

# *Educational and Child Psychology*

Vol. 21, No. 2, 2004

## **EARLY CHILDHOOD EDUCATION AND CARE**

The British Psychological Society  
Division of Educational and Child Psychology



# Observational learning and enculturation

Harold Odden and Philippe Rochat

Emory University, USA

## Abstract

*Participatory learning as a central mechanism of enculturation is put into question based on ethnographic research conducted in a rural village in the Western Pacific country of Samoa.*

*The paper investigates the role of observational learning in the transmission of crucial social knowledge in Samoa allowing children to become active participants in their cultural environment.*

*The sample consists of 28 children aged between 4 and 12 years, 152 parental belief questionnaires as well as numerous semi-structured interviews. The research on learning individual fishing was conducted with a sample of 22 boys between 5 and 12 years of age and their older male relatives.*

*Experimental testing of children over a two-year period was combined with semi-structured interviews of caretakers and other adults as well as older children, parental belief questionnaires (multiple choice and short answer responses), and ethnographic observations of children's daily life.*

*Our data show that observational learning is both a pervasive and potent mode of social learning in the Samoan context. Samoan children learn a range of different values, practices and beliefs via observation and without the benefit of extensive social scaffolding and intensive instruction. These results are particularly relevant to educators as the number of multicultural students in Western classrooms increases. Children, who grow up in a family and community environment that emphasises observational learning, may be at a great disadvantage in Western classrooms that emphasise active participation and dyadic instruction. The possibility exists that these children might not have learnt how to acquire knowledge effectively from such an environment.*

## Introduction

Over the past three decades, there has been a convergence in thinking about the relationship of culture and child development based around the cultural historical theories of Lev Vygotsky and the concept of 'activity'. While there are still important differences in these different thinkers' theoretical stances, there are numerous similarities. All argue for a form of social learning that might be described as 'participatory learning' – learning that occurs as a result of the child's increasing participation in the culturally specific, everyday activities of a given society (Rogoff, 1990, 1993, 1998; Cole, 1985, 1996; Laboratory of Comparative Human Cognition, 1983; Lave, 1988; Wertsch, 1985; Tharp & Gallimore, 1988). The overwhelming emphasis on participation underestimates the role of observational learning in

which the child is a voluntary, casual and peripheral observer of everyday activities without any direct participation in them. We argue here that such learning is a potent and central mechanism of enculturation, the process by which a child comes to bear the knowledge, values and practices of the surrounding cultural environment (Herskovitz, 1948, 1955, p.326–333; Mead, 1963; LeVine, 1990; Gaskins, Miller & Corsaro, 1992; Strauss & Quinn, 1997; Tomasello, 1999).

We put into question the assumption of participatory learning as a central mechanism of knowledge transmission and enculturation cross-culturally. We base this argument on recent observations collected in the Western Pacific country of Samoa where one of us (Odden) conducted extensive field research over a two-year period. We show that observational learning in Samoa plays a prominent role in the transmission of crucial social knowledge, allowing children to become active participants in their cultural environment. This knowledge pertains to household chores, local notions of rank, status and hierarchy, as well as important subsistence activities such as fishing. We conclude that participatory learning, although important in the process of children's enculturation, is not an exclusive mechanism, especially in non-Western cultural contexts such as Samoa. This fact points to the necessity of considering the processes underlying children's enculturation as being multiple and context specific. We believe that this consideration is important for Western educators who are increasingly teaching cohorts of children from multicultural backgrounds. Some of these children are accustomed to forms of social learning that are profoundly at variance with the forms emphasised by developmental psychologists (Rogoff, 1990, 1993; Valsiner, 1987; Bruner, 1990; Lave, 1988; Tomasello, 1999; Wertsch, 1985; Cole, 1996) and commonly utilised in Western classrooms. These facts also force us to reconsider the importance of observation as an important mechanism underlying social learning in various cultures, including the West.

