

Socialization and Communication in Primary Groups

World Anthropology

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Editor

THOMAS R. WILLIAMS

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General Editor's Preface

In every human society, relating to people must always have been a subject of thought. Relations in primary groups — whether with kin or neighbors, whether within or across generations — present problems universally. However old, these are always also new, and subjects of study that never die. In the behavioral sciences, new insights develop in respect to the oldest subjects (e.g. Freud on the family) or to newer situations (e.g. morale on the assembly line) and make all older subjects new. This book thus illustrates how anthropological concepts (older and newer) are clarified and enriched when applied not to culture or even to cultures or communities, but to any constellations of “persons together.” This and a companion volume, *Psychological anthropology*, are creations of an organizer-editor inspired by an unusual international Congress.

Like most contemporary sciences, anthropology is a product of the European tradition. Some argue that it is a product of colonialism, with one small and self-interested part of the species dominating the study of the whole. If we are to understand the species, our science needs substantial input from scholars who represent a variety of the world's cultures. It was a deliberate purpose of the IXth International Congress of Anthropological and Ethnological Sciences to provide impetus in this direction. The *World Anthropology* volumes, therefore, offer a first glimpse of a human science in which members from all societies have played an active role. Each of the books is designed to be self-contained; each is an attempt to update its particular sector of scientific knowledge and is written by specialists from all parts of the world. Each volume should be read and reviewed individually as a separate volume on its own given subject. The set as a whole will indicate what changes are in store for

anthropology as scholars from the developing countries join in studying the species of which we are all a part.

The IXth Congress was planned from the beginning not only to include as many of the scholars from every part of the world as possible, but also with a view toward the eventual publication of the papers in high-quality volumes. At previous Congresses scholars were invited to bring papers which were then read out loud. They were necessarily limited in length; many were only summarized; there was little time for discussion; and the sparse discussion could only be in one language. The IXth Congress was an experiment aimed at changing this. Papers were written with the intention of exchanging them before the Congress, particularly in extensive pre-Congress sessions; they were not intended to be read aloud at the Congress, that time being devoted to discussions — discussions which were simultaneously and professionally translated into five languages. The method for eliciting the papers was structured to make as representative a sample as was allowable when scholarly creativity — hence self-selection — was critically important. Scholars were asked both to propose papers of their own and to suggest topics for sessions of the Congress which they might edit into volumes. All were then informed of the suggestions and encouraged to re-think their own papers and the topics. The process, therefore, was a continuous one of feedback and exchange and it has continued to be so even after the Congress. The some two thousand papers comprising *World Anthropology* certainly then offer a substantial sample of world anthropology. It has been said that anthropology is at a turning point; if this is so, these volumes will be the historical direction-markers.

As might have been foreseen in the first post-colonial generation, the large majority of the Congress papers (82 percent) are the work of scholars identified with the industrialized world which fathered our traditional discipline and the institution of the Congress itself: Eastern Europe (15 percent); Western Europe (16 percent); North America (47 percent); Japan, South Africa, Australia, and New Zealand (4 percent). Only 18 percent of the papers are from developing areas: Africa (4 percent); Asia-Oceania (9 percent); Latin America (5 percent). Aside from the substantial representation from the U.S.S.R. and the nations of Eastern Europe, a significant difference between this corpus of written material and that of other Congresses is the addition of the large proportion of contributions from Africa, Asia, and Latin America. "Only 18 percent" is two to four times as great a proportion as that of other Congresses; moreover, 18 percent of 2,000 papers is 360 papers, 10 times the number of "Third World" papers presented at previous Congresses. In fact, these 360 papers are

more than the total of ALL papers published after the last International Congress of Anthropological and Ethnological Sciences which was held in the United States (Philadelphia, 1956).

The significance of the increase is not simply quantitative. The input of scholars from areas which have until recently been no more than subject matter for anthropology represents both feedback and also long-awaited theoretical contributions from the perspectives of very different cultural, social, and historical traditions. Many who attended the IXth Congress were convinced that anthropology would not be the same in the future. The fact that the next Congress (India, 1978) will be our first in the "Third World" may be symbolic of the change. Meanwhile, sober consideration of the present set of books will show how much, and just where and how, our discipline is being revolutionized.

Readers of this book (and its companion volume) will also be interested in those others in the series that deal with communications and language; adolescence and the religions of the sexes; education; mental health; and cultures, ethnic relations, and social change as described for many areas of the world.

Chicago, Illinois
September 3, 1975

SOL TAX

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Introduction

THOMAS R. WILLIAMS

The papers in this volume are derived from two distinct areas of contemporary anthropological research. These areas commonly are termed "socialization" (the intergenerational transmission of culture), and "communication" (the interpersonal sharing of cultural and social information). Scholars concerned with these areas of research understand that both socialization and communication occur in the context of PRIMARY GROUPS, or social groups characterized by intimate, face-to-face associations and a high degree of cooperation.

Primary groups are basic to the forming of the cultural and social components of the individual self. Thus, the essential result of life in primary groups is not only the development of a self structure that contains a biologically derived "I" and a reflectively based "me" (cf. G. Mead 1934), but also a primary group, "we." A substantial part of the human self is derived from learning the common attitudes, outlooks and ways of behaving that are typical of the primary groups in which humans mature. In primary groups individuals also acquire the kinds of broad mutual identifications that make possible the interaction of large numbers of humans.

In their early years, human individuals live in just a few types of primary groups; the family, the playgroup, and a neighborhood or local community. These groups are marked by their relative permanence, the intensity and frequency of contacts between members, and the cultivation of deep emotional ties. For the most part, participation in such primary groups is not optional for an infant or child. These groups place restraints upon an individual's behavior; he is compelled by a variety of physical and verbal techniques to act in ways deemed acceptable by primary group

members. It should be noted, however, that because of the development of deep emotional ties between members of these primary groups most children come to readily accept restraints upon their activities as both reasonable and "good." In time, most children regularly act alone with reference to such primary group restraints in a "self-socialization" fashion (Williams 1972a, 1975), that is, children come to apply to themselves, through use of their capacities for reflection, cognition, etc., the rules and limits set by their primary groups and thus shape, or operantly condition, their own behavior in ways that would be approved by members of their primary groups. In other words, through primary groups, children come to act regularly in ways that, if they were adults, they would approve of.

Socialization research has developed quite rapidly in the past three decades.¹ Similarly, basic studies of the nature of human communication in primary groups have expanded significantly in the past two decades.² The papers in this volume illustrate some of the kinds of basic research being conducted in socialization and communication. These papers also indicate a growing trend toward the development of a new theoretical outlook in which socialization and communication in primary groups are treated as related and interdependent processes, that is, as contributing equally to the development of the individual self and behavior. Another way to state this would be to note that the process of socialization in primary groups is dependent upon effective communication, while the process of communication between members of primary groups depends upon effective socialization.

