Patricia Goldring Zukow
Editor

Sibling Interaction Across Cultures

Theoretical and Methodological Issues

1989

Springer-Verlag
New York Berlin Heidelberg
London Paris Tokyo

2
Comparing Sibling Relationships Across Cultures

THOMAS S. WEISNER

Introduction

The essays on siblings collected in this volume vividly show cross-cultural differences in sibling caretaking (Chapters 3, 4, and 5), in language development (Chapters 3, 4, and 5), and in play interaction (Chapters 3 and 5). The North American samples (Chapters 6, 7, 8, and 9) address many of the same topics, including folk perceptions of siblings and sibling roles; caretaking patterns; and friendship and support among sibs.

How can sibling relations be compared across apparently different worlds of meaning and discourse in cultures as distinctive as Native Hawaiians, the Kwara'ae of Melanesia, Mandinka of Sénégal, periurban Mexicans, and North Americans in Davis, California? In spite of the differences in culture and ecology across these societies, comparative research can generate principles about sibling relationships. Indeed, sibling studies are especially useful for comparative purposes, for several reasons: they raise issues of contemporary importance in the social sciences; they start from a common comparative base; and they can be done at different levels of analysis—for example, by comparing values and beliefs regarding siblings, the norms and customs for dealing with them, and variations in the local activity settings shared by siblings. The next sections discuss each of these advantages of comparative sibling research.

Contemporary Importance of Sibling Research

Sibling research speaks to several contemporary problems in the social sciences. Dunn's work (1983, 1985, Chapter 6, this volume) has highlighted one such issue: the attempt to learn more about children's capacities as these unfold in the children's own worlds, rather than in the context of unfamiliar tests and experimental situations. Children show the capacity for empathy, nurturance, and a subtle understanding of elaborate social relationship patterns in their behavior with their siblings. Most children will rehearse, display, and experiment with language capacities and cognitive skills with their siblings well before they will do so with other people. Siblings are often present when behaviors and ideas are first transformed from their existence in the social world, to their joint

construction and performance along with others, to their internalization as a part of the child's independent repertoire of behaviors. To use Vygotsky's (1978) term for the second phase of this transformation, siblings are crucial for developing skills in the joint "zone of proximal development"—when children can engage in activities only with assistance from more capable others. In the secure, reciprocal, complementary world of the sibling group, we may discover very early evidence for children's capacities (Cole, 1985; Wertsch, 1985).

A number of studies in this volume (see Chapters 5 to 8) show how children display social and cognitive capacities much earlier in the familiar environment of sibling interaction. This is of particular interest because American developmental and cognitive research has long focused on early precursors of later competencies in children. Whether the interest is in genetic precursors, or cultural and familial antecedents of later patterns in development, work with siblings advances the search for clues to later culturally valued competencies at younger and younger ages.

Studies of human development across the lifespan are also of growing interest. Because sibling relationships often remain important throughout life, they are important in lifespan research. Current theories of relationship formation and change (i.e., Hartup & Rubin, 1986; Elder, 1987) view children's development in a social context extending far beyond individual differences at a single point in time. Elder, for instance, emphasizes the study of family transitions rather than typologies, and the importance of studying temporality, process, and dynamics in family research. Lifespan research also involves studies of social effects beyond dyadic interactions (Lewis, 1984). Sibling relations are important for every one of these lifespan perspectives.

Sibling relationships may also be of increasing functional importance in the current period of high divorce, single-parent families, and blended families in North America. It may be that because of these social and demographic trends, siblings need more from each other today, and perceive that they may continue to do so in the future. New relationship styles between siblings may emerge as a result. Part-sibling and quasi-sibling groups (such as half-siblings, unrelated children living together with step-parents, unrelated children living with one parent and an unmarried partner of their parent, etc.) occur more often in domestic groups. Without a clear set of norms for conduct amongst these other-than-full-sibling relatives, the norms for sibling relationships may be invoked as the expected ideal. The cultural model for appropriate sibling relationships comes under closer scrutiny in this situation, raising new questions regarding just what sibling relations are like in North America and elsewhere, as well as what they should be like.

Universals in Sibling Research

Sibling research is particularly valuable for comparative human developmental work because there are universals that provide a starting point for examining cultural variations. Full siblings share an average of 50% of their genetic material. Siblings were born in a particular order, and that order, along with age and gender, provides a standard way to describe and compare siblings across cultures. Fortes (1974), Jackson (1978), Munroe and Munroe (1983, 1988), Sangree (1981), and Skinner (n.d.) compare conceptions and roles of first-born and last-born siblings across cultures, for instance. They have tested the effects of parity on intelligence, personality attributes, mythological representations of siblings, relationships to parents, and other issues. Cultures make use of, exaggerate, or ignore sibling parity and genetic relatedness in different ways, of course—but rarely are they irrelevant in shaping interaction or cultural beliefs.

