

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Anthropology Faculty Publications

Anthropology, Department of

January 1974

Comparative Studies of Socialization

Patricia Draper

University of Nebraska, Lincoln, pdraper1@unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/anthropologyfacpub>



Part of the [Anthropology Commons](#)

Draper, Patricia, "Comparative Studies of Socialization" (1974). *Anthropology Faculty Publications*. 7.
<https://digitalcommons.unl.edu/anthropologyfacpub/7>

This Article is brought to you for free and open access by the Anthropology, Department of at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Anthropology Faculty Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Comparative Studies of Socialization

Patricia Draper

*Department of Anthropology,
University of New Mexico
Albuquerque, New Mexico 87106*

This paper will not attempt a comprehensive review of the recent literature on socialization. Rather, it will deal with four areas of the comparative study of childhood which have particular interest to this writer: systematic ethnographic reports on child life in non-Western societies; education and anthropology; cognitive style and socialization; and socialization for sex role. As a further means of narrowing the potential range of this review, the author will exclude most reports of infant, adolescent, and adult socialization.

Review of Reviews

In the last 5 years an abundant review literature has appeared which deals with socialization in a variety of its aspects. Since the present review is quite limited, some of these sources will be mentioned here for readers wishing additional types of coverage.

Among texts dealing primarily with socialization is one by Williams (115) which introduces a variety of topics such as operant conditioning, critical periods, twin studies, importance of wider kin groups for children in traditional societies. This text also includes an excellent bibliography of ethnographic studies of childhood. Wesley (106) reviews the psychological findings relevant to various stages and problems of childhood. McCandless (73) emphasizes childhood socialization within the framework of the family. Goslin's (33) *Handbook* contains a variety of specialized, excellent articles on theory and research in socialization. A volume edited by Borgatta & Lambert (10) contains several articles relevant to child socialization and personality development; in particular see Levin & Fleischmann (62).

Several excellent cross-culturally comparative articles on socialization and personality are found in the book by Lambert & Weisbrod (57). Reports in this volume by

Whiting & Whiting (111) and Lambert (56) give further findings from the Six Culture Project.

Barnouw (4), LeVine (63–65), Pelto (91), and Triandis, Malpass & Davidson (101) cover psychological anthropology and culture and personality but also report on cross-cultural studies of socialization. Hsu's (48) new edition of *Psychological Anthropology* incorporates much material of relevance to socialization. Especially pertinent are articles by Harrington & Whiting (39); Munroe, Munroe & LeVine (85); and Norbeck & DeVos (88). Aronfreed (1) reviews literature on the internalization of norms in the socialization process and discusses mechanisms of socialization and processes by which certain behaviors are suppressed.

Writing on political socialization has increased steadily. Research in this field includes but is not limited to experiences during childhood which are related to adult or adolescent political orientation. Major reviews of this field have been done by Dawson (23), Dawson & Prewitt (24), and Greenstein (37). Orum & Cohen (89), looking specifically at young children, found that black children have higher political sensitivity and awareness than do white children of comparable ages. This finding parallels other studies in this country of racial differences in adult political outlooks. Another study which focuses on the development of political attitudes in children is by Hess & Torney (42). Langton (58) investigates effects of family structure, school curriculum, and peer groups on political attitudes of adolescents. This study utilizes survey material from Jamaica and the United States.

A volume edited by Clausen (16) brings together psychologists and sociologists dealing with the interrelation of social structure, socialization, and personality. Hess (41) focuses on the variations of socialization expressed in different socioeconomic and ethnic groups in American society. Inkeles (49) traces the interaction of social structure with different phases of the life cycle.

Another area of research deals with particular aspects of parental behavior and their impact on child personality. Coopersmith (20) looks at origins of self-esteem in children and finds them in the form of parental warmth, concern with the child's problems, and appreciation of the child's achievements. Miller (75) found nonevaluative (as opposed to judgmental) verbal behavior of parents toward children to be predictive of high levels of self-esteem in inner city children. Minturn & Lambert (77), using material from the Six Cultures Project, isolate variables which affect maternal style and ultimately the degree of warmth or hostility in mothers' relations with their children. Weinstein (104) discusses children's strategies in acquiring interpersonal competence and those parental and peer group behaviors which foster or inhibit it.

Bandura's (2) recent text on aggression is an excellent source for a review of the general literature in this field. It contains numerous references to studies of the effects of aggression on children's behavior as well as many scattered references to family and socialization antecedents of aggressiveness in children, and also reports on procedures tested in modifying and controlling aggression. This volume has a lengthy bibliography.

Trends in Socialization Studies

A recent trend in studies about socialization is to attempt to determine the larger factors of social organization, environment, economy, etc which affect socialization practices rather than to assume that socialization practices themselves are the independent variable. Whiting & Whiting (111), using material from the Six Culture Project, found the presence of domestic animals and the practice of assigning boys herding chores to have an effect on boys' personality in the form of increased responsibility, even in contexts totally removed from the herding chore itself. Minturn & Lambert (77) found a variety of factors to affect the amount of time and care mothers can give their children—some of these were mothers' work load, household composition, and family size. Munroe & Munroe (83), following up on a cross-cultural study by Whiting (112), found the degree of infant care to be positively related to household density.