### *Participatory learning paradigm*

Developmental psychologists interested in the process by which children learn the values and practices of their parents' culture have typically emphasised the role of activity and children's participation in their social environment. This is primarily a legacy of Lev Vygotsky's influential view on education, which has at its core the principle that children learn most effectively via social scaffolding by more experienced individuals, which is targeted just beyond the scope of their current abilities and understandings (Vygotsky, 1978, 1986; Valsiner & van der Veer, 1993; Bruner, 1990; Rogoff *et al.*, 1995; Cole, 1985; Wertsch, 1985). The conceptualisation of activity and participation at the core of social learning was further elaborated and emphasised by Vygotsky's student Leontiev (1981; see also Cole (1985), Wertsch (1985), Chaiklin and Lave (1995) for his influence on developmental theories in the United States, and Engstrom (1987) for Scandinavia). In the footsteps of Leontiev, Rogoff emphasises the active side of enculturation when she defines it as 'the personal process by which, through engagement in an activity, individuals change and handle a later situation in ways prepared by their own participation in the previous situation. This is a process of becoming, rather than acquisition', (1995, p.142). Such a definition and the other similar accounts to be found in this school of thought tend to ignore alternative, less active modes of children's social learning, in particular casual and peripheral, non participatory observational learning.

Overall, in current theories of children's enculturation, if observational learning is considered, it is at most as a starting point or preliminary process that prepares them for further participation in a given activity. It is typically not viewed as a distinct and core process of cultural learning; see, for example, the astute and extensive discussion in Lancy (1996, pp.21–23) and Goodnow (1990, p.274) as quoted by Lancy (1996).

The primary emphasis on children's participatory learning leads researchers to focus on instances in which children are active participants engaged in a given activity. However, this is to the exclusion of instances in which children are peripheral, casual and non-participatory social actors. It also led researchers to emphasise observations of dyadic interactions between the adult and the child to the exclusion of polyadic social exchanges. This is strikingly at odds with numerous ethnographic observations of children's development in non-Western contexts (Fortes, 1970; Ochs, 1988; Schieffelin, 1990; LeVine, 1990; Morton, 1996). It is also at odds with regards to ethnic minorities in the West (see for example Heath, 1983, on African American children in the Southern United States) both in terms of the prominence of observational learning in enculturation and the prevalence of polyadic interactions in social life.

We see two key problems with the assumption of the central role of participatory learning in enculturation:

- ◆ it overlooks important inter- and intracultural variation in the processes by which children learn the values and practices of their culture;
- ◆ it removes from consideration the possibility that there might be multiple, yet complementary mechanisms of children's enculturation, each culture emphasising a different blend of social learning modalities.

To start, we present a brief description of the cultural context of our ethnographic observations and research findings from which our argument stems.

### *Some background information on Samoa*

The Samoans are a Malayo-Polynesian language-speaking population living on an archipelago of volcanic high islands in the southwestern Pacific Ocean. The Samoan archipelago is divided into two geopolitical entities: American Samoa and the much larger and more populous independent Samoa, which is the focus of the research described here. Samoans bear close cultural and historical ties to the peoples of nearby Tonga and Tokelau, as well as the more geographically distant islands of Tahiti, New Zealand and Hawaii, all of whom are jointly described in the ethnographic literature as 'Polynesians' because of their relatively high degree of cultural similarity (Kirch, 1984).

The majority of the Samoan population resides in small 500- to 2000-person rural villages. Samoans live in relatively large extended, multigenerational families with an average household size of 7.6 persons (Department of Statistics, 2002). Children's development occurs in the midst of an extensive and flexibly constituted social network, which extends far beyond the immediate household (Mead, 1928; Mageo, 1998; Ochs, 1988). Economic activities are primarily oriented towards subsistence agriculture and fishing, although there is some

employment in light industry and tourism. Political life is organised around the village council of chiefs (*matai*), who possess hereditary titles that entitle them to far-ranging political and economic powers within the village and within their extended families. Samoa is a representational government, yet most day-to-day political power is invested in these local village councils of *matai*.

Samoa society is pervasively hierarchical and socially stratified. Considerations of relative rank structure the functioning of all social institutions and the nature of a wide variety of practices (Duranti, 1994; Ochs, 1988; Shore, 1982, 1995; on rank and status in Polynesia as a whole see Sahlins, 1958; Goldman, 1970; Howard & Kirkpatrick, 1989). This is certainly the case with regards to child-rearing practices, where concerns for rank serve to structure these practices in various ways, and a constant attention to rank and status have been described as a central goal of socialisation (Ritchie & Ritchie, 1989).

