Poverty and Childhood*

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I should like to consider what we know about the education of the very young, about what may be formative influences during infancy and early childhood upon later intellectual competence and how these influences may be more compassionately deployed. Our focus will be upon the manner in which social and cultural background affects upbringing and thereby affects intellectual functioning. And within that wide compass, we shall limit ourselves further by concentrating principally upon the impact of poverty and dispossession.

There is little enough systematic knowledge about what in fact happens to children during infancy and early childhood and even less on what its latter effects on competence may be. Indeed, in the current debates, it is a moot point as to what is properly meant by intellectual competence, whether or in what degree competence comprises soul, mind, heart, or the general community. Nor can the topic be limited to education. For the charge has been made by Royal Commissions and advisers to presidents as well as by the anti-Establishment New Left that educational and socializing practice, before the school years as after, reflects and reinforces the inequities of a class system by limiting access to knowledge for the poor, while facilitating it for those better off. The charge is even more serious: that our practice of education, both in and out of school, assures uneven distribution not only of knowledge but also of competence to profit from knowledge. It does so by limiting and starving the capabilities of the children of the poor by leading them into failure until finally they are convinced that it is not worth their while to think about school-like things.

As Stodolsky & Lesser (1967) grimly put it, "When intelligence data and early achievement data are combined we have a predictor's paradise, but an abysmal prognosis for most children who enter the school system from disadvantaged backgrounds".

Why concentrate on the very young? The answer is, of course, in the form of a wager. For one thing, Bloom's (1964) careful and well-known work strongly suggests that a very major proportion of the variance in adult intellectual achievement, measured by a wide variety of procedures, is already accounted for by the time the child reaches the usual school-starting age of five. For another, there are enough studies to indicate, as we shall see, that certain possibly critical emotional, linguistic, and cognitive patterns associated with social background are already present by age three.

But principally, I am moved to concentrate on the very young by my own research (for example, Bruner, 1969; Bruner, Lyons, & Kaye, 1971). The staggering rate at which the preschool child acquires skills, expectancies, and notions about the world and about people; the degree to which culturally specialized attitudes shape the care of

children during these years—these are impressive matters that lend concreteness to the official manifestos about the early years.

Our first task is to examine what is known about the effects of poverty on child development in our contemporary Western culture—whether this knowledge comes from attempted intervention, from naturalistic studies, or from the laboratory. I do not wish to make a special issue of poverty, of whether or not it represents a self-sustaining culture, as Oscar Lewis (1966) urges; nor do I want to make the claim that poverty is in every culture the same. Yet there are common elements that are crucial wherever it is encountered and in whatever culture embedded. We shall have more to say about these in context as we consider what it is that poverty and its attendant sense of powerlessness may do to the pattern of growth in children.

Our second task is to look briefly at modern theories of development with a view to assessing whether they aid in the understanding of the impact of culture on growth, generally, and of the impact of poverty, particularly.

Finally, and again too briefly, we must examine what the implications of this exercise are for public policy and for the conduct of early education. As Hess & Shipman (1968) put it, "The current growth of programs in early education and the large-scale involvement of the schools and federal government in them is not a transitory concern. It represents a fundamental shift in the relative roles and potential influence of the two major socializing institutions of the society—the family and the school".

Most of the work that compares children from different socio-economic backgrounds points to three interconnected influences associated with poverty.

> The first relates to the opportunity for, the encouragement of, and the management of goal seeking and of problem solving; it reflects differences in the degree to which one feels powerless or powerful, and in the realistic expectation of reward for effort. *What* the child strives for, *how* he goes about the task of means-end analysis, his expectations of success and failure, his approach to the *delay* of gratification, his *pacing* of goal setting—these are not only crucial, but they also affect how he uses language, deploys attention, processes information, and so on.

> The second influence is linguistic: by exposure to many situations and through the application of many demands, children come to *use* language in different ways, particularly as an instrument of thought, of social control and interaction, of planning, and so forth.

> The third influence comes from the pattern of reciprocity into which the child moves, whether middle class or poor and dispossessed. What parents expect, what teachers demand, what peers anticipate—all of these operate to shape outlook and approach in the young. We must consider each of these in turn.

GOAL SEEKING AND PROBLEM SOLVING

A close reading of the evidence surely suggests that the major source of 'cognitive' difference between poor and better off, between those who feel powerless and those who feel less so, lies in the different way goals are defined and how means to their attainment are fashioned and brought into play.

Begin with a general proposition: that one feels competent about oneself before feeling competent about others or about the world at large. Moffett (1968) observes how language complexity increases when the child writes or speaks about events in which *he* participated in a goal-seeking process. Consider these unlikely initial subordinate constructions from third-graders uttered in describing a task in which they have had a central, directive role:

> *If I place a flame over the candle,*
>   *the candle goes out.*
> *When you throw alum on the candle,*
>   *the flame turns blue.*

Or take two speech samples from lower-class black children, one describing a TV episode in *The Man From U.N.C.L.E.*, the other a fight in which he, the speaker, was engaged:

>   This kid—Napoleon got shot
>   And he had to go on a mission
>   And so this kid, he went with Solo.
>   So they went.
>   And this guy—they went through this window.
>   And they caught him.
>   And they beat up them other people.
>   And they went
>   and then he said that this
>   old lady was his mother
>   and then he—and at the end he say
>   that he was the guy's friend.

And the fight:

>   When I was in the fourth grade—
>   no it was the third grade
>   This boy he stole my glove.
>   He took my glove
>   and said that his father found it downtown
>   on the ground.
>   (And you fight him?)
>   I told him that it was impossible for him
>   to find downtown 'cause all those people
>   was walking by and just his father
>   was the only one that found it?
>   So he got all (mad).
>   So then I fought him.
>   I knocked him all out in the street.
>   So he say he give
>   and I kept on hitting him.
>   Then he started crying
>   and ran home to his father.
>   And the father told him
>   that he didn't find no glove.