This latter study is one of a recent set of studies designed to test within one society the findings from previous cross-cultural research. Draper took the cross-cultural findings by Barry, Child & Bacon (5) about the relation between subsistence economy and child training practices to the Kalahari for testing among two groups of !Kung: one a nomadic hunting and gathering group, the other a recently sedentary agricultural group. The cross-cultural study was partially validated; socialization pressures on sedentary !Kung children showed increased pressure for compliance as predicted by the hypothesis, but there was no evidence for pressure for independence and self-reliance among the hunting and gathering children (27, 29).

Another study by Ember (30) illustrates how the accident of birth order and short term imbalance in sex ratio in a Luo community contributes to atypical socialization pressures on first-born boys in the direction of greater responsibility and nurturance training. These are behaviors normally expected of female children.

Granzberg's study of Hopi found that initiation rites serve to minimize conflicts in children stemming from earlier conflicting socialization practices (34, 35). This study is a within-culture validation of earlier cross-cultural studies by Burton & Whiting (15), Whiting, Kluckhohn & Anthony (113), and Young (121).

Monographs and Articles on Socialization in Particular Societies

The past few years have seen several monographs and scholarly articles which describe childhood in "anthropological populations," that is, societies which usually though not necessarily are non-Western, largely preliterate, traditional, and based on ties of kinship and local community groupings. It is relatively uncommon for works of this type to be purely descriptive of child training practices, stages in a child's life, etc. More often these studies are organized around a central issue or theoretical point. Academics involved in teaching courses in cross-cultural psychology or comparative socialization and child development may be interested in the literature listed below.

A number of reports deal with child rearing in communally organized communities. Bettelheim (9) describes his impressions of the impact of kibbutz child rearing methods on such psychodynamic processes as identification, introjection, attachment, dependency, and the resolution of the Oedipal complex. Rabin (96) reports on a controlled comparison study of kibbutz-reared and Moshav-reared Israeli children of ages ranging from infancy through adolescence. A posthumously published collection of earlier articles by Talmon (100) contains material on child development in communal rearing conditions. A new book by Rabin & Hazan (97) is made up of reports by veterans of the kibbutz movement who have been intimately involved in various phases of kibbutz education.

Other reports on socialization in separatist and communally organized societies are Hostetler & Huntington's (45, 46) studies of Hutterite and Amish socialization patterns. Bronfenbrenner (11) compares collective child rearing in modern Russia with the individualistic emphasis characteristic of American nuclear families and school environments.

Kalahari Hunter Gatherers (59) includes two statements about child life among the !Kung Bushmen. Konner (55) describes the developmental ethology of !Kung infants and indicates that when various aspects of infant motor behavior are viewed in their natural environment their adaptive value can be inferred, whereas they could not be inferred in the more artificial environment of Western crib-reared infants. In the same volume Draper (29) details the social and economic constraints on !Kung child life under conditions of small group size and a foraging subsistence economy.

Leighton & Adair (60) have published the results of a testing program on Zuni children done in the 1940s. The general interpretation of these results is that the Zuni children showed a greater degree of conformity to tribal norms than had been observed among other indigenous tribes. The study does not attempt to specify discrete antecedents to the low degree of individual variation as revealed by various psychological testing measures.

Wolfs (119, 120) study of domestic life among rural Taiwanese contains a rich store of material on socialization. This book makes a good companion to other studies of child life in societies with a strongly patrilineal and patriarchal bias, such as those by LeVine & LeVine (67) and Minturn & Hitchcock (76).

Whiting (107) and Watson (102), writing about Kenya and Venezuela, describe similar consequences of residential shift from rural to urban settings for the traditional role of women and their relations with their children. In both cases they report a lowering of the self-esteem of women and increased individualism and aggressiveness in their children. Changes in father-child relationships under conditions of urbanism and modernization in Nigeria are the subject of an article by LeVine, Klein & Owen (66).

The Case Studies in Education and Culture series, edited by George and Louise Spindler, brings many studies of enculturation into accessible form and attractive format. The diverse studies are done mainly by anthropologists and educators with interests in traditional modes of education (in its broadest sense) and in the changes and

conflicts which are engendered by introducing formal Western schooling into traditionally oriented communities. The case studies fall into two categories: one in which the aim is to describe traditional forms of child rearing and enculturation, and another in which the goal is to describe particular local schools and teacher-pupil interaction against a backdrop of traditional culture and socialization processes which in many cases make optimum participation in the schools a difficult achievement for these children. Examples of the first type are reports by Williams on the Dusun of Borneo (114), by Leiss on the Ijaw of Nigeria (61), and by Jocano on the people of a Philippine barrio (50). Examples of the second type will be dealt with in the next section.

Anthropology and Education

At one time anthropological studies of childhood socialization realistically limited themselves to investigation of indigenous processes of enculturation, but this becomes less feasible as schooling comes to more children living in isolated, traditional areas of the world. It is to be expected that schooling and its consequences now receive independent treatment in the literature of child socialization. This area attracts a diverse group of scholars: political scientists, educators, psychologists, and sociologists, as well as anthropologists.

