A SPECULATIVE STUDY OF HUMAN DEVELOPMENT AND ITS IMPLICATIONS FOR PUBLIC SCHOOLS

Dissertation for the Degree of Ph. D.

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CLIFFORD POTTER BORBAS

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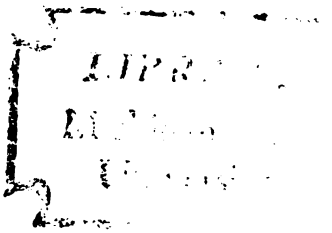

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ABSTRACT

A SPECULATIVE STUDY OF HUMAN DEVELOPMENT AND ITS IMPLICATIONS FOR PUBLIC SCHOOLS

BY

Clifford Potter Borbas

The purpose of this study was to develop a model of human growth and development and a philosophical position consistent with this model. Part II explored the implications of the model and of the philosophy for public schools.

The following postulates were made:

1. Man strives continually for increased satisfaction.
2. The uniqueness of each person requires as many choices to be available as possible in order for each person to maximize his satisfaction.
3. Man's chief evolutionary accomplishment has been the development of a perceptual field of reality--a symbolic representation of the external world.
4. He responds to the environment as he perceives it to be, not as it actually is.
5. The formation of the perceptual field is affected by the following factors:
   a. The meanings associated with habits can become part of the perceptual field.

b. The meanings associated with personal experiences can become part of the perceptual field.

c. Meaning that is developed through the intellectual process alone can be incorporated into the perceptual field.

d. The direction of perceptual field development is toward consistency and order.

e. All perceptions in the perceptual field are related in an internally logical way, and a change in one can change others.

f. The more directly a perception affects one's views of himself, the stronger will it be and the more vigorously will it be defended.

g. The perceptual field tends to become increasingly differentiated over time.

6. The motivation of behavior is due to four factors:
   a. The life-force.
   b. The mental powers.
   c. The tendency toward consistency.
   d. The tendency toward least effort.
7. Society developed because man found it easier to satisfy basic needs cooperatively.
8. But social living requires conformity to group norms and is therefore inimical to self-fulfillment.
9. Self-fulfillment requires perceiving a high number of options for one's behavior, making decisions from among these options, and acting on these decisions.

10. Effective decision making can be taught.
11. Schools with a self-fulfilling curriculum must develop a philosophy and teaching methods compatible with the nature of man, the nature of society, and an ultimate decision-making process that leads to maximum personal satisfaction.
12. Such schools would be characterized by maximum student decision making within a framework that meets these specific curriculum goals:
    a. To develop the mental powers.
    b. To increase the specificity and accuracy of the perceptual field of reality.
    c. To develop the ability and the willingness to overcome personal and environmental forces in the way of self-fulfillment.
13. There are five principles of instruction consistent with this model of human development:
    a. Instruction is easier to the degree that the students and the teacher have similar perceptual fields of reality.
    b. Instruction is easier to the degree that students possess undifferentiated perceptual fields.
    c. Instruction is easier to the degree that the reality of the classroom experience corresponds to the students' perceptual fields of reality.
    d. Instruction is easier to the degree that it accounts for the internal forces.
    e. Instruction is easier to the degree that it recognizes the developmental process of the perceptual field.

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Clifford Potter Borbas

Schools must recognize that the basic character of man is that of a creator of myths (perceptions) about his life and his world. These myths have been responsible for his survival and continue to make possible decision making necessary for his existence. Man also lives in a natural and social environment that is fundamentally hostile to his efforts to find personal satisfaction. A self-fulfilling curriculum has been designed with attention paid to the nature of the learner, the nature of his environment, and to an ultimate decision-making process (self-fulfillment) that leads to a truly satisfying life.

A SPECULATIVE STUDY OF HUMAN DEVELOPMENT AND ITS IMPLICATIONS FOR PUBLIC SCHOOLS

By

Clifford Potter Borbas

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PART I

CHAPTER I

INTRODUCTION

i

The history of mankind is a history of people's struggles to live fulfilling lives. From the snow-capped reaches of the far north to the steaming tropics, cultures have evolved which have mediated between the demands of the environment and human desires. The remarkable variety of human behaviors attests to the ingenuity with which man has responded to geographical limitations, to forces within himself, and to cultural designs in order to make decisions that he believed would contribute to a more fulfilling life.

Underlying social evolution is the fact that man's wants are insatiable. There is no ultimate level of satisfaction possible, for all satisfaction is relative to the individual's biological needs for survival, his past, and his expectations. As man becomes accustomed to a given level of satisfaction, he simultaneously perceives a different level as more desirable, and strives toward this newly perceived level. For this reason, it is difficult to discuss self-fulfillment in specific terms, for it is a curious blend of objective realities and subjective perceptions that must be understood together.

Any discussion of self-fulfillment must begin with basic needs. They are the foundation upon which a satisfying life is built. We can say for certain that there are some basic requirements for human

existence--food, warmth, and protection from aggression without which, death results. However, it is also important that they be perceived as basic requirements by people themselves, because people's perceptions largely determine the ways they behave.

One reason for the difficulty in defining "basic needs" is that they often depend upon predictions of events which may occur, if at all, in the distant future. For example, there can be a wide gap between what is perceived as adequate nutrition and what actually is. A full stomach is not necessarily an adequate guide. In many developing countries, people who have eaten unpolished rice all of their lives see polished rice as a luxury and buy it when they can afford it. Their efforts to increase their standard of living by eating "better" food actually result in lowering their nutritional level. Only gradually will the reality of the situation catch up with them as their health deteriorates.

We will use the term "basic needs" to mean both a perceived minimum level of food, warmth, and protection, as well as an actual minimum level below which death results. Only when both of these conditions are met are people freed from psycho-biological bonds to pursue satisfying lives. Whether or not they achieve personal satisfaction is due to factors we will discuss later.

The concept "self-fulfillment" is critical to the development of our thesis. It describes a way of perceiving one's existence, as well as a decision-making process that results in satisfying feelings. Self-fulfillment maintains that each person has within his power the potential to create meaning to his life. But choosing a purpose to one's life and exercising control over it is an immensely difficult task. It

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runs counter to prevailing environmental and personal forces that direct one's behaviors toward socially useful or personally safe goals.

Self-fulfillment requires of man a conscious and sustained effort to use highly developed decision-making skills to select goals he has consciously chosen, which he predicts will bring him a high degree of satisfaction. To achieve these goals, he must develop the ability to make consistently effective choices--those that provide a high degree of satisfaction within environmental and personal limitations. However, to maximize the choices that man has available, he must first reduce--though he can never eliminate--the restrictions that the environment and his internal forces place on his behavior.

Effective decision making, then, is a function of the development of specific and accurate perceptions of the environment and of oneself, of highly developed intellectual powers, and of the willingness and ability to restrain certain internal forces urging safety and security and to allow the forces urging growth and personal development to dominate.

Learning to live a fulfilling life is difficult indeed. It requires personal strength and perseverance, as well as highly developed decision-making skills. Some people, of course, are able to develop these skills by themselves--just as some have taught themselves the violin or other difficult skill without the help of one more experienced than they. But, like learning to play the violin, learning to live a fulfilling life often requires assistance to insure that one acquires the proper technique and style conducive to further growth.

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We maintain that the skills and attitudes necessary for self-fulfillment can and should be taught. In many cases, of course, they are already taught by parents, teachers, and others who are concerned with the individual's growth rather than just the maintenance of their society. But there are people--a great many--who have the potential for living a fulfilling life but who, instead, live "lives of quiet desperation." They feel impotent to take charge of their lives in the face of social and personal restraints.

ii

We believe that every person has a unique genetic endowment which, when coupled with his special experiences, creates an individual unlike any other. Consequently, we must also believe that options should be available from which one can select experiences which he believes will be most satisfying. But the availability of options depends on one's perceptions that there are options available. Such perceptions, in turn, require one to be as free as possible from environmental, cultural, and physical restrictions.

Each individual is faced, many times every day, with alternatives, among which he must make the best choice. The environmental conditions surrounding him profoundly affect the alternatives. These conditions--such as geography, climate, and natural resources--influence his options by providing a structure to life which determines the ease or difficulty with which basic needs can be satisfied. At any given moment this structure is fixed, and all decisions must be made within it. Otherwise, there is the risk that basic needs would not be met. An agrarian society, for instance, whose land has lost its fertility

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and whose people must work desperately to scratch out enough food to live, has a severely limited environmental structure. All decisions made by individuals in this society will reflect their limiting environmental conditions.

The complexity of the environmental conditions is not apparent from the above example, where only one factor affecting basic needs was mentioned. Rarely is the situation so simple. The basic structure within which people must make satisfying choices is a complex combination of many factors, and natural environmental conditions are but one.

The culture of any society evolves as a response to the ways basic needs are satisfied. Language, religion, social customs, political organization, and beliefs about reality all support and reinforce the manner of basic need satisfaction. No society will jeopardize its existence by embracing cultural norms which are not compatible with basic need satisfaction. To do so would threaten its very existence.

One effect of culture is to provide boundaries within which permissible behavior may take place. These boundaries may be wide or narrow, depending upon the mode of basic need satisfaction. A society faced with harsh conditions against which it must continually struggle to survive, will evolve a culture which prescribes specific behaviors for its members. It cannot risk much choice by individuals, for fear that the choices they make might threaten its existence. In times of war, people who are otherwise accustomed to great latitude in their choices, will accept restrictions on their behavior--such as the rationing of goods--and they may even relinquish democratic decision making in favor of an authoritarian leader until the danger is past.

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Through child-rearing practices, each society inculcates in its young its culture. This cultural indoctrination includes teaching children the nature of reality compatible with the society's acquisition of basic needs. These assumptions about reality influence individuals' perceptions which, in turn, influence their actions. Such conditioning reduces the necessity for direct control to keep people within the acceptable boundaries, since, if they have been socialized properly, their perceptions of available choices will coincide with socially acceptable ones.

Man's individual physical characteristics constitute a third external restraint, unique to each person. These characteristics--size, health, coordination, sensory functioning, age, I.Q., and sex--act as limiting structures in much the same way that natural and social environmental conditions do. Like the environment, physical characteristics are so much a part of each person that their effects go unnoticed in daily affairs. Unlike environmental conditions, however, physical characteristics can change more rapidly. Some of these are changes over which one has little or no control, such as aging and its accompanying disabilities, illness, or injury. However, there are also physical characteristics over which an individual has considerable control. He can exercise to improve muscle tone, avoid danger or exposure to disease, correct poor eyesight or other disabling conditions, and take advantage of medical treatment to insure that his physical equipment is in proper working order.

Physical characteristics affect behavior in much the same way as the environment. They contribute to the structure within which each person must operate and help determine the viability of some choices

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instead of others. The difference between the environment and physical characteristics as they affect behavior is that the environment is basically the same for all members of the group and changes gradually over long periods of time. Physical characteristics, on the other hand, are individual limitations which can change relatively quickly.

We have seen, thus far, how, at any moment, the natural and social environment and individual physical characteristics create a structure within which all behavior takes place. If behavior exceeds these boundaries, the individual suffers, either because his level of basic need satisfaction is inadequate or his society punishes him for violating its norms. Any understanding of individual behavior must include an awareness of this fixed set of circumstances which acts not only to limit but also to guide behavior. An individual, faced with daily choices, sees this structure as fixed, though, over time, it can and does change.

Unfortunately, this view of man as confined and restricted in his decision making by forces over which he has no control is too often true. If personal freedom or autonomy is to go beyond political rhetoric, it must account for external restrictions as unchanging at any given moment. What is necessary, then, is that each person be able to perceive choices within environmental limits that will contribute to increased happiness. While not minimizing the need to change oppressive environmental obstacles to self-fulfillment, our interest in this work is to discuss psychological freedom as an internal process leading to more satisfying lives.

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iii

One's perceptions of his world are the crucial element that affects his living a satisfying life. These complex and interrelated symbolic representations of reality are organized in each person's mind to form a particular world view or perceptual field of reality. In this work, the term "perception" refers to an image, sound, or other bit of sensory evidence and to the meaning, if any, that one attaches to this evidence. "Perception" also refers to meanings in general, conscious or unconscious, directly related to sensory data or not. As we will see in Chapter IV, perceptions may also be internal perceptions that are unique to the individual or external perceptions, which may be held by others as well.

To grasp the concept of perceptual field is difficult, because it is only indirectly subject to study. We infer its existence, as well as its character, from human behavior, and a perceptual approach to understanding individual behavior is the one that we will take in this work. We will not attempt to divide the perceptual field into sub-fields, because it is not an entity whose form or function remains the same when it is dissected. To attempt to analyze one aspect of the perceptual field apart from the rest of it is like trying to understand the function of an arm apart from the rest of the body. Some characteristics of the perceptual field could perhaps be studied, but certainly not its <u>function</u>. Just as the human organism is more than the sum of its parts, so too is the perceptual field.

Descriptive terms such as "complex," "interrelated," and "personal" fail to describe the perceptual field. To speak of perceptions

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only as if they were a collection of items is to disregard their dynamic, changing, and interrelated nature. And to speak only of their dynamism is to ignore the intensely stabilizing effect certain perceptions have in a constantly changing environment. Nor can we consider perceptions as if they were all similar in their effects on the organism, for some are more significant than others. Even the term "perceptual field" or "world view" is confusing, for it assumes the consistency of perceptions with one another which rarely happens. Even the most mentally healthy people have contradictory beliefs and behaviors.

Understanding perceptions would be relatively easy if they were all formed in a single way, but this is not the case. Many, perhaps most perceptions, are formed, strengthened, and modified through reinforcement by the environment. However, some perceptions are formed internally, with no testing of the environment possible. One person may believe in a hereafter, though he cannot prove the existence of heaven. Another may believe that America is a "land of opportunity," even though he and his friends live in abject poverty. In Chapter II, we will further discuss the development of the perceptual field.

Each perceptual field is unique and unfathomable. Of the myriad perceptions which have formed one's world view, only a portion can be considered on a rational level, and only a few of these are conscious at any given moment. The vast majority of perceptions have been formed slowly over a long time or have been forgotten by the conscious mind. Nevertheless, they can affect behavior as long as they are part of the perceptual field. While a semanticist might argue that "perceptions" cannot be "unconscious," the use of the expression "unconscious perceptions" signifies a unique relationship between a person and reality

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that is not ordinarily subject to rational thought. There is no fundamental difference between unconscious and conscious "facts of reality" in terms of their effects on behavior.

The accuracy of a perception depends on the degree to which the environment reacts in the expected ways. Ideally, if the environment fails to respond according to the way it "should," one will change his perceptions accordingly. However, though man may be rational, he is not always rational. Instead of modifying his perceptions when this view of reality does not make sense, he often ignores contradictory evidence, or forces an interpretation on events that supports his view of reality. In other cases, he may not look for confirmation or rejection of a particular view, fearing that to test the environment will prove his perceptions faulty. The importance of accurate perceptions of reality, both of oneself and of the environment, cannot be underestimated. Since perceptions directly affect behavior which, in turn, affects feelings, it stands to reason that the greater the degree to which one's perceptual world describes accurately the real world, the better the chances of making choices that will achieve the desired ends.

Throughout this work, we will refer to "reality," cognizant of the fact that no way exists to identify objectively that which is real: everything, ultimately, is perceptual and hence subjective. However, when we speak of "the real world" or of "external reality," we are referring to theoretical criteria with which we can compare "perceptions of reality" with "objective reality."

To have knowledge of accurate perceptions in one's world view enables him to consider available options, to determine the best ones

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for creating the desired feelings, and to act on the basis of conscious choice. There are times, of course, when rationality does interfere with a satisfying experience. One ought to be able to allow sensations to overcome rationality and to evoke pleasurable feelings in fantasy, enjoyment of the arts, and sexual expression, for example. However, such suspension of rationality ought to be itself a rational decision.

iv

Man's ability to reason has made him the only animal who is aware of his own existence. This places a tremendous burden on him by driving him to seek the reason for existence itself. Unwilling to accept the randomness of events, for then he, too, would be a random event, man has ordered the world in his mind to give it, and consequently him, a reason for existing.

He has tried throughout history to perceive himself as fundamentally different from other animals, and he has succeeded. Unlike all other animals, he has conquered and subjugated not only his fellow men, but also as much of the environment as he could. He has amassed ostentatious displays of worldly goods to prove that he is more than mere animal. But most indicative of his vanity and arrogance is that man has invented a God who has made him the chosen species. The trappings of civilization--the rituals, objects, and customs which have little relationship to basic physical needs--may be partly due to man's need to prove to himself that there is a special reason for human life.