Suomi (1982) points out that across all primate species, infants and young children universally grow up with exposure to siblings and/or maternal half-siblings in the contexts of play, caretaking, and sociable interaction. What varies across primate species, and across cultures, is who *else*, in addition to siblings and cousins, will constitute salient primary and secondary social groups. Suomi identifies (1982, pp. 337, 353) a small set of features that influence patterns of caretaking and sibling interaction across nonhuman primate and human groups. These features include age differences in the sibling group and within dyads; sex of participants; the availability of other peers who complement sibling group interaction (features of interaction such as degree of access to peers, for how long, and under what conditions); the developmental stage of the individuals (preadolescent or adolescent, for instance); and features of the local social structure (such as the composition of family, peer, and other social groups). These features are candidates for systematic cross-cultural comparisons across sibling groups. Although the relative importance, cultural elaboration, and range of variation of each feature differs across human societies and families, each feature provides a starting point for comparative analysis of sibling relationships.

Dunn and Kendrick (1982) point out another important comparative feature of sibling groups: they *share* so much common experience, so many thousands of hours of social and emotional involvement with each other and their families in the same setting. Siblings do share common expectations about each other, and a vocabulary of memories and past experience. This is why *complementarity* of roles and relationships appears so often in descriptions of sibling interactions.

But whether this shared history makes siblings similar in personality or competence is the subject of active debate. Plomin and Daniels (1987) point out that there is good evidence from genetic heritability studies that there is a strong environmental effect on behavior; there is seldom evidence that more than half the variance for complex behavioral traits is due to genetic differences among individuals (Plomin & Daniels, 1987, p. 1). However, based on adoption and twin studies, they argue that the environmental influences which remain after genetic influence are largely not shared! That is, family and other environmental influences matter, but each offspring may be influenced by different environmental factors, in different ways.

Nonetheless, the implicit, shared understandings of one's familial environment may bind siblings together, even when many cognitive and behavioral

patterns differ between siblings nearly as much as would any two individuals selected at random. In addition, the literature reviewed by Plomin and Daniels describes studies done within a single culture. Two individuals "selected at random" from the same culture have not been randomly selected by culture; they already share a common culture. Similarly, siblings within a family may share common experiences, moral and religious ideas, ways of speaking, and so on, while at the same time differing on other measures of competence, personality type, and other characteristics. Comparative sibling research *across* cultural groups will provide one way to determine whether siblings in fact do "share" many basic cultural/familial scripts and beliefs that are not measured by conventional behavioral assessments or paper and pencil tests. The chapters in this book all assume some significant degree of *shared* culture and shared family influence among siblings in each of their samples.

Siblings always *matter*. How siblings should relate to each other, what to call them, and what resources they are to have and share is important to all cultures. These matters are not left culturally undefined. Siblings usually will live with at least some of their brothers and sisters for much of their childhood, and very often on into adulthood. The particular beliefs regarding family roles and responsibilities of siblings can vary widely across cultures: how and when siblings inherit wealth varies widely; the structure of their relationships to their full siblings and cousins, aunts and uncles differs; whether siblings live, sleep, and work together or apart in the domestic group and household gets resolved in different ways; and the same variation exists for many other customs. This universal cultural concern betrays the pan-human significance of the sibling relationship.

Comparing Sibling Relationships Across Cultures: Activity Settings as a Unit for Comparative Study

The common features of sibling status should provide a basis for comparison of sibling relationships across cultures. Such comparisons of siblings across cultures should situate siblings within their everyday worlds and the local ecology around them and their families, starting with the "activity settings" of siblings. Activity settings are the contexts for action in the everyday routine of life. *Culture is instantiated in local activity settings that shape interaction and thought* (Cole, 1981; Super & Harkness, 1982; Weisner & Gallimore, 1985; Wertsch, 1985; Whiting, 1980; Whiting & Edwards, 1988).

Activity settings include five components: personnel, tasks, cultural scripts for conduct, motives, and goals. To describe activity settings as useful units for comparative analysis, we need data on the *personnel present* in and around sibling groups; information on the kinds of *tasks and social activities* siblings engage in (such as school; home chores; sports and games); the standard *cultural scripts*, or taken-for-granted ways siblings perform tasks and activities (bedtime routines, for example; proper ways of eating meals; rules for going visiting); and the *cultural goals and motives* of children, parents, and significant others in the child's daily life (Weisner, 1984; Weisner & Gallimore, 1985).

Activity settings provide a way to operationalize or "unpackage" culture, to use Beatrice Whiting's (1976) vivid term. "Unpackaging" culture means identifying how culture-level factors are translated into ecocultural contexts (Super & Harkness, 1980, 1982, 1986) that influence the daily activities and routines that affect teaching and learning, and elicit child behaviors, skills, and cognitive operations.