As Labov (1969) remarks, the difference between the two is that the second has a consistent evaluative perspective or narrative line—from the speaker to the events that impinge upon him, and back to his reactions to these events.

A study by Strandberg & Griffith (1968) provides the third example. Four- and five-year-olds were given Kodak Instamatic cameras and told to take any pictures that interested them. Their subsequent utterances about these pictures were compared with what they said of comparable pictures that they had photographed when told to do so in order to learn.

In the first of the two excerpts, the child struggles—unsuccessfully—to find a context for an assigned picture. In the second, describing one he took on his own, it is built in.

The speaker is a five-year-old.

Assigned:

> That's a horse. You can ride it. I don't know any more about it. It's brown, black, and red. I don't know my story about the horse.

Own Choice:

> There's a picture of my tree that I climb in. There's—there's where it grows at and there's where I climb up—and sit up there—down there and that's where I look out at. First I get on this one and then I get on that other one. And then I put my foot under that big branch that are so strong. And then I pull my face up and when I get a hold of a branch up at that place—and then I look around.

The bare, schoolish organisation of the first seems so detached next to the intentional, active, egocentric perspective of the second.

Shift now, without benefit of transition, to much younger children—infants of four to six weeks, studied at the Center for Cognitive Studies. In this study, conducted by Kalnins & Bruner (1970), infants control the focus of a lively motion picture by sucking at a preset rate on a special nipple. In one condition, sucking at or faster than the prescribed rate brings the moving picture into focus and keeps it there. In the other, sucking at this rate drives the picture out of focus and keeps it out. One group of infants starts with sucking for clarity and shifts to the suck-for-blur condition. The other begins with the suck-for-blur and shifts to the suck-for-clear condition—though the two conditions were never presented in the same session, or, indeed, on the same visit to the Center.

Note two crucial points about performance. The first is that the infants respond immediately and appropriately to the consequences produced by their sucking—the pauses averaging about four seconds in suck-for-clear and about eight seconds in suck-for-blur. As soon as the consequences of sucking alters, the infant's response pattern shifts abruptly and appropriately. As a further feature of reacting to consequences in both conditions, the infant averts his gaze from the picture when it is out of focus—while sucking in the case of suck-for-blur, and while pausing in the other case.

For those not acquainted with the data on infant learning, these findings may seem a trifle bizarre though otherwise quite to be expected. They are, in fact, rather unexpected in the immediacy of the learning reported, particularly in the light of the painfully slow process of *classical* conditioning found in infants of comparable age by Papoušek (1967), Lipsitt (1967) and others. Papoušek's infants turned their head one way or another *in response* to an environmental event, as did the babies in the Brown University experiments. Kalnins' babies were learning to respond not to a stimulus, *but to a change produced by their own act,* and to store the information thus gained as an instrumental sequence involving their own action. Indeed, it may well be that a special type of recurring 'critical period' is to be found in the few thousand milliseconds that follow upon a voluntarily initiated act. This is not the proper context in which to treat the matter in detail, yet it must be said emphatically that since the pioneer work of von Holst & Mittelstaedt (1950), the role of intention has become increasingly central in biology and psychology.

It was Held & Hein (1958) who first showed how crucial was the reafference output of 'intentional' movement for adaptation learning. In their now famous experiment with yoked kittens adapting to prismatically induced angular displacement in the visual field, one kitten actively walked about an environment, the other was passively transported in a gondola through an identical path. The former adapted to the prisms, the latter did not. While we are still far from understanding the neural mechanisms of intentionality—variously called reafference, feed-forward, motor-to-sensory mechanism corollary discharge, or 'Sollwert'—there are a sufficient number of leads to suggest that the pursuit will pay off.

In a word, probably the first type of acquired representation of the world the child

achieves is in the form of an egocentrically oriented action schema: a joint representation of action intended along with the consequences of that action—a matter of which Piaget (1954) has devoted some of his most exquisite descriptions.

But if one thinks of acquired egocentric orientation only as a phase out of which the child must grow enroute to becoming operational and decentered, then a crucial point may be overlooked. In Vygotsky's (1962) terms, the stream of action and the stream of language begin to converge in the process of interacting with the world in just such an egocentric orientation.

My colleague, Dr. Greenfield (1969) notes, "Not only can people fail to realize goals, the environment can fail to provide a growth-promoting sequence for them. I should like to suggest that the goals set for the child by his caretakers and the relation of these to the child's available means is a critical factor in determining the rate and richness of cognitive growth in the early, formative years. If a mother believes her fate is controlled by external forces, that she does not control the means necessary to achieve her goals, what does this mean for her children?"

The follow-up data from the Hess (1969) group's study of the relation between maternal variables and the development of intelligence (to which we shall turn shortly) shows that the more a mother feels externally controlled when her child is four years old, the more likely the child is to have a low IQ and a poor academic record at age six or seven.

Striking documentation of these points is beginning to be available at the intimate level of family interaction (Shaw & Schoggen, 1969). One such study, now in progress, is Maxine Schoggen's (1969), an effort to elucidate differences in directed action that had been found in the children of the five-year study of Klaus & Gray (1968). She uses an 'environmental force unit' (EFU), which is defined as an act by any social agent in the child's environment directed toward getting the child to seek a goal. One crude finding already available—the data are only now in process of analysis—is that for lower-class families, some two-thirds of the children are below the total median rate for EFU's per minute, whereas only a quarter of the middle income children are. This suggests how great a difference there may be in sheer emphasis upon goal directedness in the two groups.

One must note also that in the two major studies of how middle class and poverty mothers instruct their children—Hess & Shipman (1965) and Bee *et al* (1969) a quite comparable trend emerged. They found:

> First, that middle-class mothers are more attentive to the continuous flow of goal directed action.
>
> Second, they allow the child to set his own pace and make his own decisions more.
>
> Third, they intrude less often and less directly in the process of problem solving itself.
>
> Fourth, they structure the search task by questions that sharpen yet ease the search for means.
>
> Fifth, they are more oriented toward the overall structure of the task than responsive to component acts in isolation.
>
> Sixth, they react more to (or reinforce) the child's successful efforts than his errors (a practice far more likely to evoke further verbal interaction between tutor and child).