The field of anthropology and education addresses the problems which occur when Western, middle-class adapted schools and educational philosophy are incorporated into traditional, non-modern communities. The problem at its most concrete level is that native children do poorly in this type of school environment and drop out at very high rates. The factors which contribute to this result are numerous. Teachers are typically from a background different from their pupils. They lack knowledge of the culture of their pupils and are often unsympathetic to it. The content of the curriculum taught in these schools typically has little or nothing to do with indigenous culture. The level of discipline expected in class is severe compared to the less structured home environments of the children. Many nonindigenous teachers try to inspire competitiveness as a spur to individual achievement, yet years of early socialization block the usefulness which peer competition has in Western schools. A common result is that children do not learn what they are intended to learn, but instead learn a set of evasive strategies which subvert the intended goals of the teacher and become in themselves the child's adaptation to the schoolroom (43).

The classroom environment poses numerous innovations and frustrations for children reared in kin-based settings, and a wealth of literature has sprung up documenting various aspects of this conflict: see Wax, Diamond & Gearing (103), Hobart (43, 44), and Howard (47).

The process of isolating the features of the school environment which create difficulty for these children has stimulated a fresh look at the quality of the traditional interpersonal milieu in which such children are reared. Several studies (14, 31, 51) suggest that strong and early authoritarian socialization can interfere with the moti-

vation necessary to perform or to learn to perform in schools or in testing situations, even after problems of unfamiliarity of the school situation or the testing stimuli have been overcome. "Observational learning" and "informal learning" are two of the labels which refer to the continuous, nonsystemic enculturation of children in most societies where personalistic standards and social and economic ties to groups of kinsmen are the norm (17, 98). For years anthropologists with an interest in childrearing practices have noted the absence of formal instruction of the young in most preliterate societies, but the characteristics and implications of this type of education (as contrasted with formal, school-based instruction) have only recently been described with such precision (14). Characteristics of observational learning are: learning is context based; instruction is by example; verbal instruction plays a minimal role; and the affective charge characterizing relations between teachers and learners creates an environment in which problems occur singly and thus require the learner to find solutions to single, discrete cases. In contrast, formal learning is largely divorced from an immediate or tangible context; mediated largely by language; and coached by a role-playing teacher whose personality and values are ideally submerged in favor of impersonal instruction. Lastly, formal learning is seen as the forerunner of a generalizing mental set, one which readily perceives underlying similarity of structure in similar problems and which quickly arrives at solutions. See Scribner & Cole (98) and Greenfield, Reich & Olver in Bruner et al. (14).

The formal vs. informal learning dichotomy obviously employs ideal types against which a variety of socializing institutions can be measured. Undoubtedly certain components of formal education can be found in some traditional societies, in such indigenous settings as bush schools, apprenticeships and the like, though according to Cohen (17) the ethnographic description of these learning environments is too sparse to permit judgment.

A study of Amish childhood and education (46) makes an interesting case study of a traditional society (Old Order Amish) which succeeds in holding the line against modern encroachments while at the same time offering an Amish version of formal education to its youth. Of particular interest are the measures which the Old Order Amish institute in their schools to insure that formal education does not instill restlessness and heterodoxy in the pupils.

As noted earlier, a second type of report in the *Case Studies of Anthropology and Education* series deals with the role (intended or otherwise) of formal education as an agent of economic development and technological change in non Western societies. See studies by Peshkin (92), Modiano (80), Collier (19), Howard (42), Grindal (38), Singleton (99), and Wollcott (118). Hobart's Eskimo studies (43, 44) are good follow-ups to both Wollcott and Collier.

These separate studies are too numerous to review separately, yet several of them have some features worth discussing. Peshkin's (92) report is a close-grained description of four Kanuri (Nigeria) school children as they move in and out of home- and school surroundings. Howard (47) gives an unusually sensitive portrayal of the conflicts experienced by Rotuman children as they must cope with school pressures for

individualism and achievement while surrounded by peers who import opposed and counterproductive expectations into the classroom. A virtue of the Rotuman study is that Howard makes specific and culturally appropriate recommendations for how some of these problems can be circumvented. The now familiar Gay & Cole (31) report demonstrates how an understanding of traditional (Kpelle) cognitive processes can be transformed into a learning booster rather than an impediment. Collier (19) makes similar points about the shortcomings of Eskimo schools, though without the economy of the previous two reports.

Anthropological Perspectives on Education (103) brings together an expert group of anthropologists addressing a range of problems similar to that covered in the Spindlers' series. Jules Henry's (40) article, like Peshkin's (92) study, gives insights which come only from realistic and highly intimate descriptions of socialization environments which can severely impair the educability (by formal school standards) of certain children. The Wax et al. volume contains numerous important essays and is a basic book for anyone wishing to master the literature and concepts of this field.

Cognition, Culture, and Socialization

Recent interest in cognitive organization and development in children (and cultural effects thereon) have succeeded in demonstrating that there are conceptual differences reliably related to age (14, 36, 93, 94), presence or absence of schooling (18, 36, 98), transition from rural to urban residence (90), and certain rather global measures of environmental variations (70). Berry (7, 8), DeVos & Hipler (26), and MacArthur (71) provide an extensive review of cross-cultural studies of intelligence and cognitive processes. However, fine grained determination of particular aspects of the environment and socialization experience which influence children's cognitive styles are largely lacking. Exceptions to this generalization are found in studies by Munroe and Munroe (84); Nerlove, Munroe & Munroe (87); and Price-Williams, Gordon & Ramirez (95).

The strength of these last named studies derives from a two-part research design aimed at (a) testing for differences in cognitive style within a sample of culturally homogeneous children, and (b) determining by naturalistic observation on the same children those aspects of the children's experience which are most likely to account for differing performance on the tests. It is this potential for isolating relatively discrete aspects of childhood experience and relating it systematically to objective measures of cognitive variation which holds such interest to people working in the area of comparative socialization.