Man's quest for the ultimate answer has combined with the human desire to live a fulfilling life and, in developed nations at least,

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has created an ironic dilemma. Man's success in providing for himself nearly unlimited choices in terms of goods, services, and lifestyles has backfired. Instead of finding the fulfillment he is seeking, he has found frustration. Technology has not delivered what it promised. While it has made life easier in many ways, the costs are higher than the benefits. There is a feeling that boring jobs, impersonal communities, expensive institutions, and the ravaging of the landscape might all be worthwhile if they brought happiness. But the best that can happen, it seems, is to use technology to escape what technology has created. Perhaps this accounts for the insatiable consumerism in this country. New and better cars, snowmobiles, clothes, and entertainment are frequently considered synonymous with happiness--but their acquisition is unfulfilling. In his efforts to become fulfilled, man has falsely equated comforts and possessions with fulfillment itself. While human desires have always been insatiable and man has always striven to a higher level of satisfaction, he has never before been so successful. Until recently, increased levels of fulfillment meant meeting basic needs more efficiently or acquiring a degree of security unavailable before. The efforts to live the good life were directly related to basic requirements for life itself, and therefore, had direct bearing on fulfillment.

In technological societies, where satisfaction of basic needs is no longer a serious problem, the issue confronting man is the use to which technological advances should be put. Though it is apparent that unlimited acquisition of comforts and possessions in no way assures fulfillment, most people still see happiness in those terms. This perception may have evolved through the ages as a survival mechanism, when

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possessions did indeed contribute to fulfillment by contributing to basic need satisfaction. For those in developed nations, at least, such a perception is no longer valid, but the habit is hard to break.

Not only are people frustrated in their efforts to live satisfying lives by seeking satisfaction where it cannot be found, but the acquisition of comforts and possessions alienates people from their sense of self-worth and purpose by placing tremendous emphasis on those things that have little relationship to a kind of meaning to life that has substance and endurance. This feeling of frustration and alienation amid affluence was succinctly put by a youth who said to the psychologist Kenneth Keniston, "You have to grow up in Scarsdale to know how bad things really are" [70, p. 28].

Technology has freed man from the necessity of spending all of his time meeting basic physical needs. It has given him an opportunity to make of his life what he wishes, and that possibility is clearly within his grasp. But the obstacles which he faces are effective blocks to self-fulfillment. To acquire the ability to maneuver among the obstacles in ways that maximize personal fulfillment is largely a problem of perception, and problems of perceptions rightly fall into the domain of education.

V

Until recently in technological societies, helping the young to live satisfying lives and preparing them to contribute to the social welfare has been a natural part of growing up. Traditionally, the distinction between children and adults has not been as marked as it is today, because children were once a vital economic necessity for the

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family. In regions where securing basic needs takes much of the family's time and energy, this is still true. Children developed a world view from actual participation in important aspects of family and community life, and, though their perceptions of the world beyond their communities may have been limited, these perceptions provided the bases for satisfying lives. There was also a structure to life that limited choices and provided firm guidelines. A child was able to grasp fully the opportunities and limitations facing him as he matured, for they were apparent and easily understood. In this way, structure provided security and direction for the child and later for the adult. He knew his position in the social order, and he knew what was expected of him.

With the gradual development of an industrialized economy, more and more people left farms to move to cities, where they took jobs in factories, a trend away from the farm that has continued throughout American history. To a rural American family, moving to a city in the late 1800's must have been a dream come true. Cities provided excitement, jobs, opportunities for recreation, entertainment, education, and various consumer goods, all of which contributed to personal fulfillment by increasing the choices available.

The cost of urban living, however, was high. People were removed from the land, from nature, and squeezed into crowded buildings. They no longer satisfied their basic needs by their own direct labor, because work had become an activity in which one engaged because it paid a wage, not because it produced anything of intrinsic value to the laborer.

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Education, too, suffered from urbanization. In a nontechnological society, it had been natural and spontaneous, arising out of participation in economically important activities; but education in the urban setting was altogether different. Here, the children were economic burdens to the parents, unless they could be put to work, and this was often done. Those who attended school were taught a primitive form of "career education," in keeping with the demands of the emerging technological society. Preparing youth for a future in industry was an important objective. Those who operated the schools decided that immigrant children needed to learn English and that all children, especially poor children, needed to learn middle class values. One speaker at a National Education Association convention in 1888 said in his address:

> The kindergarten system, which has already secured a strong hold in this country, is admirably adapted for laying a general foundation for an industrial career. Manual instruction in some of its practical phases should be engrafted into our public-school system. A vast majority of the children now attending the schools must engage ultimately in some industrial occupation. It is to be regretted that a portion of the young people of this country are growing up with a positive distaste for manual labor. We believe that the introduction of manual training into the schools of the country would tend to correct this alarming evil [68, p. 151].

Another speaker, in a similar convention, three years later, spoke on "The Future High School." He pointed out that "lessons in obedience, industry, economy, virtue, and other valuable human attributes should be conscientiously inculcated" [20, p. 628]. Though schools did not only fit children into the factory system, their bias was unmistakably clear. By the late 1800's, the basic structure of American schools was set. They were universal, tax-supported, compulsory, bureaucratically organized, class-biased, and racist [38]. Furthermore, they were institutions that

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perpetuated the myths of the American industrialized society: upward mobility, inevitable progress, and democracy.

The first decade of the twentieth century saw efforts toward broad social change, including innovation in education. The Progressive Movement in education sought changes in the political control of the schools, reform in educational thought, educational innovation, pedagogical change, and the scientific management of schools [38]. While marginally successful, progressive education succumbed shortly after the Progressive Movement lost steam upon America's entry into World War I. Since progressive education was supported by the middle class, which had no fundamental objection to the social structure, the progressives sought changes within the established order. They especially wanted a broader decision-making base. A recent resurgence of progressive educational thought has brought about the establishment of nontraditional classrooms and "free schools," which offer an alternative to traditional education. Generally, these are met with opposition and/or hostility, and do not constitute a significant trend away from the traditional methods of formal education.

Though there are classrooms throughout American schools that help children perceive their environment realistically and help them make choices that will contribute to more satisfying lives, these are aberrations from the norm. In the late 1960's, John I. Goodlad, the dean of the UCLA Graduate School of Education, along with several colleagues, visited 260 kindergarten-through-first-grade classrooms in 100 schools in 13 states to determine the extent to which the reform movement had changed schools. "We were unable to discern much attention

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to pupil needs, attainments, or problems as a basis for individual opportunities to learn," he reported.

> Teaching was predominantly telling and questioning by the teacher, with children responding one by one or occasionally in chorus. In all of this, the textbook was the most highly visible instrument of learning and teaching. . . . Rarely did we find small groups intensely in pursuit of knowledge; rarely did we find individual pupils at work in self-sustaining inquiry. . . . We are forced to conclude that much of the so-called educational reform movement has been blunted on the classroom door [70, p. 401].

Most American schools are nineteenth century institutions which, with few changes, are trying to prepare children to function effectively in the twentieth and twenty-first centuries. Their role is still seen as equipping children with the skills and attitudes that would enable them to obtain and hold jobs and behave in socially acceptable ways. While neither of these goals is objectionable per se and, in fact, both are necessary, they fail to get at the root of the challenges facing educators. The first challenge is to recognize the profound and complex changes that have occurred in man's perceptions of himself and of his natural and social environment in the past hundred years; and the second is to adapt the structure and curricula of schools to modern perceptions, so that children acquire the skills and attitudes necessary to live satisfying and socially responsible lives.

We have grown so accustomed to the impact that technology has on us, that it is hard to step back and to look at it critically. It is harder yet to imagine the changes in people's perceptions of themselves and of their world over the past hundred years as a result of technology. But this we must do in order to gain a perspective from which to make educational decisions.

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Even a casual tally of the ways technological development, unknown a century ago, affects us daily will clearly indicate that life has profoundly changed. For instance, most Americans enjoy the security of knowing that acquiring food and warmth necessary to insure their survival is not a serious problem. We forget that the feeling of security is a feeling only a small fraction of the world's people have ever known. We forget, too, how this knowledge has changed our lives. It has released time and energy, formerly used for meeting basic needs, for other life-fulfilling pursuits. Occupational conditions, if not the occupations themselves, have changed. Buildings, where most people spend most of their time, are artificially lighted, heated, cooled, and humidified. Modern transportation has made accessible places for business and pleasure which would have been prohibitive in the 1800's; and the list can go on and on.

More important, even, than the ways in which daily life has changed, is that individuals' perceptions of themselves and others have had to change accordingly. This change has brought within one's grasp new and often frightening concepts, which need to be fitted into the perceptual field. Communication, for instance, has quickened the pace of life by enabling the instantaneous reproduction of images and sounds from remote distances. Far from being the possession of a privileged few, communication machinery beams signals into nearly every living room in the country, bringing immediate reports of current events, new ideas, different lifestyles, and much more. The impact of television, the proliferation of written material, computers, pocket calculators, telephone service, Xerox machines, photography, and other inventions have enabled

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individuals to compare themselves with others whom they will never meet. Such communication must affect one's perceptions of himself and others and of his expectations for the future.

Another phenomenon that affects people deeply, which is now an accepted part of our lives, is nuclear weaponry. It can wreak instant destruction on a scale impossible to imagine. When massive destruction is a genuine possibility, serious doubt is cast on the future of mankind. Every person must learn to live with this fact and to confront the question, "Is there a purpose to life?" The necessity for each to answer this question in the affirmative and to find that purpose is incumbent upon us as never before. Living under the sword of Damocles, as it were, must be a stimulus for discovering a meaning to life, as it must be for world cooperation.

These and many other changes in the past hundred years go all but unnoticed in today's schools. Many of these changes are far subtler, arising from new knowledge of human behavior, learning, and social relationships and cast doubt on some traditional methods of planning and organizing instruction.

The challenge facing man is clear. Either he must learn to find fulfillment amid the technological monster he has created, and, in effect, to tame that monster, or continue to search frantically for happiness, by the mere accumulation of goods and comforts. A mind that can create the technology that the human mind has is surely up to the task of learning to use what he has built to his advantage, and a large part of this job lies with education. When we understand the forces operating within us and within our social structures, we will be better able to design education to help prepare children for this task.

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Knowing the changes that have occurred in American society and the ways that these changes have affected our perceptions is theoretically possible, since such changes are subject to inquiry and observation. What is far less subject to inquiry is knowing what adaptations are necessary in contemporary educational practices to help children lead more fulfilling lives. This is an area of conjecture, though such conjecture must be based on evidence.

Out purpose in writing this dissertation is to contribute to the groundwork for a reassessment of the structure, the content, and the methods of instruction of today's schools by developing a model of human growth which ties together strands of thought from diverse quarters. In Part II, we will discuss the implications of this model for schools. Educators and others who teach or who plan learning experiences for children base their decisions on their understanding of the process of human development. The various teaching methods in use today attest to the lack of agreement as to what this process is. Rarely is a conscious and consistent theory, supported by adequate evidence, the basis for curriculum planning. Unfortunately, such planning usually happens piecemeal, supported by a vague theory, for which tradition is the primary evidence.

Our hope for this work is that it develop a particular view of human growth and of education by which one can examine his own assumptions and understandings of the process of growth and of the implications of that process for schools. It is not important for others to agree with us; what is important is that each be aware of his reasons for his beliefs.

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Any look at human growth and development must logically begin with the biological and psychological "givens." For centuries, man has tried to discover what his basic nature is, and this search has led him to postulate every conceivable behavior as part of his human nature. The reason that so many views exist of what is distinctly human is because man, unlike any other animal, is primarily a creature of his culture. Thus, his nature manifests itself in myriad ways and only by studying both animal and human behaviors can we infer what man's basic nature might be.

We wish to begin by examining the development of specific physiological characteristics that have enabled man to survive changing conditions. Some of these man has in common with other animals, but one, the most highly developed nervous system, is unique to him. We shall see how these characteristics ultimately affect his perceptions of reality.

Without an effort made to identify man's physiological character, we will be guilty of making implicit assumptions about the nature of man that we will later use as the basis for the discussion of growth and development. We wish, instead, to make the assumptions not only explicit, but also to remove them from the realm of assumption and closer to that of fact, by discussing each in some detail.

Following a discussion of the physiological factors which affect perceptions, we will turn to a description of human growth and development from a perceptual point of view, one that respects the uniqueness and the totality of each person. The physical self, the perceptual field, and the individual's behaviors must all be seen as coherent and

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unified at all times from the point of view of the individual. Any division of these, even for purposes of discussion, must be temporary, or we risk losing the dynamism of the organism which is synonymous with humanness itself.

Throughout this work, our interest lies in acquiring an understanding of why people behave the way that they do, and why and how these behaviors lead to various feelings. The importance of understanding why certain behaviors take place instead of others has direct relevance for teachers. We believe that the appropriate role of a teacher is to influence the development of students' decision-making abilities which are likely to result in behaviors that, in turn, are likely to lead to satisfying feelings.

The last portion of this work describes how a school might operate if the perceptions of human growth by those in charge were consistent with the model we will develop. The description is more conservative than it might be, because we recognize the staunchly conservative nature of schools and know that fundamental change is very hard to achieve. Any proposal for change, therefore, has a better chance of adoption the closer it is to traditional practices, because this and any redefinition of educational purposes must, initially, at least, defend itself on traditional grounds.

Man's propensity to theorize is a response to his need to make sense of his world. His intellectual capacity enables him to perceive so great a quantity of seemingly unrealted events, that in order to function effectively, he must order these events into frameworks or theories that are relatively consistent and that facilitate comprehension.

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No theory will last long if it fails to explain events to the satisfaction of the theory's originator or if it fails to predict the events that it should.

Implicit in the function of a theory which explains and predicts events is the belief in one's ability to control those events or, at least, to prepare himself psychologically or physically for them. This serves survival-related purposes by giving the organism control over his environment and hence the ability to order his life to maximize his satisfaction.

Informal theories of the types used constantly by all people differ from formal ones used for the development of a more abstract understanding, because formal theories need to be more thorough in their organization. They must be based on firm evidence, obtainable by others, and about whose validity there is little question. The evidence is the foundation upon which the theory is built, and to use shaky evidence is equivalent to building a home with a shaky foundation. Social science theories, by dint of the fact that they relate to people whose behaviors are often exceedingly difficult to understand, employ "soft" evidence, that may be open to differing interpretations. It is very possible for two or more theorists to observe the identical evidence and to use that evidence to support very different conclusions.

The description of human growth and development that follows is not a theory in the sense just described, but it may point the way for a formal theory. We recognize that many of the conclusions are tentative, and we do not attempt precise and thorough explanations of all the conclusions drawn. Nonetheless, the inexact nature of this

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work, at this point, may still be useful for teachers and others who design learning experiences for children. The ultimate proof of a description of human behavior, of course, is whether it explains and predicts what it claims to. We leave to the reader the final judgment.

CHAPTER II

A MODEL OF PERCEPTUAL DEVELOPMENT

i

The search for human nature--the unique tendencies, characteristics, or instincts that clearly separate humans from other animals--has both fascinated and frustrated investigators for centuries. The wish to understand his psycho-biological roots is the same one that motivates man's search for knowledge in general, and culminates in the belief that from knowledge will come power to improve the quality of human life. Clearly this belief has merit, for life has changed dramatically, and often for the better, through the discovery of new knowledge. If a human nature were identified, it might provide a key for understanding diverse human behaviors and social organization. Examination of those behaviors and organizations could be made in the light of this discovery and judgments made as to their compatibility or incompatibility with human nature.

Unfortunately, while much valuable knowledge of cultures has been accumulated over the years by anthropologists and others--seeking an answer to the question, "What is man?"--no definitive answers are forthcoming. Many anthropologists, looking at the uniqueness of each culture, conclude that man's behavior is almost exclusively a function of his culture, and there is, in fact, no distinctly human nature. This idea has been expressed, among others, by those who have studied accounts

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of children raised by animals. Presumably, if there were some uniquely human tendency toward certain behavior, it would appear even outside of a cultural setting. While clearly not the final word, because records have not been consistently kept and there have been relatively few incidents reported, these accounts suggest that ". . . the search for human nature among 'wild' children has always proved fruitless precisely because human nature can appear only when human existence has entered the social context" [43, p. 12].

This cultural relativist view has gained favor among twentieth century intellectuals, but, at the same time, a body of research has also developed which indicates that there are strikingly similar customs throughout all known cultures. Professor George Murdock [51] was one of the first to describe the existence of specific universal behaviors. He identifies 73 items* which, according to his data, occur in every culture known to history or ethnography. Most of these categories are quite general and relate to survival necessities or functional prerequisites to survival. What is suggested by the identification of universal human behaviors is that there may well be common underlying motives for their occurrence, which may be the sought-for human nature or common bond uniting all humans in a fundamental way.

