Deprivation is a broad general term which cannot be translated directly into a precise, quantitative definition. Rather, it is a concept covering a broad territory which must be mapped out into a series of more carefully defined areas that lend themselves to precise measurement and research. The meaning of the verb "deprive" encompasses such synonyms as "disposses", "take away," "hinder from possessing," "shut out," "keep from having." There is also the connotation that deprivation occurs because of some inequity, - that a child died of starvation in an environment in which food was available but was not given him because of the fault or neglect of some person or persons or of the economic or political system as a whole. Deprivation occurs when a person does not have something that is important to which he has a right.

There is also inherent in the term a value judgment. The person who makes the judgment of whether any particular case involves deprivation does so always from a position of membership in a particular society and in terms of the values and positions he holds within the society. To some extent he may modify or change his judgment on the basis of the time, place and set of conditions in which the case of deprivation occurs. For example, he may not regard as deprived a 12 year-old child who has not learned to read in a nomadic or peasant society where few learn to read, but will probably judge a child of the same age in a western urban environment as deprived
if he has been given no training in reading when almost all other children read by this age. Unless the positions of the judge and person judged are carefully considered, there is real danger of ethnocentrism in deciding whether or not deprivation occurs.

Two kinds of evidence can lead us to suspect the existence of deprivation. The first is whether the child is able to perform at a given age within the level of expectations and demands commonly expected by his society. Some of these expectations will be general to many societies, such as remaining alive, in good health and without any permanent handicap. Evidence for deprivation then is mortality, morbidity and the presence of a permanent handicap. Other expectations for the child will vary depending on the skills and talents needed by the society in which the child lives. Some societies may stress for boys physical stamina, agility and strength for hunting; others may emphasize intellectual and conceptual abilities for the skills needed in a technologically advanced industrialized urban way of life.

The second kind of evidence needed to judge a case of deprivation involves the upbringing and experiences which the child has had. Every society through time has evolved child-rearing practices which gives the child a complex array of experiences designed to preserve life, maintain health and seek to avoid chronic or handicapping conditions. They also develop physical motor, intellectual, sensory and social skills so the child is prepared for life as an adult in his society. If a child does not receive
elements of upbringing or experiences essential for development, this is evidence of deprivation.

These two kinds of evidence, - whether a child fails to live up to expectations, and whether he has not had the necessary experiences to prepare him to meet these expectations, are both needed to make a judgment. The judgment would also be simplified if there were evidence that the absence or paucity of some care or experience was the cause of the child's inability to later perform at the level expected of him. We do not know, for example, whether an acute episode of malnutrition at the age of 2 years causes mental retardation and thus an inability of the child to meet the levels of intellectual performance expected of him when he is 10 years old. We do know that this simple cause-and-effect example is a gross oversimplification. In nearly all cases, a child's inability to meet his parents' or others' expectations by an outcome measure, physical, intellectual or social is the result of a complex cumulative sequence of events, circumstances and conditions spread over a time period. We rarely know all the kinds of experiences the child may have missed -- the adequacy of his fetal developments, the kinds of prenatal insults to which he may have been exposed, and, in his post-natal life, the quality of his maternal care and intellectual and social stimulation. Studies of the association between mental subnormality (where the child is unable to meet expectations of adults) and antecedent factors, using large numbers of cases, have shown mental subnormality occurs more often in lower class than upper class families (R. Masland, et al, 1958; D. Baird, et al). These differences in the styles of life which the social class concept encompasses evolved over a time-span far longer
than the child's life. We have evidence that mental subnormality is associated with pregnancy complications of the mother (R. Masland, et al., 1958; R. Illsley and D. Fairweather, 1960). But we also know from the work of Baird and his associates that pregnancy and delivery complications occur more frequently in lower-than upper-class women. There appears to be some complex interaction then among lower-class membership, complications of pregnancy and delivery and mental subnormality. Kwashiorkor in infancy would be taken as strong evidence of deprivation. But the range of evidence needed to identify the essential experiences that lead to kwashiorkor is extremely complex, as is shown by a case of a child in a Central American country. The child was admitted to a hospital at 2 years of age with kwashiorkor. The mother reported that her husband had become an alcoholic and deserted her 18 months previously. She had five children and, to support them, went to work in a tortilla factory for approximately six hours a day. For this work she was paid 15 cents a day plus a dozen tortillas. While she worked at the factory, the children were left without any adult care. The youngest child developed chronic diarrhea, and she placed the child on an atole diet. Kwashiorkor developed and she then brought the child to the hospital.