As stated earlier, this type of documentation is still uncommon. Whiting (109) remarks that oftentimes variations in cognitive processes are treated as consequences of ill-specified "variables" such as sex, age, ethnicity, socioeconomic status, and others. Whiting terms these so-called "independent" variables "packaged variables" and urges that they be further unwrapped and probed for regularities in their association with variations in cognitive performance.

Studies by Munroe & Munroe (84) and a replication by Nerlove, Munroe & Munroe (87) are examples in which findings about ability difference within a sample of children were linked with highly suggestive differences in socialization experiences. In brief, the two studies of East African children found that certain children showed superior performance in various tests of spatial ability. Subsequent systematic observation of the same children revealed that the particular children who tested higher in spatial ability were the same children who for various reasons ranged farther from home base and who were assumed to have had greater experience in environmental exploration.

A parallel study by Price-Williams et al. (95) of children of Mexican potters demonstrated that children of potters as opposed to children of non-potting families showed accelerated mastery of conservation. None of these relationships between rather specific aspects of environmental conditioning and cognitive precocity would have surfaced in the absence of directed questions stimulated by prior collection of fairly technical kinds of information. Nor would resorting to a traditional ethnography of childhood in the community under study (if there was one) have suggested the relationship, since in these cases they key depends on specifying experiential variation within classes of individuals.

Williams (114), writing of Dusun (Borneo) enculturation, states that in a society where child nurses tend most of the children over 2 years of age, the age of the child nurse can be a predictor of precocious maturity in her charges. When Williams separated 6-year-olds into those who had been tended by 5-year-old as opposed to 8-year-old nurses, he found that adults were more likely to rate children tended by the older nurses as "having more sense," presumably entailing greater cognitive and social maturity. Such a hypothesis is ready for testing along the lines of Munroe & Munroe (84) and Price-Williams et al. (99, but as yet I know of no attempt to determine the effects on cognitive ability of being tended by young vs. old child nurses.

Socialization for Sex Role

The mechanisms and consequences for personality of socialization for sex role continue to attract interest. The fact that children are deliberately trained to adopt sex appropriate behaviors and values is well established. That observational learning and internalization via identification with a same-sexed model facilitates sex typing is discussed by Kagan (52), Mussen (86), Mischel (78, 79), and Maccoby (72). Kohlberg (54) offers a cognitive-developmental analysis of the internalization of sex role standards by arguing that children's self-sex typing is but one aspect of cognitive growth.

More controversial today is the proposition that humans and other mammals have underlying biological predispositions for sex differentiated behavior (3, 68) which are intensified and exploited by differences in the socialization of the two sexes (21). In our species it is difficult to isolate the hereditary or biologically programmed component in behavior since the underlying structure is only dimly perceived through an intricate overlay of learned behavior. As a way out of this particular version of the chicken

and egg problem, researchers have looked at human neonates for evidence of sex differentiated behavior. Here, presumably, learning has not yet had an opportunity to cloud the issue.

Some of the findings about neonatal and early childhood sex differences follow. Females have greater tactile sensitivity (6, 69), and this difference persists into adult life (105). Males are reportedly more irritable and less responsive to social reinforcement (81, 82). Males of nursery school age prefer novelty (as measured by choice within a range of toys) more than females (74). Kagan & Lewis (53) found that girls displayed more sustained attention (presumably indicating preference) to novel visual and auditory patterns. Males of one year (32) are more investigative of their environment than females, a finding also reported for higher primates (25). This finding about the superior environmental exploration of males is apparently a forerunner of superior male performance on tests of spatial ability (84). The developmental precocity of girls in language acquisition, sensitivity to social cues, and success in school environments is generally recognized. Bardwick (3) provides one of the best summaries of this literature.

In socialization environments where children receive relatively unambiguous pressure to conform to sex stereotypes, learning and heredity are virtually impossible to disentangle by even 12 months of age. Hypothetically, under different conditions if pressure for sex differentiated behavior were minimal and if the adult climate of opinion were evaluatively neutral, or nearly so, it might be that subtle hereditary sex differences of style in children would elicit a type of unconscious sex stereotyping from adults. For example, if a girl acquires language earlier and is more sensitive to social cues, and if she is less exploratory of the environment, then on balance she will be closer to adults (chiefly the mother) who can manipulate her earlier and with less difficulty than would be the case for boys of the same age. Bardwick (3) discusses these issues and points up the potential of this syndrome for the oversocialization of girls and the inducement of typical feminine behaviors of passivity, compliance, and dependence.

A related contribution to this topic is that of Whiting & Edwards (110), which analyzes sex differences in the behavior of children from the Six Culture Project. This paper refines concepts of the prevailing Western sex role stereotype and shows that certain behaviors which are elements of the masculine-feminine polarity can vary cross-culturally.

Another strategy has tried to specify the possible socialization antecedents of observed cognitive or perceptual sex differences in adults. A sizable literature of field dependence indicates a persistent sex difference (females more field dependent than males) in our own and most other societies (116, 117). On the other hand, there are several cross-cultural studies (7, 8, 22) which indicate that certain socialization antecedents are predictors of greater or lesser field dependence in *both* sexes. Dawson (22), for example, argues that the findings of field dependence in Mende and Temne subjects is the outcome of strict maternal control. Such studies suggest that the findings about sex differences in field dependence among Western females may have antecedents in a certain type of early training which in some societies is given to children of both sexes.