Identifying the common denominators of human existence is fraught with difficulty. Chief among the problems facing the investigator is the eternal confusion between what are genetic and what are cultural traits. For instance, is man an innately aggressive creature who must learn to cooperate, or is he an innately cooperative one who learns to

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*See Appendix.

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fight? This dichotomy is a classic example of polar positions that can be convincingly defended. Two careful observers, Robert Ardrey, in The Territorial Imperative, and Ashley Montagu, in The Human Revolution, have taken just these positions. To illustrate the degree of difference between them, their hypotheses are stated below. Early in his book, Ardrey proposes:

> . . . Man, I shall attempt to demonstrate in this inquiry, is as much a territorial animal as is a mocking bird singing in the clear California night. We act as we do for reasons of our evolutionary past, not our cultural present, and our behavior is as much a mark of our species as is the shape of a human thigh bone or the configuration of nerves in a corner of the human brain. If we defend the title to our land or the sovereignty of our country, we do it for reasons no different, no less innate, no less ineradicable, than do lower animals [51, p. 208].

Ashley Montagu vigorously attacks the concept of innate human aggression and territoriality, as described by Ardrey.

> Everything points to the non-violence of the greater part of early man's life. To the contribution made by the increasing development of cooperative activities, the very social process of hunting itself, the invention of speech, the development of food-getting and food-preparing tools, and the like [50, p. 115].

ii

There are several difficulties inherent in the investigation of human nature. Probably none is avoidable, so each person looking at the range of human behavior and interpreting what he sees to be "basically human" must carefully examine his procedure and his results. The most striking problem is identifying what is uniquely human primarily through introspection, either intentionally or accidentally. Though the introspective method is unscientific, yet, to a degree, it is unavoidable. Each person brings his own unique perspective to bear on his investigation

and interprets the evidence and reaches conclusions which may incorporate his biases. This is especially likely in a field as essentially subjective as "human nature." The conclusions one draws, then, must be considered carefully in the light of other evidence or, at least, one's biases acknowledged. To grasp uncritically at what appears to be the unifying tendency toward certain behaviors in all humans may place one in the untenable position of actually having identified those characteristics as innately human which bear a curious resemblance to the traits he sees in himself. Ellsworth Faris has made the following observation:

> The ability to conceive of human nature thus always involves the ability to take the role of another in imagination and to discover in this manner qualities that we recognize in ourselves. We regard as inhuman or non-human all conduct which is so strange that we cannot readily imagine ourselves engaging in it. . . . Human nature is, therefore, that quality which we attribute to others as a result of introspection [51, p. 98].

A second problem awaiting the investigator of human nature is that innate human tendencies can easily become lost in the expanse of cultural adaptations. Since man is a creature of culture rather than instincts, his nature can manifest itself in various ways depending upon the characteristics of the natural environment, the history of his people, and other factors. Behaviors may, therefore, relate to basic human tendencies in extraordinarily diverse ways. For instance, while every human group has a belief in the supernatural, these beliefs vary widely in their effect on the daily lives of people and on the way these beliefs are practiced.

A further difficulty arises in trying to compare behaviors among different cultures in order to identify a common origin. Even with

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Murdock's "common denominators of culture," there is no proof that similar behaviors are caused by similar human tendencies toward those behaviors. Does the fact that all cultures have beliefs in supernatural powers indicate that the tendency toward such beliefs is innate? Perhaps it is, but perhaps it is just a cultural manifestation of other more basic tendencies--the wish to explain dreams, for example. The family unit, too, is found to be a basic social unit in all cultures. Is this innate, or could it be the result of efforts to meet certain basic needs, such as the creation of a strong unit to insure sufficient food or of a system to minimize conflicts over sex partners? A more confusing aspect of this problem develops when one realizes that a single behavior or custom might be the result not of a single factor, but of several factors, all of which have been obscured over the centuries.

The third problem is that even similar social structures or behaviors in different cultures did not necessarily evolve because of anything innate in human nature. The similarity may be due to the relatively limited choices that the various social groups had to meet their basic needs. Given the environmental restrictions on behavior and the same physiological equipment and basic needs of all human beings, similar activities may have arisen by accident.

The temptation is great, in the light of conflicting evidence, subjective interpretations, and the variety of cultural organization, to conclude that there is no common bond, other than the biological, that ties all humans together and that, consequently, the search for a human nature is bound to be unsuccessful. However, there appears sufficient evidence that some common bond does unite all of mankind, and,

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in spite of the problems inherent in the search for human nature, we believe that the benefits from a successful search are worth the risks.

We know that culture profoundly affects the ways that basic need acquisition is organized. But why is it organized in one way rather than another? And when and why does it change? Anthropologists and other investigators seeking the answers to these questions have only tentative explanations, and they reject any simplistic cause-and-effect relationship. But the fact that all human behavior is directed toward an increasingly satisfying life offers a clue. Unlike most other animals, people make choices based on complex perceptions of their environment, which are unified into perceptual fields of reality.

The development of the perceptual field is neither random nor haphazard. There is a systematic development in the ways perceptual fields of reality are formed, as well as in the ways that they function in order to provide the individual with appropriate information with which he must make choices. Since a perceptual field as sophisticated as man's is unique to him alone, the development and functioning of this field is where the search for human nature must begin. If this search proves fruitful, it should cast light on the reasons both for the similarities as well as for the differences that are observed among people in different cultures. But, more important, if we can identify a distinctly human nature, we will have taken a first step toward the understanding of human behavior.

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The history of the development of man over more than a million years has been characterized by an evolutionary phenomenon unknown to any other living organism. While human and nonhuman animals alike adapted to the changing conditions of their physical environment through the modification of physiological structures, something happened to the proto-humans which was qualitatively different from the changes taking place in their ape cousins--the development of a highly complex central nervous system. No evidence exists to suggest why such a change took place, and we can only speculate as to its causes.

More than two million years ago, the ancestors of man, who had far more in common with apes than with modern man, must have led a harsh existence. It is likely that they were fairly easy prey for predators, being neither strong in comparison with other animals, nor very fast afoot. Like all animals, they were driven by instincts to meet their basic needs. Man's ancestors had no culture, no language, and nothing approaching a special nature that really set them apart from the apes.

Over the course of hundreds of thousands of years, certain of proto-man's physiological structures were passed on, through the genetic process, to subsequent generations, while other such structures gradually became extinct. The interbreeding of those possessing a given trait increased the probability that it would occur in the offspring. The change in proto-man's physiology included a change in his brain size, which, for the first time, made possible a process that we regard as uniquely human--thought. The harsh environment had exacted greater accommodation from the proto-humans than mere physiological adaptation,

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along with instincts, could handle. Many bands must have died out, having failed to meet the challenges of the environment. Those who survived did so because they were able to use their intellectual powers to their advantage. But the brain alone did not give man ready-made answers. It did not just provide a sophisticated set of instincts capable of triggering responses as problems arose. The brain is a marvelously complex mechanism which requires a unique relationship with the environment. Unlike other organs which operate irrespective of the environment, the brain is effective only to the degree that it acts upon sensory information. Although other mammals have brains which process sensory data, the exceptional powers of the human brain put man in a class by himself.

The human brain, using the information about the environment which the senses have gathered, forms in the mind of each person an image of the world--the perceptual field of reality or a world view. A crucial element in the development of this representation of the environment is the instinctive awareness that an order actually exists. Without such an awareness of order, a perceptual field would not and could not develop, for every event and act would appear to be without cause or effect. Functioning in a world without apparent order would be akin to attempting to solve a mathematical problem without understanding the values of the numbers or the meanings of the expressions.

The critical difference, then, between man and beast is that the development of a perceptual field of reality and the accompanying intellectual powers permitted man to perceive the world in a framework with components which are structurally related to one another and which

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operate in an understandable way. This is not to say that all the forces are understood, but only that one believes that they can be understood because all events are caused. Nor does what is believed to have caused an event necessarily do so. An "act of God" may be a sufficient explanation for the cause of an event to satisfy the need to perceive a world order. History is full of instances of unequivocal acceptance of the explanations for truly significant events--the creation of the universe, human nature, the origin of life, and so on--which, when viewed from the modern perspective, are ludicrous. But regardless of their inaccuracy, such explanations satisfied the innate need to perceive the world as ordered. As a result of the ability to perceive an order to his world which allows its comprehension, man is able to predict some events and, consequently, to control them.

The primitive humans who observed that every day before dawn animals move toward the water hole, could assume that there was a reason behind this behavior and that unless some event changed the situation, animals would continue to behave this way. This ability to understand that the regular movement of animals had a cause may have led some hunter to suggest that he and his fellow hunters hide along the game trail before dawn and attack the animals they knew would happen along. Unlike the hunting practices of animals, those of man were not guided by instincts but by reason, primitive as it may have been. Man could choose the time of day or night to hunt, plan a strategy, develop tools commensurate with the type of game he was seeking all because his world had order, giving rise to predictability. Once the ability to predict events was established, some of those events could be controlled to help man insure that his basic needs would be met.

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Culture developed as man established routines in his behavior to make the securing of basic needs easier. He found cooperative undertakings--hunting, gathering, fighting, and farming--much more efficient than individual ones, and, over the course of millenia, he developed language, division of labor, rules of conduct, and many other practices to enable his society to function smoothly. But most important, he institutionalized perceptions into a world view that was shared by all the members of his group. These unified perceptions constitute a complex set of socially accepted beliefs about all aspects of life. Cooperative effort could not have arisen without unified perceptions, and this ability to cooperate may have been a key to man's survival. Institutionalized perceptions release time and energy that would otherwise be used to rediscover what others before him had discovered.

The child entering the world confronts an environment that both restricts and enhances his future development. The environment presents a structure to his life by dictating how he is to be cared for--strapped on a cradle board or laid in a cradle, how he is to be treated--ignored and left alone or made the center of attention. He accepts certain food, clothes, and customs as normal, and when he grows a little older he will regard those from other regions with suspicion, disdain, or curiosity because they are "different." The language and religion he learns, too, will restrict his development by teaching only a relatively small number of symbols from the vast human repertoire. The growing child acquires by degrees the customs and cultural beliefs of his society until the perceptions he holds of his physical and social

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environment are an internalization of the culture itself. The internalization of the cultural norms and expectations, along with his own unique perceptions acquired throughout life, do for man what instincts do for animals: help determine his behavior.

Man's survival has been due not primarily to physiological adaptation but to cultural adaptation made possible by a brain that has provided him with intellectual power and flexibility essential for creating a world view that enables the prediction of events. Wolfgang Köhler [39] has identified three universal human characteristics which distinguish man's intellectual processes and abilities from those of apes which we feel account not only for man's survival but also for his potential for living a fulfilling life.

The first characteristic of man's intellectual processes is that his thought is not restricted in time or space. Man has a sense of time, a sense of the sequence of events. Without this ability, a world view could not develop, for it requires a cause-and-effect understanding that can only come through perceiving the temporal sequence of occurrences and inferring relationships between them. These perceptions are incorporated into the perceptual field to provide information for future behavior. Such behavior would not be possible if man were restricted in his ability to conceive of the future. In actuality, though, man does a relatively poor job of predicting the future, compared to his ability to examine the past, but his ability is still far greater than that of even his closest nonhuman relatives--the apes.

Köhler has reported that chimpanzees in the laboratory have been observed to use sticks as tools to reach desired objects placed

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too far from their cages to be reached with their hands. They also appear to reflect on the problem and suddenly "figure it out." Köhler suggests that this shows insight--a solution to a problem without trial and error. Chimpanzees also were able to make tools by putting two sticks together to make a long one, or by breaking a branch off of a tree to use to reach an object [39]. This degree of "advanced thinking" on the part of man's cousins only underscores the difference between the human mind and that of other animals. No chimpanzee, however, was observed making a tool without an immediate use for it, indicating that such thinking was restricted to the present and possibly to the immediate future. Man, on the other hand, typically designs tools and other technological apparatus without an immediate need for them and with an eye to the future.

Köhler's second universal characteristic is concept formation. At some point in the development of the brain a new function became possible: man could not only manipulate concrete objects with a precision unknown to any other animal, but he also became able to manipulate objects in his mind regardless of their physical existence. The duality of brain and environment has been a critical evolutionary development, enabling sensory information to be transferred to the brain, which, in turn, reconstructs a representation of the external world. By necessity, it is a world far simpler than the external one, and the ability to form concepts--mental "pictures"--of events and forces, both real and imagined, is crucial to this reconstruction.

The power to conceptualize has also been the basis for communication beyond the basic signals for fear, pleasure, hunger, and others

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that many animals have. Though man could have used other means of communication, vocalizing was the easiest and most efficient way [17]. The use of language requires a high degree of symbolic ability, for tangible and intangible objects, forces, and feelings are all represented by symbolic sounds which are combined according to rigorous rules to express complex ideas.

Culture is possible because of language, and language depends on the ability to conceptualize. Without the ability to communicate the institutionalized perceptions that define culture, no unique approach to coping with the environment could develop. Each person would have to discover anew the basic facts of reality that culture provides.

The third universal characteristic described by Köhler is the ability to calculate forces and to combine numbers. This ability, unique to man, has enabled him to create the objects his mind has imagined. Without this ability, stresses could not be calculated and all but the simplest tools would be impossible to make. No ape, for example, can build a bridge, for to do so requires a conceptualization of horizontal, vertical, and diagonal supports and the forces affecting each. This relatively simple bit of engineering is only possible for man. The chimpanzees observed by Köhler were able to calculate only the simplest of forces, such as the series of psycho-motor movements necessary to release a banana from a hook [39].

It is interesting to watch a three-year-old child play with toys. He has a rudimentary understanding of the forces at work, and one can watch his attempts at building or manipulating objects in ways

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that adult "common sense" indicates cannot be done. A chimpanzee will never advance beyond this point, but the child will soon acquire the necessary ability to calculate the forces at work and will then be able to generalize these perceptions to other situations.

The significance of the development and functioning of the brain is that it set man apart from the rest of the animal kingdom in a way that was fundamental--not just one of degree. The human infant, facing the world for the first time, is not a neutral object, lacking developmental direction and waiting to be molded by whatever environment he happens to find himself in, but rather is a person whose potential includes the culmination of his ancestors' successful efforts to survive. The development, organization, and functioning of the perceptual field of reality, which enables man to organize events in understandable patterns of thought and the uniquely human mental powers make possible predictions of future events so that satisfying choices can be made.

Man's intellectual powers--his ability to comprehend, apply, analyze, synthesize, and evaluate data to a sophisticated degree--does not make him the rational creature we might like him to be, but rather the theorizing animal that he is. And man must theorize to survive, for he has virtually no instincts to guide his decisions. Faced with seemingly random events and forces with which he must contend, man invents mental structures to facilitate this task. These structures or theories constitute working hypotheses that are sufficiently accurate from man's point of view to be considered reality. The ability to form perceptual fields does not bestow on man the <u>choice</u> of perceiving

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the world as ordered or not, but rather the requirement that he do so. The deep-rooted impulse toward forming a world view of his environment is not one over which man has control. The survival of his species has been due to this human nature, and now his personal survival is due to it as well.

iv

A newborn child must feel the world to be a frightening place indeed. Possessing untrained senses and an uncontrollable body, he is entirely dependent on others to meet his every need or desire. Most other animals are considerably more developed at birth, compared to the adults of the species, than is a human baby. Shortly after birth, most other animals move on their own, forage for food, and possess more discriminatory senses. They are equipped with instincts that evolved with the survivors of their species, instincts which direct their behavior in very specific ways. Reaction to aggression--fleeing, hiding, or fighting, selection of mates--lifetime or temporary bonding, nest building, caring for the young, and many other behaviors need not be taught. An animal as simple as the honey bee has elaborate instinctual behavior, enabling a hive of up to 80,000 bees to live cooperatively through a "sophisticated" division of labor. The human baby, on the other hand, has none of the "advantages" of strong instincts to guide most of his behavior. What he does have is a human brain and specific human tendencies which will create an ordered picture of the world in his mind.

How are perceptions selected that will become part of the perceptual field of reality? Obviously, some selection process is

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necessary, for otherwise one would be bombarded by myriad perceptions --thoughts, feelings, and experiences--which would overwhelm the senses. And not only must there be a selection process, but there must also be an ordering process as well, so that an organized world view develops.

We infer from behavior that the formation of a perceptual field of reality is affected by seven factors:

1. The meanings associated with habits can become part of the perceptual field.

A habit is a behavior, repeated often enough so that it becomes internalized and takes place without conscious thought. Many of the decisions one makes each day and their resulting behaviors have become habitual. These habits not only include social ones, such as the clothes one wears, language, social graces, religion, and so on, but also individual habits like the psycho-motor skills that an experienced driver uses to control an automobile.