Activity settings will inevitably vary across families within a culture, and among individual children in a family. No two siblings have the same goals and motives, or the identical personnel around them. Each child in a family group has his or her own unique and uniquely experienced environment (Scarr & Grajek, 1982). The question of the homogeneity of cultural features across activity settings then becomes an empirical question, and a useful one in analyzing sibling data. Cultural analysis, in other words, includes the analysis of intracultural heterogeneity (Boster, 1987), as well as between-culture variation.

Activity settings are useful means of describing the effects of culture *on* the child, and to understand the way siblings *use* culture to provide meaning for their own and others' behavior. It is an empirical question whether different features of the activity setting have effects that depend heavily on siblings' own perceptions and meanings (Geertz, 1984), or whether activity setting features appear to influence action with relatively little intervention of meaning-frames or consciously held beliefs. Either kind of cultural effect should be visible in the transactions between actors (such as siblings within their family) within their activity settings. Chapters 3 and 4 take a more shared-meaning view of culture. This approach is most useful in the analysis of a single culture and the richness and subtlety of thought and behavior to be discovered in that locale. Other authors (see Chapters 5, 7, 8, and 9) use cultural features to describe sibling relationships through more direct, activity-setting-to-behavior-outcome analyses.

Comparative research on sibling relationships speaks directly to the following question: in what ways has a particular culture elaborated (or ignored or suppressed) pan-human features of sibling status, and what is the effect of such elaboration or denial on sibling relationships in that particular culture's activity settings? Although the studies in this volume vary in their methods, samples, and epistemologies, they all include, or could be expanded to include, data on the activity settings of the sibling groups they studied. Including such data would make effective cross-cultural comparisons possible.

Ecocultural Influences on Sibling Activity

Another advantage of the cultural activity viewpoint in comparative work with siblings is that the context surrounding interaction is also open to explanation.

Activity settings themselves need to be accounted for. They need not stand as the unexamined endpoint or final cause in the analysis of social behavior in context. Bronfenbrenner (1979), Whiting and Whiting (1975, 1978), Whiting and Edwards (1988), Weisner (1984), R. LeVine (1977), and Super and Harkness (1980, 1982) among others, have proposed variations on the ecocultural model in order to account for activity settings. Ecocultural features likely to influence the activity settings of parents and children, including mortality threats to children and demographics of a community; subsistence (work cycles, chores, and tasks); personnel around children and the family (division of labor, child caretakers); requirements for social replacement (Goody [1982], discusses moral and religious training, etiquette and hospitality, social comportment); roles of women in the community (including support for women, couple relations); and the range of alternative cultural models for conduct (if there are alternatives known and available in a society) from which parents and children can choose in deciding on their actions.

Although data on all these features of siblings' activity settings are not reported for each society described in this book, the chapters can be compared along several relevant dimensions, including cultural goals, social stratification and hierarchy, inheritance patterns, personnel available for interaction, and styles of discourse. For example, the societies differ in the extent to which the sibling relationship itself is a pervasive cultural and moral ideal. The Kwara'ae, for example, are a kindred- and hamlet-based community with sibling set organizations; siblings often remain living nearby for their entire life, and are encouraged by social and institutional arrangements to sustain lifelong shared obligations. In constrast, Bryant's North American Davis, California, sample consists of conjugal families in which siblings neither remain living together after adolescence, nor are encouraged by everyday activity settings and social institutions to pursue lifelong shared obligations and relationships.

The Kwara'ae and the Mandinka treat the sibling relationship itself as a fundamental and valued cultural ideal. From the perspective of the activity setting, members of these cultures have shared goals that include the idea of the complementary and solidary sibling bond as a model for *all* social relationships. In the Pacific islands, for instance, "sibling sets" (broadly defined as groups of persons in the same generation within a kindred or descent group) often will hold property, raise children, and share resources (Marshall, 1983, 1983b, p. 220). However, sibling sets do not intermarry. Compatible sibling sets are the model for social relationships, and reflect the culturally ideal relationship style. Marshall (1983a) argues that such relationships are "analytically primary" over the parent–child, nuclear family tie. In the Mandinka situation, corporate patrilineage groups of brothers and male cousins provide a strong sibling influence throughout life.

Sibling relationships in many Pacific island cultures have been described as a metaphor for how the entire culture should be organized, what cultural ideals are worth pursuing, and the ways in which one's self and one's community should be reproduced (Marshall, 1983a, pp. 10–13). The ethos of siblingship in such societies is hardly distinguishable from ideals of kinship more generally, or from moral values for society. The cultural ideal of love or concern for others, for instance, is expressed in the same ways as are used to describe ideal relations among sibs.