## Research

The first author conducted research in Samoa for a total of 25 months, with 20 of those months spent in a single large village on the south coast of the main island of Upolu. The research focused on cultural learning and the acquisition of knowledge of the local system of rank, status and hierarchy. The ultimate aim was to understand what children up to 12 years of age understood about the system of chiefs (*faamatai*) as well as the mechanisms involved in this process of enculturation. To this end, children were selected from various families in the village and intensively investigated over the length of the research. Twenty-eight children aged between 4 and 12 years were observed longitudinally over two years in the key contexts of village life (family, peer groups, school, Sunday school, and other church and village events). Caretakers, teachers, pastors, chiefs and other primary figures surrounding these children were interviewed with reference to their beliefs about child development, parenting goals and practices. A parallel research project on cultural learning of subsistence fishing entailed observations of 22 boys between 5 and 12 years of age as well as semi structured interviews with the boys and their older male relatives who fished with them.

### *Ethnographic observations of child enculturation in Samoa*

First, we present briefly our general findings regarding Samoan socialisation practices and ethnotheory of learning. Overall, Samoan social interactions between adults and children are at some variance from the patterns that are typically assumed within the participatory learning paradigm (Rogoff, 1990, 1998; Wertsch, 1985; Cole, 1996). Due to the wide hierarchical gap between the high-ranking parents and their offspring, it is the adults who tend to initiate, control and regulate interactions with the child. In general, compared to more egalitarian, child oriented contexts ('neontocracies' – see Lancy, 1996) found in the West, these social norms limit the amount of prolonged active engagements between children and adults, sharply reduce the frequency of questions by children, and diminish the degree to which adults 'follow into' the attention of children. Samoan adults tend to perceive these types of actions as demeaning and damaging to the respect and dignity associated with their overall higher rank vis-à-vis children. These observations corroborate those of Ochs (Ochs, 1988; Ochs & Schieffelin, 1984). In general, although active adult scaffolding of the child's actions can be observed in Samoa, it is remarkably infrequent compared to its pervasiveness in the West.

We also found that Samoan belief and practice regarding enculturation are non-interventionist in nature. With a few exceptions,\* caregivers and other adults surrounding the children do not feel it is their role to actively promote children's learning of various domains of cultural knowledge. Children are largely left to learn things on their own without adults attempting to motivate, channel or accelerate that learning. Interviews and questionnaires of Samoan adults reveal that the modality through which children are thought to learn their culture is most often via observation and listening to their elders. While numerous parents indicated that adults were to model various behaviours and actions correctly so as to set a good example for their children, we found that in practice adults do not draw their child's attention to themselves as they model various actions, nor do they position children in a place where they would be able to observe something which is culturally valued. Our ethnographic observations suggest that instances of learning occur serendipitously as part of everyday activities\*\* – if the child takes an interest in observing it.

Three additional factors also make Samoa a fertile ground for the central role of observational learning as a mechanism of enculturation. First, Samoan homes are built largely without walls as an architectural adaptation to the hot and humid climate. As these homes are built in close proximity to each other, the activities of nearby households are easy to observe. Second, there is great permissiveness both for children and adults to observe the activities of others as notions of personal privacy are not valued and can even be associated with immorality or emotional instability (Shore, 1982). Third, children regularly accompany adults on errands, work, social visits and village events. Thus, there are many regular opportunities for Samoan children to observe adults engaged in their everyday activities.

While Samoa is atypical relative to most Western contexts, it should be noted that several of the attributes mentioned here – most notably the non-interventionist approach to the child's enculturation and social interactions between children and adults that are influenced by a heightened sensitivity to relative rank – are widely found in non-Western contexts (Lancy, 1996; LeVine, 1988) and in minority ethnic groups in the West (Heath, 1983; Gallimore, Boggs & Jordan, 1974). Next we present three examples of observational learning in specific contexts.