These papers on socialization and communication also contribute to a resolution of an apparent theoretical paradox in the definition of the nature of culture. In a review of Geertz's (1973) conception of culture, Goodenough (1974) has succinctly stated the essence of this paradox; while culture is directly observable in "significant symbols" (Geertz 1973)

¹ For discussions of socialization research see Brim (1968); Burton (1968); Child (1954); Clausen (1968); Cohen (1971); Danziger (1970); Elkin (1960); Elkin and Handel (1972); Gearing (i.p.); Goslin (1969); Greenberg (1970); Greenstein (1968); Henry (1960); Kluckhohn (1939); LeVine (1969, 1973); Mayer (1970); McNeil (1969); Mead (1963, 1972); Middleton (1970); Scribner and Cole (1973); Shimhara (1970); Whiting (1968); Williams (1972a, 1972b, 1975); and Williams, ed. (1975).

² For references to research concerned with the nature of human communication in primary groups see Bateson (1971); Birdwhistell (1970); Blurton-Jones (1972); Brown (1974); Caudill (1969); Forston and Larson (1968); Gerbner, Rittolsti, Krippendorff, Paisley, and Stone (1969); Gesell (1940); Hall (1963, 1966); Hymes (1967); Jaffe and Feldstein (1970); Kendon (1967, 1970, 1972); Liberman (1967); Lind (1965); Little (1965); McGrew (1972); Rheingold, Gewirtz, and Ross (1959); Schefflen (1964, 1965); Trager (1958); and Watson and Graves (1966).

and their associated meanings, created and maintained by groups of humans in the course of social behavior, such symbols and their meanings demonstrably are acquired by individuals through use of particular features of human biology (e.g. reflexes, drives, capacities) and so become internalized within the biological structure of individuals. Thus the apparent theoretical paradox for culture theorists: culture is a system of directly observable symbols/meanings acquired and used by individuals in ways that largely are incapable of being directly observed. In other words, the phenomenon of culture is to be located conceptually both "outside" as well as "inside" the human individual. Goodenough (1974: 435) has termed a resolution of this theoretical paradox as "the crux of the problem of cultural theory."

There have been two contrasting theoretical approaches to studies of culture. One approach, based on the 19th century traditions of naturalism, positivism, and biological evolution, depicts culture as existing entirely OUTSIDE human individuals, that is, as an autonomous, superpsychical, and superorganic phenomenon, subject to its own laws, internal dynamics, and phases of development. This theoretical view has been often expressed through use of a common-sense example: in the course of time, individuals are born into, live out their lives, and die as members of a culture, but the culture continues in an existence independent of the life of any individual.

A contrasting view of the nature of culture has depicted this phenomenon as located INSIDE human beings, that is, as a product of individual learning and intellectual activities, fully subject to human understanding, control and direction. This approach to culture is derived from the general humanistic tradition of the European Renaissance and the rationalism of the 18th century philosophers of the Age of Enlightenment. The common-sense example used to illustrate this view of culture notes simply that in each generation individuals have contributed, through invention and other intellectual activities, to the accumulated store of ideas that comprise the culture learned by infants and children who in turn will contribute their ideas to the body of culture possessed by a human group.

The impact and influence of these markedly different theoretical approaches are well illustrated in the various definitions of culture noted by Kroeber and Kluckhohn (1952), as well as in the works of culture theorists (cf. Kaplan and Manners 1972; Harris 1968). One can see clearly the various problems arising from considering culture to be located either "outside" or "inside" the human individual. And from study of such definitions and theoretical accounts, one can understand that Geertz (1973) has adopted an essentially superorganic theoretical view-

point, while to a lesser degree, Goodenough (1974) has assumed the correctness of the humanistically based theoretical view of the nature of culture.

The papers in this IXth ICAES volume provide further evidence in support of a general conclusion derived from a substantial body of empirical evidence, based upon systematic studies of socialization and communication in human primary groups, indicating that culture is not to be located theoretically in either the EXTRA-SOMATIC (i.e. "outside," superorganic) or INTRA-SOMATIC (i.e. "inside") dimension of human existence. To the contrary, evidence from studies of socialization and communication indicate that culture exists in both human dimensions, or locations, as one of two key factors in an ongoing cybernetic interaction process expressed in the equation: CULTURE \leftrightarrow HUMAN BIOLOGY (cf. Bajema 1972, i.p.; LeVine 1969, 1973; Williams 1972a, 1972b).

It is useful to note in brief explanation of this point that since the appearance of the hominids, sometime between fifteen and ten million years before the present (Pilbeam 1972:125), natural selection has promoted the production of genotypes which enhance individual educability. Dobzhansky (1972:372) has estimated that natural selection for individual human educability has operated in *Homo sapiens* and his hominid precursors for at least 100,000 generations, or some two million years. Recent fossil hominid evidence suggests, however, that natural selection for human educability probably has operated for a much longer time, possibly for three to five million years, or for some 250,000 human generations (cf. Leakey 1972; Howell 1969).

Through natural selection for educability in the course of ongoing biological evolution, hominids became genetically adapted to life in a CULTURAL rather than a NATURAL environment, that is, hominids no longer were adapting solely to specific features of local physical settings. And so humans came to be possessed of an evolutionary heritage in which a new natural phenomenon, CULTURE, began to interact with a continuing natural phenomenon, HUMAN BIOLOGY, in a mutually dependent or cybernetic process. As changes occurred in human biology through the action of natural selection, culture was directly affected, while as changes occurred in a developing culture system, human biology was directly affected. Thus, beginning three to five million years before the present the human evolutionary heritage came to contain culture as a powerful directive force for human biology, while at the same time culture itself was directed and shaped by human biology. I have suggested (Williams 1972b) some ways in which this mutually dependent interaction process might have commenced and proceeded in considering the nature of the

contemporary socialization process. Hockett (1973) also has noted some ways that such a cybernetic process might have proceeded in the origin of human communication. In essence the equation CULTURE ↔ HUMAN BIOLOGY recognizes that for a very long period of time humans have been born possessed of a biological structure shaped by natural selection for life in a cultural system.

As a phenomenon, then, culture is not located “outside” or “inside” human individuals. Rather, culture must be viewed as one of two key factors in a cybernetic equation, with each factor dependent upon and at the same time acting as a directive force for the other factor. In thinking about these ideas concerning the nature of culture it is helpful to note that the chimpanzee, man’s closest contemporary primate relative, does not possess such an evolutionary heritage. Although structurally similar to man, chimpanzees do not behave like men since they lack the evolutionary heritage derived from millions of years of complex interactions between an evolving chimpanzee biology and a system of culture.

Mead (1972:xi) has expressed the hope that the days have now passed when it was necessary to waste time on sterile discussions concerning the respective importance of culture and human biology (or “nature vs. nurture”). Mead notes too that although her students used to rebel and accuse her of trying to have the argument both ways when she would lecture one day concerning the importance of innate human capacities and then the next concerning the different ways personal character is formed in different cultures, we now in fact can have both culture and human biology in our theoretical formulations, since inborn capacities become human capabilities only when cultural and human social experience makes it possible for them to manifest themselves. In other words, a cybernetic view of the interdependence of culture and human biology allows us to dispense with theoretically unproductive arguments concerning the primacy of culture or human biology that have hindered anthropology as well as other human sciences.