> Spread throughout much of this area is a notion, sometimes glossed as "love" but perhaps better translated as "concern" or "compassion," that is used to describe proper kin sentiment, including that among siblings.... Siblings in most of the Pacific may be taken to be those persons who stand in the same or parallel relationships to the same things(s), e.g., other persons, land estates and the like. Put otherwise, siblings are those, usually of the same generation, who share a jointly inherited past and a common future. Siblings emerge ... as sets of persons linked by biology and biography who inherit or enjoy mutual rights in persons, property, knowledge, etc., and who seek to increase or expand (to "reproduce") this inheritance. The central importance of cross-siblings [opposite-sex member of the sibling set] in much of the Pacific stands out here, as it is widely held in the islands that one cannot "reproduce" in this sense without a cross-sibling... (Marshall, 1983a, p. 13).

> ... husband and wife represent different, competing interests (even though they should cooperate in day-to-day tasks) and they and the groups from which they come typically are engaged in "exchange" transactions, rather than sharing (Marshall, 1983a, p. 12).

By marrying across sibling sets, the tensions, conflicts, and complications surrounding property, sexuality, and descent that arise from the structure and symbolic opposition of siblings and couples are partially resolved. The sibling bond remains dominant, however, even over the married couple or parent-child bonds in many hamlet or kindred-based societies.

The societies described in this volume also differ in their social hierarchy and dominance patterns. The Hawaiians and Samoans (Ochs, 1982) culturally elaborate status based on rank, whereas the Kwara'e are virtually at the other extreme—a kindred-based, bilateral society, in which genealogical connections are reckoned through the mother's and father's families of orientation. Mandinka live in a world of gerontocratic and sex-differentiated hierarchies. Since the Mandinka participate in the modern world economy, there is also an overlay of social class differences based on monetary wealth. Mexico and the North American samples live in a society dominated by economic class and racial quasi-caste organization (Ogbu, 1981).

Parents in each of these societies are preparing their children for different social and economic worlds, based on these different status hierarchies and task expectations. Literacy training is the central task of subsistence competency in childhood for middle-class American samples. The tasks for Mandinka, Native Hawaiian, Kwara'ae, and Mexican children currently may include schooling, but also comprise domestic chores, subsistence aid to the family, help with child care, assistance in trade and marketing, and so forth. Siblings' relationships with each other during childhood already anticipate these future realities of adult economic and social life. The Kwara'ae encourage a behavioral style of gentle training for cooperation and nurturance; the Mandinka establish sibling care-

taking roles that require great situational sensitivity, as well as a strong requirement of learning the dominance hierarchy and appropriate deference within it; middle-class homes in Davis, California, train children for individual autonomy and privacy.

Inheritance patterns are bilateral and partible in Davis, patrilineal and partible among Mandinka, and patrilineal with mixed inheritance in Mexico. Siblings in each culture know this about one another as surely as they know their sex and their respective temperaments and talents. Future resource allocation and competition influences how boys and girls, firstborns and last, full and half siblings are treated by adults and how they treat each other as young children. Sibling status differences that will fully emerge later in life are already understood and known to children, and can shape relationships long before children reach maturity. This is evident in the description of sibling relationships in many chapters.

The Mandinka, Native Hawaiians, and Mexicans have high birth rates and declining infant and child mortality rates; their families are large, birth spacing is close, and so the sibling group includes large multi-age and multi-sex groups of children. Sibling groups in the North American samples (see Chapters 7, 8, and 9) are dramatically smaller in the size and age ranges of other children available for interaction. In addition, cousins and other classificatory relatives are typically excluded from sibling-like relationships in the North American cases. The Kwara'ae represent a third, hamlet-type pattern, with smaller settlements and domestic groups. Siblings there live among fewer people. The available numbers and statuses of children (sibs, cousins, other relatives, or friends, acquaintances, and strangers) vary widely in daily activity settings across the communities in this study.

Finally, expectable patterns of talk and discourse between sibs, parents, and children vary widely across the societies discussed in this volume. Watson-Gegeo and Gegeo (Chapter 4), for instance, describe Kwara'ae and other child caretakers going to great lengths to engage in dialogues with their charges in which empathic attention by the caretaker is important, and in which considerable teaching and instruction occurs. Caretakers are described as talking with their charges while carrying them around the gardens and forests, naming objects, telling stories to them, and so forth. Ochs (1982) does not find this in her Samoan work, and in fact finds little evidence of verbal negotiations and instruction. Samoan children are expected to understand their world through observational learning, to monitor their position in the family and social hierarchy, and learn from that position when to remain silent and when to speak.