These surely suggest some of the crucial differences that emerge in the goal-seeking patterns of economically advantaged and disadvantaged children.

To this evidence must now be added still another type of research finding, resulting from longer-term longitudinal studies tracing human growth from infancy through adolescence.

Kagan & Moss (1962) state in their well-known monograph, "It appears that the pattern most likely to lead to involvement in intellectual achievement in the boys is early maternal

protection, followed by encouragement and acceleration of mastery behaviors". And then, "Following our best judgment in estimating the most desirable patterns to follow with young children, our educated guess remains that higher intelligence is fostered by warmth, support, and plentiful opportunity and reward for achievement and autonomy. Moreover, it is probably important to provide active, warm, achievement-oriented parental figures of both sexes after whom appropriate role patterns can be established" (pp. 221–222).

Add to this, finally, the conclusion reached by Robinson & Robinson (1968) in their review: "Children with a high degree of achievement motivation tend to become brighter as they grow older; those with a more passive outlook tend to fall behind their developmental potential (Bayley & Schaefer, 1964; Sontag, Baker & Nelson, 1958).

The degree of achievement motivation is related to the socio-cultural background of the child; middle-class children are more strongly motivated toward achievement than are lower-class children (Douvan, 1956; Lott & Lott, 1963; Mussen, Urbano & Bouterline-Young, 1961)".

There is a further multiplier factor in the effects we have been discussing: the impact of urbanization on the care of children. We have, until now, argued that poverty, by its production of a sense of powerlessness, alters goal striving and problem solving in those it affects, whether the powerlessness occurs in a depressed London working class borough, among Kurdistani immigrants to Israel, in a black ghetto, among uneducated and abandoned Greenland Eskimo, mothers down-and-out in literate Copenhagen, or in the midst of Appalachia.

The evidence points to a magnification of this effect when poverty moves to the city. Perhaps the most comprehensive study to date is by Graves (1969), who has compared rural and urban Spanish Americans around Denver, as well as rural and urban Baganda around Kampala and Entebbe in Uganda.

Interviews with mothers in her study show that urban mothers come to believe more than rural mothers that their preschool children cannot understand, cannot be taught ideas or skills, cannot be depended on. City mothers rated their children lower in potentialities for independence, for self-reliance, and for ability to help with the family.

It is a cycle. When the poor mother moves to the city, she becomes trapped with her children—more irritable, more interested in keeping peace than in explaining and encouraging adventure. She often, then, produces the very behaviour she rates down. At the same time the urban environment itself restricts outlets for the child, it also reduces the mother's confidence in her children's capacity for coping with those that are left.

Warren Haggstrom (1964), in a masterful review of the literature on the effects of poverty, comes to the conclusion that "the fact of being powerless, but with needs that must be met, leads the poor to be dependent on the organizations, persons, and institutions which can meet these needs. The situation of dependency and powerlessness, through internal personality characteristics as well as through social position, leads to apathy, hopelessness, conviction of the inability to act successfully, failure to develop skills, and so on" (p. 215).

Consider now some consequences of this pattern on the development of language usage in interactive speech, and likely as well in the internal use of speech in problem solving.

LANGUAGE AND POVERTY

It was perhaps the studies of Hess & Shipman (1965), inspired by Basil Bernstein (1961), that drew attention to *how* language was used in communicating with young children and what its significance was to the lower- and the middle-class child.

They asked mothers to instruct their own children to use an Etch-a-Sketch drawing pad, taking careful note of the mother's language and her mode of instruction. Their general conclusions have already been discussed.

Looking in detail at linguistic considerations, we turn to a more recent study that used Hess & Shipman's system of classification with further elaboration. It documents the work carried out by Helen Bee and her colleagues (1969) at the University of Washington with four-to-five-year-olds. The Washington group also asked the mother to help her child accomplish a task (copying a house of blocks); in addition they observed mother-child interaction in the well-supplied waiting room and interviewed the mother afterwards about her ideas on looking after children. An excerpt from their paper can serve as summary.

> The middle-class mother tended to allow her child to work at his own pace, offered many general structuring suggestions on how to search for the solution to a problem, and told the child what he was doing that was correct . . . The general structure offered by the mother may help the child acquire learning sets (strategies) which will generalize to future problem solving situations.
>
> In contrast, the lower-class mother did not behave in ways which would encourage the child to attend to the basic features of the problem. Her suggestions were highly specific, did not emphasize basic problem-solving strategies, and seldom required reply from the child. Indeed, she often deprived the child of the opportunity to solve the problem on his own by her non-verbal intrusions into the problem-solving activity.

They comment on the fact that middle-class mothers ask so many more questions in an effort to help the child in his task, that their mode of operating linguistically could fairly be called 'interrogative' in contrast to the more indicative and imperative modes of lower class mothers.

Hess & Shipman (1965) had, of course, found quite comparable differences in mothers, though they distinguished three modes of communicating: cognitive-rational, imperative-normative, and personal-subjective.

In the first, the mother was task-oriented, informative, and analytic; in the second, she ordered and evaluated; and in the third, she pleaded for performance on grounds that it would please her. The highest concentration of the first mode was found among middle-class mothers.

Both studies point to early class differences in language use. One is the use of language to dissect a problem. In lower class discourse, mothers more often order, or plead, or complain, than set up a problem or give feedback. Such usage possibly accounts for the 'poor reinforcement value' of verbal reactions by the parents of less advantaged children (see, for example, Zigler *et al*, 1968): language is not usually used for signalling outcome or hailing good tries. What is most lacking in the less-advantaged mother's use of language is analysis-and-synthesis: the dissection of relevant features in a task and their appropriate recombinings in terms of connection, cause-and-effect, and so on.