The possibility that the sex differences in field dependence have a genetic component has not been ruled out. A conclusive test is difficult to devise, for it is not easy to find societies or cases of individuals where the typical, sex-specific socialization pressures are reversed or where the differences are removed.

There is also evidence that environmental variables may sometimes outweigh constitution in producing differences in ability, performance, or style. Nerlove, Munroe & Munroe (87) and Munroe & Munroe (84) found that some East African children's physical distance from home was related to spatial ability as measured by various tests. Boys ranged farther from home than girls (confirming sex differences of environmental exploration suggested by other studies), yet those few girls who were found farther from home than typical for their sex outperformed their male age-matched counterparts in the experimental tasks designed to measure spatial ability.

This type of finding returns us to the "some of both" position with regard to the heredity versus environment issue. It is probable that biologically based sex differences do exist and that under most cultural conditions these differences culminate in different behavior styles and different types of mental ability. However, the reversals in which girls of comparable experience in environmental exploration score higher than their male counterparts indicate that biological differences contribute to but do not account for all of the eventual manifestations of behavior differences between the sexes. Several years ago D'Andrade (21) underscored the cross-cultural regularity with which most socialization practices act back upon underlying predispositions.

Along with the renewed attack on biological versus cultural influences on sex differences has come an interest in the relationship between the cultural role and status of women and the socialization of children (see Brown 12, 13; Whiting 107, 108; and Draper 28). Whiting cites attributes of the traditional role of women in East African agricultural societies which contribute to their high self-esteem and to the early and meaningful integration of children into adult work roles via task assignment and child tending during the time when children have the strong desire to master the adult world. When the daily routines of traditional women are changed, either through modernization in rural areas or through migration of rural families to urban areas, women experience increasing physical isolation and social separation from other adults with whom they can have work or leisure. A consequence of confinement and boredom is increasing irritability and hostility in their interaction with children (107, 108). A comparison by Draper (28) of women's economic role and status in two !Kung groups, foraging and sedentary, indicates that both the intensity of differential sex role socialization and the age at which it begins vary with changes in women's economic role and in their status relative to men.

It is likely that certain cultural constellations produce early and differential treatment of girls and boys. For example, societies having (a) a high degree of separation of men and women in space, work, and leisure activities, (b) status inferiority of women relative to men, and (c) women's spheres of interest and influence limited to the domestic sphere may set into motion a characteristic set of socialization demands. Girls may

be tapped by their mothers for work (obedience and responsibility training) more than boys and at earlier ages due to the fact that boys' eventual roles are presumed to require skills unrelated to routine domestic work. The earlier and more consistent responsibility training of girls may work directly or indirectly to keep them closer to home where their behavior is continuously, and perhaps more consistently, shaped and where they will do little exploring of the larger environment. Boys in such societies, like their adult counterparts, may gravitate increasingly to the periphery of the domestic setting where fewer demands are put on their time. Once boys are more removed from immediate adult supervision they come under less consistent discipline; as a result of fewer restrictions on their mobility they have more access to a wider range of environments which lie at greater distances from home base than those routinely traversed by girls. The suggestion here is that sexual difference in adult roles and spatial separation of the male and female spheres may predict sex differences in the onset of strong socialization pressures and separation of ideal sex roles along the dimensions of self-reliance, activity, independence, passivity, and conformity.

This review has covered a limited range of the literature on childhood socialization. Earlier sections of this paper scanned the recent reports of childhood in primarily non-Western societies. It was observed that descriptions of traditional or indigenous enculturation were few and that accounts of the impact of Westernization (particularly in the form of schooling) on traditional child rearing were becoming more common.

Research on cognitive style now occupies a prominent place in the socialization literature. This interest stems in part from the fact psychologists are seeking cross-cultural data to test Western formulations about cognitive organization and developmental processes. The arrival of formal schooling in previously remote, non-Westernized areas has provided an additional dimension of contrast for persons interested in the effect of culture and culture change on cognitive style. This direction of research gives renewed impetus to the long-standing anthropological concern with indigenous forms of child training. It is increasingly apparent that children socialized in the context of most non-Western kin-based communities are ill-fitted for the typical classroom situation derived from Western, middle-class experience. It also appears that just the fact of experiencing formal schooling brings about substantial (and cross-culturally replicated) changes in cognitive style. Questions are now accumulating as to what direct or indirect effects school experience and attendant cognitive shifts will have on the potential for modernization of traditional values and attitudes. Also of compelling interest is the probability that the experiences children encounter in schools will react upon traditional child rearing patterns and role expectations in the domestic group, creating new forces of social change.