Zukow's data (Chapter 5) on naming and play among Mexican adult and child caretakers show a pattern different from either Kwara'ae, Samoan, or American middle-class samples. However, her data show evidence of accommodation to children by caregivers, especially when there are signs of communicative distress, such as a lack of comprehension of verbal messages. Adult and sibling caregivers coordinate nonverbal and verbal information to facilitate the comprehension of verbal messages *when* children display a lack of comprehension. During play, older children will break down activities into subsequences, explicitly

contrast their own expertise with the younger child's lack of apparent knowledge, and provide models of "competent" conduct to other children.

Sara Harkness (1977) studied language acquisition among the Kipsigis of Western Kenya, a society (like the Mandinka) with high rates of sibling caretaking and shared domestic management. She found that siblings engaged in frequent "commentary dialogues" with each other and with younger toddlers and infants, talk that does not require children to respond by giving answers and engaging in dialogue with their interlocutor. Mothers, in contrast, engaged in more "elicitation dialogues," asking questions of children while giving fewer statements and information in exchange. Kipsigis mothers engaged in more continuous dialogue with children than children did with each other, and Harkness found a richer, more complex language environment in mother–child dyads versus child–child. At the same time, Harkness found that *both* mothers and children used patterns of language repetition, explanation, and practice in talking with young children and infants.

It is evident from these and other data that societies emphasizing the sibling set, or using shared domestic management in the sibling group, do not necessarily show similar kinds of language socialization, or teaching and learning contexts. The discourse styles in Zukow's Mexican sample (Chapter 5), Whittemore and Beverly's Mandinka group (Chapter 3), Ochs' Samoan data (1982), and the Kwara'ae (see Chapter 4) differ from one another as well as from the middle-class North American samples.

The societies in this volume vary in the extent to which commentary or elicitation characterize adult, child, and child–child talk. One reason for such variations may be that early language socialization is influenced by the *future* use of varying kinds of talk. The question then is, for what subsequent kinds of activity settings will these early language patterns be useful? Some Polynesian or African sibling groups, for instance, are likely to remain together throughout their lives. Early language among siblings may already anticipate later sibling complementarity. From a lifespan developmental perspective, the child who is able to *switch* readily between various language styles may be the most effective language user.

Sibling Activity Settings and Literacy: An Example from Hawaii

Cultural beliefs about sibling relationships are not necessarily shared by an entire community, and cultural approaches to the study of siblings do not (or should not) assume homogeneity. Data from a study of sibling caretaking and language use in Hawaii illustrate cultural heterogeneity of the local activity settings surrounding children, and in children's language and discourse styles (Weisner 1982; Weisner, 1987; Weisner & Gallimore, 1977; Weisner, Gallimore, & Jordan, 1988; Weisner, Gallimore, & Tharp, 1982). Polynesian and Pacific island societies, and Native Hawaiians in particular, are well-known for the importance of the sibling group in family and cultural life, and for the use of sibling caretaking

in rearing children (Gallimore, Boggs, & Jordan, 1974; Howard, 1974; Jordan, 1978; Jordan & Tharp, 1979; Levy, 1968; Marshall, 1983; Ritchie & Ritchie, 1979; Weisner, et al., 1982). Contemporary Native Hawaiian society still shares many of these beliefs, yet shows considerable variability in their implementation in family life.

Our research with Native Hawaiian families in Honolulu, for instance, shows that parents understand and accept the ideas of sibling solidarity and sibling care for their families, yet are also highly variable in their attitudes toward and practice of such customs (Weisner et al., 1988). Interviews with 56 parents showed considerable ambivalence in how parents felt about the practice of sib care and the role of sibling groups in family life. Some families pointed out negative consequences of sib care, such as the use of shared domestic management by parents as a way to avoid necessary parental responsibility, or the danger of putting too much responsibility on children by giving them excessive child-care duties too early. Others said that certain children are more fitted to promoting shared caretaking and responsibility than are others, and parents must be selective. The "cultural notion" of sibling-sibling solidarity identified by Marshall as characteristic of societies in Oceania *is* recognizable, but is quite variable at the level of cultural beliefs and attitudes and implementation into family life.

Families also varied in the degree to which they reported or were observed to actively implement these goals for sibling relationships in their families' daily routines. Some did so frequently, some intermittently, and some not at all. To test for patterns in sibling roles and activities, home observations were conducted using a repeated-measures design in which eight children and their families were visited 20 times after school. Data were collected at each of these visits on children's social activities, caretaking, and play groups. The home observers looked for evidence in the afternoon daily routines of the children and parents that would indicate whether families were practicing customs consistent with the Native Hawaiian cultural ideal of sibling companionship, caretaking, and shared domestic management.