The evidence surely leads one to the conclusion that there is more demand for as well as more use of analytic language among middle class than among lower class speakers.

Turner & Pickvance (1970), for example, attempted to measure the difference by counting incidences of uncertainty in the verbal expressions of sixteen-year-olds from middle class and poverty backgrounds who were making up stories or interpreting uncertain events. "Orientation toward the use of expressions of uncertainty is more strongly related to social class than to verbal ability . . . In every case in which social class has been shown to be related to the use of expressions of uncertainty, it was the middle-class child who used more of them"; the middle-class child had more recourse to Wh-questions, to the use of "might be . . ." and "could be . . .", to "I think", and to

refusals to commit himself. As the authors say, "Bernstein's work suggests that the forms of socialization typically employed in middle-class families are likely to give the children reared in these families greater scope for self-regulation, for operating within a wide range of alternatives. These socialization procedures . . . are likely to give these children a greater awareness of uncertainity in certain areas of experience and are likely to encourage the children to be flexible in their thinking".

Other evidence also suggests a difference in analytic discrimination. Klaus & Gray (1968), among impoverished black children in Murfreesboro, Tennessee, and Robinson & Creed (1968), with slum children in London's Borough of Newham, agree in finding less fine discriminations made by lower-class than by middle-class children—at least in rather impersonal, school-like tasks. Blank *et al* (1969) shows that tutoring children from poverty backgrounds to extract features from displays—distance, direction, form, for example—increases their measured intelligence (long a belief of Maria Montessori). Indeed, it is not surprising that Earl Schaefer's (1969) careful intervention study with one- to three-year-old children in poverty families emphasizes such discriminative training, with good results in raising standard intelligence scores.

Another index of the analytic use of language is the accumulation of vocabulary. As Cazden (1970) puts it, "Consideration of vocabulary as an aspect of language cannot be separated from considerations of concepts as the whole of our personal knowledge. The content of our mental dictionary catalogs more than our knowledge of language; it catalogs our substantive knowledge of the world". Brown, Cazden & Bellugi (1969) also point out that most instances of natural language instruction between parent and child relate to word meanings—true not only in their small Cambridge sample, but also for two lower-class black mothers in a Great Lakes city (Horner, 1968) and for mothers in Samoa (Slobin, 1968). It is of special interest then that Coleman (1966, pp. 292–295) noted that vocabulary subtests of an IQ test were more correlated with differences in quality of schools than were achievement tests in such more formal school subjects as arithmetic and reading.

This suggests that the push to analysis, differentiation, synthesis, and so on, is accompanied by a push to achieve economy of means of representation in words. Again, the more active the intellectual push of the environment, the more the differentiation of concepts and of words, their markers. Hence the richer, better stocked vocabulary of the middle-class child.

Perhaps the most telling example of increased analytic-synthetic activity in speech *per se* comes from Joan Tough's (1970) study of two groups of three-year-olds, matched for IQ and about equal in verbal output, one of middle-, the other of working-class background. Even at this age, middle-class children single out many more qualitative features of the environment to talk about, and indeed, also talk much more of such relations between them as cause-and-effect. So there is good reason to believe that there is an early start to the differentiating process whereby children from one social class move toward a programme of linguistic analysis-and-synthesis while the others move toward something else.

Klaus & Gray (1968) remark of this 'something else', "the children with whom we worked tended to have little categorizing ability except in affective terms; they were highly concrete and immediate in their approaches to objects and situations" (p. 16). Berstein (1970) also comments on the fact that in carrying on a role-play type of conversation of the "he said/she said" variety, the child from the slum area is often richer and less hesitant in his speech, as if the more direct and concrete affective tone of human interaction were the preferred mode. Perhaps the 'something else' is more thematic, personal and concrete.

Let me then suggest a tentative conclusion from the first part of this much too condensed survey of class differences in language use. Bruner, Goodnow & Austin (1956)

drew a distinction between affective, functional, and formal categories. Affective categories involved the organization of events in terms of the immediate reactions they produced in the beholder, particular affect-laden reactions. Functional categories group objects and events in terms of fitness for the achievement of some particular goal or the carrying out of a particular task. Formal categories are those governed by a set of relatively universal criterial attributes in terms of which things can be placed without reference either to their use or to the 'gut reaction' they produce.

It would seem to be the case, though I am aware of how very insufficient the data still are, that 'middle-class upbringing' has the tendency to push the child toward a habitual use of formal categories and strategies appropriate to such categorizing—featural analysis of tasks, consideration of alternative possibilities, questioning and hypothesizing, and elaborating. It is a mode in which one uses language in a characteristic way: by constructing linguistically an analytic replica independent of the situation and its functional demands and manipulating the replica by the rules of language.

But note that it is *not* that children of different classes differ either in the *amount* of language that they 'have', nor in the variant *rules* that govern their language. Cazden (1970) and Labov (1969) have compiled enough evidence from the extant literature to cast serious doubt on both the 'less language' and the 'different language' theories of class difference. The critical issue seems to be language *use* in a variety of *situations* and the manner in which home and subculture affects such usage. Or as Hymes (in press) puts it, children not only learn to form and interpret sentences but "also acquire knowledge of a set of ways in which sentences are used".

A striking experiment by Heider, Cazden & Brown (1968), and an observation by Francis Palmer (1968), remind us again that the lower-class child, under appropriate conditions, *can* operate analytically quite well, though he might ordinarily or habitually not do so. Heider *et al* asked lower-class and middle-class ten-year-old boys to describe a picture of an animal in a fashion that would later permit distinguishing it from many other similar pictures. Some of the attributes they used in their descriptions were criterial in the sense of uniquely defining the target or reducing materially the range of possibilities; others were irrelevant for guiding one to the correct target. Both groups mentioned about the same total number of attributes, and moreover, both mentioned about the same number of criterial attributes, 18 out of a total of 67 for middle-class boys, 16 out of 69 for lower-class. Where they differed was in the number of adult prompts and requests that were necessary to get the attributes out of them: an average of 6·11 for the lower-class children, and only 3·56 for the middle-class. And by the same token, Palmer (1968) finds that if seven or eight hours of prior, rapport-establishing contact is assured before testing, most differences between lower-class and middle-class children become minimal. This point was also established by Labov *et al* (1968) when he concluded that Northern Negro English did not differ structurally or in underlying logic from Standard English.