### ***Three specific observations***

#### ***1. Household chores:***

A wide range of chores are performed by both male and female children beginning around the time they enter school at age six. The number, relative difficulty and degree to which the children are held responsible for their successful completion of these tasks increases with

---

\* The one principal exception to this norm is the basic set of respectful behaviours, which are taught largely through aversion training where adults shame, threaten and occasionally utilise corporal punishment to motivate children's adherence to these valued social norms. After reviewing the cross-cultural literature on childhood, Lancy notes that respectful behavior is the 'one area in which nearly all parents seem to take on the didactic role of teacher' (1996: 23).

\*\* Two clear exceptions are the respectful speech taught at the Congregational Christian Church of Samoa's pastor's school and the Samoan language curriculum taught in the primary and secondary public schools. In both these instances, certain portions of highly valued domains of cultural knowledge are formally taught in an institutional setting.

age. At around age 15 adolescents, and in particularly females, spend a significant amount of their time engaged in chores, depending on the composition of the household and whether or not the child is currently attending school. These chores include such things as: washing clothes and dishes; sweeping; picking up leaves; gathering fire wood and carrying water; child care; cooking and food preparation; and feeding domesticated animals.

Interviews with parents and ethnographic observations in numerous households indicated that parents do not actively teach these chores to their offspring. The majority of parents believed that children simply come to learn these tasks by watching them performed correctly by adults and more experienced older siblings. Parental perception was that these tasks were relatively easy to learn, yet clearly each of these tasks had to be learned. Washing clothes, for example, requires the child to learn how much soap to use, how to mix the soap with the water, what implements to use, how to beat the clothes with a stick, and how to rinse the clothes and hang them on a line or place them on the ground to dry, as well as a standard of cleanliness.

Young children seem to learn these tasks primarily via observation of the successful completion of the given task by a more experienced person – as Samoan parental belief indicates is the case. These different chores are performed on a daily basis, and are readily observed by any child present. On a few occasions adults were observed correcting children's efforts, but these corrections were mostly to censure them for a job not done sufficiently thoroughly. At no time was a parent observed explicitly and verbally explaining a given chore to the child. When such a possible scenario was proposed to adults in interviews, a majority indicated that was not consonant with the Samoan way.

## *2. Fishing*

Various forms of individual and communal fishing are very common in Samoa, as they are throughout the Pacific. The three most common methods of individual fishing in the village in which we worked were spear fishing, line fishing and thrown-net fishing. For each of these methods, children from 6 to 12 years of age frequently accompanied the adults or adolescents who were the primary participants. On many occasions the accompanying children carried woven palm frond baskets into which the captured fish are placed. With line fishing, children may be asked to gather hermit crabs, which can be used to bait the fishing hooks. But the child's participation in the actual fishing is strikingly limited. Fishing line, nets and spears are limited in number, so that there is little opportunity for the child to fish simultaneously with adults where the adults might supervise the child's actions. On the numerous (approximately 50) occasions on which children were observed fishing, only once did an adult allow the accompanying child to use the adult's line, net or spear while he supervised their efforts. Of course, with spear fishing there are strict limits on observation as there was frequently only a single spear and set of goggles, so that the child would simply wait on the shore while the adult fished in the lagoon.

The observational and interview data suggest that learning how to fish occurs by observing the actions of an adult or more experienced adolescent at close proximity on several occasions, regardless of the fishing method employed. Older children (generally 10 years or older) would then borrow the adult's fishing equipment and attempt to go fishing on their own without any adult supervision. Thus, there is observation coupled with emulation and



experimentation by the child or a group of children, which eventually resulted in fishing skill acquisition. Several of the older children observed (10–12 years of age) were moderately skilled fisherman who could successfully capture fish via one or more of these methods. When asked how they learned to do so, each indicated that they had at first observed the actions of a skilled fisherman and then had repeatedly tried to imitate their actions on their own, and with some practice began to successfully catch fish.