Literature Cited

1. Aronfreed, J. 1968. *Conduct and Conscience: The Socialization of Internalized Control over Behavior*. New York: Academic
2. Bandura, A. 1973. *Aggression: A Social Learning Analysis*. Englewood Cliffs, NJ: Prentice Hall
3. Bardwick, J. M. 1971. *Psychology of Women*. New York: Harper and Row
4. Barnouw, V. 1973. *Culture and Personality*. Homewood, Ill.: Dorsey. Rev. ed.
5. Barry, H., Child, I. L., Bacon, M. K. 1959. The relation of child training to subsistence economy. *Am. Anthropol.* 61: 51-63
6. Bell, R. Q., Costello, N. S. 1964. Three tests for sex differences in tactile sensitivity in the newborn. *Biol. Neonat.* 7: 335-47
7. Berry, J. W. 1966. Temne and Eskimo perceptual skills. *Int. J. Psychol.* 1: 207-29
8. Berry, J. W. 1967. Independence and conformity in subsistence level societies. *J. Pers. Soc. Psychol.* 7: 415-18
9. Bettelheim, B. 1969. *The Children of the Dream*. New York: Macmillan
10. Borgatta, E., Lambert, W., Eds. 1968. *Handbook of Personality Theory and Research*. Chicago: Rand McNally
11. Bronfenbrenner, U. 1971. *Two Worlds of Childhood: U.S. and U.S.S.R.* London: Allen and Unwin
12. Brown, J. K. 1972. *The subsistence activities of women and the socialization of children*. Presented at Am. Anthropol. Assoc. Ann. Meet. Toronto
13. Brown, J. K. 1973. *The recruitment of a female labor force*. Presented at Ann. Meet. Cent. States Anthropol. Soc. St. Louis
14. Bruner, J. S. et al. 1966. *Studies in Cognitive Growth*. New York: Wiley
15. Burton, R., Whiting, J. W. M. 1961. The absent father and cross-sex identity. *Merrill-Palmer Quart.* 7: 85-95
16. Clausen, J., Ed. 1968. *Socialization and Society*. Boston: Little, Brown
17. Cohen, Y. A. 1971. The shaping of men's minds: adaptations to the imperatives of culture. See Ref. 103, 19-50
18. Cole, M., Gay, J., Glick, J., Sharp, D. 1971. *The Cultural Context of Learning and Thinking: An Exploration in Experimental Anthropology*. New York: Basic Books
19. Collier, J. 1973. *Alaskan Eskimo Education: A Film Analysis of Cultural Confrontation in the Schools*. New York: Holt, Rinehart & Winston
20. Coopersmith, S. 1967. *The Antecedents of Self-Esteem*. New York: Freeman
21. D'Andrade, R. G. 1966. Sex Differences and cultural institutions. See Ref. 72, 174-204
22. Dawson, J. L. M. 1967. Cultural and physiological influences on spatial-perceptual processes in West Africa, Parts I and II. *Int. J. Psychol.* 2: 115-28, 171-85
23. Dawson, R. E. 1966. Political socialization. *Polit. Sci. Ann.* 1-83
24. Dawson, R. E., Prewitt, K. 1969 *Political Socialization*. Boston: Little, Brown
25. DeVore, I., Ed. 1965. *Primate Behavior*. New York: Holt, Rinehart & Winston
26. De Vos, G. A., Hippler, A. E. 1969. Cultural psychology: comparative studies of human behavior. In *Handbook of Social Psychology*, ed. G. Lindzey, E. Aronson, 4: 323-417. Reading, Mass.: Addison-Wesley
27. Draper, P. 1972. *!Kung childhood*. PhD thesis. Harvard Univ., Cambridge. 130 pp.
28. Draper, P. !Kung women: contrasts in sexual egalitarianism in foraging and sedentary contexts. In *Toward an Anthropology of Women*, ed. R. Reiter. In press
29. Draper, P. 1974. Social and economic constraints on !Kung childhood. See Ref. 59
30. Ember, C. R. 1973. The effect of feminine task assignment on the social behavior of boys. *Ethos* 1:424-439.
31. Gay, J., Cole, M. 1967. *The New Mathematics and an Old Culture: A Study of Learning Among the Kpelle of Liberia*. New York: Holt, Rinehart & Winston
32. Goldberg, S., Lewis, M. 1969. Play behavior in the year-old infant: early sex differences. *Child Develop.* 40: 21-31