What seems to be at issue again is the question of 'personalness' and the egocentric axis. If the situation is personal, egocentrically organized, then the lower-class child can be just as complex as the middle-class one. But the lower-class child seems far less able to achieve 'decentration', to analyze things in the world from a perspective other than his personal or local perspective. Perhaps this point will become more compelling when we examine a second feature of language that differentiates between social classes, to which we turn now.

This second feature involves communicating through language in a fashion independent of the situation. Grace de Laguna (1927, p. 107) says, "The evolution of language is characterized by a progressive freeing of speech from dependence on the perceived conditions under which it is uttered and heard, and from the behavior which accompanies it". She argues that the superior power of a written language inheres in this freedom from the contexts of action and perception, that all of its "semantic markers", to use a

more familiar contemporary term (Katz & Fodor, 1964), are inherent in the utterance itself: they are 'intrasemantic' rather than 'extrasemantic'.

Greenfield (1968) remarks on how the speech of technologically oriented societies (in contrast to preliterate, more traditionally oriented ones) becomes more like a written language in its increasing context-independence. The theme of her paper, "On speaking a Written Language", is apposite not only, I think, to the trend in spoken language from a preliterate to a literate society, but also from working-class to middle-class society in Western culture.

Basil Bernstein (1970) provides an interesting reason for the class difference. "We can see that the class system has affected the distribution of knowledge. Historically and now, only a tiny proportion of the population has been socialized into knowledge at the level of the metalanguages of control and innovation, whereas the mass of population has been socialized into knowledge at the level of context tied operations . . . This suggests that we might be able to distinguish between two orders of meaning. One we would call universalistic, the other particularistic. Universalistic meanings are those in which principles and operations are made linguistically explicit, whereas particularistic orders of meaning are meanings in which principles and operations are relatively linguistically implicit. If orders of meaning are universalistic, then the meanings are less tied to a given context. The metalanguage of public forms of thought as these apply to objects and persons realize meanings of a universalistic type. Where meanings have this characteristic, then individuals have access to the grounds of their experience and can change the grounds . . . Where the meaning system is particularistic, much of the meaning is imbedded in the context of the social relationship. In this sense the meanings are tied to a context and may be restricted to those who share a similar contextual history. Where meanings are universalistic, they are in principle available to all, because the principles and operations have been made explicit and so public. I shall argue that forms of socialization orient the child toward speech codes which control access to relatively context-tied or relatively context-independent meanings".

In short, it is the parochializing effect of a culture of poverty that keeps language tied to context, tied to common experience, restricted to the habitual ways of one's own group.

The comparative context dependence of the language of disadvantaged children shows up early. In Joan Tough's work (1970) on three- to four-year-olds from middle- and lower-class backgrounds in an English industrial city, the children were matched on Stanford-Binet scores and, roughly, on verbal output. All of the children's items of representation were rated as to whether they required the presence of the concrete situation for effective communication. This concrete component constitutes 20·9 per cent of the representation of the favoured children and 34·5 per cent of the less favoured children. The most frequent form of the concrete component are pronouns whose only reference is to something pointed at in the environment. Such 'exophoric' reference is contrasted with 'anaphoric' reference, where pronouns refer to an antecedent previously supplied in words. The percentage of anaphoric references was 22·8 per cent for the favoured children and only 7·7 per cent for the less favoured. This finding replicated Bernstein's research with children five to seven years old (Hawkins, 1968). I do not know, save by everyday observation, whether the difference is greater still among adults, but my impression is that the difference in decontextualization is greater between an English barrister and a dock worker than it is between their children.

Two trends, then, seem to be operative in the *use* of language by middle-class children. One is the use of language as an instrument of analysis-and-synthesis in problem solving, wherein the analytic power of language aid, in abstraction or feature extraction, and the generative, transformational powers of language are used in reorganizing and synthesizing the features thus abstracted.

The second trend is toward decontextualization, toward learning to use language

without dependence upon shared percepts or actions, with sole reliance on the linguistic self-sufficiency of the message. Decontextualization permits information to be conceived as independent of the speaker's vantage point, it permits communications with those who do not share one's daily experience or actions, and in fact does, as Bernstein (1970) insists, allow one to transcend restrictions of locale and affiliation.

Lower-class language, in contrast, is more affective and metaphoric than formal or analytic in its use, more given to narrative than to causal or generic form. It is more tied to place and affiliation, serving the interests of concrete familiarity rather than generality, more tied to finding than to seeking.

Both trends seem to reflect the kind of goal striving and problem solving characteristic of those who without protest have accepted occupancy of the bottom roles and statuses in the society that roughly constitute the position of poverty. It is not that the poor are 'victims' of the system—they are, but so is everybody else in some way. It is rather that a set of values, a way of goal seeking, a way of dealing with means and ends becomes associated with poverty.

SOCIAL RECIPROCITY

Being socio-economically disadvantaged is no simple matter of deficit, of suffering a cultural avitaminosis that can be dosed by suitable inputs of compensation. It is a complex of circumstances at the centre of which is usually a family whose wage-earner is without a job or where there is no male wage earner. If there is a job, usually it is as demeaning in status as it is unremunerative. The setting is a neighborhood that has adapted itself often with much human bravura to 'being at the bottom', with little by way of long range perspective or hope, often alienated by a sense of ethnic separation from the main culture.