In another context, Wallace (1970) has noted that it is the primary business of anthropology and anthropologists to develop a scientific theory of culture. It seems clear, in light of contemporary knowledge concerning the processes of socialization and communication in human primary groups, as well as new data of human evolution, that a continuation, as for instance in the discussions by Geertz (1973) and Goodenough (1974) pitting “culture” against “human biology,” simply extends the intellectual life-span of outdated ideas concerning man. There are new and more efficient ways of viewing human life derived from studies of the processes of socialization and communication in human

primary groups and the introduction into anthropology of cybernetic concepts. These ways will contribute to a considerably revised scientific theory of culture as basic questions concerning the cybernetic interrelationships between culture and human biology (i.e. CULTURE ↔ HUMAN BIOLOGY) are systematically investigated (cf. Byers 1972; Chapple 1970). It appears now that the most important questions in conducting the business of modern anthropology, and for anthropologists, are those that involve such systematic investigation of the interdependence of culture and human biology.

The papers included in this volume of the ICAES *World Anthropology* series contribute to resolution of the apparent theoretical paradox in defining the nature of culture. These papers do not, with some exceptions, touch upon data of systematic investigations of the interrelationships between culture and human biology. Rather, they are concerned essentially with reporting data of socialization and communication in human primary groups, or in presentation of theory regarding these processes. The papers in this volume are important contributions to the business of modern anthropology because authors do not waste time on sterile arguments regarding the primacy of culture or human biology. The main direction of papers in this volume is unmistakably clear; a significant theoretical watershed has been passed — at least in these two areas of anthropological research (i.e. socialization and communication) — in the search for ways to understand man.

The papers selected for inclusion in this volume were chosen after a lengthy editorial process. I have described the ways I proceeded with my editorial tasks in another volume of the *World Anthropology* series (Williams, ed. 1975). However, it is appropriate to note briefly that editorial decisions were based upon the specific charge given by Dr. Sol Tax, as President of the IXth ICAES, to session organizers and editors. In essence this charge was that to be published, papers must be professionally competent and complete, that is, in a form capable of being published. A number of papers that might have been included in this volume were submitted in a form that did not meet the specification that papers be ready for publication. Other papers were too lengthy — more than 200 pages in some instances — for inclusion in this volume. Too, some papers were not included in this volume because authors believed data incompletely analyzed or insufficient for publication.

I have selected papers for this volume without requiring that each one be rewritten to meet a common format or writing style. Thus, ways of presenting data and conclusions vary between papers. This does not significantly impede the flow of ideas and data in succeeding papers.

The papers in this volume are grouped into three parts. The first part contains papers concerned with various features of the socialization process. The next part of the volume contains papers discussing selected aspects of the process of communication. The third part of the volume presents a paper providing a theoretical statement concerning the human individual as a locus of culture.

The limitations of space in this volume preclude the inclusion of extensive editorial discussion and citations placing each paper in the specific context of particular traditions in contemporary socialization and communication research. However, readers unfamiliar with the literature of specialized research topics will find that it is possible to build a reading bibliography from citations included in most papers. In addition, the socialization and communication studies cited in the references section will provide a bibliography for reading on selected topics. Readers should not view these papers as summary expressions of research topics, that is, as "handbook" or "review" articles.

It usually is difficult to say whether a volume of papers written for one international anthropological meeting will have any significant impact on the kinds of future research conducted in a discipline. However, I believe that, in the instance of the papers in this volume, it is clear that these works collectively mark a turning point in the development of research on socialization and communication in primary groups. These papers demonstrate an advancing level of competency in such research, illustrate a continuing search for conceptual precision and clarity of expression and exhibit the intense concern of a large and increasing number of able scholars seeking to comprehend processes fundamental to human life. This work should not be viewed as the end, but rather as an early stage in the course of development of two viable traditions of contemporary anthropological research.

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PART ONE

Socialization: A Brief Review of Directions of Research

JUDITH K. BROWN

The purpose of this introduction is not to provide a comprehensive overview of the past twenty years of socialization research. Rather it is to identify three directions this research has been taking. First, it has exhibited responsiveness to the social problems of our day. Second, the study of socialization has become relevant for all the subdisciplines of anthropology. Finally, socialization research has reflected the changing theoretical concerns of the discipline.

Yet the study of socialization has not neglected its traditional focus on the child-rearing practices of non-Western peoples. The collection of data on enculturation is now informed by new research trends. For example, Draper (1971a, 1971b, n.d.) has explored the cultural ecology of !Kung childhood¹ and Konner (1972) has provided an ethological study of !Kung infancy. Both research efforts serve to augment the previously scant record of child rearing among hunter-gatherers, societies which have been of particular interest to anthropologists in recent years.

Yet the collection of data has also moved into areas largely unanticipated twenty years ago, areas suggested by social concerns of our times. The desirability of group care for young children has been a matter of dispute arising both from a reconsideration of the role of women and from attempts to cope with the problems of poverty. The group rearing of children and the concomitant reduced socializing responsibility of the immediate family have been examined among the Hutterites, for whom such child rearing has a long tradition (Hostetler and Huntington 1967, 1968), and in the

¹ Cultural ecology has also informed the work of Munroe and Munroe and their co-workers (R. L. Munroe and R. H. Munroe 1967, n.d.; R. H. Munroe and R. L. Munroe 1971).

planned, innovative subculture of the kibbutz (Spiro 1958). In the future, child rearing in mainland China will provide yet another example. The material available so far is only fragmentary, but promising (see, for example, Green 1963: 49–56; Lazure 1962).

Yet another new area for research, the classroom, is presently of interest to anthropologists concerned about the quality of education available to American minorities and to children of the westernizing world. The importance of this trend is evident from the publication of entire series of books devoted to such research efforts: *Anthropology and Education*, *Case Studies in Education and Culture*.² One recent example, in which a research tool developed by anthropologists is applied to the educational problems of minority school children, analyzes the filmed classroom behavior of Eskimo children and their teachers in a variety of Alaskan schools (Collier 1973). In yet another innovative study, three Africans present their recollections of village childhood and early schooling in accounts informed by a college course in human development (Fox 1967). The political socialization of the urban poor has come under scrutiny (Harrington 1972) and the schooling of American Indians has been re-examined (see, for example, M. Wax, R. Wax, and Dumont 1964; R. Wax 1967; Wolcott 1967; Berry 1969; Cazden and John 1971; Miller 1971; Thomas and Währhaftig 1971; Chadwick 1972).

The study of socialization has always shared its domain with developmental psychology. Twenty years ago psychoanalytic theory and social learning theory strongly influenced both fields. More recently, interest in infant development produced a body of research on African infancy (Ainsworth 1967; also see R. L. Munroe, R. H. Munroe, and LeVine 1972: 74–81). Today, the cognitive-developmental approach and the work of Piaget³ have opened new areas for socialization research. Psychologists such as Jahoda, Kohlberg, and Bruner and his co-workers have brought a cross-cultural perspective to their formulations. This intermingling of the disciplines is not without its problems (Richards 1970; Edgerton 1970). Yet it has led to the experimental investigation of cultural influences on intellectual processes (e.g. Cole, Gay, Glick, and Sharp 1971) and to concrete suggestions (based on an examination of traditional Kpelle culture) for the improved teaching of mathematical concepts to Kpelle children (Gay and Cole 1967).⁴

² See also, for example, Lindquist (1970) and M. Wax, Diamond, and Gearing (1971).