The importance of habit for the perceptual field is not the behavior itself, but the meaning that the individual attaches to that behavior. One can see this in the practice of religion. The act of attending Mass, for example, in and of itself, has no effect on the individual (assuming, of course, that God does not care). It becomes important only when the act has acquired a meaning that influences other perceptions and other behaviors. In fact, it is the meaning rather than the rituals that makes religion important, and the intent of religion is precisely to affect the individual in some meaningful way. When this meaning becomes internalized, it forms part of the perceptual field. The stronger the meaning to the individual, the more it will

affect the ordering of the experience into an understandable framework, and important beliefs, such as religious ones, may influence other perceptions as well. A Christian fundamentalist, whose world view depends on his belief in the literal interpretation of the Bible, filters all perceptions through that framework. Faced with anthropological evidence supporting the evolutionary theory, the fundamentalist will form conclusions consistent with his religious orientation and will reject the scientific interpretation. The effect other habits have on the perceptual field is not necessarily as striking as is the above example, but they all serve the same general purpose: to order the world in an understandable way.

2. The meanings associated with personal experiences can become part of the perceptual field.

Since man has evolved as a theorizing animal, he must discover meaning to his world, for that is the key to his survival and to his living a satisfying life. The creation of this meaning involves the creation of literally thousands of meanings for experiences and observations which must relate to one another. The process is much like the one a painter uses to develop an image on canvas. He employs colors and textures, each of which may have a meaning to an observer, but, when they are combined with one another in some orderly fashion, they evoke a meaning both more than and different from the accumulations of individual meanings of the colors and textures.

The variety of human behaviors even within a single culture strongly suggests that it is personal experiences that account for the diversity among people rather than cultural conditioning, for while the

culture affects its members rather uniformly, personal experiences may be as varied as the environment and circumstances permit. Such experiences may result in important self-perceptions, and such perceptions are seen as having the most significance to the individual.

Similar experiences over a period of time, whether caused by conscious choice, unconscious choice, another's choice, or by the exigencies of daily living, may create perceptions of reality in the same way as habits, because, in fact, they have become habits. Habits may acquire meanings that become crucial to the maintenance of the perceptual field simply because no alternative meanings are considered. A person who has followed a set routine for years sees meaning in that routine which has now become part of his reality.

The meanings associated with nonhabitual experiences may also become part of the perceptual field by strengthening related meanings or by providing an explanation for the cause of an unknown observation. For instance, if one sees people putting coins into the cup of a blind man, the meaning acquired from the observation may be that people are generally kind, or that people are generally gullible, or that blind people are generally wealthy, or combinations of these and other meanings. Whichever meanings become part of his world view will be those that confirm other previously held perceptions or which are later confirmed by the meanings of subsequent experiences.

3. Meaning that is developed through the intellectual process alone can be incorporated into the perceptual field.

Not all meaning that becomes part of the perceptual field is a direct result of environmental stimuli--either cultural conditioning

or personal experience. The mind of man has so developed that he can be his own source of knowledge. Although the environment plays a part in the internal formation of such meanings, its influence may be minimal. All significant perceptions are partly due to this intellectual process, because the senses only provide the raw materials from which the brain must invent meanings. These are meanings the brain derives both from sensory data and from the relationship between sensory data. In some cases, however, sensory data are so lacking that a complete picture is impossible without the intellect "filling the gaps." This requires the ability to abstract the principles of an understood phenomenon and to apply them to a similar phenomenon whose causes or elements are unknown.

Another method of "filling the gaps" is to use one or more perceptions as the raw ingredients, the same as one would use sensory data. The resulting perceptions, in turn, can be used to generate other perceptions, and so on. The process of increasingly differentiating the perceptual field, which we are postulating is a basic tendency, could not take place without the use of higher order perceptions in the places of sensory data.

Suppose an anthropologist spends several months living with a Stone Age people, in order to understand their culture. He has taken copious field notes, but, because he is merely an observer in the life of the people he is studying--and hence too close for adequate perspective--he tries to refrain from making judgments of any kind. Upon his return to his familiar culture, the anthropologist then reviews his notes. Accumulating sensory data in the field has ended, and no

additional data are forthcoming. His notes refresh his memory, but do not constitute new data of any kind. But from the experience of living with the Stone Age people, new, subtler, and more specific perceptions may arise. He may realize, from reviewing his notes on family relationships, that a particular child-rearing pattern emerges that he had not noticed at the time. From this perception of a particular child-rearing pattern, the anthropologist may understand adult patterns of behavior which may have developed in childhood. These perceptions about adult relationships may make clearer the role that religion, art, and economics have for these people, and a fuller understanding of the entire culture may develop as a result. In short, then, the anthropologist, wishing to relate relatively undifferentiated perceptions on a more complex level, creates from these perceptions more highly specific ones. These perceptions, in turn, may form the raw material for the further differentiation of perceptions.

The same process is used by each person to develop self-perceptions, which are formed largely through inference and through the extrapolation of evidence that may only be vaguely related to him. For instance, people one thought were friends may appear to avoid him or to treat him coldly; he may do poorly in school; and he may be unable to do anything that pleases his parents or other significant people around him. While all these negative perceptions may only exist in the person's imagination--and certainly it is vague evidence at best--they may seriously affect his self-perceptions.

4. <u>The direction of perceptual field development is toward consistency and order</u>.

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The perceptual field is never fixed, but rather changes throughout life. Perceptions can become increasingly differentiated, they can increase in number, or they can change in relation to one another. A basic tendency in all people is for the perceptions contained in one's world view to move away from inconsistency and toward order. Only when relative order is realized in one's environment will it make sufficient "sense" to permit the accurate prediction of the effects of events on him. The greater the degree to which perceptions are compatible with one another and prove valid when tested against the environment, the greater is the likelihood that effective behavior--that which achieves the desired feelings--will take place.

New perceptions or modifications of old ones must fit into the perceptual field in ways that are compatible with previously held perceptions. Not only will consistency be maintained by the incorporation of compatible new perceptions, but the perceptual field will be strengthened through more perceptual evidence that supports the validity of the world view. The greater the number, the larger the degree of differentiation, and the broader the scope of perceptions contained in the perceptual field, the easier is the job of day-to-day decision making. The reason for this is that one is likely to have highly specific perceptions of the issue about which a decision is necessary, and to give accurate information about options and their consequences. In subsequent decision-making situations, comparatively less inference and extrapolation are necessary to determine the appropriate course of action consistent with the perceptual field.

To illustrate this last point, imagine an explore who, with a crude map, must lead a party across an uninhabited expanse of barren

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land. He knows that there are mountains, valleys, rivers, and lakes, but he is not certain about their locations. Considerable inferential ability must be employed to orient his crude map to the geography of the land. At first, he can only use observable landmarks, such as high mountains, and draw them on his map. From the positions of several mountains, he may infer the approximate location of lakes and rivers and the direction of the flow of the river. As his party travels through the barren land, he can confirm or modify his predictions as to the reality of the geography. When enough evidence has been collected and when the map has been completed, far less inference will be necessary and decisions will come more easily.

5. All perceptions in the perceptual field are related in an internally logical way, and a change in one can change others.

In innate human tendency is to organize one's sensory data into perceptual fields so that prediction of events is possible. However, this process can only take place if one views every event and experience as caused by some understandable force. This understanding, in turn, can only occur if each person sees the environment as logically conceived. Perceptions, then, that are seen to be unrealted to others are virtually useless, for they will not aid in the prediction process and they will not be incorporated into the perceptual field.

There is another reason, too, why all perceptions in the world view must be related in a logical way. A good portion of an individual's perceptual field does not come from specific sensory data, but rather is made up of inferred or extrapolated perceptions derived from the data. These perceptions, which lack the evidence of sensory data, could not

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occur unless the world were seen as logical and related, because a systematic procedure is necessary to arrive at other perceptions not directly supported by such evidence. One first must assume that a relationship between all perceptions exists and then order the unsupported perception into what appears to be the approximate position in the world view.

How does the human organism handle a perception that is inconsistent with other perceptions that make up his world view? Such a situation is critical, because it casts doubt on the validity of the perceptual field itself. All a theory, such as one's world view, needs to cast doubt on its accuracy is one bit of contradictory evidence that cannot be explained. Each person depends on the consistency of his perceptual field to such an extent that inconsistent perceptions will be handled immediately and with the thoroughness the situation requires. A likely initial reaction to such perceptions is to deny or ignore them. If there is a conflict between one's perceptual field and the perceptions of a single incident, reason will probably allow that the latter perceptions were erroneous for some reason. This is the characteristic way people respond to para-psychology, for example. It is disconcerting, at best, to believe that mental telepathy, forecasting the future, and communication with spirits are actually possible, because the perceptions of these feats are not compatible with the world views of most people. However, when evidence accumulates and the new perceptions can no longer be ignored or denied, the perceptual field must accommodate them in some way.

When acupuncture was announced in the United States a few years ago, it was met with acute skepticism by the medical community. Only

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as significant evidence of its effectiveness accumulates are medical professionals gradually willing and able to alter their deeply held perceptions about the human nervous system.

The acceptance of an inconsistent perception need not take place slowly, though it usually does. There are many cases of people who have seen a flying saucer or who have "found Jesus" and who suddenly become "believers." Presumably their perceptual fields make the necessary modifications in existing perceptions immediately, in order to accept the new discovery of truth. The resistance encountered in accepting perceptions that are inconsistent with world views is understandable, for there must be modification of many other perceptions about how the environment operates. This is painful, especially when there is no guarantee that one's resulting consistent perceptual field will work any better at predicting the effects of events upon him.

Since all perceptions in the perceptual field are related in a logical way, a change in one can change others. Change in a significant perception may alter the entire world view, creating illogical relationships between perceptions. Since the function of the perceptual field depends on its logical internal structure, the tendency is to re-establish the state of consistency.

Though no precise analogy to perceptual field exists in the physical world, a crude comparison can be made by using a theoretical free enterprise system model, which tends to move toward equilibrium just as perceptual field moves toward consistency. Under the theoretical capitalist system, there is a relationship between land, labor, and capital, which changes over time according to decisions by

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individuals and by physical factors beyond human control. A shift in demand for a particular commodity manifests itself sooner or later in a change in the availability and hence in the price for land, labor, and capital. This, in turn, affects consuming habits and can even affect customs. Even a small change in one of the interrelated factors--and all factors are related to all others in some way--affects other factors.

6. The more directly a perception affects one's views of himself, the stronger will it be and the more vigorously will it be defended.

The purpose of the perceptual field is to enable the individual to make effective decisions that will bring about satisfying feelings. But all perceptions in one's world view do not have equal meaning. There is a vast difference in intensity between, let us say, a man's view of himself as sexually attractive and his view that if he exceeds the speed limit regularly, he is bound to get caught. The one may be integral to his views of himself, while the other describes his relationship to a portion of the environment. Since it is the individual or the self* that exists, acts, and experiences feelings, the significant self-perceptions must be vigorously defended, for they are synonymous with what the individual perceives himself to be. Perceptions that are merely descriptions of his relationship to the environment are not nearly as important, for they are not integral to a

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*We define the "self" as a basic theoretical unit in the human organism which experiences thoughts and feelings. We will refer to one's views of the "self" as his "significant self-perceptions" or "values"--basic perceptions that define for him who he is.

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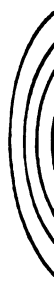

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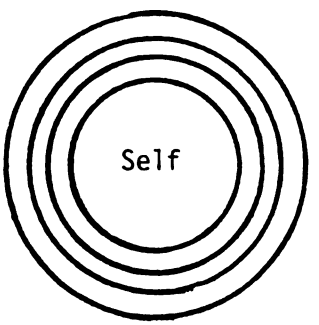
definition of the self. The relationship between perceptions within one's world view can be understood if one imagines a series of concentric circles. The smallest circle represents the self and circles of increasing distance from the center represent perceptions. The greater the importance of a particular view to the maintenance of one's self-perceptions, the shorter will be its distance from the center of the diagram.



Each ring of the concentric circles represents a perception of reality. The greater the importance of a particular perception to the maintenance of the self, the shorter will be the distance from the self to that circle.

The greater the importance of a perception to one's views of himself, the more critical its role will be in his perceptual field, and the more staunchly will it be defended against attack. Any threat to an individual's fundamental definition of himself must be countered effectively, otherwise his entire world view may be in jeopardy. The extent to which significant self-perceptions will be defended knows no limit; one may hold these perceptions dearer than life itself, for, in fact, they are life itself. One need only think of those who have died defending their honor, or who have taken their own lives because of shame, to understand the significance of self-perceptions.

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7. The perceptual field tends to become increasingly differentiated over time.

The ability to generalize principles and to employ abstract reasoning is a function both of the physiological development of the brain and of experience. Each complements the other; a person with a highly developed brain, living in a deprived environment with little chance for experiences that will stimulate the intellect, is no more likely to develop a highly differentiated perceptual field than is a severely retarded child in a highly stimulating environment.

> . . . A child which is perfectly normal at birth can develop into an idiot if his education is unfavorable enough. . . . The personality develops in exact proportion as the educative value of the environment offers the correct cultural support at the right moment [43, p. 71].

Since the development of a perceptual field is critical for survival, the young child has been equipped with a special physiology that helps him acquire this perceptual field. The human child, like his nonhuman animal counterparts, has a higher metabolic rate than an adult, which affects the perceptual field in two distinct ways. First, both his brain and his body are growing fast. By five years of age, a child has reached 80 percent of his intellectual capacity [12]. This fast rate of growth begins before birth and gradually slows until full body size is reached during late adolescence. Second, a high metabolic rate also provides the young child far more energy than is required for maintaining life. Through the release of this energy, the child discovers his world by sensory as well as intellectual efforts--creating, imagining, testing, exploring, questioning, and playing. His acquired perceptions are incorporated into a world view according to the factors we have discussed.

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As the child matures and his metabolic rate approaches that of an adult, his physical energy decreases. He is no longer stimulated to expand and differentiate his perceptual field, according to a biological timetable. From this point on, any change in perceptions will come from his interaction with his environment or, as we have seen, from internally created perceptions.

It is impossible to imagine a normal human life that does not experience sufficient sensory stimulation in daily living to differentiate perceptions. The very process of maturing--both physical and psychological--provides changes in perceptions, which need to be incorporated into the overall world view. The process of aging forces on one the requirement of adjusting his world view to the changing conditions of his life. Not only may he be experiencing a decrease in physical vigor, but also he may see younger people, who may perceive reality differently, taking over decision making in the society and changing familiar procedures.

Of course, life is more than just aging. One forms relationships, has children, and acquires vocational and other skills. Through the experiences that these and other life situations present, increasingly specific perceptions of the environment are formed and incorporated into the perceptual field. Increasing differentiation, however, is not automatic; it occurs only to the degree that there is sensory stimulation for it to do so. Unfortunately, after the high metabolism of childhood slows to the adult level, the rate of increasing differentiation of perceptual fields slows greatly for most people. Many people place themselves in "ruts" of one sort or another, providing

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both a comfortable routine to life and reducing opportunities for acquiring new or more specific perceptions. We shall discuss this further in Chapter III.

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In this chapter, we have hypothesized the development of the perceptual field of reality and of the concomitant mental powers as the fundamental distinguishing feature that separates man from other animals. Through countless millenia, man has acquired the ability and the requirement to form in his mind an interrelated representation of the external world, which operates according to internally logical principles. He must use his perceptual field to make decisions that not only satisfy basic needs, but that also lead to a satisfying life.

Man is more dependent on his environment than any other animal. Nonhuman animals have instincts to guide or determine their behavior, but man's behavior is almost totally a function of his environment, as understood through his perceptual field. Though he may deny his animal origins and flatter himself that he has transcended nature and is no longer affected by it, man has only substituted the controls of culture for the controls of nature. To be sure, man is more-or-less the master of culture, at least to the degree that he invented it and can and does change it. The irony of the "nature versus culture" dilemma, however, is that culture is intimately dependent on nature, and man--though he may deny it--is thus dependent on them both. His recognition of and accounting for the external world is as necessary for his existence as a flower is to a honey bee.

Some views of human nature attempt to show that man has certain tendencies, or needs--aggression, cooperation, love, growth, and so on--which manifest themselves in general ways throughout all cultures [51]. But as we discussed at the beginning of this chapter, anthropological evidence for innate tendencies is far from conclusive, and the problems of investigation are many. The cultures of man are so diverse that one can postulate almost any tendency as to man's basic nature and find sufficient "evidence" to prove such a hypothesis. This may satisfy those with the desire to give their theories the weight of scientific thought, but it does little to advance the understanding of human nature. We feel it is necessary to identify what constitutes the lowest common denominator of man's nature and to discuss the innate forces or tendencies we believe to be at work.