### 3. *The chief system (faamatai): concepts of rank and hierarchy*

The hierarchical system of chiefs is often described by Samoans as the crux of their culture (Shore, 1982). This valued domain of knowledge entails a wide range of intricate concepts and practices pertaining to notions such as power and authority, ritual practices, respectful and deferential behaviours, and complex genealogical relationships linking different descent groups (Shore, 1982; Duranti, 1994). In contrast to the two earlier examples, knowledge of the chief system entails understanding a complex and abstract conceptual system as well as the associated practices and rituals.

Observations and testing revealed that Samoan children as young as six years of age begin to demonstrate some level of implicit learning regarding these notions. They begin to pick up the distinctive features characterising people of rank and authority without any explicit instruction. This was particularly the case for distinctive behavioral aspects of common ritual events associated with chiefs that children could readily witness. Thus, for example, we observed that a majority of children from six years of age demonstrate an implicit understanding of the orator chief's ritualised postures and gestures using his symbols of office (i.e. fly whisk and staff) while giving a formal speech. They also demonstrate some understanding of ritual gestures during kava ceremonies – kava is a ritualised drink served to chiefs during their meetings. They also showed imitation of the distinctive intonation contours of the public announcement of ceremonial gifts and large social events. These three examples are signs of Samoan children's developing understanding of the chief system via observation.

Testing and interviews with older children revealed that a majority had knowledge of many aspects of the basic concepts underlying the chief system. A multiple choice test of the basic set of conceptual knowledge of the chief system and its local manifestations were given to all of the seventh and eighth grade students ( $N = 46$ ) at a local primary school. A majority of the students tested demonstrated a broad understanding of many basic concepts, including the two types of Samoan chiefs, the identity of the ceremonial attendant of the highest ranking chief in the village, the responsibilities associated with the social role of a chief both in the family and in the village, and the order in which the beverage kava (*piper methysticum*) is ritually served at village meetings of chiefs, a practice that indicates the relative rank of the chiefs present.

The relative amount of knowledge of the chief system demonstrated by children is revealing, as this domain of Samoan social life is both highly valued and very restrictive in terms of participation and explicit instruction. Participation in the meetings of chiefs and in the various chiefly duties at various village events is strictly limited to title holders. While non title holders may observe these activities from the periphery, under no circumstances would a non title holder be able to participate as a chief in these proceedings. The village's untitled men's association (*aumaga*) attends to the village chiefs during the meetings,



and family members will attend to chiefs on other occasions. Yet these activities are largely parallel to and distinct from the chief's activities.

Again, learning about the various aspects of the chief system occurs through observation and overhearing adult discussions of it. With absolutely no exception, children do not participate in the activities of chiefs but rather remain on the periphery while their activities are enacted. While children are formally taught about the chief system in schools, interviews with teachers and analysis of curriculum guides indicates that this knowledge is taught almost exclusively in secondary school (grades 9 and higher).

In summary, there are several common attributes to these three sets of ethnographic observations that bear on the argument presented here. First, children's learning of these three cultural domains does not occur as the child moves on a gradient from peripheral to full participation as the participatory learning paradigm suggests. Rather, participation seems to be 'binary' in that the social actor is either a full participant or a peripheral one. Second, rather than participatory learning, we see observational learning employed by children in acquiring these different skills and understandings. In some instances, emulation and experimentation on one's own or as part of a group seem to play a secondary role in this process of learning. Third, both in terms of Samoan parental belief and practice there is relatively little use of active scaffolding in teaching these activities, even with regards to the conceptually complex and culturally valued knowledge of the chief system. This is counter to Kruger and Tomasello's (1996) assertion that highly valued, complex and abstract domains of cultural knowledge are taught via intensive, highly scaffolded, intentional instruction. Fourth, and perhaps most importantly, despite the lack of participation we do see evidence of successful learning in each of these three domains that occurs by virtue of the child's observation.

It could be argued that Samoan targets of enculturation – the beliefs, values and practices that are deemed important to learn in this culture – are of a type that would favour observational learning over other forms of social learning such as participatory learning. Following this argument, the Samoans have simply adapted their modes of enculturation to the specific types of knowledge to be imparted. This argument is probably too simple. Fishing and different types of household chores, which entail some measure of visual-spatial skill, might indeed be readily acquired via observation. However, in contrast, the learning of complex conceptual understandings such as rank and hierarchy are not readily available via observation. In Western cultures this kind of knowledge would likely be imparted in a highly formalised, institutionalised setting featuring extensive social scaffolding, thorough questioning and discussion. Yet, our data indicates that Samoan beliefs and practices advocate the use of observational learning for simple skills as well as complex, conceptual bodies of knowledge.