³ That a recent review article in *American Anthropologist* (T. Turner 1973) should be devoted to Piaget's formulations indicates the extensiveness of his recent influence in anthropology.

⁴ For a meticulous review of this extensive literature for Africa, see Evans (1970) and Price-Williams (1969).

A second major trend removes socialization research from the confines of cultural anthropology and gives it relevance for the other subfields of anthropology. It is perhaps indicative of this trend that a recent book of readings, *Anthropological perspectives on education* (M. Wax, Diamond, and Gearing 1971), contains an entire section dealing with linguistics and culture, as well as a paper on primate behavior (Washburn 1971). The new text on socialization by Williams (1972a), which includes chapters on archaeology, physical anthropology and anthropological linguistics, could as easily serve to introduce the entire discipline of anthropology as to introduce socialization. In two more recent papers, Williams (1972b, 1973) explores the significance of socialization for human evolution.⁵ Field studies of the rearing of young, particularly among non-human primates, have provided a widened perspective from which to view all human child rearing (see, e.g., Bowlby 1969; Poirier 1972; Blurton-Jones 1972). Even British social anthropology, long aloof from the study of socialization (Richards 1970) has provided an entire volume devoted to the subject (Mayer 1970).⁶ And Whiting and his co-workers have embarked on cross-cultural research related to physical anthropology (Gunders and J. Whiting 1964; Landauer and J. Whiting 1964; J. Whiting 1965) and archaeology (J. Whiting and Ayres 1968).

Recent socialization research has also reflected developments within cultural anthropology: a concern with adaptation and ecology and a concern with societal complexity and evolution. To illustrate the first, I will present examples from the growing body of cross-cultural research. To illustrate the second, I will cite the Six Cultures Project.

There has been a prolonged association between cross-cultural research and the study of socialization. Over the years, the former has been the subject of frequent reappraisals and refinements.⁷ This has resulted in greater methodological rigor. In addition, a number of coded variables relevant to socialization research have become available for an increased number of societies (Murdock 1967; Barry, Bacon, and Child 1967; Barry and Paxson 1971), making possible large-scale correlational studies (Textor 1967). But cross-cultural research on socialization has also

⁵ Also see LeVine (1969) and Mourant (1973) for further explorations of the relationship of socialization and human evolution.

⁶ In this volume Richards suggests that "the study of ritual and myth from the socialization point of view" would constitute an exciting new direction for field work (Richards 1970:12). Her own study (Richards 1956) and the numerous works by V. Turner (e.g. 1964, 1967) concerned with initiation rituals are perhaps the major contributions to such socialization research (see also Grindal 1973).

⁷ Among the telling criticisms are those by Mead (1963). The recent literature devoted to the cross-cultural method is too extensive to be cited here. Several examples may be found in Naroll and Cohen (1970).

experienced modifications in the underlying basic model (Harrington and J. Whiting 1972). Many earlier cross-cultural studies were concerned with the relationship of child rearing to adult personality or to projective systems which gave indirect evidence of adult personality.⁸ In recent years, the emphasis has shifted to a greater concern with the antecedents of child rearing:⁹ household structure and residence patterns, subsistence activities, the nutritional quality of staple crops, climactic and environmental conditions, and even historical factors.¹⁰

This change in emphasis can be traced in a series of studies of male initiation rites.¹¹ The earliest of these (J. Whiting, Kluckhohn, and Anthony 1958) suggested that the ceremonies were a response to certain child-rearing conditions which exacerbated oedipal rivalry. A subsequent paper (Burton and J. Whiting 1961) still emphasized child-rearing antecedents, but these were traced to residence patterns and household composition and the rites were seen as a response to sex identity conflict. The psychological nature of these explanations was sharply criticized (Cohen 1964; Young 1962). Partly in response to these objections, Whiting published yet another paper (J. Whiting 1964) in which "extra-systematic" antecedents were suggested. The humid, tropical setting of societies which practice male initiation was seen to provide staple crops low in protein which in turn necessitated long nursing, which in turn was related to a long post-partum sex taboo, polygyny, and partilocal residence, all previously identified as among the antecedent conditions for the celebration of male initiation rites.¹²

The decline of the influence of psychoanalytic theory, with its strong emphasis on the primacy of early childhood experiences, can be inferred: the subject of these studies was adolescent initiation.¹³ The first study does identify early childhood experiences as antecedents. The second paper

⁸ For a review of this literature, see Harrington and Whiting (1972).

⁹ The complicated relationship between antecedent and consequent variables in this form of research has been suggested by LeVine (among others): "Thus child training may be CAUSE with respect to the behavior of individuals, but is EFFECT with respect to the traditional values which aid in the maintenance of social structures" (1960:57).

¹⁰ J. Whiting, Chasdi, Antonovsky, and Ayres (1966) indicate that historical events served to shape the basic values which in turn influenced the child-rearing methods of three societies which shared a similar geographic and climactic setting.

¹¹ The findings and methods of these studies will not be reviewed here. For a summary, see Brown (i.p.).

¹² Female initiation rites have been studied cross-culturally by Brown (1963). Residence patterns were suggested as antecedents as well as a major subsistence contribution by women. The latter was subsequently found to be related to the nature of the subsistence base (Brown 1970).

¹³ Similarly in the research of Barry, Bacon, and Child (1957, 1967; Barry, Child, and Bacon 1959) the major focus was on middle childhood.

shifts its emphasis to antecedent variables of greater interest to anthropologists: household compositions and residence patterns. The final paper reflects the recent concern of anthropology with cultural adaptation and ecology.

Perhaps the most ambitious of all research projects in socialization, the Six Cultures Project was designed to study "child rearing and its causes and consequences in six different cultures" (J. Whiting, et al. 1966). The origins of this study reach back to the 1930's and 1940's and the interdisciplinary research approach of the Yale Institute of Human Relations. Three immediate predecessors of the project are identified by its authors: the cross-cultural study, *Child training and personality* (J. Whiting and Child 1953); the intracultural study, *Patterns of child rearing* (Sears, Maccoby, and Levin 1957) and the replicative study, "The learning of values" (J. Whiting, Chasdi, Antonovsky, and Ayres 1966). Viewed by its authors as the culmination of preceding studies, the Six Cultures Project combined all three research strategies.

Innovative not only in design but also in method, the study involved "pre-planned field work." Before the research teams went into the field, their members and the senior investigators drew up a detailed field guide (J. Whiting, et al. 1966). In addition to general advice on field methods, it suggested parameters for the social units to be studied in order to insure their comparability. Further, it detailed the major hypotheses of the study, identified the data relevant for these and offered concrete suggestions for the collection of such data. The value of the field guide has been demonstrated also through use in subsequent studies (e.g. Williams 1969).