The experiences of this child are related to the general historic and political conditions of the country, the social and economic conditions of the urban slums surrounding the city, the level of hygiene, the social pathology of the family, the mother's being forced to work, her values and training in how to care for chronic diarrhea, and the kinds of advice which she felt were available to her and she would use.
The value of the concept of deprivation for scientific research is to direct inquiry into areas where we need more knowledge about what are necessary experiences for children in order that they meet the expectations of the society in which they live. In terms of social and psychological factors, for example, to explore whether certain patterns of child care differentiate children with different rates of physical growth; whether certain forms of residential institutional care for rearing children do not provide children with certain experiences such as love and support, play and opportunities to explore a colorful and varied physical environment, sufficient time with adults for adequate development of speech, and whether these are necessary for adequate socialization. Much work of this kind has been attempted and will be the subject of this paper. It was nearly done, however, in westernized industrial societies and we should remain alert to the danger of both the ethnocentric view of the investigator and the cultural conditions in which the work took place. There can be ethnocentrism in adherence to a particular scientific approach, theory or viewpoint as well as in the selection of topic for investigation.

Social Factors Associated With Mortality, Morbidity, and Handicap

An important body of research findings relating childhood mortality, morbidity and handicapping conditions to social environmental factors has been obtained through use of epidemiology. Although epidemiology developed in the search for the causes of diseases such as pellagra, cholera, typhoid and malaria, it has increasingly been used for the study of disabling
conditions such as mental subnormality, reading handicaps, school drop-out, psychiatric disorders, and juvenile delinquency -- conditions which prevent the child or young person from performing in a way expected of him by society. Whereas some of the classical studies of epidemiology were able to track down the insult which caused the disease state, more recent studies are dealing with impaired functioning in which the causes are probably multiple and cumulative over time, and where identifying the conditions under which the impairment is most likely to occur tells little about the mechanisms or causes of why the child is not functioning as expected.

The most common social variable used in epidemiology is "social class", usually measured by the occupation of the child's father, these occupations being then classified in a number of categories in which distinctive styles of life are believed to occur. More complex measures of social class sometime include income and the education of the parents. Numerous studies have found that mortality, morbidity, and various forms of functional impairment in children have higher rates in the lower social classes. Relationships have also been found between greater frequency of infant mortality, prematurity, epidemic and infectious diseases, bronchitis, pneumonia and tuberculosis, rheumatic heart disease, ulcer and cancer of the stomach (Susser and Watson, 1962, p. 82), handicaps such as anencephaly (Jessop and Coffey), mental subnormality (R. Masland, et al, 1958) and lower social class.

Other social variables used are race and ethnicity. Negroes in the United States and the colored South African population compare poorly with whites on most measures of health (Susser and Watson, 1962). Minority
groups such as Spanish Americans, French Canadians and Indians in Central America are frequently found to have higher infant mortality rates and childhood morbidity. Ethnic and racial minority groups are found most often in the lowest social class where there is the greatest degree of poverty. And along with this poverty are other factors which have been shown to be associated with higher mortality and morbidity -- high parity, close spacing of children, prenuptial conception and illegitimacy, poor hygiene, broken homes and mothers leaving young children to take unskilled employment to achieve a minimum level of subsistence.

Shifts in the Viewpoint and Interests of Scientists

The close association between poverty and a wide variety of indicators of physical and social pathology has been known for a long time, but until recently few scientists have gone further than demonstrating the existence of this association. Perhaps the apathy in the face of such powerful findings may be accounted for in part by the widespread belief in theories of constitutional inferiority, the process of natural selection, and such economic views as the iron law of oligarchy. These theories led to a viewpoint and values rather similar to those of McFarland who, in 1782, (in Encyclopedia Britannica, edition of 1960) wrote: "in tracing the causes of poverty, I have endeavored to show that the greatest number of those who are now objects of charity are either such as have reduced themselves to this situation by sloth and vice, or such as, by a very moderate degree of industry and frugality might have prevented indigence".
There is, however, increasing interest and attention being paid to the view that poverty with all the deprivation associated with it is not a necessary state of any society. There are many forces encouraging this view: the growing number of independent nations who previously were under colonial rule; the civil rights movement, which is challenging the traditional caste treatment of the Negro; the growing demand for training and education as technological development reduces the need for unskilled labor, and an increasing recognition of the needs for dealing with a wide variety of deprivation and social pathology through prevention rather than treatment in such forms as social welfare, crime detection and punishment, provision of health services, etc. In the United States, this interest is manifested by the antipoverty program, the new educational legislation for providing enrichment programs to deprived children, and recent and pending civil rights legislation.