The variance in these behaviors across the eight families (pooling the 20 visits to each family) was statistically significant ($p < .001$). The within-subject, individual difference variance for each of the eight children across their 20 visits was also significant ($p < .001$). These data suggested that the practice of sibling care, and the patterns of afternoon peer activities, were not homogeneous across families, nor were they homogeneous in the individual experience of the children across the 20 afternoons that we visited them.

However, there is no reason to expect that data at the cultural level of analysis (such as the moral or relationship-ideal of sibling solidarity) will necessarily appear at the level of small-group dyadic interaction, or within the individual experience of a particular child. Individual experience will vary due to differences in activity-setting features such as personnel available; task requirements; or participants' goals and motives. What is described as a cultural tendency toward high solidarity among Native Hawaiian sibling groups might be transformed in mothers' reports of their own children to be described as a highly

differentiated, heterogeneous group. Observations of siblings in activity settings in turn might reveal setting-specific, varying degrees of cooperation and shared caretaking.

Data on language use among children ages 5 to 9 years in these same home activity settings shows more similarity across families. Field observers judged the children's language facility in the context of various dyads and tasks. Language measures included talkativeness among the children or with adults; use of Standard English (SE) phrases, grammar, or vocabulary; and the complexity of language heard by the field observer (use of whole sentences, for instance). These three measures were all significantly intercorrelated. Older children (ages 7 to 9 years) were more talkative, used more SE, and displayed more complex language *with other children* (peers and siblings), than they did with their mothers. Younger children (5 to 6 years) were *equally* high on language measures with their mothers as with other children and so were, *overall*, more talkative ($p < .002$), used more SE ($p < .04$) and more complex language ($p < .016$) than older children. Girls had higher scores on all three measures than boys ($p < .0001$) at younger and older ages.

We next examined the activity settings around children during the bouts of talk, or during literacy-related activities (such as any direct teaching done at home, practicing or discussing school work, or naming or spelling objects). Mothers and other adults were unlikely to be participants in these activities; adults seldom engaged in "scaffolded" dialogue with children, as children reached school age. Children were likely to talk, or engage in other school- or literacy-related activity, during *child*-generated, spontaneous co-participation in tasks and activities. When children were independent of direct adult interactions, and were shaping their own activities, they could bring talk or literacy-related skills to bear in order to accomplish the activity. Examples of these joint, child-generated activities include naming cars, deciding how to get objects off a roof, talking about family visitors and who they were, doing paper constructions or doll play, or discussing school and school work.

Our conclusion, from both ethnographic and quantified home observational data, is that literacy-related activity occurs most often in child–child dyads, child–generated tasks, and child–negotiated scripts for conduct. These data are congruent with Native Hawaiian cultural ideals of early child interdependence, shared domestic activity among the sibling group, joint task responsibility among family members without continuous parental involvement, and the cultural importance of peer and sibling solidarity.

What seemed variable and heterogeneous initially (e.g., variability in sibling caretaking and parental beliefs) shows evidence of culturally patterned behavior at the level of scripts for conduct (joint, child-generated and constructed activity) and personnel (adults become less involved in language and literacy-related activity as children get older). It is sufficient for analytical and comparative purposes to find out *which* aspects of activity settings are similar across families and children. It is not necessary to find consistency in all respects at every level. The cultural ideal of sibling solidarity and sharing seems visible in the ways children

share tasks or jointly plan peer activity rather than in how parents or children report their moral beliefs about sibling relationships, or how they practice sibling caretaking. Other cultures may show a different pattern of implementation of such beliefs, or may show more homogeneity across all levels. The effects on children in their sibling group would presumably differ in such cases. Using the activity setting as the unit for cultural analysis encourages comparative work of this kind.

Conclusion

The sibling group plays a powerful role as a cultural relationship ideal in many of the societies described in this volume, especially smaller-scale societies with shared domestic management; sibling caretaking of children; and continuing, functionally interdependent sibling relationships throughout life. The activity settings around siblings provide a useful framework for the comparative analysis of sibling groups across cultures. Activity-setting data include personnel, tasks, goals, motives, and specific cultural scripts for carrying out activities. Cultural features need not be homogeneous to have powerful effects on sibling relationships.

Language use and literacy-related activity among Native Hawaiian mothers and children illustrate cultural activity-setting analysis. Child-generated tasks and activities, rather than parent–child contexts, show the most talkativeness, use of Standard English, complexity in language, and literacy activities in this sample of urban Native Hawaiians. This pattern is more common among children ages 7 to 9 years. These findings can be compared to discourse and talk in other sibling groups in which different activity settings provide the context for development. Without minimizing the important differences in methods, sampling, and analytical categories used for the societies studied in this volume, activity-setting analysis and pan-cultural features of sibling groups provide powerful tools for the comparative study of siblings.