## **Conclusion**

Based on this research, we conclude that observational learning is both a pervasive and potent mode of social learning in the Samoan context. The ethnographic data collected suggest that observation is a common mode of children's cultural learning of a range of different skills, values, practices and beliefs. This is in contrast to the participatory learning paradigm, which asserts the predominance of activity in cultural learning and, more broadly,

in children's enculturation. This paradigm has also typically marginalised the role of observation in cultural learning by relegating it to the initial step or process in participatory learning (Rogoff, 1990, 1998). The data presented here point to observational learning as a central mechanism of Samoan as well as probably a large number of non-Western and minority children's enculturation.

Samoan children acquire a range of skills and understandings, from subsistence activities and various household chores to basic conceptual knowledge regarding local models of rank and status, without the active assistance of more experienced social others. This is at odds with the Vygotskian inspired 'zone of proximal development' and the closely related notion of scaffolding that has generated so much attention in recent years.

We propose that cultures vary the blend of different modalities of social learning underlying children's enculturation. In the Samoan context, observational learning plays a more central role than has been typically acknowledged in the participatory learning paradigm due to a heightened sensitivity to issue of rank and status, a non-interventionist attitude towards children's learning, and the Samoan ethnotheory of child development that emphasises observation and overhearing as culturally appropriate forms of learning. We are not suggesting that participatory learning and even some limited active scaffolding and instructional learning cannot be found in the Samoan context. Rather, we propose that the particular modalities of social learning that are promoted depend upon the cultural context. In the Samoan context observational learning plays a central role in children's enculturation. Participatory learning and active instruction appear as secondary processes. Ethnographies of childhood from other parts of the world suggest strongly that the Samoan case is not a lone exception, and that observational learning may have a more general role in children's enculturation than has been previously acknowledged (Lancy, 1996).

For educators, these results are particularly relevant as the numbers of multicultural students in Western classrooms increases. Children who grow up in a family and community environment that emphasizes observational learning may be at a great disadvantage in a Western classroom that emphasizes active participation and dyadic instruction. A great deal of empirical support for this 'mismatch' hypothesis has been gathered over recent years suggesting that a disjuncture between familiar forms of social learning at home and those utilized in the school may have a pronounced negative impact on the child's school achievement (Heath, 1983, for African American children; Boggs, 1985; Gallimore, Boggs & Jordan, 1974; Weisner, Gallimore & Jordan, 1988, for Hawaiian American children; Phillips, 1983; Cazden & John, 1971; Greenbaum & Greenbaum, 1983, for Native American children; and Jordan, 1984, for general perspectives.) Children growing up in a non-Western cultural environment might not be prepared to benefit from the intensive social scaffolding, lengthy dyadic interactions between teacher and student, as well as other forms of cognitive acceleration approaches to teaching that are valued and promoted in Western classrooms.

## **Acknowledgements**

Funding for the research described in this paper was provided to the first author by the National Science Foundation (grant BCS-0079118) and the Wenner Gren Foundation for Anthropological Research (Individual Research Grant 6740).

