

# Perspectives in the Behavioral Sciences

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## Modesty Becomes Us

Those of us who study human behavior are in a maddening position. On the one hand people think we know more than we do, and on the other, people think we know nothing. It is probably safer that we support the latter group, because it is safer to be smarter than you look rather than looking smarter than you are. At this time in our social development when we are conscious of great inequalities and disturbed about ourselves, experts in the behavioral sciences are in a dangerous position, because their advice may well be sought and possibly even followed. Most of us are not well equipped to give practical advice on a broad scale. Physicians may do pretty well with a single patient in a single situation, but overall advice, except in the form of public health measures, is notably less successful. Not many of us in the behavioral sciences are really in the front lines, but we are great Monday morning quarterbacks. Those of us who are in the front lines may well display courage but not always good judgment. The point I am trying to make is simply that those who try to study and deal with the human condition would do well to have great humility about their capacity to do so and be willing to accept information about man, whatever the source; from history, novels, plays, poems, monks, the military, biology, psychoanalysis, psychol-

ogy, the social sciences, and, I suspect, as important as any, from politicians. The politicians have to "put it all together and make it work" somehow—so they have the hardest jobs and yet in many ways are the most learned.

May I say that many of us interested and working in the broad community let our little communities fall apart. How many leaders in this movement have the greatest difficulty in talking with their own colleagues, let alone their families? How many communication experts won't talk or listen to their wives? It would be hard, indeed, to prove that the children in the families of the psychologically- and socially-oriented are better off than others. Now I don't want to wear a hair shirt over all this, because many divorced men and women can be knowledgeable and helpful about someone else's marital problems. Many weird and difficult people can have unique universal insights. But there are few of us who put it all together, and putting it together is what we are after. Our danger is that with the words to diagnose and, thus, sound scientific, we can condemn another point of view out of prejudice and never know it. This can escalate in pure culture in psychoanalytic circles, so that no time is wasted on issues. The diagnostic terms really fly when there are two well-matched analysts duelling. These terms are never complimentary; no diagnostic term is. Academic people need

the perspective that, by and large, they are not "doing in the real world," and the "real world" people need to know that study, away from doing, enlightens.

## What We Think We Know

To those of us fortunate enough to be in the general field of behavior, this seems an ideal time, because we feel we know enough to ask some answerable questions and have the tools with which to work. Most of the tools were developed far outside our fields, we must remember, and although I suppose the majority of us think spending money on a moon shot foolish at this time, it is from NASA and exploration of space that telemetering and miniaturization have come.

What do we know? And what are the big questions? Several things are clear. As one goes up the phylogenetic scale, the influence of environment upon the developing individual increases. An insect is entirely instinct bound and needs no education. Its behavioral array is small and predictable. This is undoubtedly true with invertebrates and many lower mammals. But in the mammalian scheme this changes rapidly as one goes higher, and we can see that those organisms that we call high on the scale are the ones that are taught, by their parents at least, and that either exhibit or are capable of exhibiting very wide arrays of behaviors.

The human is the epitome of

early environmental influence. It seems an extraordinary evolutionary precaution to have the brain, and, thus, the mind, develop after birth, so that environmental influence can have its play and the mind can develop around the environment that stimulates it. This allows for the development of what one might call a "fit" between the challenge of the environment and the adaptive tool of the mind. We know that the lack of development at birth demands that the human infant be dependent during its development; hence, the need for a family. Strikingly, those animals that seem highest on the scale have the longest dependency and the latest puberty—dolphins, chimps, baboons, elephants, and men. From another view, these late developers are forced into a position in which education is inescapable. What we do not know about all this is how it happens biologically. There must be some biophysical event that fixes information inside, and there is certainly an emotional coding on this information. Psychoanalysis, in particular, has taught us that. To solve this puzzle in some way would open possibilities that at least seem unlimited. In addition, we think we know that there is a postnatal timetable fixed, just as there is a prenatal one which controls the steps of development, so that stimuli have different effects at different times and the absence of stimuli at one stage cannot be made up later. Certainly this seems true in the nervous system. The monkey who is raised in the dark for a period of six months after birth develops an optic atrophy that is permanent, and even the kitten deprived of patterned light suffers degeneration of cells in the medial geniculate. We do not know the boundaries of the postnatal timetable, nor do we know the mechanisms that control them.

Although there are many controls within the genetic structure of organisms, it would seem that genetic structure sets the limits of

possibilities and the environment determines the development within these limits. Many behaviors that we had taken for granted as being entirely genetic in origin now are known to be at least partially taught. Quite a few of the higher mammals, including cats, are sexually incompetent unless taught. Long known in animal-raising circles is the need for perineal stimulation in kittens and puppies in order for elimination to take place.