This is not the place to examine the economic, social, and political means whereby some societies segregate social classes by restricting access to knowledge and eroding in childhood the skills needed to gain and use knowledge. Obviously, the techniques of segregation by class are not deliberately planned, and they often resist deliberate efforts of abolition. More to the point is to ask how the behaviour patterns of the dispossessed are transmitted by the family to produce the forms of coping associated with poverty (or middle-class status).

We have already encountered a striking difference in the use of reward and punishment by the mother. One finding suggests that the transmission may be accomplished by so simple a factor as rewarding achievement in the middle-class while punishing or ridiculing failure among children of the poor (Bee *et al.*, 1969). Several studies point to a by-product in the form of a class difference in asking adults for help (for example, Kohlberg, 1968) or in showing doubt in their presence (e.g., Hawkins, 1968). The poor do much less of both.

Modelling of 'class' patterns by adults—both in interaction with the child and in general—may be another source of family transmission. Hamburg (1968) draws some interesting inferences about such modelling from studies of higher primates. He writes "The newer field studies suggest the adaptive significance of observational learning in a social context. Time and again, one observes the following sequence: (1) close observation of one animal by another; (2) imitation by the observing animal of the behavior of some observed animal; and (3) the later practice of the observed behavior, particularly in the play group of young animals". A like point is made for preliterate people, as in the close study of Talensee education and play by Fortes (1938) and the detailed observation of children's play among the Bushmen by Lorna Marshall (1963). They too point to the conclusion that observation and imitative incorporation in play is widespread and seemingly central.

Early language acquisition seems almost to be the type case of modelling. In a recent

and detailed review of the language acquisition of the three children being studied at Harvard by Brown, Cazden & Bellugi (1969), the importance of modelling is highlighted. But this work suggests that modelling is not a simple form of transmission.

The puzzling and challenging thing about learning language from a model is that the child is not so much copying specific language behaviour from observation-and-imitation, but rather is developing general rules about how to behave from which various specific acts can be appropriately derived or interpreted. It is not at all clear how much we should attribute in early learning to the reinforcing effects of reward and/or punishment and how much to such rule learning acquired by observing or interacting with a model. Discussing the role of approval and disapproval as possible influences in the acquisition of grammar, Brown and his colleagues (1969) say, "In general, the parents fitted propositions to the child's utterances, however incomplete or distorted the utterances, and then approved or not according to the correspondence between proposition and reality. Thus *Her curl my hair* was approved because the mother was in fact curling Eve's hair. However, Sarah's gramatically impeccable, *There's the animal farmhouse* was disapproved because the building was a lighthouse . . . . It seems then to be truth value rather than syntactic well formedness that chiefly governs explicit verbal reinforcement by parents— which renders mildly paradoxical the fact that the usual product of such a training schedule is an adult whose speech is highly gramatical but not notably truthful" (p. 70–71).

If it turns out to be the case that the young child is learning not only linguistic rules but also "rules about rules" and rules also about *ways* of thinking and *ways* of talking then indoctrination in class patterns must be, in the linguist's sense, generative and pervasive to a degree that is difficult to estimate. This would make even more meaningful the insistence of Smilansky (1968) that intervention programmes emphasize *rationale* and *explanation* in order to reach the deep conceptual level where the class-pattern rules operate. In sum, both through the compelling effects of approval and disapproval and by the modelling of 'rule-bound' behaviour, the family passes on class patterns of goal striving, problem solving, paying attention, and so forth.

Let me, in closing this section, make one thing clear. I am *not* arguing that middle-class culture is good for all or even good for the middle-class. Indeed, its denial of the problems of dispossession, poverty, and privilege make it contemptible in the eyes of even compassionate critics. Nor do I argue that the culture of the dispossessed is not rich and varied within its limits. (There are critics, like Baratz & Baratz (1970), who are too ready to cry 'racist' to what they sense to be derogation of Black culture, or Yemeni culture, or Cockney culture.) But, in effect, insofar as a subculture represents a reaction to defeat and insofar as it is caught by a sense of powerlessness, it suppresses the potential of those who grow up under its sway by discouraging problem solving. The source of powerlessness that such a subculture generates, no matter how moving its by-products, produces instability in the society and unfulfilled promise in human beings.

CULTURE AND THEORIES OF DEVELOPMENT

Thus far we have concentrated upon how a culture of poverty reflects itself in child rearing. But there is no reason to believe that the effects of such child rearing are either inevitable or irreversible—there are ways of altering the impact of middle-class pressures or of poverty. Better to appreciate this likelihood of change, we must look briefly at the nature of human development and at theories designed to explicate it.

There is a paradox in contemporary formulations. We have, on the one hand, rejected the idea of culture-free intelligence, and probably the Coleman Report (1966) put the finishing blow to the idea of school-free tests of intelligence. In this view, intelligence depends on the incorporation of culture. At the same time, there is a current vogue for

theories of intellectual development promoting education strategies that presumably are unaffected (or virtually unaffected) by class difference, cultural background, and other conditions of the life of the child short, perhaps, of pathology. The only differences, according to such theories, are in timetable, the steps being the same. It is a matter only of slower and faster, not of difference in kind. So on the one side we urge a context-sensitive view while on the other we propose that intelligence grows from the inside out with support from the environment being only in the form of aliments appropriate to the stage of development—a relatively context-free conception formulated most comprehensively by Piaget's Geneva School.

I suspect both kinds of theory are necessary—at least they have always existed. The strength of a context-free view is that it searches for universal structures of mind; its weakness is its intrinsic anticulturalism. Aebli (1970) notes the Geneva dilemma: if the child only takes in what he is 'ready to assimilate', why bother to teach before he is ready, and since he takes it in naturally once he *is* ready, why bother afterwards. The weakness of most context-sensitive views of development is that they give too much importance to individual and cultural differences and overlook the universals of growth. Their strength, of course, is in a sensitivity to the nature of the human plight and how this plight is fashioned by culture.