33. Goslin, D., Ed. 1969. *Handbook of Socialization Theory and Research*. Chicago: Rand McNally
34. Granzberg, G. 1972. Hopi initiation rites: a case study of the validity of the Freudian theory of culture. *J. Soc. Psychol.* 87: 189–95
35. Ibid 1973. The psychological integration of culture: a cross-cultural study of Hopi type initiation rites. 90: 3–7
36. Greenfield, P. M., Bruner, J. S. 1969. Culture and cognitive growth. See Ref. 33, 633–57
37. Greenstein, F. 1965. *Children and Politics*. New Haven: Yale Univ. Press
38. Grindal, B. 1972. *Growing Up in Two Worlds: Education and Transition among the Sisala of Northern Ghana*. New York: Holt, Rinehart & Winston
39. Harrington, C., Whiting, J. W. M. 1972. Socialization in process and personality. See Ref. 48, 469–507
40. Henry, J. 1971. Education of the Negro child. See Ref. 103, 273–89
41. Hess, R. D. 1970. Social class and ethnic influences on socialization. In *Carmichael's Manual of Child Psychology*, ed. P. H. Mussen, 2: 457–558. New York: Wiley. 3rd ed.
42. Hess, R. D., Torney, J. 1967. *The Development of Political Attitudes in Children*. Chicago: Aldine
43. Hobart, C. 1970. Eskimo education in the Canadian Arctic. *Can. Rev. Soc. Anthropol.* 7: 49–69
44. Hobart, C. 1970. Some consequences of residential schooling of Eskimos in the Canadian Arctic. *Arctic Anthropol.* 6: 123–35
45. Hostetler, J. A., Huntington, G. E. 1968. Communal socialization patterns in Hutterite society. *Ethnology* 7: 331–55
46. Hostetler, J. A., Huntington, G. E. 1971. *Children in Amish Society: Socialization and Community Education*. New York: Holt, Rinehart & Winston
47. Howard, A. 1970. *Learning to be Rotuman: Enculturation in the South Pacific*. New York: Holt, Rinehart & Winston
48. Hsu, F. L. K., Ed. 1972. *Psychological Anthropology*, new ed. Cambridge: Schenkman
49. Inkeles, A. 1969. Social structure and socialization. See Ref. 33, 605–32
50. Jocano, F. L. 1969. *Growing up in a Philippine Barrio*. New York: Holt, Rinehart & Winston
51. Johnson, D. L., Johnson, C. A., Price Williams, D. R. 1967. The Draw-a-Man Test and Raven Progressive Matrices performance of Guatemalan boys and Ladino children. *Rev. Inter-am. Psicol.* 1: 143–57
52. Kagan, J. 1964. Acquisition and significance of sex typing and sex role identity. In *Review of Child Development Research*, ed. M. L. Hoffman, L. W. Hoffman, 137–67. New York: Russell Sage Found.
53. Kagan, J., Lewis, M. 1965. Studies of attention in the human infant. *Merrill Palmer Quart.* 11: 95–127
54. Kohlberg, I. 1966. A cognitive-developmental analysis of children's sex-role concepts and attitudes. See Ref. 72, 82–173
55. Konner, M. J. 1972. Aspects of the developmental ethology of a foraging people. In *Ethnological Studies of Child Behavior*, ed. N. B. Jones, 285–304. London: Cambridge Univ. Press
56. Lambert, W. W. 1971. Cross-cultural backgrounds to personality development and the socialization of aggression: findings from the six culture study. See Ref. 57, 49–61
57. Lambert, W. W., Weisbrod, R., Eds. 1971. *Comparative Perspectives on Social Psychology*. Boston: Little, Brown
58. Langton, K. 1969. *Political Socialization*. New York: Oxford Univ. Press
59. Lee, R. B., DeVore, I., Eds. 1974. *Kalahari Hunter Gatherers*. Cambridge: Harvard Univ. Press
60. Leighton, D. C., Adair, J. 1966. *People of the Middle Place*. New Haven: Behav. Sci. Monogr.
61. Leis, P. E. 1972. *Enculturation and Socialization in an Ijaw Village*. New York: Holt, Rinehart & Winston
62. Levin, H., Fleischmann, B. 1968. Childhood socialization. See Ref. 10, 215–38
63. LeVine, R. A. 1969. Culture, personality and socialization: an evolutionary view. See Ref. 33, 503–41

64. LeVine, R. A. 1970. Cross-cultural study in child psychology. See Ref. 41, 2: 559–612
65. LeVine, R. A. 1973. *Culture, Behavior and Personality*. Chicago: Aldine
66. LeVine, R. A., Klein, N. H., Owen, C. R. 1967. Father-child relationships and changing life-styles in Ibadan, Nigeria. In *The City in Modern Africa*, ed. H. Miner. New York: Praeger
67. LeVine, R. A., LeVine, B. 1966. *Nyan-songo: a Gusii Community of East Africa*. New York: Wiley
68. Levine, S. 1966. Sex differences in the brain. *Sci. Am.* April: 48–90
69. Lipsitt, L. P., Levy, N. 1959. Electro-tactual threshold in the neonate. *Child Develop.* 30: 547–54
70. Luria, A. R. 1971. Towards the problem of the historical nature of psychological processes. *Int. J. Psychol.* 6: 259–72
71. MacArthur, R. 1967. Sex differences in field dependence for the Eskimo: replication of Berry's findings. *Int. J. Psychol.* 2: 139–40
72. Maccoby, E. E., Ed. 1965. *The Development of Sex Differences*. Stanford Univ. Press
73. McCandless, B. R. 1969. Childhood socialization. See Ref. 33, 791–820
74. Mendel, G. 1965. Children's preferences for differing degrees of novelty. *Child Develop.* 36: 453–65
75. Miller, T. 1972. Cultural dimensions related to parental verbalization and self-concept in the child. *J. Soc. Psychol.* 87: 153–54
76. Minturn, L., Hitchcock, J. 1966. *The Rajputs of Khalapur, India*. New York: Wiley
77. Minturn, L., Lambert, W. 1964. *Mothers of Six Cultures*. New York: Wiley
78. Mischel, W. A. 1966. A social learning view of sex differences in behavior. See Ref. 72, 56–81
79. Mischel, W. A. 1970. Sex-typing and socialization. See Ref. 41, 2: 3–72
80. Modiano, N. 1973. *Indian Education in the Chiapas Highlands*. New York: Holt, Rinehart & Winston
81. Moss, H. A. 1967. Sex, age and state as determinants of mother-infant inter-action. *Merrill-Palmer Quart.* 13: 19–36
82. Moss, H. A., Robson, K. S., Pedersen, F. 1969. Determinants of maternal stimulation of infants and consequences of treatment for later reactions to strangers. *Develop. Psychol.* 1: 239–46
83. Munroe, R. H., Munroe, R. L. 1971. Household density and infant care in an East African society. *J. Soc. Psychol.* 83: 3–13
84. Munroe, R. L., Munroe, R. H. 1971. Effect of environmental experience on spatial ability in an East African society. *J. Soc. Psychol.* 83: 15–22
85. Munroe, R. L., Munroe, R. H., LeVine, R. A. 1972. Africa. See Ref. 48, 71–120
86. Mussen, P. H. 1969. Early sex-role development. See Ref. 33, 707–32
87. Nerlove, S. B., Munroe, R. H., Munroe, R. L. 1971. Effect of environmental experience on spatial ability: a replication. *J. Soc. Psychol.* 84: 3–10
88. Norbeck, E., DeVos, G. 1972. Culture and personality: the Japanese. See Ref. 48, 21–70
89. Orum, M., Cohen, R. S. 1973. The development of political orientations among black and white children. *Am. Sociol. Rev.* 38: 62–74
90. Page, H. W. 1973. Concepts of length and distance in a study of Zulu youths. *J. Soc. Psychol.* 90: 9–16
91. Pelto, P. 1967. Psychological anthropology. *Bien. Rev. Anthropol.* 140–208
92. Peshkin, A. 1972. *Kanuri Schoolchildren: Education and Social Mobilization in Nigeria*. New York: Holt, Rinehart & Winston
93. Piaget, J. 1930. *The child's conception of physical causality*. London: Keegan Paul
94. Piaget, J. 1970. Piaget's theory. See Ref. 41, 703–32
95. Price-Williams, D., Gordon, W., Ramirez, M. 1969. Skill and conservation: a study of pottery-making children. *Develop. Psychol.* 1: 769
96. Rabin, A. I. 1965. *Growing up on the Kibbutz*. New York: Springer
97. Rabin, A. I., Hazan, B. 1973. *Collective Education in the Kibbutz from Infancy to Maturity*. New York: Springer
98. Scribner, S., Cole, M. 1973. Cognitive consequences of formal and informal education. *Science* 182