## References

- Boggs, S.T. (1985). *Speaking, relating, and learning: A study of Hawaiian children at home and at school*. Norwood, NJ: Ablex Publishing Co.
- Bruner, J.S. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.
- Cazden, C. B. & John, V. P. (1971). Learning in American Indian children. In M. L. Wax, S. Diamond, & F. O. Gearing (Eds.) *Anthropological perspectives on education*. New York: Basic Books
- Chaiklin, S. & Lave, J. (1995). *Understanding practice: Perspectives on activity and context*. Cambridge: Cambridge University Press.
- Cole, M. (1985). The zone of proximal development: where culture and cognition create each other. In J. Wertsch (Ed.) *Culture, communication and cognition: Vygotskian perspectives*. Cambridge: Cambridge University Press.
- Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Belknap Press.
- Department of Statistics, Government of Samoa (2002). *2001 Census of Population and Housing: A special release of census selected tabulations*. Apia, Samoa: Department of Statistics.
- Duranti, A. (1994). *From grammar to politics: Linguistic anthropology in a Western Samoan village*. Los Angeles: University of California Press.
- Engstrom, Y. (1987). *Learning by Expanding: An activity theoretical approach to developmental research*. Helsinki: Orienta Konsultit Oy.
- Fortes, M. (1970). Social and psychological aspects of education in Taleland. In J. Middleton (Ed.), *From child to adult: Studies in the anthropology of education*. Garden City, NY: Natural History Press.
- Gallimore, R., Boggs, J.W. & Jordan, C. (1974). *Culture, behavior and education: A study of Hawaiian-Americans*. Beverly Hills, CA: Sage Publications.
- Gaskins, S., Miller, P.J. & Corsaro, W.A. (1992). Theoretical and methodological perspectives in the interpretive study of children. In W. Corsaro & P.J. Miller (Eds.), *Interpretive approaches to children's socialisation*. San Francisco, CA: Jossey-Bass.
- Goldman, I. (1970). *Ancient Polynesian society*. Chicago, IL: University of Chicago Press.
- Goodnow, J. J. (1990). The socialisation of cognition. In J. W. Stigler, R. A. Shweder & G. Herdt (Eds.), *Cultural psychology*. New York: Cambridge University Press.
- Greenbaum, P. & Greenbaum, S.C. (1983). Cultural differences, non verbal regulation, and classroom interaction: Sociolinguistic interference in American Indian education. *Peabody Journal of Education*, 61, 16-33.
- Heath, S.B. (1983). *Ways with words*. Cambridge, MA: Cambridge University Press.
- Heath, S.B. (1990). The children of Tracton's children. In J. W. Stigler, R. A. Shweder & G. Herdt (Eds.) *Cultural psychology*. New York: Cambridge University Press.
- Herskovitz, M.J. (1948). *Man and his works*. New York: Knopf.
- Herskovitz, M.J. (1955). *Cultural anthropology*. New York: Knopf.
- Howard, A. & Kirkpatrick, J. (1989). Social organization. In A. Howard & R. Borofsky (Eds.) *Developments in Polynesian ethnology*. Honolulu: University of Hawaii.
- Jordan, C. (1984). Cultural compatibility and the education of ethnic minority children. *Educational Research Quarterly*, 8(4), 59-71.
- Kirch, P.V. (1984). *Evolution of Polynesian chiefdoms*. Cambridge, MA: Cambridge University Press.
- Kruger, A.C. & Tomasello, M. (1996). *Cultural learning and learning culture*. In D.R. Olson & N. Torrance (Eds.) *Handbook of education and human development: New models of learning, teaching and schooling*. Cambridge: Blackwell Press.
- Laboratory of Comparative Human Cognition (1983). Culture and cognitive development. In P. Mussen (Series Ed.) & W. Kessen (Vol. Ed.), *Handbook of child psychology* (Vol. 1). New York: Wiley.