This general developing interest in factors that contribute to deprivation in children has influenced research interests. Although scientific interest still continues in genetics and biochemistry and on innate mechanisms that influence growth, greater emphasis is now being given to environmental factors both biological and social. In recent reviews of mental subnormality (Masland, et al, 1958; Penrose, 1954; Knobloch, 1962), the authors estimate that genetic and chromosomal abnormalities contribute only a minor proportion of all cases of mental subnormality as compared with biological and social environmental factors before and after birth. This shift in emphasis is strongly expressed by Pasamanick:

...Except for a few hereditary clinical deficiencies and for exogenous injury to neural integration, behavior variation does not seem to be the result of genetically determined structural origin. It is now possible to entertain a new tabula rasa theory hypothecating that at conception individuals are
quite alike in intellectual endowment except for these quite rare hereditary neurologic defects. It appears to us that it is life experience and the sociocultural milieu influencing biological and psychological function which, in the absence of organic brain damage, makes human beings significantly different behaviorally from each other. (Amer. J. Mental Deficiency, Sept. 1959, p.318)

To explore this challenging hypothesis, it becomes necessary to go beyond the essential first step of studying the associations between mortality, morbidity, and handicap and demographic variables such as social class, race and ethnicity and to seek to identify specific factors in the general style of life broadly identified by these general variables that contribute to differential rates of pathology or different levels of functioning. Essential to the development of this approach is careful and systematic description of the child in the context of his family environment.

A pioneer study of this kind was a pediatric investigation conducted by Sir James Spence and his colleagues in Newcastle-upon-Tyne. Their purpose was "... to identify the diseases of childhood in a representative sample of families, to trace their origins, and to measure their effects" (J. Spence, et al, 1954). Approximately 1000 families were studied over a span of several years. In introducing the second report of the study (Miller, et al, 1960), they state:

...We shall show that the occurrence and natural history of illness can be understood only if it is regarded as an aspect of the community in which it occurs, and that when illness develops in a growing child the pattern and outcome are influenced by the child's environment as well as by the particular agents of infection or injury. Indeed we think we could go further and suggest that some disorders such as pneumonia are almost an expression of family environment (Introduction, page B).

In examining frequency of illness and condition of risk these
investigators found that children in lower-class families had bronchitis, pneumonia, staphylococcal disease, convulsions and infections disease more frequently than children of higher social status. Going beyond the gross classification of social class, investigators described, defined, and classified for purposes of analysis, features of the children's family environment which they believed contributed to the level of health of the child: the mother's care of the child, the structural environment of the housing, the human environment of the family; and a series of factors by which an index could be constructed of problem families. When these measures of social and physical environment were related to the children's diseases, associations were obtained where none had been evident on the basis of the unrefined classifications of social class. For example, although no significant relationship was found between alimentary infections and social class, significant relationships were found between the disease and deficiency of supervision and clothing, personal cleanliness, and sleep and sleeping arrangements. The investigators were impressed by the importance of the quality of the mother's care as the chief single factor in the welfare of the infants. In their conclusions, they also emphasize the complex interrelationships and cumulativeness of biological and social environmental factors in the causation of disease.
Social and Psychological Factors That Influence Social Psychological Development

There have been a number of careful sociological descriptions of child development in socially and culturally deprived children. Davis and Dollard (1940), through case histories of Negro children in Louisiana, make vivid the ways in which the white person is taught the social dogma of his caste with regard to Negroes, the rigidity of the caste system and its effect on the personality development and aspirations of Negro children; and particularly the human bitterness and resentment that is engendered by their childhood experiences.

