td>
<td>20%</td>
</tr>
<tr>
<td>10-49%</td>
<td>65%</td>
<td>18%</td>
</tr>
<tr>
<td>&lt; 10%</td>
<td>41%</td>
<td>31%</td>
</tr>
<tr>
<td>none</td>
<td>-</td>
<td>36%</td>
</tr>
</tbody>
</table>

settings with large numbers of Polynesian students, Pakehas were even more exclusive in their behavior than in settings where they were clearly dominant.

From a careful examination of the data it does not appear that Polynesian children were simply adopting a Pakeha mode when they were in the minority, although sometimes this occurred. Nor
did we observe many instances of overt discrimination, in which they were being rejected by Pakeha children. More frequently they appeared shy, had little influence over the mode of interaction used in the setting, and found it easiest to attach themselves to one friendly person. Similarly, it may be that Pakeha mothers and children, when they are in a Polynesian dominated setting, are more shy and unsure of themselves, and take refuge in more exclusive patterns of behavior. Even when severely outnumbered, however, Polynesians remain more inclusive in their behavior than Pakeha.

Discussion and Implications

Anthropologists or other cross-cultural researchers with experience in Polynesian or other traditional settings will easily recognize many of the behaviors reported above as features of interaction in such societies. Placing a child within a peer group is a common socialization technique in many Polynesian groups (Boggs, 1973; Firth, 1963; Gallimore, McDonald and Howard, 1969; Hocart, 1929; Howard, 1970; Levy, 1969; Mead, 1928), and Ritchie (1972) has recently labelled this form of child rearing a feature of the "co-relative" family. In this type of socialization, the child is raised by many adults as well as trained by many other children. Ritchie postulates that this should result in a "flexible accommodation to the needs of others, what Riesman once called 'other direction' (1950), low long-term personal aspiration levels, but great social responsiveness" (1972:91). In traditional groups this socialization style places a great deal of emphasis on sharing and cooperation, behaviors which are highly adaptive in small, closely-knit societies with subsistence economies. By contrast, European children raised within small nuclear families have less opportunity to acquire a level of skill
in interpersonal relations and group functioning which is commonly exhibited by Polynesian children.

Patterns of social interaction which we have labelled "inclusive" are carried over into styles of cooperative work and group problem-solving. Unlike Western society, traditional men typically does not separate "tasks" from personal relationships. In such societies it is common for working parties, sewing bees, and other task-oriented groups to work willingly because of the inherent social rewards in being together. The extended family group often gathers for problem-solving and decision-making, solutions being arrived at through group consensus under the guidance of elders sensitive to individual feelings. Thus, problem-solving is a part of a total pattern of inter-related social behaviors.

These patterns of inclusive, group-oriented problem-solving constitute highly adaptive coping strategies which can also be employed effectively within the context of modern, industrial society (Graves and Graves, 1974a and 1974b). For example, researchers working with Polynesian migrants to New Zealand have found kin and church-related cooperative and decision-making groups functioning strongly in urban environments (Boardman, 1969; Hooper, 1961; Metge, 1964; Pitt and Macpherson, 1971; Hooper and Huntsman, personal communication).

Having established this basic difference in interaction patterns between traditional Polynesian and industrial European society, there is the further question of their pedagogical significance. Are patterns of adaptive problem-solving used in traditional societies applicable within modern schools? Or more radically, is there any evidence that in some instances they may be
preferable to present educational methods? If so, in what ways might these patterns of learning be used in educational institutions for the benefit of all the children of a multi-cultural society? Finally, can children socialized to different thinking patterns and problem-solving strategies at home, for example the white New Zealand child from a European cultural background, learn to adapt to new problem-solving techniques more typical in another culture? Here is the "cultural deficit" problem in reverse.

It is an oversimplification and ethnocentric assumption of Western man that learning and problem-solving are most effectively carried out on an individual basis. A related assumption is that group activities are "fun", and to be kept distinctly separate from the "work" of education. Consequently, as students progress in school, more and more learning tasks are performed by individuals, and pupils are actively discouraged from pooling their knowledge or solving problems together. Teachers increasingly treat their classrooms as random collections of individuals; it is the task of learning which is of primary importance, and personal relationships among participants are felt to be secondary or irrelevant. As students progress toward the national examinations, "Do your own work!" becomes a prime maxim.