Five field teams undertook research in 1954–1955 and a sixth went into the field in 1955.¹⁴ The resulting ethnographies offered extensive information on the lives of infants and children (B. Whiting 1963). A subsequent volume, *Mothers of six cultures: antecedents of child rearing* (Minturn and Lambert 1964), analyzed interviews which were administered to a sample of mothers in each of the societies. These interviews were broadly similar in content and attempted to focus on concrete action.

The final volume, still in press (J. Whiting and B. Whiting i.p.), will analyze data based on observations of child behavior. It is significant that

¹⁴ The Rājapūts of Khalapur, India, were studied by Leigh Minturn and John T. Hitchcock. The Mixtecos of Juxtlahuaca, Mexico, were studied by Kimball and Romaine Romney. The New Englanders of Orchard Town, U.S.A., were studied by John and Ann Fischer. Tarong, an Ilocos barrio in the Philippines, was studied by William and Corinne Nydegger. Taira, an Okinawan village, was studied by Thomas and Hatsumi Maretzki. And Nyansongo, a Gusii community in Kenya, was studied by Robert and Barbara LeVine. First published in a collected volume (B. Whiting 1963), each study was subsequently also published separately.

the Six Cultures Project concentrated on observation in favor of the projective tests typical of earlier studies. In part a reflection of the general decline of cross-cultural projective testing, this decision resulted in a promising new source of cross-cultural data (B. Whiting and J. Whiting 1970). A sample of children, stratified by age and sex, was chosen for each of the six societies. The children were repeatedly observed, interacting with others, in settings which sampled their typical activities. These five minute observations were recorded in narrative style and subsequently coded (not by the field workers) for certain types of behavior relevant to the hypotheses of the study. Barnouw offers a brief preview of the results of the analysis:

Children of the three groups which make up Type A [societies] ... OFFER SUPPORT significantly more, and SEEK HELP and SEEK DOMINANCE significantly less than the children in Type B [societies]. Children of Type A also OFFER HELP and SUGGEST RESPONSIBILITY more than do the children of Type B. It was hypothesized that the Type A cultures stress the importance of the group, while the Type B cultures are more individualistic.¹⁵

... a more significant factor in differentiating the two types [of societies] is degree of cultural complexity.

... There seems to be an evolutionary progression from Type A to Type B cultures ... (1973:209-210).

The Six Cultures Project has provided not only new data but also innovative methods for gathering and analyzing information on socialization. Furthermore, the theoretical model, which informed the original research design and its hypotheses, has proved sufficiently flexible to accommodate the elaboration of alternative hypotheses which have come to light, and which "will explain the observed relations and so insure the continuing growth of the discipline" (Strodtbeck 1964: 229). The relationship between child behavior and societal complexity and the significance of socialization for social evolution were probably not anticipated by the planners of the Six Cultures Project twenty years ago. But at that time, these were not the concerns of anthropology. Socialization research has been alert in responding to the trends within the discipline.

Any number of introductory texts, as well as the unguarded comments of some of our colleagues, would suggest that the study of socialization is not within the mainstream of present-day anthropology. To counter this misconception, I have tried to demonstrate that research in socialization has been responsive to the social problems of our day. Furthermore, the study of socialization has become relevant for all the subfields of anthropology and has reflected the recent concerns of the larger discipline. The

¹⁵ Greenfield and Bruner (1969) also speak of "individualistic self-consciousness" and of a "collective orientation" in identifying cultural influences on cognitive growth.

reader is invited to find evidence for these trends in the papers which follow.

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The Nonsocial Behavior of Young Liberian Kpelle Children and Its Social Context

GERALD M. ERCHAK

The study presented here is an outgrowth of two bodies of research, that of Michael Cole and John Gay and their associates (e.g. Gay and Cole 1967; Cole 1971; Cole, et al. 1971) and that of John and Beatrice Whiting and their associates (e.g. B. Whiting 1963; Minturn, et al. 1964; Whiting and Whiting i.p.). Cole and his fellow researchers have been studying cognition and learning among the Kpelle of Liberia for some time in order to determine the factors that prevent tribal children from performing successfully in Liberia's Western-style government schools (Cole and Gay 1972: 1068). Their results, while impressive and provocative, are largely the product of psychological experiments; they lack solid ethnographic data on the learning environment of the Kpelle child and refer to this lack as a "major gap in our research" (Cole, et al. 1971:219). My own research, a small part of which is presented here, is an attempt to at least partially fill that gap. The Whitings have been developing a data bank of cross-culturally comparable materials on child behavior and child rearing based on behavior observations carried out by their students and research associates who used similar methods of data collection and analysis. My data are additional input to this project.

This study is based on field research in a town in Nyafokwele Chiefdom, lower Bong County, Liberia carried out in 1970-1971. The research was made possible by a Fulbright Research/Lecture Grant to me, OE Grant #OEG-0-71-1695 to Michael Cole, and a grant from the Department of Social Relations, Harvard University. I am indebted to Michael Cole and John and Beatrice Whiting for their assistance, both financial and advisory, in carrying out this project.

THE PEOPLE

The subjects of this study are the Kpelle, a group of swidden rice horticulturalists numbering between four and five hundred thousand people in Liberia and Guinea. They are the largest ethnic group in Liberia, and make up about 20 percent of the population of that country. Because the main highway in Liberia bisects Kpelleland, they have been exposed to a great deal of Westernizing influence in the last twenty-five years but, except for some superficial changes, they have remained quite resistant to it. A prominent factor in the retention of much of their traditional culture is, no doubt, the profoundly conservative influence of the men's and women's secret societies, the Poro and Sande; these institutions are universal among the Kpelle, who also share them with many neighboring groups (see Fulton 1972). Politically, the Kpelle are a loose network of chiefdoms, a system Gibbs labels a "polycephalous associational state" (Gibbs 1965: 216).

METHOD

This research was conducted in Kien-taa, a town of about 200 people in the Nyafokwele Chiefdom.¹ Because the earliest years are the most critical in affecting intellectual development, a sample of twenty children of "pre-school" age was selected. Half were boys and half girls; half were approximately one to three years old and half were four to six.² The typical Kpelle working day can be divided into six distinct periods of activity; each child was observed equally during each of these time units. Children were observed for fifteen minutes twice in each of these time units during the rainy season and twice more in each unit during the dry season (see Whiting and Whiting 1970). This schedule was thought useful because Kpelle activities vary with the season. This time sampling provided a total of 24 fifteen-minute observations for each of the twenty children in the sample, or 480 in all. Thus, each subject was observed for a total of six hours, which constituted a representative composite day for each child. These behavior observations were supplemented by observations of a less systematic sort as well as by parent interviews and standard ethnographic methods (see Hilger 1966; J. Whiting, et al. 1966; Slobin 1967).

The observations were coded according to a system which has been

¹ "Kien-taa" is a fictitious name.