Oscar Lewis, in *Five Families* and *Children of Sanchez*, presents detailed case histories of Mexican families in rural and urban environments and shows some of the social environmental factors that influence the children's growth and development. Although not dealing specifically with children, Caudill (1962), shows the social effects of industrial exploitation in Kentucky and the poverty of the region when the mines closed down. The following composite description which Martin Deutsch *(Merrill Palmer Quarterly, July 1964)*, gives of lower-class life illustrates the kinds of leads for further work which such descriptions provide.*

...Geographically, there are crowded and dilapidated tenements quite at variance with the TV image of how people live. If the people are Negro, Puerto Rican or Mexican-American, or poor mountain white, life is in a more-or-less segregated community. There are likely to be extremely crowded apartments, high rates of unemployment, chronic economic insecurity, a disproportionate

number of broken families, and (particularly in the case of the Negro) continual exposure to denigration and social ostracism of varying degrees. The educational level of the adults tends to be quite limited. In the homes, there is likely to be a nearly complete absence of books, relatively few toys, and, in many instances, nothing except a few normal home-objects which may be adapted as playthings. In addition—particularly but not exclusively where relatively new in-migrants are concerned—there is a great deal of horizontal mobility. The result is a pattern of life that exposes a child to a minimum of direct contacts with the central channels of our culture. The conditions of social inequality, the absence of an accessible opportunity structure, and the frequent non-availability of successful adult male models create an atmosphere that is just not facilitating to individual development. Moreover, the everyday problems of living, particularly those of economic insecurity and a multiplicity of children, leave minimum time for the adults who may be present to assist the child in exploring the world, to reward him for successful completion of tasks, or to help him in the development of a differentiated self-concept. Even in homes which are not broken, the practical manifestations of economic marginality result in the father sometimes holding two jobs and having little time for interaction with the child. We have found in various studies that children from these circumstances have relatively few shared or planned family activities, again resulting in a narrowing of experience. (page 252-3)

The value of these and other descriptions is that they provide opportunity for identifying variables in the social environment for further more systematic and specifically focused quantitative study, and insights which may become the basis for further studies.

There is good evidence (Miller, Conant, J. Douglas) that children of the lowest social class, especially if they come from stigmatized minority or ethnic groups, perform less well generally on a wide range of measures—school grades, dropping out of school at earlier ages, and failure to finish high school. The frequency with which the quality of education provided to lower-class children is inferior to other children has also been made clear in terms of such measures as the professional-to-pupil ratio, per pupil expenditure, quality and experience of teachers, and proportion of school
time spent in teaching (James B. Conant, 1961; Patricia C. Sexton, 1961; and James Douglas, 1964). Studies by Martin Deutsch and his colleagues (Merrill-Palmer Quarterly, 1964) have shown that differences in school performance between children of lower and higher social classes emerge at early ages.

... The overwhelming finding of studies on the relationship between social class and learning, school performance, and the like is that children from backgrounds of social marginality enter the first grade already behind their middle-class counterparts in a number of skills related to scholastic achievement. They are simply less prepared to meet the demands of the school and the classroom situation. Conversely, though, the school has failed to prepare to meet their needs. The failure of the educational institution to overcome the children's environmentally determined handicaps too often results in early failure, increasing alienation, and an increasingly greater gap between the lower-class and middle-class youngsters as they progress through school. In other words, intellectual and achievement differences between lower-class and middle-class children are smallest at the first grade level, and tend to increase through the elementary school years. (page 254)

The findings of poorer performance at school entry for lower-class marginal children did not have any beneficial consequences for these children as long as the explanation was genetic, or intelligence was regarded as innate and fixed. With increasing evidence of the postulated importance of the social environment in influencing cognitive development, however, differences in performance at school entry have led to two rapidly developing bodies of research and action. In research, studies are now investigating the nature of the early environment to determine whether the socially marginal children are being deprived of experiences necessary for later adequate growth and development. In action, a widespread program is getting under way in the United States to better prepare the child to meet the expectations and
demands of the school when he enters school. A great deal of thought and
attention is going into the nature of these pre-school "enrichment" programs.
In this paper, however, we shall focus on some of the social science research
on socially marginal children. Because many of these studies are still under
way, perhaps the most useful form of reporting is to illustrate the kinds of
questions and hypotheses that guide the work and some of the variables being
studied.

A major emphasis in these recent studies has been in sensory
development - in identifying the kinds of environment and experiences
necessary for the adequate development of auditory reception and discrimina-
tion, and the development of language, visual and tactile learning. This
probably stems from the interest of educators in the development of
cognitive skills, from some evidence that sensory development is more
sensitive to environmental influences than motor development (See J. McV.
Hunt in Merrill-Palmer Quarterly, July 1964), and from reports of differences
in perception between and within cultures (Allport & Pettigrew, 1957; Bagby,
1957; Nissen, Machover, & Kinder, 1935; Rivers, 1901, 1905; Segall,
Campbell, & Herskovits, 1963; Sherif, 1935; Tresselt, 1948; Woodworth,
1910).