Our search for the lowest common denominator has resulted in the hypothesis that the development of the perceptual field of reality according to specific principles and of the concomitant mental powers are the fundamental features that separate man from other animals. These features constitute the psychological ties between all humans. Support for this view is not yet scientifically based, though we believe that experimental evidence can be obtained. We have developed a highly plausible explanation of the process that awaits further analysis. At present, it should perhaps be treated with guarded skepticism, particularly in view of its speculative nature.

At the outset of this chapter we contended that if a human nature were identified, it would provide a key for understanding diverse human behavior and social organization . . . and that examination of

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those behaviors and organizations could be made in light of this fact. . . . We do not believe these statements constitute merely wishful thinking and will attempt to show, in the last two chapters, how this perception of human growth can contribute to answering such important questions as, "How might school curricula be organized, if school design were consistent with our view of human nature?" and "What teaching methods may work best?" However, before we can begin to answer these difficult questions, we must examine how perceptions affect behavior and amplify our definition of self-fulfillment.

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CHAPTER III

THE MOTIVATION OF BEHAVIOR

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The demands of the environment on ancient man were severe enough to have provided the stimulus for a novel means of responding effectively to environmental conditions. Unlike other animals, for whom instinctual behavior is sufficient to insure basic survival, man's survival has been due to his capacity to use his intellect. Over many thousands of years, the human brain increased in size, making possible the development of a perceptual field of reality and of intellectual powers. These qualities of mind enabled man to create a mental picture of his world and reduce complex and otherwise incomprehensible environmental conditions to understandable terms to which he could then respond. Man's unique adaptive and decision-making ability bestows upon him the special need to remain constantly in touch with his environment, since it provides him with his cues for effective behavior. Unlike other animals that act instinctively, man's environment provides the seed from which his total reality is built.

The maintain a viable relationship with his environment, man must continually modify his perceptions so that they reflect current data about external reality. If he fails to do so, his perceptual field becomes an inaccurate representation of the external world, a consequence as disastrous as using an outdated map in one's travels.

Inaccuracy in the perceptual field would be reflected in incorrect predictions about the environment. But even a perceptual field that accurately portrays the external world does not automatically provide a decision-making apparatus which effortlessly determines the best course of action. Behavior is the result of complex determinants, which interact in characteristic ways, to indicate to a person which of the perceived options is most likely to achieve his goal.

These determinants of behavior which we infer from observation may be individual mechanisms which respond together, or they may be a single force that functions in a variety of ways. To facilitate understanding of behavior, however, we have postulated four tendencies or general principles that affect the ways in which one will behave to achieve satisfying feelings. These are the life-force, the mental powers, the tendency toward consistency, and the tendency toward least effort.

How does behavior arise as a result of the combination and interaction of these four general principles? To answer this question, we must understand what behavior is. We have discussed the organism's need to make choices among perceived options that will achieve the desired emotional results. But the act of choosing is not as simple as flipping a coin or turning on a switch. If decision making were primarily the process of choosing one option from among many, then choices would be the external embodiments of internal meanings. But meanings do not exist in the external world apart from the internal processes that created them. Rather, decision making is a continuous process of interaction between the individual and his environment that creates

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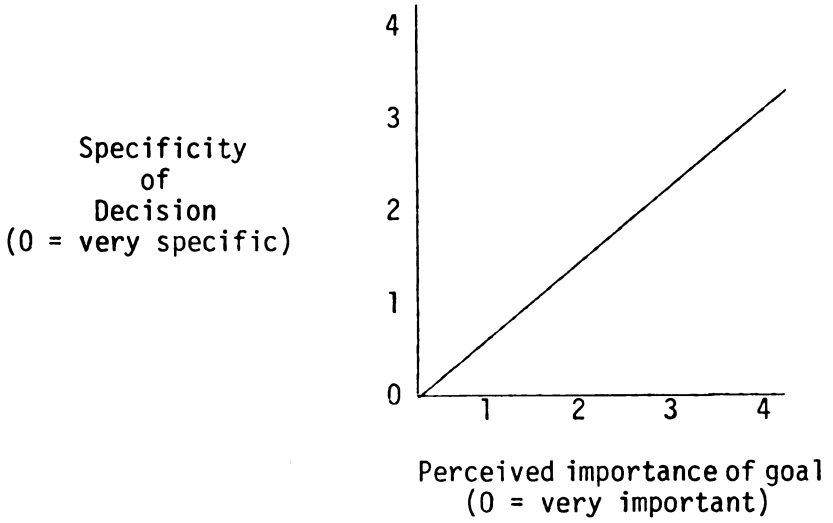
continuous meanings for him, meanings which he must then examine in the light of his chosen goals. This examination and, in fact, the entire decision-making process, usually takes place unconsciously, but it need not. Whether or not one arrives at decisions consciously or unconsciously, the fundamental procedure is the same. Consciousness of the decision-making process is largely a function of perceptions of this process, and perceptions are learned.

Every behavior has as a goal the ultimate creation of satisfying feelings. Each person, though, facing his world each day, has many goals that he may wish to achieve. Many of these are related or are pre-conditions for other goals. Some are serious goals for which the individual will apply great effort, while others are frivolous and easily brushed aside when their achievement becomes difficult or when other goals supersede them in importance. In general, the more important an individual perceives a goal to be, the more specific will be his behavior to attain that goal. The graph below illustrates this point.



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A person faced with the necessity of finding food will make more specific decisions to achieve that goal than he will to marvel at the beauty of a sunset, since eating food is generally more important than watching a sunset. If, however, under different circumstances, this person places a high value on watching a sunset, he will then make specific decisions about his behavior to make sure that he is in the right spot at the right time. Generally speaking, long-range goals do not have the urgency that immediate goals have. Perhaps this is due to the fact that they are further away in time, and immediate goals intervene.

In the process of selecting a goal, each person acts in a manner in which he can predict the consequences of his behavior. These consequences include a general or specific emotional experience. The act of choosing a goal, however, requires the choosing of a host of other goals as well, and many of these may be unconscious choices. Take, for example, a person who decides that he is hungry for apple pie. His goal is to eat a pie that will make him feel the way he remembers it felt when he last ate apple pie. But to eat a pie he must first bake one. Baking requires a variety of ingredients combined in a certain way, some of which need to be purchased, and so forth. All of these intermediate goals must be satisfied before the ultimate goal is reached. However, while most of these goals are conscious, there are many minor, but necessary, goals that must be achieved as well. Included among these are the psycho-motor decisions essential for goal attainment.

The vast majority of goals that every person sets for himself each day are composed of thousands of minute goals. The sense organs

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give a constant source of feedback to the individual who, unconsciously, uses his mental powers to judge the effect of the minute goals on his ultimate desire to achieve satisfying feelings. At any moment when the individual senses that the meaning of his previous "bit" of behavior failed to meet his predictions of what the meaning should be, he is able to alter his behavior. Such failure may have been due to inaccurate predictions or to a change in external conditions. He can then change goals, cease further behavior toward the goal, or repeat his previous behavior.

An example that shows clearly the nondirectional nature of minute decisions inherent in the decision-making process is the case of a simple conversation which has some specific goal: the reduction of tension, the request for a favor, an agreement on some matter, a clarification of views, or other purpose. The decisions, both conscious and unconscious, that each party must make in a conversation are innumerable. The vast combinations of words, gestures, facial expressions, and vocal inflections make practically unlimited meanings possible. The conversational decisions that are selected involve both the ultimate goal as well as decisions based on the reactions of the other party in the conversation: his comments, facial expressions, and so on. Either or both persons may choose to reword previous statements, support their positions better, appeal to specific feelings or beliefs in the other, and, in general, maintain a constantly flexible position ready to respond to changes in their dialog.

Behavior, then, which has been referred to as a choice or an option is really the result of many actions caused by the interaction

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of the individual and of his environment. The motivational forces behind any decision making are the four general principles named earlier.

ii

The Life-Force

The basic drive behind all animal behavior, as old as life itself, is what we will call the "life-force"--the internal pressure on the bio-psychological systems to keep them from reaching equilibrium with the environment, which is death. A most primitive instinct, the life-force undoubtedly arose as a condition of physical survival eons ago. For millions of years, this force has operated to insure that basic conditions necessary for life did not fall below the biological minimum. Thus, the life-force generates the search for food, the avoidance of predators, the building of homes or dens, the stimulus to reproduce, and other physical conditions necessary for individual or species survival. Operating as it has for so long in the biological realm, it is little wonder that the responses of the life-force have become very specific.

When a serious threat to the self is present, the life-force stimulates specific behavior to combat this threat. If one does not get adequate nutrition, for example, he may feel tired and seek rest, which is his body responding to the threat by decreasing energy output and the need for food. In some cases, a deficiency in a nutrient may cause a craving for foods which contain that nutrient.

With the evolution of the mental powers and of the accompanying ability to create a perceptual field, the basic life-force also began

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to protect the perceptual field--the all-important world view. The world view enabled man to make effective decisions, and, as such, was crucial to his existence. A serious threat to one's perceptual field may very well incapacitate him, because his decisions then have no basis in what he perceives to be reality. The most critical of these perceptions are self-perceptions around which all other perceptions are created.

Just as the life-force generates action to defend the organism from threats to its physical well-being, so, too, does it generate action to protect self-perceptions from attack. No person can weather, unscathed, attacks on his deep-seated views of himself any more than he can be deprived of food and water. If a person places strong faith in his independence, personal strength, and ability to cope effectively with adversity, he will resist any perceptions which might cast doubt on these personal traits. To believe adverse criticism of such significant self-perceptions would be catastrophic; although physical death would not result, one may become incapable of making effective decisions to maintain the self. The significant self-perceptions under attack may not necessarily even be "positive" or "useful" perceptions from an external point of view. One's belief that he is lazy and unloved may be so much a part of his world view that any criticism of this belief will be just as strongly resisted as if it were a "positive" perception.

Since the importance of the perceptual field and of the intellectual powers for survival is such a relatively recent phenomenon, the life-force has not evolved the specificity with which to cope with serious threats to significant self-perceptions. Such threats are

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countered by general defensive responses on the part of the threatened person, such as refusing to recognize the possible validity of alternative ways of one's viewing himself. Another typical response is to discredit threats to self-perceptions. The source may be called into question, or the mental process that dealt with the contradictory perception may be seen as responding inadequately. These defensive responses to perceived threats to the self may suggest why punishment does so little to change behavior and why a confrontive encounter with another is not likely to achieve change: one simply becomes unreceptive to the alternative behavior or viewpoint.

These defensive responses may explain why it is so difficult to help people with negative self-perceptions to see themselves in a more positive light. To do so is to require them to reconstruct part of their world view and acquire a new set of assumptions. Such a task will usually meet with resistance. It is arduous, requiring time and energy, and there is no assurance that the resulting feelings from behavior based on a different world view will be any more satisfying. One must have faith in the possibility that a different perceptual field will be more fulfilling before he will take such a drastic step. Such a faith may be instilled by a close friend, a teacher, a counselor, or a therapist --someone who clearly cares about the individual, who does not intend to destroy his ability to make effective decisions, and who supports the individual and his efforts to live a fulfilling life. The threat to significant self-perceptions may lessen, and, consequently, resistance to accepting different self-perceptions may lessen as well. Thus, the struggle to change self-perceptions may become easier, successful, and undertaken willingly.

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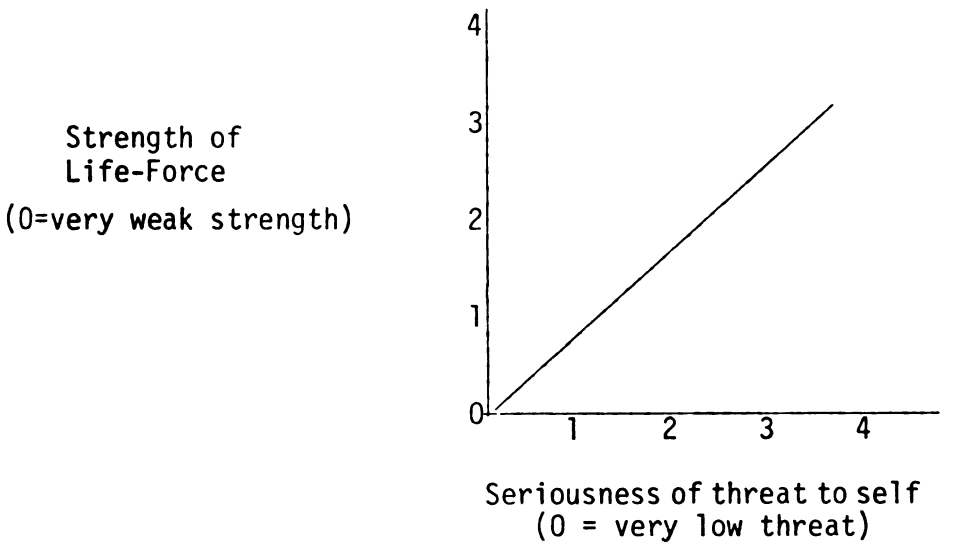
What role does the life-force play when people have adequate basic necessities and reasonably secure self-perceptions? Does it continue to generate behaviors toward some goal, or does it cease to function? We believe that it continues to generate behavior that will result in pleasant feelings, although its force is much weaker when a threat is absent. In fact, we believe the life-force is behind the desire to increasingly satisfying feelings that ultimately may lead to self-fulfillment. Below is a graph illustrating the strength of the life-force compared to the seriousness of a threat to the self.



There exists a continuum of purposive behavior from that generated to acquire the basic necessities for the maintenance of life on the one end, to the ultimate decision-making process--self-fulfillment--on the other.

Effort to acquire basic necessities _____ self-fulfilling decision making

For millions of years, the life-force has affected behavior almost exclusively at the basic need end of the continuum, and consequently, it

generates specific actions to respond to physical threats to the well-being of the organism. However, man has for a comparatively short time been able to transcend the need to devote all of his time and energy to securing basic necessities. While the life-force generates behavior toward increased satisfaction, it does so weakly the greater the distance one moves toward self-fulfilling decision making. Thus, while threats to the self will be strongly countered, threats to significant self-perceptions are only met with a generalized response.

iii

Mental (Intellectual) Powers

Because of man's requirement to cope more effectively with the conditions of his environment, his brain developed unique powers of comprehension, application, analysis, synthesis, and evaluation [4]. These intellectual qualities, along with the equally unique perceptual field of reality, enabled man to make effective decisions. Though they developed together and are integrally related, the intellectual powers and the perceptual field are two distinct elements, and are both essential for decision making.

The role of the mental powers is threefold. First, these powers determine which sensory data are relevant for the individual so he may cope effectively with the forces and events in his immediate environment. This requires a selection process, for all data are not equally important. The situation must first be understood or comprehended, a function of the most basic of the mental powers. Without such comprehension, sensory data may well be generated that will have no meaning for the individual.

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Analysis, too, may be used to create meanings from sensory data that are confusing because of the complexity of the source of those data. Using this power, one determines what is relevant and what is not and the relationships between the relevant data. From the sensory data that have been judged to be pertinent, perceptions may be formed, which, of necessity, are an oversimplified representation of the environment. These perceptions are then related to previous perceptions to contribute to a more highly differentiated world view.

The second function of the mental powers is to process the elements of the perceptual field in ways that provide explanatory information about oneself and the external world and predictive information about future events. Rather than operating directly on sensory data as does the first function of the intellectual powers, these powers--primarily those of application, analysis, synthesis, and evaluation--operate on perceptions alone. The ability to apply a concept to an unfamiliar situation is an example of this power. This would occur in the case of a mechanic who is used to repairing only automobile engines. He has developed in his mind an understanding of the functional relationships between the various parts of the internal combustion engine. His perceptual field includes an understanding of how the passage of gasoline, the emission of exhaust, the electrical current, and other forces cause the crankshaft to turn. If a customer brings him a lawn mower engine that will not start, the mechanic would probably understand how it is supposed to operate, even though he had never seen one like it. The picture in his mind of the functional relationships between the components of the automobile engine could be modified sufficiently to

apply to the smaller engine. As a result of his efforts, a new set of perceptions--those relating to lawn mower engines--will be incorporated into his perceptual field. Thus, the mental powers are used to respond to specific situations, by acting on perceptions to create still other perceptions, which may later become part of the perceptual field.

The third function of the intellectual powers, and one to which we have alluded already, is establishing a relationship between personal experiences and the appropriate perceptions in his world view. This relationship provides the theoretical framework for creating meaning from that experience. Not only does one use his intellectual powers to create meaning from his experiences, but also he uses these powers to determine what behaviors are most appropriate. The answer is not always clear, and sometimes it is even thoroughly confusing. Let us take the case of a doctor examining a sick patient: He must correlate the symptoms that the patient describes, the symptoms that he observes, and the results of diagnostic tests. The doctor then must theorize what is wrong with his patient, based on previous learning and experience. If his theory suggests a specific illness, the doctor may conduct further tests or check for symptoms that he knows must be present if his theory is correct. In this instance, the doctor is not using his mental powers only to incorporate information into his perceptual field, as he did as a medical student; nor is he using these powers solely according to his own prior perceptions, as he did when he constructed his theory of his patient's illness. He is using his intellectual powers to establish a relationship between the realities of the external world and the world of his perceptions.