- Lancy, D. (1996). *Playing on the mother-ground: Cultural routines for children's development*. New York: Guilford Press.
- Lave, J. (1988). *Cognition in practice*. Cambridge: Cambridge University Press.
- Leont'ev, A.N. (1981). The problem of activity in psychology. In J.V. Wertsch (Ed.) *The concept of activity in Soviet psychology*. Armonk, NY: Sharpe.
- LeVine, R. (1988). Human parental care: Universal goals, cultural strategies, individual behavior. In R. LeVine, P. Miller & M. West (Eds.) *Parental behavior in diverse societies. New directions for child development*, 40. San Francisco: Jossey-Bass.
- LeVine, R. (1990). Enculturation: A biosocial perspective on the development of the self. In D. Cicchetti & M. Beeghley (Eds.), *The self in transition: Infancy to childhood*. Chicago, IL: University of Chicago Press
- Mageo, J.M. (1998). *Theorizing self in Samoa: Emotions, genders and sexualities*. Ann Arbor, MI: University of Michigan Press.
- Mead, M. (1928). *Coming of age in Samoa*. New York: William Morrow.
- Mead, M. (1963). Socialisation and enculturation. *Current Anthropology*, 4, 184-188.
- Morton, H. (1996). *Becoming Tongan: An ethnography of childhood*. Honolulu: University of Hawaii Press.
- Ochs, E. (1988). *Culture and language development: Language acquisition and language socialization in a Samoan village*. Cambridge: Cambridge University Press.
- Ochs, E. & Schieffelin, B. (1984). Language acquisition and socialisation: Three developmental stories and their implications. In R. Shweder & R. LeVine (Eds.), *Culture theory: Essays on mind, self and society*. New York: Cambridge University Press.
- Phillips, S.U. (1983). *The Invisible culture: Communication in classroom and community on the Warm Springs Indian Reservation*. New York: Longman, Inc.
- Ritchie, J. & Ritchie, J. (1989). Socialisation. In A. Howard & R. Borofsky (Eds.), *Developments in Polynesian ethnology*. Honolulu: University of Hawaii.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.
- Rogoff, B. (1993). Children's guided participation and participatory appropriation in sociocultural activity. In R.H. Wozniak & K.W. Fischer (Eds.), *Development in context*. Hillsdale, NJ: Erlbaum.
- Rogoff, B. (1995). Observing sociocultural activity on three planes: participatory appropriation, guided participation, and apprenticeship. In J. Wertsch, P. del Rio & A. Alvarez (Eds.) *Sociocultural studies of mind*. Cambridge: Cambridge University Press.
- Rogoff, B. (1998). Cognition as collaborative process. In W. Damon (Ed.), *Handbook in child psychology (volume 2)*. New York: John Wiley.
- Rogoff, B., Baker-Sennett, J., Lacasa, P. & Goldsmith, D. (1995). Development through participation in sociocultural activity. In J.J. Goodnow, P.J. Miller & F. Kessel (Eds.), *Cultural practices as contexts for development*. San Francisco, CA: Jossey-Bass.
- Sahlins, M. (1963). Poor man, rich man, big-man, chief: Political yypes in Polynesia and Melanesia. *Comparative Studies in Society and History*, 5, 285-303.
- Schieffelin, B. (1990). *The give and take of everyday life: Language socialization of Kaluli children*. Cambridge: Cambridge University Press.
- Shore, B. (1982). *Salailua: A Samoan mystery*. New York: Columbia University Press.
- Shore, B. (1995). The absurd side of power in Samoa. In R. Feinberg and K. Watson-Gegeo (Eds.) *Leadership and change in the Western Pacific*. London: Athlone Press.
- Strauss, C. & Quinn, N. (1997). *A cognitive theory of cultural meaning*. Cambridge: Cambridge University Press.
- Tharp, R.G. & Gallimore, R. (1988). *Rousing minds to life*. New York: Cambridge University Press.

- Tomasello, M. (1999). *The cultural origins of human cognition*. Cambridge, MA: Harvard University Press.
- Valsiner, J. (1987). *Culture and the development of children's action*. New York: Wiley.
- Valsiner, J. & van der Veer, R. (1993). The encoding of distance: The concept of the zone of proximal development and its interpretations. In R.R. Cocking & K.A. Renninger (Eds.), *The development and meaning of psychological distance*. Hillsdale, NJ: Erlbaum.
- Vygotsky, L.S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Vygotsky, L.S. (1986). *Thought and language*. Cambridge, MA: MIT Press.
- Weisner, T.S., Gallimore, R. & Jordan, C. (1988). Unpackaging cultural effects on classroom learning: Hawaiian peer assistance and child-generated activity. *Anthropology and Education Quarterly*, 19, 327–353.
- Wertsch, J.V. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.

*Address for correspondence:*

Harold Odden, Department of Anthropology, Emory University, 207 Geosciences Building,  
Atlanta, Georgia 30322, USA; [hodden@learnlink.emory.edu](mailto:hodden@learnlink.emory.edu)