J. McV. Hunt has speculated that infants exposed to the crowded
conditions of lower-class slums may not be handicapped by the diversity
and level of visual and auditory inputs during the first year of life but that
during the second year,
...as the infant begins to throw things and as he begins to
develop his own methods of locomotion, he is likely to find
himself getting in the way of adults already made ill-tempered
by their own discomforts and by the fact that they are getting in
each other's way. In such a crowded atmosphere, the activities
in which the child must indulge for the development of his own
interests and skills must almost inevitably be sharply curbed.

Beginning in the third year, moreover, imitation of
novel patterns should presumably be well established, and should
supply a mechanism for learning vocal language. The variety of
linguistic patterns available for imitation in the models provided by
lower-class adults is both highly limited and wrong for the standards
of later schooling. Furthermore, when the infant has developed a
number of pseudo-words and has achieved the "learning set" that
"things have names" and beings asking "what's that?", he is all too
unlikely to get answers. Or, the answers he gets are all too likely
to be so punishing that they inhibit such questioning. The fact that
his parents are preoccupied with the problems associated with their
poverty and their crowded living conditions leaves them with little
capacity to be concerned with what they conceive to be the senseless
questions of a prattling infant. With things to play with and room
to play in highly limited, the circumstances of the crowded lower
class offer little opportunity for the kinds of environmental encounters
required to keep a two-year old youngster developing at all, and
certainly not at an optimal rate and not in the direction demanded
for adaptation in a highly technological culture. (page 238)

There is some indirect evidence in support of these speculations.

Fifth grade, lower-class Negro and white children were given the Wepman
Auditory Discrimination test (See Cynthia P. Deutsch in Merrill-Palmer
Quarterly, July 1964). In this test, pairs of words are presented to the
child which are very similar in sound and he is asked to state whether the
pairs are the same or different. These children scored well below the
norms established for the test.

R. Hess is conducting a laboratory experiment in which mothers
and their young children participate in a task which requires close coopera-
tion for its successful completion. The discussion between each mother and
child is systematically analyzed. Compared with middle-class mothers,
lower-class mothers provided less information for the child and less opportunity for the child to share in planning the task.

It is widely believed that the parents or caretaker of a young child are of crucial importance in the child's acquisition of language. Factors that influence the learning process include the amount and nature of the adult speech the child listens to, the extent to which the child's attempts at speech are encouraged and corrected, whether the development of the child's questioning is helped or hindered, and the quality and quantity of adult speech. If the young child spends little time with adults and learns speech more from older brothers and sisters or other children, the speech he learns from will be more rudimentary than adult speech. M. Deutsch (in A. H. Passow, 1963), studying the nature of conversation between adults in middle- and lower-class families, has found that sustained conversation in lower-class homes is far shorter. Studies by Bernstein (1965), of middle- and lower-class language usage by British children show that lower-class children use far less complex patterns of speech, short, grammatically simple, often unfinished sentences, and less conceptual language. Although their vocabulary may be quite rich expressively, it is not the vocabulary likely to be encountered among teachers in school, (K. Eells et al, 1951). V. P. John and L. S. Goldstein (Merrill-Palmer Quarterly, July 1964), in examining social conditions that affect language acquisition are studying "... the gradual shift in the child's use of words, from labeling specific and often single referents to the use of words for signifying categories of objects, actions, or attributes". They hypothesize
"... that the rate and breadth of this shift varies from one social context to another, and that it has differential consequences for cognitive development dependent on the social context in which it occurs". Nisbett (1953), has carefully reviewed "... the slight but definitely established tendency for intelligent children to be found in small families and dull children in large families." This tendency persists even when such factors as parents' occupation or overcrowding in the home have been controlled for. He believes the results in part may be explained by "... the environmental influence of the size of the family on verbal ability and through it on general mental development."

Although the influences of an impoverished social environment on oral discrimination and speech development is a major issue now under investigation, there is also interest in what influences the development of visual and motor sensory skills. In impoverished homes, there is likely to be an absence or paucity of toys and especially the kinds of objects which will be encountered later in schools--pencil and paper, crayons, blocks, modeling clay, etc. The home and immediate environment in slum areas is less likely to have a wide variety of pictures and books, and the child is less likely to be taken to a variety of environments beyond his home and its immediate surroundings. In a survey, as yet unpublished, of reading ability for the total population of 7- to 12-year-old children in Aberdeen, Scotland, we have found that reading test performance of children whose fathers are manual workers is poorer than that of children whose fathers have nonmanual
occupations.