Two things, it seems to me, can keep us mindful of both universality and cultural diversity. The first is an appreciation of the universals of human culture, which revolve most often around reciprocal exchange through symbolic, affiliative, and economic systems. To alter man's participation in any of these systems of exchange is to force a change in how man carries out the enterprises of life. For what must be adjusted to is precisely these exchange systems—what we come to expect by way of respect, affiliation, and goods. Herein is where poverty is so crucial an issue—for poverty in economic life affects family structure, affects one's symbolic sense of worth, one's feeling of control.

But beyond the universals of culture, there are universals in man's primate heritage. The primate series illustrates to an extraordinary degree the emergence of curiosity, play, planfulness, anticipation, and, ultimately, the human species' characteristic ways of seeking, transforming, representing, and using information.

Our review thus far has surely shown us how hope, confidence, and a sense of the future can affect the unfolding and nurturing of these capacities. If the conditions imposed by a culture can alter hopes and shrink confidence it can surely alter the use of these species-typical patterns of behaviour.

Theories of development are guides for understanding the perfectibility of man as well as his vulnerability. They define man's place in nature and signal opportunities for improving or changing his lot by aiding growth. A theory of development that specifies nothing about intervention is blind to culture. One that specifies only intervention is blind to man's biological inheritance.

ON INTERVENTION

With respect to virtually any criterion of equal opportunity and equal access to opportunity, the children of the poor, and particularly the urban poor, are plainly not getting as much schooling, or getting as much from their schooling as their middle-class age mates. By any conservative estimate of what happens before school, about a half million of the roughly four million children of each year of age in the United States are receiving sub-standard fare in day-care, nursery school, kindergarten, guidance, whatnot. This is not intended as a psychological assessment but as a description of resources, of officially agreed-upon facilities (cf. Sugarman, 1970). A few typical figures make the matter of facilities concrete.

The kindergarten population in the United States in 1966 was 3,000,000 out of approximately 12,000,000 of the age group three through five. And the chances of a child in the lowest quarter of income being in kindergarten were immeasurably less than of a child in the top quarter.

In 1967, there were 193,000 children in full-year Headstart, a definite improvement but a fraction of the estimated twenty per cent of the 8,000,000 three- and four-year-olds who needed it, or 1,600,000. One should note that more than 80 per cent of parents covered in the Westinghouse study (Cicirelli *et al.*, 1969) said that their children improved as a result of Headstart, a fact to be reckoned with in the light of the Rosenthal effect (1968) and Graves' (1969) findings on the ebbing confidence of poor urban mothers in their children.

Finally, in 1968 there were some 2·2 million working mothers in America with children three to five many of whom were the sole breadwinner in the family. In that same year, there were approximately 310,000 places for children in registered day care centers and in approved 'private home' arrangements, one place per seven mothers. The present estimate, as of 1970, is that 9 per cent of children two to five or 14 per cent of children three to five with working mothers are catered for by day care.

I have been expressing the view that induction into this 'culture of failure' begins early. In cities like New York, half the children born in poverty are illegitimate. Growing up in an urban ghetto, in the family structure often produced by such a setting, in the neighbourhoods and schools that it spawns, surely diminishes the skills and confidence needed to use the benefits of modern industrial, democratic society on one's own behalf or on behalf of one's own group. Romanticism about poverty and its effects on growth is middle-class escapism.

Probably we cannot change this plight without changing the society that permitted such poverty to exist during a time of affluence. My first recommendation as a common-sense psychologist and as a concerned man is to transform radically the structure of our society. But that is not our topic. What can one do now, within the context of the changing society of today?

At a symposium on the 'Education of the Infant and Young Child' at the American Association for the Advancement of Science late in 1969 (Denenberg, 1970), I was asked to prepare a summary of reports on major programmes of intervention. Several common themes running through the reports struck me.

The first was that there is an enormous influence exerted by the child's day-to-day caretaker, whatever the programme. Programmes had to consider the mother as a major factor. She had to be worked with, not compensated for.

Secondly, growth involves a small, step-wise acquisition of skill and competence on a day-to-day basis. Though theories of development emphasize principally the great leaps forward, it is in the management of day-to-day progress that discouragement or encouragement occur, where shaping has effect toward progress in one direction or another.

Thirdly, there is an enormous contribution to cognitive development from factors that, on the surface, are anything but traditionally cognitive. They are, instead, diffuse affective factors: confidence, the capacity to control one's environment, hope in the future, and the like. They too operate day-to-day, and they reflect the caretaker's mood.

Fourthly, it is now widely agreed that the idea of 'enrichment' puts the child in the position of a passive consumer. One study after another showed that for a child to benefit he must be helped to be on his own, to operate eventually on his own activation. It is this activation that must be cultivated and supported.

Fifthly, and very practically, there seem to be a wide range of alternative ways to succeed in an intervention programme—provided only they produce opportunities for mother and child to carry out activities that have some structure to them.

Beyond these specific conclusions, a general one stood out: the importance of initiative in the community as a means of activating parents and caretakers to do something for their children.

Haggstrom (1964) again makes telling points in discussing 'the power of the poor'. "In order to reduce poverty-related psychological and social problems in the United States, the major community will have to change its relationship to neighborhoods of poverty in such a fashion that families in the neighborhoods have a greater stake in the broader society and can more successfully participate in the decision making process . . . The poor must as a group be helped to secure opportunities for themselves. Only then will motivation be released that is now locked in the silent and usually successful battle of the neighborhoods of poverty to maintain themselves in an alien social world. This motivation . . . will enable them to enter the majority society and make it as nurturant of them as it is at present of the more prosperous . . . ".

"One way in which the poor can remedy the psychological consequences of their powerlessness and of the image of the poor as worthless is for them to undertake social action that redefines them . . . To be effective such social action should have the following characteristics:

1. The poor see themselves as the source of action.
2. The action affects in major ways the preconceptions, values, or interests of [those] defining the poor.
3. The action demands much in effort and skill . . .
4. The action ends in success; and
5. The successful self-originated important action [seen to increase the symbolic value of specific people who are poor]".