All people use their mental powers every day in making choices that bring about satisfying feelings. The process is automatic, though not always accurate. One's analysis, for instance, may not really be an analysis at all, but the identification of superficial components in an external situation or in a perception. Or one's efforts at synthesizing evidence or perceptions to form a composite theory may leave significant evidence out. This suggests that not only is there a wide range of intellectual ability possible, but also that this ability can improve. As we will discuss in the next chapter, the development of these powers is a key to self-fulfillment.

iv

The Tendency Toward Consistency

Every living system strives toward the creation of internal balance, which is a condition for life. Each organism must continually supply its cells with nutrients, remove waste, replace or repair dying or damaged tissue, maintain the proper blood chemistry, coordinate the responses of internal systems, and so on. If an organism becomes unable to function in a way that maintains the proper relationship between the internal systems, death may result.

Critical complications, too, may arise from disequilibrium of the perceptual field, a condition that is analogous in many respects to a serious threat to life. Such disequilibrium may occur when some perceptions fail to interrelate in jig-saw fashion with other perceptions that the individual has, to form a coherent, consistent picture of reality. The more basic these perceptions are for the maintenance

of the individual's world view, the more serious this situation becomes. Let us take, for example, a person who has developed the belief that behavior is motivated by selfish intentions and that he must, therefore, protect himself from others. But, at the same time, many people treat him with respect and kindness, creating perceptions that conflict markedly with his previous perceptions. These dual views about his relationships with others are fundamental views of reality and must generate inconsistent behaviors. Actions consistent with one cannot be consistent with the other. This situation will continue until these contrary perceptions are made compatible, or until one of them is eliminated.

So serious is the situation caused by inconsistent perceptions that one will strive to create unity in his perceptual field and especially among his significant self-perceptions. He must do so, for an accurate world view is vital to his survival. The perceptual field that most people create from diverse and even incompatible perceptions is sufficiently consistent to give the impression of an accurate portrayal of reality. Thus, one's behavior is meaningful to him and consistent from his point of view at the moment when he acts, for he tries to make the best decision that he can from the options he sees available to him. The consistency of the perceptual field has caused Prescott Lecky to note that behavior is usually in character, not because separate acts are related to one another, but because all the acts of an individual have the goal of maintaining the same structure of values [41, p. 51].

If one's structure of values if fragmented, inconsistencies will create behaviors that either are so inappropriate for the situation that

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they create unpleasant feelings for him or behaviors that are viewed by others as inappropriate. In such a case, one may seek or be made to seek the help of a therapist. The goal of one who seeks such professional help is the same as the goal of everybody: to create pleasant feelings, which are the consequences of behaviors that, among their other characteristics, maintain the consistency of one's values.

To say that the perceptual field moves toward consistency does not mean that it is always consistent. Rarely, in fact, does such a state occur. The process of day-to-day living provides a continual stimulus to create new perceptions, either because of changes in one's physical state or new or different experiences and environmental conditions. These perceptions must take their places within one's world view so as to disrupt his sense of reality as little as possible.

Most people recognize some inconsistencies in their own actions, but are unable or unwilling to do anything about them. And a minor inconsistency does not usually affect, to any appreciable degree, the ability of the person to make satisfying choices. Generally, the inconsistency relates only to a small portion of one's sense of reality and to one which is only seldom called upon to guide decisions. However, if a situation arises that calls for information from that part of the perceptual field which is inconsistent with the rest of it, the subsequent behavior could be out of character when seen from the point of view of one's total picture of reality. For example, white, middle-class liberals usually articulate the belief that racism is wrong, and important self-perceptions may depend on this faith. Such articulated beliefs often emanate from the secure confines of a predominantly

middle-class institution like a university or a nearly all-white suburb. When these people are actually confronted with a situation requiring actions or decisions about this issue, they may find that their values are not as strong as they had perceived them to be. The "What if your daughter married a Negro?" question is a cliché now, but it represents a kind of inconsistency within one's world view that may not manifest itself until the conditions are right.

It is somewhat misleading to speak of perceptions and behavior as if they were distinctly separate entities. Behavior, of course, depends on perceptions, but perceptions depend on behavior as well. The interdependence of these two characteristics of man is just as crucial to human life as the interdependence of the perceptual field and the environment. A young child who touches a hot stove forms a rapid and indelible perception about the relationship between stoves, heat, and pain. Many perceptions concerning man's relationship to environmental conditions would not and could not develop were it not for some behavior on his part.

The person who responds to an external situation by some action that is consistent with his perceptual field may, if his behavior achieves the predicted result, reinforce his own views of reality. On the other hand, if his behavior does not achieve the desired result, he may choose to modify either his perceptions or to assume that his behavior was inappropriate, or both. Decision making can almost always be improved, and an individual may recognize his own shortcomings. However, decision making is always related to one's perceptions of reality. Helping students acquire accurate and differentiated perceptions are fundamental tasks for teachers and topics we will discuss later.

v

The Tendency Toward Least Effort

George Kingsley Zipf, in his Human Behavior and the Principle of Least Effort [85], stated, "It is the expressed purpose of this book to establish the principle of least effort as a primary principle that governs our entire individual and collective behavior of all sorts." Relying heavily on the study of linguistics to prove his point, Zipf provides empirical evidence for a human law of least effort. Through the use of statistics, he shows that there is an inverse relationship between the length of words and their frequencies of use, and claims that this is because the effort required to pronounce a long word is greater than that required to pronounce a short one. Zipf ends this treatise with this statement: ". . . We are finding in the everyday phenomena of life a unity, an orderliness and balance that can only give faith in the ultimate reasonableness of the whole person whose totality lies beyond our powers of comprehension" [85, p. 544].*

In its broad application, the principle of least effort may serve as an explanation of all animal behavior. However, we feel that fuller understanding of personality development and the motivation of behavior can occur by postulating other forces or tendencies that affect the individual as well. In this way, we can more directly

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*Others have found fault with this approach. Joseph H. Greenberg, writing of Otto Jespersen who believed, with Zipf, that the general movement of languages is toward simplification, has said, "What is probably an internally conditioned drift toward morphological simplification [of Indo-European languages] has therefore been mistaken for a universal linguistic trend. An objective survey fails to disclose any decisive correlation between morphological complexity and usual criteria of cultural evolution" [27].

relate behavior to what we feel are the causal forces or tendencies. An all-encompassing principle as that of "least effort" might require forcing the evidence to fit the theory. In order to avoid this situation, we are postulating, therefore, a fourth determinant of behavior, a tendency within each human and nonhuman animal to achieve goals (both conscious and unconscious) using the least effort possible.

Like all of the tendencies we have discussed, the tendency toward least effort evolved as a mechanism for survival. Probably as ancient as life itself, this tendency gradually came to be a basic determinant of behavior long before proto-man emerged. Those animals which were able to secure basic physical necessities with the least effort had a better chance of survival. First, they required relatively less food, because their energy output was relatively less. Since their energy output was relatively less, they were better able to flee, fight, or meet other basic survival requirements. The animals that survived possessed this trait and passed it from generation to generation.

With the advent of theorizing man, this tendency became modified. No longer did it affect only the physical output of energy, but, since the perceptual field and the intellectual powers played such a crucial role in man's life, it began to affect these areas as well. When man considered possible goals, this tendency narrowed their number and influenced the process chosen to achieve those goals by making more appealing the one that was perceived to require least physical, emotional, or intellectual effort. This tendency is a guiding force that suggests that over a period of time the paths of least resistance will be followed. To do otherwise is simply an inefficient and wasteful use

of energy. This tendency can be seen at work in any school classroom. If a child is able to select his goals, he will generally select those that minimize the amount of energy he must put forth. If, as is usually the case, the goals are selected for him, he will minimize the effort needed to achieve the goals. Teachers recognize this tendency at work in their classrooms. They usually assign homework, test students, and award grades so that in order for the student to achieve his goal, the minimum effort required--which is the minimum level of performance--will be a certain degree of effort with which the teacher feels comfortable. Most teachers realize that if they suddenly dispensed with all course requirements, their students would likely reduce to a minimum the amount of effort they will put forth in that class.

The tendency toward least effort not only affects behavior; it also affects the effort that the mental powers exert on perceptions to create higher-order perceptions. Generally speaking, thinking is hard work and is often resisted. The temptation is great to seize on simplistic explanations and easily understood analyses that give the impression of describing reality accurately.

Thus, the tendency toward least effort affects the perception of choices, as well as behavior. Suppose a man is leaving his place of work for the day. If his goal is to get home in the shortest amount of time, he will probably take the route that allows him to achieve the goal the easiest way. That is, he will take what he perceives to be the least effortful--though not necessarily the shortest or the quickest--route. It makes no sense to do otherwise, and, without thinking about the process for achieving his goal, he will naturally make the choice

that requires least effort. If, however, one's goal is not only to arrive at his house, but also to experience the beauty of the fall colors in the nearby countryside, he will alter his travel plan and will take a route that he perceives will enable him to achieve his new goal. His second route will probably require more effort, but it is still the easiest and most efficient, from the standpoint of the goals he has chosen.

The idea that people seek to minimize the amount of work or effort that they put into the attainment of a goal has been included in discussions of motivation for a very long time. Classical free enterprise economic theory, in fact, is based on the premise that each person will seek the most satisfaction for his money, the most money for his labor or for the commodities he is selling, and the most efficient use of land, labor, capital, and management.

Adam Smith, whose The Wealth of Nations (1776) provided a teoretical basis for capitalism, wrote,

> . . . It is the interest of every man to live as much at his ease as he can; and if his emoluments are to be precisely the same, whether he does, or does not perform some very laborious duty, it is certainly his interest . . . either to neglect it altogether, or . . . to perform it in as careless and slovenly a manner as . . . authority will permit [72, pp. 717, 718].

About a hundred years after Adam Smith, Henry George published his classic Progress in Poverty (1880), in which he agreed with Adam Smith that human efforts to conserve energy provided a scientific base for free enterprise economics. He wrote, "The fundamental principle of human action--the law that is to political economy what the law of gravitation is to physics--is that men seek to gratify their desires with least exertion" [21, p. 204].

Robert Assagioli has said of the human tendency toward least effort,

> A realistic observation of the flow of the psychological life in ourselves and in others shows clearly the existence of a number of differing and conflicting tendencies. . . . Another basic conflict is that between inertia, laziness, tendency to preservation, craving for security (which expresses itself in conformity) on the one hand, and the tendency toward growth, self-assertion and adventure on the other [1, pp. 36, 37].

Abraham Maslow also realized that a tendency toward safety, security, and least effort occurs in all people. After several discussions on this point with Frank Goble, author of The Third Force [25], Maslow added the word "challenge" to his list of environmental factors necessary for self-actualization [24].

vi

Now that we have described briefly the four forces or tendencies that are the internal determinants of behavior, we are ready to see how they affect perceptions to cause one type of behavior instead of another. To illustrate the decision-making process, we will take a common situation and show in some detail how choices might be made in terms of the four determinants of behavior. We have selected for our decision-making study a mythical school administrator--a Dr. Jones--whom we will observe for part of his working day. We have acquired special research skills enabling us to examine not only his behavior, but also the internal processes that give rise to that behavior.

Let us suppose that our administrator's current task is to make a decision between several competing curriculum innovations proposed for the following year. Not only must he review the proposals and make

a judgment on educational grounds, but he must also choose a program that has community support and the support of the faculty. This, then, is part of Dr. Jones' environment--the external conditions with which he must contend.

The goal which Dr. Jones seeks is that of maximizing pleasant feelings or, inversely, of minimizing unpleasant ones. In order to know what specific behavior he will choose to maximize satisfaction, it is necessary to understand Dr. Jones' perceptions of his world, for they are an important key to his behavior. Dr. Jones, like all other people, will only perceive as possible options those experiences or behaviors that, because of his unique personal history, are real or true for him. Thus, from the vast potential number of choices available to him, Dr. Jones perceives a very limited selection from which he will choose. Satisfying feelings may come from his belief that he is contributing to the education of students, that he is pleasing his colleagues, community leaders, or faculty members, that he is receiving a regular paycheck with which he can buy goods that give him satisfaction, or a combination of these motivating factors. In all likelihood, satisfying feelings derive from his achieving a variety of goals, some of which may be contradictory with one another. Satisfaction might come from his choosing the curriculum innovation that he believes will most significantly improve education for the children in his district. On the other hand, community leaders, who are the administrator's friends and from whom he also derives satisfaction, may object to the proposed innovation. Many other factors may also contribute to his goals, not the least of which might be pleasing the powers-that-be that guarantee him his job.

Even before Dr. Jones' day begins, we can make very rough predictions about the types of behavior in which he will engage. They must satisfy four conditions: first, he will engage in purposeful behavior from his point of view; second, he will engage in behavior that he perceives as affording the greatest satisfaction; third, all his behavior will be consistent in terms of his perceptions and his goals; and fourth, his goals and behavior toward those goals tend to represent the least effortful choices. The satisfaction he seeks may not be immediate satisfaction, but, depending on what he perceives as desirable goals, satisfaction may occur only after a long period of unpleasant prerequisites.

Upon entering the administration building, Dr. Jones greets the receptionist, secretaries, and his colleagues and engages in casual small talk with them. On the one hand, he may value their friendship--his relationship with them is enjoyable. On the other hand, however, such behavior is a way of testing the environment, in this case the office complex, to sense the moods and dispositions of others with whom he must work. It is to his advantage to ascertain the psychological climate, so that he can use such information later to his advantage in his decision making. If, through this informal and nearly unconscious testing process, he discovers that the superintendent had an argument with his wife, Dr. Jones may consciously choose not to discuss a controversial aspect of the proposed curriculum alternatives with him on that day.

When he is ready to begin his day's work, Dr. Jones has already registered in his mind certain information about his environment that

will facilitate his acquiring the satisfying feelings which are his ultimate goals. He has discovered this information using the easiest, least threatening means that he perceived available to him--casual conversation coupled with careful observation of those with whom he was speaking. Dr. Jones could have approached the goal by a different route. He could have asked each person directly for a report on his mental health. Not only would this approach result in less accurate information, for it would probably not elicit honest responses, but also its directness would cause tremendous anxiety. The tendency toward least effort militates against the direct, confrontive approach.

All of the psycho-motor responses Dr. Jones made from the moment he awoke are, of course, unconscious. They and other unconscious decisions involve hand-eye coordination, such as the many decisions that must be made while driving a car, and the delicate sensing of others' meanings of their language, facial expressions, and vocal inflections. The primary difference between those behaviors that are unconsciously and those that are consciously motivated is simply that the reasons for some have entered the conscious mind, while the reasons for others have not. Awareness of one's motives is a function of experience, intellectual ability, and the desire to understand his reasons for behaving the way that he does.

Sitting down at his desk and scanning the curriculum proposals, Dr. Jones must make a decision. He has met with various representatives, reviewed the budget, and has read hundreds of pages of rationales for each proposal. He must weigh in his mind the effects of any decision. That is to say, his intellectual powers will enable Dr. Jones to acquire

a mental picture of how the programs will appear in operation and their consequent ramifications for other programs, present and future, for the education of the school district's children, and for his own goals for personal satisfaction. Such mental picture will require the formation of higher-order perceptions from the basic information presented to him. These perceptions will fill the enormous gaps, which exist in even a detailed proposal. Dr. Jones will construct probable situations that might arise from the adoption of such a proposal and the probable consequences of those situations. The more realistic Dr. Jones' perceptions are, the more accurately will be his predictions about the consequences of the curriculum innovation that he finally selects.

Another important consideration affecting Dr. Jones' choice of proposals will be the effect of that choice on his time and energy, once the decision has been made. The tendency toward least effort suggests that if one of the options will require a difficult job of "selling" to the various factions in the community, it may be rejected because it is "not worth the trouble." On the other hand, a proposal that, once it has Dr. Jones' approval is out of his hands and frees him for other pursuits, may well be the one that is finally approved.

Our brief observation of Dr. Jones has been an attempt to tie together the four factors which, along with the perceptual field, are the determinants of behavior. Though our description of the decision-making process was over-simplified, it suggests that these factors operate simultaneously and influence, to a greater or lesser extent, all aspects of decision making.