Clearly, consideration of the various sensory modalities is only the first step toward considering the interrelationships among sensory skills and their development, and also the various hierarchical organizations of the different sensory modalities. Birch and Lefford (1963) have been developing methods for approaching the study of intersensory perception and developing norms for their test. The children are asked to listen to a series of dots and dashes tapped out with a pencil and then to identify the dot and dash pattern from three alternatives shown visually. The authors find a positive correlation between audio-visual integration as measured by this test and reading ability in first- and second-grade children. They found also that children who were retarded in learning to read performed more poorly on the test than normal readers (Birch et al., Perceptual and Motor Skills, 1965 and Developmental Medicine and Child Neurology, April 1965).

Children who live in lower-class, minority, or stigmatized groups generally have little personal contact with members of the middle class or the majority group before they reach school age. Yet in many ways they learn many of the upper- and middle- class values and begin to recognize that they and their families do not conform to these values and expectations. The effect on their personality development has been well summarized by K. B. Clark (1955):
... As minority-group children learn the inferior status to which they are assigned and observe that they are usually segregated and isolated from the more privileged members of their society, they react with deep feelings of inferiority and with a sense of personal humiliation. Many of them become confused about their own personal worth. Like all other human beings, they require a sense of personal dignity and social support for positive self-esteem. Almost nowhere in the larger society, however, do we find their own dignity as human beings respected or protected. Under these conditions, minority-group children develop conflicts with regard to their feelings about themselves and about the values of the group with which they are identified.... These conflicts, confusions, and doubts give rise under certain circumstances to self-hatred and rejection of their own group.

Minority-group children of all social and economic classes often react to their group conflicts by the adoption of a generally defeatist attitude and a lowering of personal ambition.

There are some specific skills expected of children in school by the teachers, who predominantly are middle-class in their orientation and values. They expect the children to have good time-sense, to know how to approach a task in an orderly manner, to be able to pay attention to them. But many of the children from low-social-class backgrounds have received little training in developing a sense of time, in approaching tasks in a systematic orderly manner, and in carrying through and completing a task within prescribed time limits. Their parents have generally not been good examples or role models for developing these skills and values. The children have had little experience in listening to sustained adult talk, particularly middle-class speech patterns. Because they live in crowded and noisy homes, they may, in fact, have learned to be inattentive to talk. Studies of schools have shown that reading and other textbooks used generally portray scenes of upper- and middle-class suburban and rural life, and there is considerable evidence that the various standard aptitude tests discriminate against lower-class children by the selection of items which include words, scenes, and events with which lower-class children
have little or no familiarity. Teachers live in a social milieu and set of conditions very different from those of the deprived child and have generally learned the middle-class set of values. They have had little experience of the day-to-day conditions in which the child lives and little understanding of his behavior. Furthermore, not only may their expectations and demands be unmeetable by the deprived child but his failure to meet them may well be interpreted as evidence of poor heredity and a low and fixed level of intelligence. On the basis of this interpretation, teachers may feel that there is little they can do, and hence they may adopt a defeatist attitude.

Possibly one of the factors most damaging to self-esteem is failure to live up to the expectations and demands of others. The widespread evidence of poorer performance by lower-class children suggests a frequency of such failure which may kill any early interest the child may have had in school and cause him to seek his successes and satisfaction with his peers, with whom in general he has far more contact, and to seek less contact with adults than the middle-class child enjoys.

The segregation of the deprived child along class, racial, and ethnic lines frequently occurs not only in his home environment but also in his school. Almost all his social and learning experiences, with the exception of his teachers, the mass media, and occasional brief encounters with middle-class people, reinforce the norms and values of his subculture and cumulate behavior patterns which increasingly make it difficult for
him to perform as an adult in ways expected by the majority culture. Studies of the ways in which lower- and middle-class children describe themselves show the lower-class child to be more fatalistic and feel he can do less to control or have autonomy over his environment than the middle-class child; to have lower self-esteem; and be more conflicted and confused about his identity (Brim, et al, 1965; Battle and Rotter, J. Pers., 31).