² Children under about ten months of age were omitted from the study because I do not feel professionally qualified to study the special problems of early infancy.

devised and successfully used by the Whittings (Whiting and Whiting n.d.a). This code was modified somewhat to include individual behavior as well as social interaction. It is the child's individual, self-initiated, non-social behavior that is the subject of this analysis. The behavior need not be solitary, although in the case of older children in the sample it may well be performed in solitude. A discrete, codable unit of behavior is defined as NONSOCIAL if it is: (a) individual, i.e. it is performed by only one child; (b) self-initiated, i.e. it is carried out by the child in response to his own concerns, rather than in response to another individual; and (c) egocentric in aim, i.e. the action is not meant to alter another's behavior (engage in social interaction).

The categories of nonsocial behavior that occurred often enough to demand coding are:³

MANL (Manual) The child practices skills which involve the use of his hands, e.g. constructs an object, practices a handiwork skill such as plaiting a straw mat, etc. The child explores with his hands, e.g. pokes something with a stick or other object, manipulates an object, etc.

IMIT (Imitative) The child does something he sees or saw someone else do, pretends to be something he cannot be, role-plays, etc. The child is learning by observation.

PHSK (Physical skill) The child practices a physical skill such as walking, crawling, jumping, etc.

ATNT (Attention) The child watches someone or something for two minutes or more; occasionally, the child listens to a radio or phonograph.

TOYS (Toys) The child plays with a toy.

HSOB (Household objects) The child plays with a household object such as a pot or broom.

BTAN (Beats an animal) The child beats an animal, throws an object at it, attempts to beat it or throw something at it, or chases an animal with obvious intent to harm it.

³ The categories listed here are those that emerged after collapsing previous categories subsequent to cross-tabulation by computer. The original code was a finer breakdown of nonsocial behavior. More inclusive categories lent themselves more readily to analysis and increased intercoder reliability, since certain categories, e.g. "satisfies own needs" and "acts responsibly," were not easily distinguished and so were collapsed into one category.

ANGR (Anger) The child vents anger, frustration, or annoyance, has a temper tantrum, cries, screams, etc.

XNTR (Explores nature) The child explores the natural environment, plays with an animal, examines a leaf, etc.

INTL (Intellectual) The child practices an intellectual skill such as writing, counting, or reading.

SRSP (Self-reliant/responsible) The child acts responsibly through his own motivation or satisfies his own needs without requesting or receiving help.

MSIN (Miscellaneous individual) All other self-initiated, nonsocial behavior (from Whiting and Whiting n.d.b).

After coding and punching, the data were subjected to cross-tabulation and analysis of variance.

ANALYSIS: CHILDREN'S NONSOCIAL BEHAVIOR

Before proceeding with the analysis of the individual behavior of the children, I would like to point out that, although children under ten months of age were not subjected to the same scrutiny as their slightly older siblings and peers, they were indeed observed. The rather superficial data obtained on them indicate that their first few months of life are like those in most other African societies described elsewhere. The child is always with the mother, often on her back. The mother is extremely indulgent during this period: the breast is offered on demand and the infant is held and caressed at the slightest whimper. Fathers, too, tickle, fondle, and entertain the infants.

Toward the end of the first year the child becomes quite mobile. He can crawl away from his mother and explore his surroundings. He is often carried about on the back of someone other than his mother, generally an older sister's. In short, the child, his environment, and the relationship of the one to the other, are undergoing critical changes. How these changes are managed can have a lasting effect on the child's course of development. It is these critical years that are under investigation here.

The residual, "miscellaneous, individual" (MSIN) category of behavior will be ignored. "Attentive" (ATNT) behavior will be dealt with separately

after the discussion of the other categories because it is really qualitatively different from the others and was more difficult to observe. For the other categories, analyses of variance were carried out on both the frequencies of the behavior (total n for each child) and the proportion of the behavior in relation to all other discrete acts, including social interaction, for a particular child (the percentage of all a child's acts that the total n of a particular child represents).⁴ The independent variables were SEX and AGE. The latter was treated dichotomously: one through three years and four through six years.

Nonsocial behavior involves roughly 45.4 percent of the discrete acts of Kpelle boys one to three years of age and 44.4 percent of the acts of girls of the same age group; there is no sex difference at all. For the four to six year age group, the figures are 33.6 percent for boys and 35.7 percent for girls. Again, there is no sex difference but an age difference has emerged. As the child grows older, proportionately more of his behavior is directed to social interaction and less to individual activities. The child is becoming more a member of a social group and less a self-concerned ego. The proportion score means and frequency score means for each of the four age-sex groups are listed in Tables 1a and 1b for each behavior category; these give a very crude breakdown of the nonsocial behavior. The indices are extremely rough since in some categories the scores of one or two children are quite deviant from the others in the group. Of course the

Table 1a. Mean proportion scores for sex-age groups (in percent)

Sex-age groups	Boys 1-3	Girls 1-3	Boys 4-6	Girls 4-6
Beh. categ.				
MANL	12.3	9.8	8.4	8.9
IMIT	1.8	2.3	.9	.7
PHSK	3.5	4.7	2.1	2.5
ATNT	5.5	6.4	6.4	6.4
TOYS	2.4	.4	1.2	.8
HSOB	3.5	5.6	2.1	1.6
BTAN	.9	.4	1.2	.4
ANGR	1.3	1.9	.2	.6
XNTR	6.7	5.0	3.8	4.2
INTL	0.0	.1	.9	.3
SRSP	2.4	3.9	2.2	6.4
MSIN	5.1	3.9	4.2	2.9
Total	45.4	44.4	33.6	35.7

Table 1b. Mean frequency scores for sex-age groups

Sex-age groups	Boys 1-3	Girls 1-3	Boys 4-6	Girls 4-6
Beh. categ.				
MANL	18.4	14.2	14.0	15.0
IMIT	2.8	3.4	1.8	1.6
PHSK	4.8	6.6	4.0	4.4
ATNT	7.8	9.2	10.6	10.8
TOYS	3.4	0.6	2.4	1.6
HSOB	5.4	7.6	3.4	2.8
BTAN	1.4	.6	2.0	0.8
ANGR	1.6	2.8	0.4	1.0
XNTR	9.4	7.0	6.6	7.4
INTL	0.0	0.2	1.6	0.6
SRSP	3.8	6.0	4.0	11.0
MSIN	7.4	5.6	7.8	4.8

⁴ The proportion score does not represent percentages of TIME, only percentages of total acts.

Table 2a. Mean proportion scores for sex and age groups (in percent)

Group	Boys	Girls	1-3	4-6
Beh. categ.				
MANL	10.3	9.3	11.0	8.7
IMIT	1.4	1.5	2.1	.8
PHSK	2.8	3.6	4.1	2.3
ATNT	5.9	6.4	5.9	6.4
TOYS	1.8	.6	1.4	1.0
HSOB	2.8	3.6	4.6	1.9
BTAN	1.1	.4	.7	1.6
ANGR	.8	1.3	1.6	.4
XNTR	5.2	4.6	5.8	4.0
INTL	.4	.2	.1	.6
SRSP	2.3	5.1	3.2	4.3
MSIN	4.6	3.4	4.5	3.5
Total	39.4	40.0	45.0	35.5

Table 2b. Mean frequency scores for sex and age groups

Group	Boys	Girls	1-3	4-6
Beh. categ.				
MANL	16.2	14.6	16.3	14.5
IMIT	2.2	2.5	3.1	1.7
PHSK	4.4	5.5	5.7	4.2
ATNT	9.2	10.0	8.5	10.7
TOYS	2.9	1.1	2.0	2.0
HSOB	4.4	5.2	6.5	3.1
BTAN	1.7	0.7	1.0	1.4
ANGR	1.0	1.9	2.2	0.7
XNTR	8.0	7.2	8.2	7.0
INTL	0.8	0.4	0.1	1.1
SRSP	3.9	8.5	4.9	7.5
MSIN	7.6	5.2	6.5	6.3

analysis of variance remedies this problem. Tables 2a and 2b present the same data for sex and age groups rather than for combined sex-age groups.