The difficulty in identifying the specific effect of each of the determinants of human behavior is that the effect changes from

situation to situation, though we assume that each determinant is always present. Furthermore, some of the determinants generate contradictory behaviors. The life-force generates in the organism the need to explore, to investigate, to experience satisfying feelings for the self, on the one hand, while the tendency toward least effort minimizes activity and promotes safety.

Most personality theories recognize the contradictory tendencies to explore and reach out, on the one hand, and to maintain safety on the other. "One can choose," Maslow writes, "to go back towards safety or forward towards growth. Growth must be chosen again and again; fear must be overcome again and again. Anything that increases fear and anxiety tips the dynamic balance between regression and growth back towards regression and away from growth" [46, p. 3].

vii

Thus far, we have discussed the development and functioning of the perceptual field of reality and the motivation of behavior. While this does not provide an adequate basis for the prediction of behavior, it does suggest avenues of investigation for future research as well as certain processes whose understanding will contribute to an understanding of behavior.

It is difficult to predict--let alone understand--human behavior, because the human organism possesses a brain which functions in ways that cannot be compared to those of any other animal. This boon to man is a bain to the investigator of human behavior. Unlike animals whose responses to environmental conditions are fairly direct and

subject to understanding, man can create his own motivation. All human behavior has its roots in sensory information that the organism has acquired from the environment. But man can use his intellectual powers to transform his initial perceptions into higher-order perceptions, thereby creating new meanings to facilitate his understanding of his world. Although much of man's specific behavior is, at this stage in our understanding, impossible to predict, we can formulate certain guidelines or principles to suggest general criteria that behavior will meet.

Since each person possesses a unique perceptual field which has developed because of his peculiar life experiences and which determines behavior that will be satisfying to him, the first step in the predictive process must be an understanding of that perceptual field. This is tantamount to knowing another person intimately--an endeavor that can easily take a lifetime, and, for practical purposes, is an impossible task. A realistic alternative is to identify and to understand the past behavior, for it will suggest what the significant self-perceptions of an individual are. These perceptions are very likely to be consistent both with his present behavior and with the elements in his perceptual field.

The implications of this general predictive pattern are enormous for teachers and others for whom the prediction of behavior is important. Though this pattern is extremely general at this point, the elements of a more sophisticated system are present. Effective teaching involves a sensitive balance between an awareness of the world views of one's students, an awareness of the external conditions that affect them, an

ability to understand those conditions, and an ability to develop and put into practice techniques that one predicts will facilitate the development of the intellectual powers and the perceptual field. Arriving at a proper balance obviously requires careful thought about these issues and inevitably requires judgments about reality itself, knowing full well that it is a manifestation of one's own perceptions.

CHAPTER IV

THE AGONY OF ECSTASY

i

Man's successful adaptation to environmental conditions has been a triumphant evolutionary achievement. He has developed ways to meet his basic physical needs by using his intellectual powers to create a perceptual field of reality, and he has formed complex social systems in which to do this. Furthermore, once his basic needs have been satisfied, man desires a higher quality to his life and seeks experiences that provide increasing satisfaction for the self.

Man's ability to insure the satisfaction of his basic needs on a mass scale has been possible for a realtively short time--probably about 10,000 years. This historical point in time represents the earliest occasion that man was able to accumulate and to protect surplus commodities on a large scale. This surplus allowed people the freedom to devote some of their time and energy to pursuits other than the acquisition of basic necessities. However, although social systems have evolved primarily to enable people to satisfy their basic needs, they have not developed institutions or customs supportive of personal growth. We will explore this issue further in this chapter.

While man has the intellectual capability to become self-fulfilled, he also has powerful tendencies toward security, tendencies that can easily overwhelm his desire to reach out, explore, and try new

experiences. These tendencies are those that limit him to actions which he has tested and found safe. Acting together, the tendencies toward growth and those toward security generate behavior that, for most people, is safe and nonthreatening. Is man, then, destined to live knowing that whether or not he achieves a fulfilling life depends on innate tendencies over which he has no control? Is he like Sisyphus, condemned forever to push a huge boulder up the mountain, only to see it roll to the bottom, just as he nears the summit? The vast majority of people live in just this way. They believe their condition and their prospects for improvement are dependent on forces over which they have no control. They see luck or fate playing a large role in their lives. However, since we believe that self-fulfillment is within the capacity of each human being, the profoundly disturbing questions at the heart of our investigation are: "Why do so many people live unhappy, unsatisfied lives?" and "What can teachers do to change this situation for their students?" A discussion in some detail of the process of self-fulfillment may shed light on ways in which we may be better able to help ourselves and others develop such a process.

Heretofore, we have dealt primarily with the individual and with the development of his psychological nature, by focusing on the development of the perceptual field of reality and the internal forces and behavior as its consequence. We have only briefly mentioned the environment, which we earlier defined as both the natural and the social forces that affect one's life. The forces of the environment include physical restraints, which man must overcome to survive, and social restraints, which inhibit behaviors not conducive to the acquisition of basic

necessities. The environment is fundamentally hostile to man's living a fulfilling life, and such a life can occur only when he has developed the ability to cope effectively with its hostile nature.

The natural environment has, for many millions of years, presented to all forms of life an uncompromising and consistent barrage of forces, with which plant and animal life alike has had to contend. The burden of survival has always been on the living organism and never on the natural environment, whose forces act dispassionately according to natural law, irrespective of the needs of living organisms. A harsh environment has forced extinction on all but a relatively few of the countless forms of life which have emerged on earth, and those that have survived were able to make sufficient changes in their structures to adapt to changing physical conditions. Since the natural environment imposes on man a set of circumstances which limit rather than expand his possible choices, man must develop strategies to deal with the obstacles and also to enhance his satisfaction. But this is only half of the challenge before him: the social environment also imposes restraints on his self-fulfillment.

Though man's relationship with the natural environment is one which requires of him any and all accommodation to its forces, his relationship with his culture is entirely different. While it, too, presents a structure of controlling social forces to which he must adapt, it also provides or creates certain conditions that enhance survival and even the possibility of self-fulfillment. Furthermore, unlike the natural environment, the social environment is man-made and hence artificial and changeable.

Social systems developed when man discovered that cooperative actions resulted in consistently more satisfaction than was possible when humans engaged in individual actions. Community living required, and its success depended upon, cooperation among the members of the community. The behaviors of individuals must complement one another to secure basic necessities, and the community members must perceive others' behavior as complementing theirs. One person who failed to behave in such a manner could have seriously jeopardized morale in the community, and consequently, could have jeopardized the community's survival.

In order to secure basic necessities for its members, every culture has created formal arrangements for minimizing potential conflicts over the mode of acquisition and distribution of basic necessities. This has resulted in restricting from the range of possible behaviors those actions likely to be inimical to the efforts of the group to survive. All societies impose limits on the behaviors of their members in order to insure that its ability to survive will not be in danger. Those who transgress these boundaries face social sanctions, the harshness of which depends upon the infraction. Culture, then, channels man's vision, minimizing the likelihood of certain behaviors that are perceived to be hostile to the group effort. It therefore maximizes the likelihood that others will occur that enhance the traditional goals of satisfying the requirements necessary for survival.

In order to guarantee that the community members would cooperate on mutually beneficial tasks with a minimum of coercion, techniques of social control evolved. The primary technique of social control is

the inculcation of common perceptions concerning significant aspects of the community's history and goals. These cultural myths have become part of the perceptual field of reality which, in turn, influence behaviors that are compatible with this reality. For example, in a society that depends on hunting--traditionally a man's role--male children will grow up seeing no other role for themselves as adults than that of a hunter.

But the cultural perceptions of reality taught to each person are often far subtler than this. They affect every aspect of one's life. Even his language carries with it cultural perceptions of reality. By its very nature, language influences to a considerable degree what is and what is not perceived [62, pp. 150-151]. Certain words carry with them special meanings that relate to and help create cultural reality. It is difficult, for example, to perceive something if there is no word for it: for this reason, the Navahos do not perceive the color orange; their language has no thought symbol for it. On the other hand, a language may contain many words for objects that are especially important to the environment. There are, for instance, 6,000 Arabic words dealing with camels, including 90 to describe camel pregnancy [62, pp. 150-151].

In English the word "love" may influence our perceptions of that emotion more than we realize. It is a general expression that we use to describe a great many relationships. One might "love" his neighbor, his wife, his child, his mother, his job, his dog, the weather, his country, his freedom, money, and so on. And each "love" is qualitatively different. One can only specualte as to how the perceptions of English-speaking

people would differ if there were, let us say, half a dozen specific expressions for which "love" is now used.

Society--composed of people whose perceptions and behaviors together form their culture--influences what is and what is not perceived. No individual, confronted with a natural and social environment, is able to see the vast number of possible choices for decision making, because his community has eliminated most of them from possible consideration by systematically reinforcing behaviors compatible with the prevailing myths, and by discouraging others. Society also presents so consistent a view of the acceptable reality that one cannot help but learn it--because no other view is available. We must not underestimate the power of the important people in one's life to influence his perceptions. One learns from others--especially from significant others--the appropriate responses to most situations. Those whom one will tend to emulate will be people from whom he seeks approval: parents, teachers, and friends. These people have the ability to give rewards, praise, status, and emotional support--all of which provide satisfaction, since they reinforce significant perceptions.

To insure the satisfaction of basic physical needs, every culture must disregard the unique personality of each of its members and develop a system compatible with an idealized personality type characteristic of that culture. This personality type is defined by the romanticized memory of personal traits necessary in the past and by those believed necessary for the future. Incorporated into the cultural myth, the idealized personality type represents an amalgamation

of those personality traits that are most valued for the survival of the community. In traditional cultures, the difference between the historical way of life and the present way of life is likely to be small, as is the difference between the idealized personality type and the actual traits necessary to maintain that culture.

The purpose of cultural myths, and particularly the idealized personality type, is precisely to generate certain perceptions that, according to community beliefs, are necessary and appropriate for the maintenance of the social system. However, in technological societies the emphasis on physical survival is no longer so critical. Today, due largely to improved agricultural productivity, many people in industrial countries can meet their basic physical needs without having to devote all of their time and energy to that task. The battle to survive is really no longer a struggle for basic necessities, but rather a struggle to discover a meaning for one's life and to have qualitatively better experiences than ever before possible.

This curious twist, caused by man's success, has rendered his social order antagonistic to his effort toward self-fulfillment. Perhaps what is needed is a new mythology, a perception of man, not as one who must struggle to stay alive, but one whose physical existence is assured and who must strive to make his life truly rewarding. In all fairness, however, we must not lose sight of the fact that, while congratulating ourselves that our basic necessities are assured, the vast majority of mankind sees in this fact no cause for rejoicing. Their lives are still literally struggles for survival.

Until society develops structures enabling individuals to experience fulfilling lives, we must realize that society will continue

to acculturate people to the prevailing myths, which guarantee that the behaviors of the members of the group will be compatible with one another and oriented toward the common goal of survival. To achieve self-fulfillment within such a basically hostile environment is exceedingly difficult. It requires nothing less than the ability and desire to moderate the social restraints one faces and to define his society according to his personal goals.

Man's evolution has put him in a dilemma. His adaptation to environmental change has been eminently successful, due to the development of intellectual processes that have emerged over more than a million years. The ability to understand the effects that complex forces and events in the environment have on man has enabled many people to meet their basic needs with unequalled success. But man's intellectual ability does not only enable him to acquire basic necessities. It also enables him to dream of what could be. The difference between his existence and his wishes is the grand dilemma. Restricted perceptions of what choices are available, internal forces that generate protective behavior, and environmental conditions that further limit options seem to make the achievement of self-fulfillment an almost impossible dream.

However, while most people are unable to achieve the qualitatively superior lifestyle that they intuitively know is possible, some overcome the obstacles to self-fulfillment and live fully satisfying and intensely meaningful lives. Is the difference between these two groups of people due to environmental factors alone? In part, of course, it is. People who are born in a country ravaged by war, famine, or political upheaval must devote their energy to physical survival. There simply is neither

the time nor the opportunity for individuals to put forth the effort necessary to overcome the tremendous environmental obstacles standing in the way of self-fulfillment.

Though the environment is always hostile to individuals seeking true personal satisfaction, some conditions are less hostile than others. It seems likely that those raised in a loving family, provided with opportunities for self-expression and self-discovery, and urged to create realistic perceptions about themselves and their environment, have a better chance to achieve self-fulfillment than those who were stifled during their childhood years in their attempts to perceive themselves as capable of coping with their world.

But this explanation is not sufficient to account entirely for the differences between fulfilled and unfulfilled individuals. To be sure, people receive reinforcement for certain behaviors from their environment, and, in so doing, develop patterns of behaving that increase the likelihood of similar behavior occurring again. The degree to which the habits that are acquired through environmental reinforcement contribute to personal satisfaction is the degree to which the environment is conducive to self-fulfillment.

However, the critical element lacking in any environmentalist explanation for behavior is the fact that man, unlike nonhuman animals, can reason, and, while the reasoning process is partly a function of environment, it is not entirely so. Regardless of his environment, man can create options in his mind, form higher-order perceptions, seek substantiating evidence for his views of reality, and act in accordance with what he has rationally determined to be in his best interest. We

therefore contend that self-fulfillment is within the reach of all people, though for many, whose experiences have not encouraged the development of appropriate skills and perceptions, the struggle may be especially severe.

Before we can design a plan of action for helping others, however, we must understand more clearly just what self-fulfillment is. What is the difference between a fulfilled life and an unfulfilled one? The answer to this question will provide us with some clues for helping others attain self-fulfillment. The sources for information pertinent to this question come from our observation of those who appear to be living thoroughly satisfying lives and from a logical extension of our study of human development.

To take control over one's life means to respond in effective ways to minimize the effects of internal and external forces that restrain one from behaviors he has identified as likely to bring a high degree of satisfaction. The important elements needed to live a fulfilling life are the same elements that have made possible human survival: the mental powers and the perceptual field of reality.

While all people use their mental powers to choose behaviors that are perceived to bring a predictable degree of satisfaction, self-fulfilled people are able to do this more consistently, more effectively, and their predictions of the results are more accurate. This superior level of decision making is a function of well-developed mental powers, of a highly differentiated and accurate perceptual field, and of the will or desire to make effective decisions.

Of the four determinants of behavior that we discussed in the last chapter, the mental powers are most subject to conscious control.

The other three--life-force, tendency toward consistency, and the tendency toward least effort--are so deeply rooted in man's psyche and respond so automatically that they are not directly available for examination or for control. But, by using his mental powers, man can not only come to understand his safety-oriented tendencies that inhibit growth, but he can also partially control these forces, if and when he chooses to do so. Furthermore, through use of the mental powers, he can develop a deep awareness of his motives, feelings, self-perceptions, and needs, as well as an awareness of the anticipated feelings that certain behaviors might bring. Such awareness allows an individual to understand consciously the internal processes which lead to behavior and to analyze them and the behaviors they generate in terms of his consciously determined goals. If he finds that his unconscious impulses to act are not consistent with his goals, he must take some remedial action. His decision might be to alter or to postpone his goal-directed behavior and to allow his internal forces to generate behavior, rather than to override those forces with his conscious mind. We often refer to the process as "intuition" or a "sixth sense," when we allow internal forces to dominate our decision making, even though our conscious thoughts may be urging other behavior. Often these forces can generate effective behavior by using sensory data in ways that the conscious mind cannot. What would be preferable, we believe, is to develop one's mental powers so that "intuition" could be analyzed and its component parts discovered.

If an individual's intuitive impulse to act is not consistent with behavior toward his goals, and if he has determined that achievement of his goals will bring greater satisfaction than engaging in the

behavior urged by internal forces, a most difficult decision will be necessary. Such a decision will be nothing less than behaving in a manner that runs counter to the internal forces. Since these forces evolved precisely in order to generate behavior essential to survival, they are powerful indeed. Self-fulfilled people are able to muster the strength to control these forces, when their mental powers determine that their control will be in the ultimate interest of the self. The strength required to control consciously one's behavior in the interest of the self should not be underestimated. Tremendous effort must be made again and again, because, although one may develop skills making such conscious control easier, the internal forces are deep-rooted and always urge survival-related behaviors that guarantee safety, security, and least effort. Evidence of the extreme difficulty with which conscious decisions are made can be seen in the vast number of people who have plans, dreams, ambitions, and goals that are never fulfilled. They act as if the forces preventing their achieving what they desire are overpowering. And for them, they are. What they do not realize is that there are people in similar circumstances who live fulfilling lives precisely because they have not let the internal forces that urge moderation of their dreams maintain the upper hand.