If the child has a stigmatized skin color, there is good evidence that he early learns the implications of his skin color for social status and personal worth (K. B. Clark and M. K. Clark, J. Soc. Psychol, 1939, and M. E. Goodman, 1952). The effects of segregation are as harmful for white as for Negroes.

... Segregated education is inferior and nonadaptive for white as well as Negroes. Put simply, no child can receive a democratic education in a nondemocratic school. A white youngster in a homogeneous, isolated "hot house" type of school situation is not being prepared for the realities of the contemporary and future world. Such a child may have brilliant college entrance scores, be extraordinary in his mathematical ability, or read and speak a foreign language with skill and precision, but he is likely to be blocked in many circumstances in his ability to use these intellectual abilities with the poise and effectiveness essential to personal and social creativity. A racially segregated school imposes upon white children the inevitable stultifying burdens of petty provincialism, irrational fears and hatreds of people who are different and a distorted image of themselves. Psychologically, the racial segregated school at this period of American and world history is an anachronism which our nation cannot afford. This point must be made over and over again until it is understood by those who have the power to make the decisions which control our destiny. (K.B. Clark, Teachers College Record, 62, Oct. 1960).

Effects of Change of Environment on Performance

A crucial test of the extent to which lack of certain experiences leads to inability to measure up to an expected level of development is whether changes in the environment lead to changed levels of performance. A number of studies do suggest the effectiveness of providing postulated
necessary experiences or training in changing performance. Mentally sub-
normal children between the ages of 3 and 6 were found to have accelerated
rates of intellectual growth as the result of a special nursery-school
experience over a control comparison group which did not have the nursery-
school experience. (S. A. Kirk, 1958) Tizard created a special residential
unit for severely retarded children aged 8 who had previously lived in a
large residential institution for retarded children. He selected 16 pairs
of children matched for sex, age, I.Q., and, as far as possible, diagnosis.
The experimental group was then moved to a small residential unit in which
they were provided with a program of care and education especially designed
to provide them with experiences the author believed necessary for optimum
growth and development. After two years, the experimental group of children
were found to be advanced in many ways over the control children who had
remained in the large institution. Klineberg (1935, and Amer. Psychologist,
1963, 18) studied school records and intelligence tests of Negro children
in the North and South and provided a wide variety of evidence to show
the positive effects of improved educational environments on the I.Q.'s
of Negro children. An early extensive study of the consequences of nursery
school attendance (B. L. Wellman, 1940) showed that it has an effect
measurable not only at the end of nursery school but for several years
after nursery school.

Another form of natural experiment which has been used to deter-
mine the effects of environment on development has been to study children
reared in institutional settings who have received adequate physical main-
tenance but very few other experiences postulated as necessary for adequate
over-all development. These studies show that these children have a higher
mortality rate, are slower in learning motor functions such as sitting, standing, and walking, are retarded in cognitive functioning, and have disturbed emotional reactions and apathetic responses to social environment (Child Welfare League of America, 1962; Bowlby, 1962; Dennis, J. Genet. Psychol., 1960; and Dennis and Dennis, Genet. Psychol. Monogr., 1941).

These illustrations of the effects of the environment on performance provide encouragement for further research into the mechanisms whereby social environmental conditions can influence the growth and development of children socially and biologically.

At the outset of this paper, we warned of the need to remain alert to the danger of being culture bound and ethnocentric in judging what constitutes deprivation. At this point, having reviewed some of the research that seems pertinent, we can determine the extent to which the studies of deprivation would be judged pertinent by the United Nations Declaration of the Rights of the Child; using the reasoning that a child who does not receive what is rightfully his is thereby deprived. Because this document has been agreed to by the membership of the United Nations, it is unlikely to express a narrow or ethnocentric viewpoint.

This Declaration was unanimously adopted by the United Nations General Assembly on November 20, 1959. Although the Declaration sets a standard which its authors believe all people seek to achieve rather than reflecting existing conditions, it does provide a valuable set of criteria both for conditions believed essential for adequate development and for desirable goals for young people. The principles in the Declaration of the Rights of the Child reflect five approaches to the consideration of
these rights. These are:

1. A necessary set of international, political and social conditions which are necessary for the healthy functioning of the society or country in which the child lives.

   Principle 10: "He shall be brought up in a spirit of understanding, tolerance, friendship among peoples, peace and universal brotherhood."