The first result, perhaps not surprisingly to child psychologists, is a negative one. There are no significant sex or age differences in either the frequencies or proportion scores of the following categories of nonsocial acts: "manual" (MANL), "imitative" (IMIT), "physical skill" (PHSK), or "explores nature" (XNTR). It seems that boys and girls engage in these four behaviors about equally and, furthermore, that the behaviors occur at a more or less constant rate throughout the first few years. However, there are trends which, while not significant at the .05 level, are nearly so; a more precise study might, in fact, find them to be significant. In brief, "imitative" behavior seems to decrease with age. This decrease probably does not apply to observational learning but only to other forms of imitation, e.g. imitating a car or a dog. There is also some evidence that the proportion of a child's acts that concern the exploration of nature drops off somewhat with age. If this trend is a valid one, it perhaps suggests that the older child is more selective about the subjects of his curiosity.

Analysis did yield significant SEX differences for the categories of "toys" (TOYS), "beats animal" (BTAN), and "self-reliant/responsible" (SRSP). Boys play with toys relatively (proportion scores) more than girls (see Table 3). The sex difference in frequencies was almost significant. Kpelle toys for the most part consist of little "cars" made of sardine cans with pieces of wood for wheels, a large wheel with long sticks attached to it that a child can "drive," and a sort of a wheelbarrow that a child can ride while

Table 3. Analysis of variance: TOYS (proportion scores)

	SS	MS	d.f.	F
Sex	7.08	7.08	1	5.36*
Age	.92	.92	1	.70
Interaction	3.13	3.13	1	2.37
Error	21.12	1.32	16	

*Significant at the .05 level.

Table 4. Analysis of variance: BTAN (frequencies)

	SS	MS	d.f.	F
Sex	5.00	5.00	1	4.65*
Age	.80	.80	1	.74
Interaction	.20	.20	1	.19
Error	17.20	1.08	16	

*Significant at the .05 level

another child pushes. These three toys are manufactured by older boys either for their own use (in which case their younger brothers and peers can get a turn) or for the younger boys. Boys one to six learn how to make them by watching their older brothers. Girls are largely excluded. It is significant that all three toys are "cars" of some sort; Kpelle women do not drive cars under any circumstances and neither, it seems, do little Kpelle girls.

The data for absolute frequencies further indicate that Kpelle boys abuse or attempt to abuse animals significantly more than the girls (see Table 4). The proportion score difference is also almost significant. However, the *n*'s are so small in this category that this writer will not draw any conclusions, but will only suggest that this may indicate an early sex difference in aggression. The boys rush after dogs, chickens, goats, snakes, etc. while girls are more timid.

Girls act both relatively (proportion scores) and absolutely (frequencies) more responsibly and self-reliantly than boys (see Tables 5a and 5b). Kpelle girls begin to care for infants, sweep the house, and fetch water at about age six; the data indicate that while still much younger, the girls, subtly encouraged by their mothers and older sisters, are "practicing"

Table 5a. Analysis of variance: SRSP (frequencies)

	SS	MS	d.f.	F
Sex	105.8	105.8	1	5.94*
Age	33.8	33.8	1	1.90
Interaction	28.8	28.8	1	1.62
Error	284.8	17.8	16	

*Significant at the .05 level

Table 5b. Analysis of variance: SRSP (proportion scores)

	SS	MS	d.f.	F
Sex	40.33	40.33	1	6.19*
Age	6.50	6.50	1	1.00
Interaction	8.98	8.98	1	1.38
Error	104.21	6.51	16	

*Significant at the .025 level

these and other tasks and are also learning how to manage for themselves. Aside from driving weaver birds from the rice farm, Kpelle boys do very little practical work until about ten or eleven; there is very little reason for them to act responsibly from one to six years of age.

There are significant AGE differences in the categories of "household

objects" (HSOB), "anger" (ANGR), and "intellectual" (INTL). The children between the ages of one and three play with household objects significantly more than their older siblings (see Tables 6a and 6b). This difference is consistent with the fact that virtually every time a child's mother or other adult catches a child playing with a household object, she stops him immediately. By the time the child is four, he has learned what not to play with; there are a few objects he is allowed to play with and these become the focus of his interest. At age four to six, the child is still reprimanded when he is discovered playing with a forbidden household object, but his infractions are less frequent than when he was younger.

Table 6a. Analysis of variance: HSOB (frequencies)

	SS	MS	d.f.	F
Sex	3.2	3.2	1	.37
Age	57.8	57.8	1	6.59*
Interaction	9.8	9.8	1	1.12
Error	140.4	8.8	16	

*Significant at the .025 level

Table 6b. Analysis of variance: HSOB (proportion scores)

	SS	MS	d.f.	F
Sex	3.70	3.70	1	.65
Age	36.45	36.45	1	6.42*
Interaction	8.45	8.45	1	1.49
Error	90.78	5.67	16	

*Significant at the .025 level

Younger children vent their anger, frustration, or annoyance more readily and more frequently than older children (see Tables 7a and 7b). This observation, of course, merely confirms the common-sense notion that younger children cry more, have temper tantrums more easily, vent their anger more readily and frequently, etc. than older children.

Table 7a. Analysis of variance: ANGR (frequencies)

	SS	MS	d.f.	F
Sex	3.2	3.2	1	1.78
Age	12.8	12.8	1	7.11*
Interaction	.2	.2	1	.11
Error	28.8	1.8	16	

*Significant at the .025 level

Table 7b. Analysis of variance: ANGR (proportion scores)

	SS	MS	d.f.	F
Sex	1.20	1.20	1	1.07
Age	7.32	7.32	1	6.55*
Interaction	0.4	.04	1	0.4
Error	17.88	1.12	16	

*Significant at the .025 level

Finally, the data indicate that older children practice intellectual skills more than younger children (see Tables 8a and 8b). This age difference is significant; but because the *n*'s are particularly small in this category, this researcher regards the conclusion only as a possibility rather than a fact. However, this possibility is not a surprising one. A very small number of children in Kien-taa sporadically attended classes held by a private, self-appointed tutor nearby. The children in the age range from four to six would sometimes imitate the older children's writing, counting, and so

Table 8a. Analysis of variance: INTL (frequencies)

	SS	MS	d.f.	F
Sex	.8	.8	1	.92
Age	5.0	5.0	1	6.08*
Interaction	1.8	1.8	1	2.18
Error	13.2	.8	16	

*Significant at the .05 level

Table 8b. Analysis of variance: INTL (proportion scores)

	SS	MS	d.f.	F
Sex	.24	.24	1	1.03
Age	1.46	1.46	1	6.20*
Interaction	.58	.58	1	2.46
Error	3.76	.24	16	

*Significant at the .025 level

forth. Occasionally, they would even receive a "lesson" in return for a small favor. Children in the lower age group were less likely to understand and/or imitate the schoolchildren's intellectual activities.