Acknowledgments. Research support for the Native Hawaiian studies comes from the Kamehameha Educational Research Institute, funded by the Bernice P. Bishop Estate. Professors Roland Tharp (University of Hawaii) and Ronald Gallimore (UCLA) were Principal Investigators of this project during the study. Additional support for the preparation of this manuscript comes from the Department of Psychiatry and Biobehavioral Sciences, UCLA. Laura B. Seidner, Anne-Marie Tietjen, and Patricia Zukow made helpful comments on an earlier draft.

References

Boster, J. (Ed.) (1987). Intracultural variation. *American Behavioral Scientist, 31* (2), 150–162.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Cole, M. (1981). *Society, mind and development*. (Report No. 106). San Diego: University of California, Center for Human Information Processing.

Cole, M. (1985). The zone of proximal development: Where culture and cognition create each other. In J.V. Wertsch (Ed.), *Culture, communication, and cognition* (pp. 146–161). New York: Cambridge University Press.

Dunn, J. (1983). Sibling relationships in early childhood. *Child Development, 54* (4), 787–811.

Dunn, J. (1985). *Sisters and brothers*. Cambridge, MA: Harvard University Press.

Dunn, J., & Kendrick, C. (1982). *Siblings: Love, envy, and understanding*. Cambridge, MA: Harvard University Press.

Dunn, J., & Kendrick, C. (1982). Siblings and their mothers: Developing relationships within the family. In M.E. Lamb & B. Sutton-Smith (Eds.), *Sibling relationships: Their nature and significance across the lifespan* (pp. 39–60). Hillsdale, NJ: Erlbaum.

Elder, Glen H. Jr. (1987). Families and lives: Some developments in life-course studies. *Journal of Family History*, 12, 179–199.

Fortes, M. (1974). The first born. *Journal of Child Psychology and Psychiatry, 15*, 81–104.

Gallimore, R., Boggs, J., & Jordan, C. (1974). *Culture, behavior, and education: A study of Hawaiian-Americans*. Beverly Hills, CA: Sage.

Geertz, C. (1984). "From the native's point of view": On the nature of anthropological understanding. In R. Shweder, & R. LeVine (Eds.), *Culture theory: Essays on mind, self, and emotion* (pp. 123–136). Cambridge: Cambridge University Press.

Goody, E.N. (1982). *Parenthood and social reproduction: Fostering and occupational roles in West Africa*. Cambridge: Cambridge University Press.

Harkness, S. (1977). Aspects of social environment and first language acquisition in rural Africa. In C.E. Snow & C.A. Ferguson (Eds.), *Talking to children: Language input and acquisition* (pp. 309–316). New York: Cambridge University Press.

Hartup, W., & Rubin, Z. (Eds.) (1986). *Relationships and development*. Hillsdale, NJ: Erlbaum.

Howard, A. (1974). *Ain't no big thing: Coping strategies in a Hawaiian-American community*. Honolulu: The University of Hawaii Press.

Jackson, M. (1978). Ambivalence and the last-born: Birth-order position in convention and myth. *Man* (n.s.), *13*, 341–361.

Jordan, C. (1978, November). *Peer relationships among Hawaiian children and their educational implications*. Paper presented at the Annual Meeting of the American Anthropological Association, Los Angeles, CA.

Jordan, C., & Tharp, R. (1979). *Culture and education*. In A.J. Marsella, R. Tharp, & T.J. Ciborowski (Eds.), *Perspectives on cross-cultural psychology*. New York: Academic Press.

LeVine, R. (1977). Child rearing as cultural adaptation. In P.H. Leiderman, S. Tulkin, & A. Rosenfeld (Eds.), *Culture and infancy. Variations in the human experience* (pp. 15–27). New York: Academic Press.

Levy, R.I. (1968). Child management structure and its implications in a Tahitian family. In E. Vogel & N. Bell (Eds.), *A modern introduction to the family*. New York: The Free Press.

Lewis, M. (1984). *Beyond the dyad*. New York: Plenum Press.

Marshall, M. (1983a). Introduction: Approaches to siblingship in Oceania. In M. Marshall (Ed.), *Siblingship in Oceania: Studies in the meaning of kin relations* (ASAO Monograph No. 8, pp. 1–15). Lanham, MD: University Press of America.

Marshall, M. (1983b). Sibling sets as building blocks in Greater Trukese society. In M. Marshall (Ed.), *Siblingship in Oceania: Studies in the meaning of kin relations* (ASAO Monograph No. 8, pp. 201–224). Lanham, MD: University Press of America.

Marshall, M. (Ed.) (1983). *Siblingship in Oceania: Studies in the meaning of kin relations* (ASAO Monograph No. 8). Lanham, MD: University Press of America.

Munroe, R.L., & Munroe, R.H. (1983). Birth order and intellectual development in East Africa. *Journal of Cross-cultural Psychology, 14*, 3–16.