For most of the non-Western world, as we have seen, working alone has never been considered the most effective pattern. And social psychologists are beginning to come to similar conclusions. There is now considerable evidence that for many types of tasks, groups perform both more efficiently and with greater quality of outcome than do individuals (Lorge and Solomon, 1958; Lorge, et al., 1958; Davis, 1969). The combining of individual knowledge on some tasks,
and the leaven of excitement that group interaction can bring to the task are instrumental in generating better or more original solutions to problems (Bouchard, 1972, 1973).

Research on the role of "person-orientation" as opposed to "task-orientation" has become the focus of a considerable body of research (Mann, 1961; Dreyer and Rigler, 1969; Ruble and Nakamura, 1972, 1973; Nakamura and Finck, 1973). Ruble and Nakamura conclude that person-oriented children were "more effective (than task-oriented children) in tasks or situations that involve relevant social cues. Thus it is perhaps inappropriate to refer to one cognitive style as more desirable than the other. Which style (task or social oriented) is more effective may vary with situational factors" (p. 479).

Another group of researchers have been studying the role of social sensitivity in small group performance. These studies indicate that "social-emotional" leaders and "task-oriented" leaders perform different functions within groups and differentially influence the effectiveness of the group on various types of tasks (Bales and Slater, 1955; Bales 1958; Fiedler, 1965; Burke, 1971; Hardy, 1971). While the inter-relationships between task-type, leader-type, and group size and atmosphere are complicated, (Frank and Anderson, 1971), it is at least clear that for most groups some balance between the concern for persons and for task must be struck for effective group functioning and outcome. Techniques for doing this have been developed by some researchers in creative group problem-solving (Gordon, 1961; Prince, 1970).

Finally, there is a body of cross-cultural research which indicates that children from rural, traditional backgrounds are
typically more cooperative than children from urban, Western backgrounds, both within and between cultures (Madsen, 1967; Shapira and Madsen, 1969; Wasik et al., 1969; Madsen and Shapira, 1970; Kagan and Madsen, 1972; Sommerlad and Bellingham, 1972). An interesting aspect of these studies is that the experimental reward system was arranged so that competitive behavior was highly maladaptive. Yet middle-class children from urban, Western culture backgrounds continued to compete even when it meant lower rewards. After discovering that competition increased with age and intelligence in Anglo-American children, two investigators noted "The highly competitive behavior of the children of increased age and intellect in the present study...indicates that the competitive motive may become so strong that the assumed cognitive capacity for reciprocal interaction is overshadowed by a culturally determined, generalized tendency to compete in conflict-of-interest situations, even if it is not adaptive to do so in a particular situation." (Madsen and Connor, 1973:178).

It would appear that Western-oriented educators may have something of value to learn from less competitive and individualistic, traditional peoples about effective group problem-solving. Multicultural schools could consequently become settings for sharing complementary skills, rather than instruments of unidirectional assimilation. Many Polynesian children, for example, enjoy a high degree of experience in the cooperative, person-oriented techniques which make for effective group problem-solving. Unhappily, these skills are often not recognized, valued, or utilized by European teachers. Gallimore (as reported in Howard, 1973) on the basis of systematic observations in Hawaiian classrooms, reports that "working in groups" is more frequently observed in Hawaiian-American than in
middle-class Caucasian classrooms, but that teachers characterize group work as "disruptive" and punish it.

In one Auckland intermediate school in a predominantly European suburb, we observed a Maori girl, age 12-13 (and one of only 14 Polynesians in the school), take the role of leader in a group requested to mime a play when the usual group leader at her table, a European boy, refused to participate. Without ever seeming to order the others about, she helped the group to choose the play, stimulated discussion as to acting methods, and maintained a lively spirit in the group. This resulted in a production less stilted than many others presented by the class. Yet this girl's social talent and person-orientation were not perceived by her teacher as relevant to learning activities. Rather, although she obviously enjoys the child, the teacher saw her as "the ring leader of most of the fun and mischief in the class." She characterized the child as "happy-go-lucky", "boisterous" and "with a good sense of humor", but her scholastic productions were "not an outstanding effort".

This evaluation is in line with the conclusions of Ruble and Nakamura (1973) who found that teachers saw outer-directed children as lower achievers in school, lower in self-confidence, wanting less to do things by themselves, more help-seeking, and less persistent - all devalued classroom traits.

By contrast, Polynesian teachers often use these same group skills to pedagogical advantage. Howard (1970), for example, found native teachers in Rotuma using groups quite frequently in a variety of tasks and with a variety of combinations of individuals:

The best way to get the children to work is to give them group projects...With arithmetic I have each group give
answers to the problems. They have to work it out together and reach a single decision. After doing this for several days I hold a competition between the groups, adding up the sums of correct answers for each group. During the competition each child works out the answers individually and the correct answers are added up to get the group score. I find great improvement in individual skills by using this technique. (55).