Haggstrom's list is admittedly ambitious. Even so, it falls short of dealing with some intractable correlates of poverty, as race in the case of the American Black, as nationality with the Italian Swiss, and so on. Yet it surely provides a sense of the role of community action in providing a background for countering the very problems of goal seeking, problem solving, and language usage we have been discussing.

Granted the importance of community action and revolutionary aspirations in the struggle against poverty's effects, one can still discuss psychological help for the child of poverty so that he may grow more effectively, not into a middle-class suburban child (who has problems of his own), but into one capable of helping himself and his own community more effectively. It is with some considerations along these lines that I should like to end this paper.

The expression, 'no room at the bottom' means something. With an increase in technological complexity, capital-intensive rather than labour-intensive techniques come to prevail. Instead of *more* labour to run the economy, more intensively *skilled* labour is used. While school rejects can be absorbed in a society built on stoop-labour, they can no longer find a place in one where even the street sweeper gives way to well designed, motorized brushing machines. Since the first steps toward dropping out take place at home, the home is where the first remedies must be applied—only the first, for it avails little to give help in the nursery only to defeat the child later in school.

The objective of 'curricula' for young children (as for older ones) is to produce the kind of generalist in skill, the 'skill intensive' worker who is capable of acting as a controlling factor in the regulating, running, or curbing of a technology such as we are

developing in the West, or one who is capable of understanding it well enough to serve, to criticize, to be controller rather than victim.

I am assuming, to put it plainly, that man's cultural and biological evolution is toward general skill and intelligence and that the major difficulty we face is not in achieving such skill but in devising a society that can use it wisely. This means a society in which man feels at home and fulfilled enough to strive and to use his gifts.

I am taking for granted that we do *not* want to curb idiosyncrasy, surprise, and the inevitable raucousness that goes with freedom.

My colleagues at the Center for Cognitive Studies, Drs. Greenfield & Tronick (1973), have devised a curriculum for a day-care centre at Bromley Heath in the Roxbury section of Boston. I have been enormously impressed with a set of implicit principles underlying their work—principles that I have extracted from one of their preliminary memoranda, but with which they may not agree. Nonetheless, let me briefly run through them, not with a view toward comprehensiveness, but toward illustration. There will be many echoes from earlier parts of this paper.

1. *The active organism.* Human intelligence is active and seeking. It needs an environment to encourage such action.
2. *Effort after meaning.* The search for meaning and regularity begins at birth. There is a constant search for cues for significance that needs nurturing.
3. *Intentionality.* Action and the search for meaning are guided by intention and are self-directed. Help can be provided by sustaining such self-direction.
4. *Pace.* Each age and activity has a pace that requires respect and patience from those around the baby.
5. *Receptivity and state.* There is a state of alert awake receptivity when the child is hospitable to the environment. Use it for getting to the infant, rather than trying to break through unreceptive states.
6. *Cycles of competence.* Each newly emerging skill has a cycle of competence: initial crude effort, followed by consolidation and perfecting, followed by a period of variation. The phases require recognition to be helped to their completion.
7. *Prerequisites.* Skills require prior skills for mastery, as, for example, in the "fail-safe" method of sitting down from a standing position before risking walking. Opportunity to master prerequisites helps later skills.
8. *Appropriateness of play and objects.* Different activities have requirements that can be met by providing appropriate games, play, or objects. The child intent on exploring small irregularities with his fingers will work for hours on a board with irregular holes cut in it, each differently coloured.
9. *Principles of the enterprise.* Activity, as the child grows older, is more temporally organized under the control of intention. It is dependent upon mobilizing means to achieve an objective. Provision of means and encouragement for such enterprise and protection from distraction is of utmost importance to growth.
10. *Principle of representation.* Useful memory depends upon finding effective ways of representing information—be it in customary action, in a well-liked game, in a vivid picture, or in words. Marking something for later use or recognition is an important aspect of growth.
11. *Analysis and synthesis.* Problem solving often consists of reducing a task or situation to its component parts and then reorganizing them. Taking apart and putting together games, objects, stories, problems is practice for such activity.
12. *Time perspective.* The future is constructed by each human being by coming to, expect, by planning and achieving planned objectives, by doing one thing so one may do the next, by learning how to hope and anticipate with realistic confidence. The process is long and begins early—probably with peek-a-boo.

13. *Principle of attachment.* Human young more than any other, perhaps, are dependent on a consistent caretaker who is there with warmth, certainty and effectiveness. It is in interaction with a caretaker that much of earliest learning occurs. A well-informed, decently satisfied, and hopeful caretaker is worth a pound of cure.

SUMMARY AND CONCLUSION

Persistent poverty over generations creates a culture of survival. Goals are short range and restricted. The outsider and the outside are suspect. One stays inside and gets what one can. Beating the system takes the place of using the system.

Such a culture of poverty gets to the young early—how they learn to set goals, mobilize means, delay or fail to delay gratification. Very early too they learn in-group talk and thinking and just as their language use reflects less long-range goal analysis, it also tends toward a parochialism that makes it increasingly difficult to move or work outside the poverty neighbourhood and the group. Make no mistake about it: it is a rich culture, intensely personalized and full of immediate rather than remote concerns. The issue is certainly not cultural deprivation, to be handled, like avitaminosis with a massive dose of compensatory enrichment.

Rather the issue is to make it possible for the poor to gain a sense of their own power—through jobs, through community activation, through creating a sense of project in the future. Jobs, community action under community control, a decent revision of preschool and early school opportunities—all of these are crucial. But just as crucial is a sense of the change in the times—the insistence of the powerless that their plight is *not* a visitation of fate, but a remediable condition. If we cannot produce that kind of change, then our system that has worked fairly well (if exploitatively) since the industrial revolution will doubtless collapse, probably to be replaced by something premissed far more on coercion for all rather than just for some. That is why the generation to be raised is so crucial a resource. It may be our last chance.

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