It is certainly clear that the structure of the environment—the pattern of its demands and the values it impresses—is going to be enormously important in shaping an individual. We, therefore, need pay great attention to this milieu. Never has our attention been so evenly divided. Enormously impressed by the biochemical revolution and the possibilities of manipulating the genetic code, we are equally appalled at areas in our society that have always existed but for which we have not felt responsible. As these areas come into focus, many of us are consumed with guilt. Evolution in the social sciences has at once fed this greater insight and has been promoted by it. Sociology has stressed broad generalities and trends in society as a whole; much of anthropology has been naturalistic or clinical. As time goes on, however, methods of investigation become less distinguishable, not unlike the melding of techniques in the traditional sciences considered basic to medicine. None of us need to be told what a turmoil most of our societies are in. We do need to be reminded of man's history, however, lest we lose perspective. There is one new thing that adds urgency to our seeking for solutions—the great increase in our destructive capability.

#### Broadening Sense of Our Social Responsibilities

In 1953 French author Jean Briller ("*Vercors*") wrote a novel called *You Shall Know Them*. In

Australia a missing link was found which proved to be a docile and highly trainable great ape or man. Naturally, other men exploited these creatures because of their docility and their expertise in carrying out certain tasks. The hero of the novel killed an infant and was brought to trial. He did this in order to protect the newly found creatures from exploitation, hoping it would be decided that he had committed murder—not just the slaughter of a lower animal. It was an intriguing theme with a denouement that was delightful. The trial necessitated many anthropological arguments about the opposable views, e.g., whether an African pygmy had more in common with the apes than with Einstein, and so on. It was finally decided that the creatures were human and that the killing of one constituted murder. The hero was saved, however, by the judge's opinion that whereas any future case would be considered murder, this could not be; because the only meaningful criterion for being a member of the human race was acceptance by other humans. At the time of the killing such acceptance had not been granted; hence, murder was an impossible verdict.

This book has remained persistently in my mind, because so many of our social problems, it seems to me, have something similar at their core. This theme pertains to fundamental identifications one makes as a child as well as the problems the child experiences in differentiating himself from the outer world and from others. One needs only to read about how children were treated in the past to become aware of something not at all unlike the theme of *Vercors'* book. It is only recently that children have been thought of as anything but little adults, toys, or laborers. Children were simply not protected in the Middle Ages and the Renaissance. Nineteenth century England and America had a ghastly history for cruelty to and neglect of chil-

dren. Not until 1912 were child labor laws passed in this country. On the Eastern Seaboard, trains were filled with unwanted children and taken west to be indentured to farmers, where many were horribly exploited. I doubt whether anyone to this day has been charged and convicted of the murder of his or her child, yet even today in this country more children are beaten to death by their parents than die of leukemia. In other words, a child is not yet fully adultly human. It is peculiar that this is true in what we caricature as a child-centered society. We have gradually and slowly admitted children to the human race and, in fact, have identified with them to the point of feeling responsible and protective. This is not true in many parts of the world today, where brutality to and neglect of children is just as bad as in 19th century America.

The poor have had a similar fate. It is really a new concept—very, very new—that someone else's poverty is your problem. This has been attributed to the Judaic-Christian ethic that says you get what you deserve, but I suspect it is basically something else. This attitude is even more pronounced in India, China, and Indonesia than it is in Judaic-Christian countries. It concerns with whom you identify and with whom you do not.

I once saw a great deal of raw footage taken by an anthropologist studying a particular tribe of Eskimos. A major part of this was of a four-year-old boy helping his father kill and butcher a caribou calf. In the next episode the father was shown snaring a sea gull. The little boy spent four solid hours beating the tethered sea gull on the head with rocks. The Eskimos are very gentle with their children—never hit them, for example. After this little boy's exploits, his parents praised him heavily. I was greatly impressed by the fact that, in a hunting culture, it is most important to avoid bringing up the

child so that he identifies with the animals; otherwise he cannot kill them. Also interesting was the fact that no animals—not even dogs—are pets.

Somehow I have the feeling that this phenomenon should be incorporated into the understanding of prejudice. It is somewhat different than our usual explanations. When Marie Antoinette said, "Let them eat cake," she wasn't being sarcastic; she was merely uninformed. When an Indian prince drives through a starving horde and curses people for blocking the way, he somehow doesn't think they get as hungry as he does and feels they are really so different that he cannot have sympathy. Certainly this kind of thing enters into the race problem. The deeply convinced segregationist feels that "they" are just not like us, and somehow the people with whom one identifies and from whom one separates oneself in childhood have a great deal to do with this dangerous problem. The attitudes of the parents are critical here, and if you convince the child that the soft little bunny is just like him, he'll believe you and have a hard time eating it.

It is clear that we have at this moment two major thrusts. The first is the unlocking of the biological secrets surrounding the potential for development and the fixing of learned material in the biological matrix. The second is the careful examination of the culture that will be learned. Here, not only every social scientist but every citizen need be concerned. The present emphasis upon the importance of culture can hardly be exaggerated unless it crowds out our interest in the biological. Man remains an enigma; reason, a personal control of prejudice, and a continuing spirit of disciplined inquiry are our methods for not only achieving a better world but the perpetuation of this one.