Teachers on this island also switched the composition of competing sports groups frequently so as to avoid an unpleasant degree of competitiveness from arising between individual members of opposing teams (Howard 1970:52). We are discovering in our rural school observations that flexible grouping is used as well by teachers experienced with Maori children.

In conclusion, it seems clear that the introduction of more group-oriented learning situations in the classroom would provide Polynesian children with an opportunity to use their considerable social talents to the intellectual advantage of all students, both Polynesian and Pakeha. Obviously children who already have experience in group situations and prefer them will be crucial in making group problem-solving successful. Davis (1969) found that while groups outperformed individuals in efficiency and quality of results on two types of tasks, the highest number of correct solutions occurred in groups made up of persons who preferred group work to working alone. Even these groups made up of individuals who had preferred solitary work, however, did better than persons working alone and, as a whole, persons having worked in a group (whether or not they preferred group work) were more satisfied with the tasks. Davis also found that group members who preferred group work seemed to exploit the possibilities of problems that permitted division of labor and the exchange of information through social interaction more thoroughly than did groups of individuals who preferred to work alone. And there is evidence that groups
composed heterogeneously (with respect to sex, ethnic group, or attitudinal characteristics) perform as well or better than groups that are homogenous with respect to these characteristics (Hoffman, 1959; Hoffman and Maier, 1961; Fiedler, 1966). Thus it would seem likely that mixed ethnic groups of Polynesian and European children, with presumed differential preferences and talents for group work, would also outperform the same individuals if they were to work alone. Furthermore, it has been found that those individuals who prefer group work perform least well when forced to work alone (Davis, 1969). This indicates that by insisting on a predominance of individual work, not only are we preventing many Polynesian children from using their talents in group problem solving, but we are increasing their academic difficulties as well.
NOTES

1. We wish to acknowledge support from the Royal Society of New Zealand, which is making possible our current research on adaptive strategies in urban migration in the South Pacific.

2. We chose this more open-ended method in contrast to earlier studies of naturalistic interaction in the home (Graves, 1974; Inamura, 1965; Kamii and Radin, 1967; Minton, Kagan & Levine, 1971; Steward & Steward, 1973) or the school (Flanders, 1967; Hunter, 1969; Jose & Cody, 1971; McGaw, Wardrop & Bunda, 1972; Medley & Mitzel, 1963) which either employed preset observation categories or structured the nature of the action recorded.

3. The representativeness of these categories and their implications have been arrived at through discussions among observers drawn from both minority and majority group cultures. An accurate picture of the cultural system within which learning and thinking take place, and an understanding of the function of learning styles, cannot be gained alone by observers who come from outside the culture. In our research, Polynesian and European observers work closely so that their varying perspectives may be compared. A Polynesian may see things in a European situation that are taken for granted by a member of Pakeha culture, and the same is true for the European in a Polynesian setting. On the other hand, the cultural "insider" can also instruct the "outsider" on the particular meaning of acts which the non-member of the culture could distort or ignore. In this regard we are particularly grateful for the help of Meremere Penfold and Tilly Reedy in understanding the meaning of inclusive behavior within Maori culture, and also to the many students who helped collect and discuss the observations: S. Arbuckle, V. Butler, F. Darragh, J. Fowler, R. Hughes, M. McPherson, R. McRae, S. Mulder, J. Paton, J. Pither, S. Steven, S. Thomson, R. Ward, F. Wilson, S. Wood and others.

4. There are three major forms of preschool presently available in New Zealand: kindergartens (both private and state-run), play-centres, and family pre-schools. These types are discussed in detail in McDonald (1973). To date we have found no significant differences in inclusive versus exclusive behavior among these three types of preschool organization.

5. This Play Centre was studied intensively by a group of students under our direction in 1972 and the results of the research are in a master's thesis by Edite Denee (1973). Additional observations were made at the Play Centre in 1973-74 after a change in locale. Polynesian and European Play Centres were compared with it to ascertain its degree of representativeness.

6. These do not include the observations made by Denée and her team in their intensive study of a single integrated play centre, described earlier.
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SOMMERLAD, E.A. & BELLINGHAM, W.P.

STEWARD, M. & STEWARD, D.

WATSON, O.M. & GRAVES, T.D.

WARD, W.C.