Munroe, R.L., & Munroe, R.H. (1988). Birth order and its psychological correlates in East Africa. In R. Bolton (Ed.), *The content of culture: Constance and variance*. New Haven, CT: HRAF Press.

Ochs, E. (1982). Talking to children in Western Samoa. *Language in Society, 11*, 77–104.

Ogbu, J. (1981). Origins of human competence: A cultural-ecological perspective. *Child Development, 52*, 418–429.

Plomin, R., & Daniels, D. (1987). Why are children in the same family so different from one another? *Behavioral and Brain Sciences, 10*, 1–60.

Ritchie, J., & Ritchie, J. (1979). *Growing up in Polynesia*. Sydney, Australia: Allen & Unwin.

Sangree, W.H. (1981). The "Last-Born" (*Muxogosi*) and complementary filiation in Tiriki, Kenya. *Ethos, 9*, 188–200.

Scarr, S., & Grajek, S. (1982). Similarities and differences among siblings. In M.E. Lamb & B. Sutton-Smith (Eds.), *Sibling relationships: Their nature and significance across the lifespan* (pp. 357–382). Hillsdale, NJ: Erlbaum.

Skinner, G.W. (n.d.). Sibling differentiation: Culture and configuration in Chinese families. Unpublished manuscript.

Suomi, S.J. (1982). Sibling relationships in nonhuman primates. In M.E. Lamb & B. Sutton-Smith (Eds.), *Sibling relationships: Their nature and significance across the lifespan* (pp. 329–356). Hillsdale, NJ: Erlbaum.

Super, C., & Harkness S. (Eds.). (1980). *Anthropological perspectives on child development: New directions for child development* (*New Directions in Child Development*, No. 8). San Francisco: Jossey-Bass.

Super, C.M., & Harkness, S. (1982). The infant's niche in rural Kenya and metropolitan America. In L.L. Adler (Ed.), *Issues in cross-cultural research*. New York: Academic Press.

Super, C.M., & Harkness, S. (1986). The developmental niche: A conceptualization at the interface of child and culture. *International Journal of Behavior Development, 9*, 1–25.

Vygotsky, L. (1978). M. Cole, V. John-Steiner, S. Scribner, & E. Souberman (Eds.), *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Weisner, T.S. (1982). Sibling interdependence and child caretaking: A cross-cultural view. In M. Lamb & B. Sutton-Smith (Eds.), *Sibling relationships: Their nature and significance across the lifespan* (pp. 305–327). Hillsdale, NJ: Erlbaum.

Weisner, T. (1984). Ecocultural niches of middle childhood: A cross-cultural perspective. In Collins, W.A. (Ed.), *Development during middle childhood: the years from six to twelve*. Washington, DC: National Academy Press, pp. 335–369.

Weisner, T.S. (1987). "Socialization for parenthood in sibling caretaking societies." In J. Lancaster, A. Rossi, & J. Altmann (Eds.), *Parenting across the life span* (pp. 237–270). New York: Aldine Press.

Weisner, T.S., & Gallimore, R. (1977). My brother's keeper: Child and sibling caretaking. *Current Anthropology, 18*, 169–190.

Weisner, T.S., & Gallimore R. (1985, December). *The convergence of ecocultural and activity theory.* Paper presented at the Annual Meeting of the American Anthropological Association, Washington, DC.

Weisner, T.S., Gallimore, R., & Jordan, C. (1988). Unpackaging cultural effects on classroom learning: Native Hawaiian peer assistance and child-generated activity. *Anthropology and Education Quarterly, 19* (4).

Weisner, T.S., Gallimore, R., & Tharp, R. (1982). Concordance between ethnographer and folk perspectives: Observed performance and self-ascription of sibling caretaking roles. *Human Organization, 41* (3), 237–244.

Wertsch, J.V. (1985). *Vygotsky and the social formation of mind*. Cambridge: Harvard University Press.

Whiting, B. (1976). The problem of the packaged variable. In K. Riegel & J. Meacham, (Eds.), *The developing individual in a changing world: historical and cultural issues*. (Vol. 1). The Netherlands: Mouton.

Whiting, B. (1980). Culture and social behavior: A model for the development of social behavior. *Ethos, 8*, 95–116.

Whiting, B., & Edwards, C. (1988). *Children of different worlds: The formation of social behavior.* Cambridge, MA: Harvard University Press.

Whiting, B., & Whiting, J. (1975). *Children of six cultures*. Cambridge, MA: Harvard University Press.

Whiting, J., & Whiting, B. (1978). A strategy for psychocultural research. In G. Spindler (Ed.), *The making of psychological anthropology* (pp. 39–61). Berkeley: University of California Press.