(4112): 553-59

99. Singleton, J. 1967. *Nichu: a Japanese School*. New York: Holt, Rinehart & Winston
100. Talmon, Y. 1972. *Family and Community in the Kibbutz*. Cambridge: Harvard Univ. Press
101. Triandis, H. C., Malpass, R. S., Davidson, A. R., 1971. Cross-cultural psychology. *Bien. Rev. Anthropol.* 1971: 1-84
102. Watson, L. C. 1970. Urbanization and the Guajiro matrifocal family: consequences for socialization and personality development. *Anthropologica* 27: 3-23
103. Wax, M. L., Diamond, S., Gearing, F. O., Eds. 1971. *Anthropological Perspectives on Education*. New York: Basic Books
104. Weinstein, E. A. 1969. The development of interpersonal competence. See Ref. 33, 753-75
105. Weinstein, S. 1968. Intensive and extensive aspects of tactile sensitivity as a function of body, part, sex, and laterality. In *The Skin Senses*, ed. D. R. Kenshalo, 195-222. Springfield, Ill.: Thomas
106. Wesley, F. 1971. *Childrearing Psychology*. New York: Behavioral Publ.
107. Whiting, B. 1970. The effect of urbanization on the behavior of children. Unpublished manuscript
108. Whiting, B. 1972. *Work and the family: cross-cultural perspectives*. Presented at conference on Women: Resources for a Changing World. Radcliffe Inst., Radcliffe College
109. Whiting, B. 1973. *The problem of the packaged variable*. Presented at Bien. Int. Conf. Behav. Develop. Ann Arbor, Mich.
110. Whiting, B., Edwards, C. P. 1973. A cross-cultural analysis of sex differences in the behavior of children aged three through eleven. *J. Soc. Psychol.*
111. Whiting, B., Whiting, J. W. M. 1971. Task assignment and personality: a consideration of the effect of herding on boys. See Ref. 57, 33-48
112. Whiting, J. W. M. 1961. Socialization process and personality. See Ref. 48
113. Whiting, J. W. M., Kluckhohn, R., Anthony, A. 1958. The function of male initiation ceremonies at puberty. In *Readings in Social Psychology*, ed. T. M. Newcomb, E. L. Hartley, 359-70. New York: Holt, Rinehart & Winston
114. Williams, T. R. 1969. *A Borneo Childhood: Enculturation in Dusun Society*. New York: Holt, Rinehart & Winston
115. Williams, T. R. 1972. *Introduction to Socialization: Human Culture Transmitted*. St. Louis: Mosby
116. Witkin, H. A. 1969. Social influences in the development of cognitive style. See Ref. 33, 687-706
117. Witkin, H. A., Dyk, R. B., Faterson, H. A., Goodenough, D. R., Karp, S. A. 1962. *Psychological Differentiation*. New York: Wiley
118. Wolcott, H. F. 1967. *A Kwakiutl Village and School*. New York: Holt, Rinehart & Winston
119. Wolf, M. 1970. Childrearing and the Chinese family. In *Family and Kinship in Chinese society*, ed. M. Freedman, 37-62. Stanford Univ. Press
120. Wolf, M. 1972. *Women and the Family in Rural Taiwan*. Stanford Univ. Press
121. Young, F. 1962. The function of male initiation ceremonies: a cross-cultural test of an alternative hypothesis. *Am. J. Sociol.* 67: 359-70