2. The set of social conditions into which the child is born and reared within his country of birth.

   Principle 1: "All children without any exception whatsoever, shall be entitled to these rights, without distinction or discrimination on account of race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status, whether of himself or of his family." This implies that presently many children are deprived because of race, color, etc.

3. The set of experiences which a child must have for optimal growth and development of his potentialities.

   Principle 4: "...adequate pre-natal and post-natal care..., adequate nutrition, housing, recreation and medical services."

   Principle 6: "...love and understanding, ...moral and material security, in the care and under the responsibility of his parents."

   Principle 7: "...play and recreation..., and education which will promote his general culture..."

4. The level of functioning at different stages in the child's development necessary to meet the expectations of the society in which he lives.
Principle 2: "To develop physically, mentally, morally, spiritually, and socially in a healthy and normal manner."

Principle 6: "...the full and harmonious development of his personality..."

Principle 7: "...to develop his abilities, his individual judgment and his sense of moral and social responsibility and to become a useful member of society."

Principle 10: "...that his energy and talents should be devoted to the service of his fellow men."

5. Special provisions and care needed for children who, in the widest sense of the term, are handicapped.

Principle 5: "The child who is physically, mentally or socially handicapped shall be given the special treatment, education and care required by his particular condition", with the implication, that, without such care, the child might suffer deprivation.

Of these five ways of viewing childhood deprivation, we have given short shrift to the first and last. The contribution of wars, revolutions, and social inequities resulting from governmental and political action has been demonstrated in countless tragedies to lead to widespread deprivation. There is a developing interest in subjecting these problems to systematic scientific inquiry. The special provisions and care needed for handicapped children from the point of view of social and psychological consequences of handicapping, I have, in part, reviewed elsewhere (S.A. Richardson, August 1963 and H.G. Birch, 1964). The remaining three viewpoints expressed in the Declaration of the Rights of the Child are close to those used in this paper.
The research reviewed in the present paper was conducted almost entirely within the context of western/society. Its emphasis on learning and the abilities prized by educated people reflect the values of the more educated segment of the society. This is an ethnocentric view, and there are certainly abilities which deprived children learn to a greater extent than other children. These we have neglected to examine. We also have neglected to examine what forms of deprivation may occur for privileged children in the society. Between and within countries, the kinds of demands and expectations placed on children will vary but, in all countries, there are demands and expectations and there will be some children who will have difficulty meeting these because of experiences which are essential for their growth and development. The task of the investigator will be to identify the values and aspirations of the culture or society where he is to work and, if these are compatible with his ethics, to use and adapt some of the research approaches and methods which have been developed in other countries.

The need to consider largely separately the social and psychological factors contributing to deprivation, on one hand biological growth and on the other hand social growth, reflects the traditional separation of the biological and social sciences. Increasingly, there is the need for designing studies which consider both biological and social factors and their complex interplay in child development.

Although there will always be an important role for laboratory experimentation, increasingly there is need for studies which use defined samples or populations of children and anterospectively study the circumstances and conditions of child growth before the diagnosis is made of ill health or functional impairment. We have relatively little
experience yet in designing and executing such ecological studies. Prerequisite for such studies is the existence of teams of investigators whose members represent both the biological and social sciences, who can stay together over a period of years, and who develop a mutual respect and intelligent understanding.

The goal of research into deprivation is prevention. In the past, there has been no shortage of social action to prevent deprivation. Those aspects of research which have been missing and are now slowly and painfully beginning to emerge are the concepts and methods necessary for systematic analysis of the mechanisms that cause deprivation. As these are used and defined and our knowledge grows, it may be possible in political and social action to come closer to the medical dictum: *Primum non nocere*, and to provide the better conditions necessary for the optimum development of children.
REFERENCES

Battle, E. S. and Rotter, J. B. Children's feeling of personal control as related to social class and ethnic group. J. Pers., 31, 482-490


Clark, K. B. Prejudice and Your Child Boston; Beacon, 1955


Coffey, V. P. and Jessop, W. J. E. Congenital abnormalities Irish J. of Medical Science, 1955, 6th series, no. 349.


Dennis, W. and Dennis, M. G. Infant development under conditions of restricted practice and minimum social stimulation. Genet. Psychol. Monogr., 1941, 23, 149-155


Passow, A. H. Editor *Education in Depressed Areas* Teachers College, Columbia University, New York, 1963.


See Separate Volume for Agenda Item 8

Special Session on DEPRIVATION IN PSYCHOLOGICAL DEVELOPMENT