One category of nonsocial behavior remains to be analyzed, that of "attention" (ATNT), specifically "watching" because listening to a radio or phonograph is extremely rare. Between 5.5 percent and 6.5 percent of a Kpelle child's total acts, irrespective of sex or age, is "watching" behavior. Since the average time a child spent watching, if it were recorded as such, was about two minutes, it was calculated that a Kpelle child spends something like 5 percent of his time during his waking hours intently watching things. It must be emphasized that this is a crude measurement and is only mentioned in the hope that it might be suggestive to other researchers. The data are firmer, however, in the area of WHAT the child watches and confirm the experimental psychological notion that children watch people rather than things and moderately novel events rather than ordinary ones. Children aged one to three watch people almost exclusively; only twice were children observed watching something other than people. Of course, novelty for these young children encompasses a wider range of people and activities than it does for children four to six. Accordingly, the young children will watch everyday activities such as someone threshing rice, cooking, eating, bathing, diapering a baby, children fighting, or children playing, as well as more novel events such as strange people walking by, or someone weaving, re-thatching a roof, picking a thorn out of his foot, scaling a fish, picking coconuts, or sewing at a sewing machine.

Older children still mainly watch people; only eight out of over sixty instances involved something other than people. But these children rarely intently watched mundane activities, such as threshing rice, as did their younger siblings. Activities had to be quite novel to hold these children's attention, and what they considered novelty covered, of course, a narrower range of things. The Kpelle children between the ages of four and six watched such activities as a woman weaving a fishnet, a medicine woman administering an ordeal test for virginity to some girls, the town chief

debating with some men, a man weaving homespun cloth, the blacksmith making a knife, a cooperative work group making mud for house walls, a man writing Arabic, a man tuning a radio, people daubing a new house, a man dressing a baby's sore, or an insane woman shouting in the marketplace. More precise measurement of watching behavior is necessary in order to make these data more than merely suggestive of hypotheses. But they are consistent with what we know of child development.

ANALYSIS: THE SOCIAL CONTEXT (THE RESPONSE OF OTHERS)

Excluding the category of "attention" (ATNT), approximately 25 percent of the sample children's nonsocial acts are part of a SEQUENCE of interdependent acts involving the response or reaction of another individual to the child's act.⁵ For boys between the ages of one and three, this figure is about 27 percent; for girls one to three, about 34 percent; for boys four to six, about 22 percent; and for girls four to six, about 17 percent. These figures, then, represent the proportion of nonsocial acts that actually instigate social interaction. The assumption is that a great amount of basic learning is occurring while a child is behaving individually and that the nature of the response of others, particularly mothers and other adults, to these acts, when and if they do notice them, may be crucial in shaping a child's orientation to learning and to exploring his environment and may affect intellectual development in general. In this section we shall briefly examine social interaction, i.e. the social context of a child's nonsocial behavior, when it occurs in direct response to a specific nonsocial act in a sequence. Those occurrences in which a child responds to himself in a sequence will not be discussed.

Responses of others will be labeled POSITIVE, NEGATIVE, or NEUTRAL, depending on whether it seems likely that they would encourage the child to continue his behavior or to repeat it, or would discourage him or prevent him from carrying out a particular act. A "neutral" label indicates that the effect on the child is ambiguous. Following the Whitings, we refer to the responses of others as MANDS, which are all the "ways in which an individual attempts to change the behavior of another" (B. Whiting n.d.: 4).⁶ A lengthy discussion of each of the many categories of mands are well outside of the focus of this paper; instead, only those which actually

⁵ See Whiting and Whiting (n.d.a: 9) for a discussion of behavioral sequences.

⁶ "All social interaction is seen as a transaction between two individuals in which one individual seeks to change the behavior of another" (B. Whiting n.d.: 3).

occurred as responses to nonsocial behavior will be listed according to whether they are positive, negative, or neutral in effect.

Positive mands include offering material goods, food (including the breast), help, information, comfort, approval, attention, or praise, seeking or offering sociability, seeking competition, and teaching. Negative mands include telling the child to stop what he is doing or to move away, threatening, shaming, or annoying the child, taking things from him, and

Table 9. Responses of others to child's nonsocial behavior

Category Response	MANL	IMT	PHSK	TOYS	HSOB	BTAN	ANGR	XNTR	INTL	SRSP	MSIN	Totals
<i>Boys 1-3</i>												
Peer-positive	3	0	2	0	0	0	2	0	0	0	2	9
Peer-negative	1	0	0	1	2	0	0	2	0	1	1	8
Peer-neutral	0	0	0	0	0	0	0	0	0	0	1	1
Adult-positive	1	0	0	1	0	0	2	2	0	0	3	9
Adult-negative	9	0	10	0	4	1	0	9	0	2	12	47
Adult-neutral	0	0	0	0	0	0	0	0	0	1	1	2
Total responses	14	0	12	2	6	1	4	13	0	4	20	76
<i>Girls 1-3</i>												
Peer-positive	2	0	0	1	2	0	0	2	0	0	0	7
Peer-negative	0	0	0	0	0	0	0	0	0	0	0	0
Peer-neutral	0	0	0	0	0	0	0	0	0	0	0	0
Adult-positive	3	0	4	1	3	0	4	0	0	1	3	19
Adult-negative	7	1	15	0	8	0	4	2	0	6	12	55
Adult-neutral	0	1	0	1	3	0	2	1	0	2	1	11
Total responses	12	2	19	3	16	0	10	5	0	9	16	92
<i>Boys 4-6</i>												
Peer-positive	3	1	0	0	0	0	1	0	2	0	0	7
Peer-negative	0	2	2	0	0	1	0	2	0	2	1	10
Peer-neutral	0	0	0	0	0	0	0	1	0	0	1	2
Adult-positive	2	0	0	0	0	0	0	0	0	0	1	3
Adult-negative	5	0	2	1	7	2	1	2	0	0	6	26
Adult-neutral	0	0	0	0	0	0	0	1	0	0	3	4
Total responses	10	3	4	1	7	3	2	6	2	2	12	52
<i>Girls 4-6</i>												
Peer-positive	1	0	0	0	0	0	0	2	0	0	0	3
Peer-negative	0	0	0	0	1	0	0	0	0	0	0	1
Peer-neutral	0	0	0	0	0	0	0	0	0	0	0	0
Adult-positive	1	0	0	0	0	0	0	0	0	3	0	4
Adult-negative	6	2	6	0	4	1	2	3	1	3	4	32
Adult-neutral	0	0	0	0	0	0	0	0	0	2	2	4
Total responses	8	2	6	0	5	1	2	5	1	8	6	44