Mental processes serve yet another function in self-fulfilled people. Because people have developed the ability to use their intellectual powers effectively, they can see relationships between perceptions and between sensory data and perceptions better than others can. This ability allows one to create very specific perceptions of the myriad components of his world view. A highly developed perceptual field

contributes to effective decision making by presenting a clearer view of the relationships between elements in the world view on which prediction of the effects of one's behavior is based. The complexity of one's perceptions of reality is related to self-fulfillment, because the complexity makes possible the understanding of subtle, though possibly essential, details of the external world.

Acquiring the ability to see complex relationships between the various segments of one's perceptions of reality is, in large part, a function of learning to use one's mind, and the process of mental development can continue throughout life. Mental development, as well as effective use of one's mental powers, requires considerable effort. The gap is large between the minimum mental effort needed for survival and the mental exertion necessary for self-fulfillment. To refuse to accept as final that which has been neatly described but which appears incomplete, and to attempt to discover the subtle relationships that lie beneath the surface of the issue, may require an immense effort and may run contrary to the basic tendency toward least effort. As might be expected, this all but insures the likelihood that most people will remain unfulfilled.

Closely related to the ability to perceive subtle relationships between forces and events in one's environment is the ability to form higher-order perceptions from lower-order ones. A self-fulfilled person uses his highly developed mental powers to make possible the tasks both of selecting perceptions from which higher-order perceptions can be created and of creating those perceptions.

An additional ability possessed by self-fulfilled people is the ability and the willingness to create or modify perceptions even when they may create extreme discomfort, because the resulting view of reality may conflict with their significant perceptions. It is most difficult, for example, for a person to examine his behavior and to admit to himself that his behavior is not consistent with certain deeply held views of himself. Consequently, for his self-perceptions to be consistent with his behavior, he must modify those flattering perceptions of himself and create, instead, more accurate ones. While the data are always available from which one can examine his behavior, most people are unable or unwilling to do so.

Thus far, in our description of self-fulfilled people, we have identified several characteristics that enable them to make qualitatively better decisions, which directly lead to fuller and more satisfying lives. Using their mental powers, self-fulfilled people have a deep understanding of themselves--their internal forces, their goals, their strengths, and their shortcomings--which is crucial to effective decision making. They also possess the ability, to a greater degree than most, to create higher order perceptions from lower ones, and they can see complex relationships between perceptions or between perceptions and sensory data in ways that would escape most others.

Perhaps the most significant attribute of self-fulfilled people is their ability and willingness to take control of their own lives. The difficulty here is immense, for it flies in the face of deeply rooted tendencies within each person and runs counter also to environmental forces. Self-fulfilled people know, as Søren Kierkegaard said, "To

venture causes anxiety, but not to venture is to lose one's self. And to venture in the highest sense is precisely to be conscious of one's self" [50].

iv

One's perceptual field of reality develops continually over his lifetime, but its development is not merely an accumulation of perceptions of the forces and events which affect him. Rather, having created a multitude of perceptions that describe his world view, each person must constantly judge the accuracy of his perceptions and amend or discard those which no longer are valid. Though all people have the intellectual ability to make accurate judgments about their perceptions of reality, not all of them do so. The degree to which perceptions are accurate probably represents the degree to which behavior creates the desired feeling. A necessary condition for self-fulfillment, then, is the ability to conduct valid tests for the accuracy of perceptions.

Contained in each person's world view are perceptions of different, though related, origins, which require, in turn, different tests of validity. The two types of perceptions that we identify are perceptions of external and of internal origin. These may be seen as polar positions on a continuum. Except in extreme cases, there are external and internal elements of both in every perception.

Perceptions of External Origin

Perceptions of external origin are those which describe forces or events that exist independent of the individual. Included in this category are perceptions of reality for which identical sensory data

are available to a large number of people. Thus, perceptions of external origin include the force of the wind, the heat of a fire, a wheel, social customs, the power of the leader, etc. These perceptions are not limited in time or space, for they can travel in the form of ideas.

It was only when man was able to acquire knowledge from remote sources, both in terms of distance and time, that customs and technology could develop. Cultural characteristics could be passed to succeeding generations, which may have added to or modified them, suggesting that perceptions of external origins have a cumulative or modifiable attribute as well. In technological cultures, perceptions of external origin have been combined and modified over hundreds of years to create sophisticated environments, which would have been impossible if perceptions were not cumulative or modifiable. It is this category of perception, in fact, which now enables man to use his time and energy to pursue activities other than the acquisition of basic necessities. He does not have to invent the wheel in order to make use of it. He can simply acquire the perception of the wheel, which has been passed from generation to generation for thousands of years.

By what criteria must one judge perceptions of external origin while, at the same time, recognizing the subjective nature of all experience? The dilemma created by the duality of subjectivity and objectivity is real indeed. One could reason that since every "fact" is only perceived to be so, and since all perceptions are subjective, all facts are subjective, and one person's perception of reality is just as "good" and "true" as another's. In a fundamental sense, this reasoning has merit, though it is a conclusion of last resort, because it evades

verification and assumes the subjectivity of all reality. This is a serious error, for, while man may not be able to discover that which is real or true in an absolute sense, elements of reality and truth do exist in certain perceptions and not in others. Theoretically, it is possible to discover what these are.

Each person must develop processes to test the validity of perceptions of external origin. These processes must inevitably include external criteria, because such perceptions exist within the world views of many individuals. The type of testing process which is selected is important, for it may largely determine the outcome of the test. There is a tendency to use a verification process that confirms one's views regarding the validity of a particular perception, because it requires the least mental effort. How many of us, for example, in order to verify our perceptions, seek out a few close friends who see reality in terms similar to ours? There are other ways to verify perceptions that are not likely to disclose inconsistencies. These include creating "straw men" that can quickly and easily be knocked down, superficial testing, drawing inaccurate or incomplete comparisons, and so forth. Another common method of dealing with the problem of reality testing is to believe that a particular perception is an absolute truth. This "truth" may be a religious belief, cultural norm, or scientific "fact," such as Ptolomy's astronomy, accepted for centuries by millions who, for religious reasons, needed a belief in a geocentric universe.

Testing one's perceptions of external origin thoroughly, accurately, and honestly depends primarily upon the individual's willingness to do so, though he must also possess the necessary skills. And his

willingness will likely depend both on his belief that even if his perceptions prove faulty, significant self-perceptions will not be affected, and in his belief that accurate perceptions are beneficial to him. Testing the accuracy of a perception involves confirmation from a variety of sources as to the meaning of the perception, the procedures for testing it, and the meanings of possible outcomes. Thus, the subjectivity of individual observation and interpretation is reduced, though not eliminated, by prescribing the framework for the investigation and by soliciting others' observations and interpretations as well.

The actual verification of perceptions of external origin is generally a far less formal procedure than the above outline suggests, although it is similar in principle. Consider, for instance, the man who has taken a new job and who wants to understand the relationships between the people there. An accurate understanding of these relationships will facilitate decisions he might make and may therefore contribute to his fulfillment. A reasonable way to gain this understanding would be to become acquainted with as many people in the organization as he can, and compare and contrast their views. Having created initial perceptions, he might speak with others who have had various experiences with people in the organizational structure to see how their perceptions compare with his. He then might form tentative hypotheses about who's who in the organization and see if subsequent events prove or disprove his hypotheses.

Perceptions of Internal Origin

At the other end of the continuum are perceptions of internal origin. These are perceptions that are unique to each person, that

relate only to or primarily to him, and that have no transferability to others.* These perceptions of reality do not possess the independent nature of those of external origin, and they must be created--not just acquired--by each person. While environmental factors can and do influence the form that internal perceptions take, they can do so only indirectly. For instance, one's perception of himself as loved and wanted or his perception of his life as having purpose or meaning can only be an individual discovery. Perceptions of internal origin are the significant perceptions that help create the uniqueness of each individual, for they include the values that form the bonds among the multitude of perceptions in one's world view. Effective decision making requires accurate knowledge of one's innermost perceptions. But such perceptions obviously cannot be verified in the same manner that perceptions of external origins can. In order to verify perceptions of internal origin, internal criteria must be established, against which these perceptions can be judged. While external evidence may be helpful in this regard, it can only be supportive.

A test of accuracy for perceptions of internal origin might include examining a perception from various points of view, to see if it appears different under different circumstances, exploring its theoretical implication for other perceptions, analyzing its effects on oneself or others, and discovering the consistency or inconsistency with other perceptions. The ultimate purpose, of course, is to determine whether

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*To be sure, perceptions of internal origin may well be generated by external conditions, but their uniqueness lies in their categorical difference from those of external origin.

or not the perception serves the explanatory or predictive function one would like it to serve. Let us suppose, for example, that one has acquired the belief that the property of other people is not to be taken without their permission.* This perception of the sanctity of private property can be examined according to several hypothetical situations: Would this ethical principle still apply if a very poor person stole from a very rich one? Would it apply if the owner did not miss or did not need the object that was stolen? Would it apply if one believes that the owner is evil? These and other such situations suggest that the perception of property rights needs to be further differentiated, so that it can be applied more effectively to a variety of situations. To be sure, one might solicit others' advice, consider religious teachings on the subject of stealing, or learn the legal consequences of getting caught. But if the perception of property rights is to have fundamental significance as a workable ethic, each person must discover the specific meaning (or accuracy) of it for himself.

Since nearly all perceptions contain elements of internal and external origin, a combination of the testing procedures usually must be used. Not only must perceptions be accurate, but they must also be specific, enabling one to see the depth and the scope of his existence and with it innumerable choices from which decisions can be made that will generate satisfying feelings. One must also develop the ability to bring as much of his perceptual field as possible into his conscious

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*The sanctity of private property is a perception of external origin to the degree that it is a professed social norm, but one of internal origin when it has been internalized and is used as a significant perception in one's world view.

mind, so that he can use his mental powers to choose his behavior. Decisions will be made regardless of the degree to which the relevant perceptions are conscious, but our contention is that awareness of one's motives, desires, options, and goals is always preferable to ignorance of them. The self-fulfilled person directs his life through conscious choice, rather than having it directed by forces and events beyond his control or even his understanding.

V

Self-fulfilled people have developed a unique relationship with their environment--both the natural and the social--that enables them to enjoy greater freedom within environmental restraints. This special relationship is an important characteristic of self-fulfilled people, for it allows them to minimize, to a great extent, the threat that the environment always poses to the satisfaction of basic needs as well as to self-fulfillment.

Unfortunately, most people fail to realize the cultural arbitrariness of the perceptions and of the behaviors they have grown up believing were necessary or best. Even when they suspect that there ought to be more to their lives, their socially induced perceptions of reality direct their behaviors primarily toward social rather than personal goals. One can describe the general human condition as one in which people are programmed through the process of acculturation from early childhood to respond to their environment in rather limited, but in socially beneficial, ways. Social controls are so pervasive and inescapable that people learn to accept them without even realizing that such controls are present.

Such controls are, of course, a mixed blessing. While they limit drastically human responses to forces and events to those that have community approval, they also make possible certain kinds of satisfaction. One of the advantages of the orderly structure of society is that it provides guidelines for perceiving one's world, thus making easier the conversion of sensory data to perceptions. A highly stable social order, then, provides a tremendous sense of security for its members.

While high stability is a fundamental characteristic of traditional societies, it is not a characteristic of many technological ones. Where social change is rapid, people may not have the comfort of a stable social structure on which to rely, because social customs and traditions are no longer observed as scrupulously as they once were. In theory, such an opportunity might enhance the possibilities for self-fulfillment, for it would allow individuals relative freedom from social controls. In fact, however, most people do not regard this situation as beneficial, but instead, view it with alarm.

Alvin Toffler describes the physical illness that arises from one's inability to adjust to rapid change--a failure which underscores the need to develop the ability, which self-fulfilled people have done--to form a special relationship with their environment, so that they can minimize its negative effects on them and maximize their satisfaction. Toffler states:

> Future shock is a time phenomenon, a product of the greatly accelerated rate of change in society. It arises from the superimposition of a new culture on an old one. It is culture shock in one's own society. But its impact is far worse. . . . Unless intelligent steps are taken to combat it, millions of human beings will find themselves increasingly disoriented, progressively

> incompetent to deal rationally with their environments. The malaise, mass neurosis, irrationality, and free-floating violence already apparent in contemporary life are merely a foretaste of what may lie ahead unless we come to understand and treat this disease [79, p. 11].

The ability that self-fulfilled people have developed to achieve satisfaction within a hostile environment can be developed by others, though it is by no means simple. Just as developing the mental powers runs counter to the tendencies of internal forces, so does discovering a special relationship between the environment and oneself run counter to prevailing social forces.

Two characteristics self-fulfilled people possess that enable them to achieve satisfaction from a hostile environment are highly differentiated and accurate perceptions of that environment. Such people are masters at perceiving the intricate relationships between both those environmental forces that restrict and those than enhance satisfaction. They are aware--more than most people--of the structures inherent in the social order: organizational, political, and family structures, and the informal structure of communities, groups of people, and nations. The structural elements, essential for an understanding of one's environment, include the formal and the informal lines of communication, the sources of power, the uses of power, the requirements for entrance, the ties with other organizations, groups, or individuals; the systems of rewards and punishments; the effects of the structure on individuals; and the process of structural change.

While difficult to achieve, a sophisticated intellectual grasp of one's environment is richly rewarding, for it then allows one to make very specific decisions based on very specific and accurate

perceptions. Having the fullest possible knowledge of the structural elements in one's environment enables him to maneuver around obstacles in his path, while remaining fully aware of his proximity to the accepted boundaries of the social structure in question.

Accurate and precise understanding of environmental forces serves the function of partially releasing one from the control of those forces by bringing the elements of social structures to the conscious mind, enabling the mental processes to direct behavior toward satisfying goals. While the self-fulfilled person is still subject to environmental forces, his ability to understand the structures leading to those forces provides him both increased choices based on accurate knowledge of his environment and on accurate predictions about the effects of those decisions on him. Rollo May has said that, as one becomes aware of the deterministic experiences in his life, he moves toward freedom and responsibility. Freedom, according to May, is an individual's capacity to know that he is the determined one [50].

Every organization--commercial, educational, religious, or social--imposes controls on its members so that they will perceive the purpose of the organization, as well as certain portions of their world view, in similar terms which will maintain the organization. Each organization, then, contains, in miniature, the kinds of forces society imposes on its members. By examining the ways in which one might respond to the controlling forces of an organization, we can see how such an individual might do the same within the larger society.

For example, an individual who works for a large corporation in a middle management position is under tremendous pressure to conform

to certain expectations not only within the organization, but also during his nonworking hours. William Whyte has documented this in The Organization Man [83]. There are recognized, though perhaps informal, lines of communication, codes of ethics, decision-making procedures, entertainment rituals, special jargon, and ways of perceiving problems, and much more. Conformity to these mores carries attractive monetary or status rewards, and certainly many people deeply involved in such organizations have seriously compromised their unique identities for an amorphous group identity. There is nothing wrong with leading such a life, of course, if, after examining the consequences--both positive and negative--one consciously decides that that is how he wants to live. Unfortunately, there are many for whom such conscious decision making has not been possible, because they joined an organization and became caught up in its structure before they realized what had happened to them.

A self-fulfilled person, joining such an organization, would possess the qualities we have discussed in this chapter. He would be cognizant of the necessity for him to adapt his job to his personal requirements rather than vice versa. Of course, behaving in ways that might make his job and hence his life more fulfilling, such as setting his own hours, individualizing decision-making procedures, re-defining his job to fit his personality, and so forth, he might run afoul of regulations or procedures prohibiting those behaviors. But, a self-fulfilled person not only has the temperament to dare not to fit into the expected mold, but also he does so with success, for he has a sophisticated awareness of specific limits to which he can go without

making the re-definition of the organizational structure counter-productive to his personal goals.

Needless to say, adapting the structure of one's environment--whether it be an organization or a society--to one's personal requirements is not the way to reap the rewards that that environment bestows on its members. External rewards are more often provided to those who conform to external demands, rather than to those who fail to or who choose not to conform. Status, prestige, or income may not accrue to the self-fulfilled person, but such external rewards may not be important to him. If they are, he will make the necessary accommodation to realize these goals.

An important decision facing all people and especially relevant for self-fulfilled people who adapt environmental structures to their own personal requirements is determining the degree to which each person has the responsibility to maintain and support the social environment. Can a person ignore customs or laws in his search for self-fulfillment? While a complete response to this question is beyond the scope of this work, we can suggest some important considerations.

The social order must be maintained, for man could not survive without it. However, there is no absolute way of organizing society. Any given culture may change form and develop new social structures which may, in turn, affect people differently. We believe that the test of beneficial social change, and, in fact, of society itself, is the degree to which it reduces as many obstacles as possible in the path of self-fulfillment and benefits the greatest number of people.

If an individual chooses to exceed permissible social limits, he must accept responsibility not only for that act but also for the ramifications it may have for the social order. He must carefully weigh the morality of his actions by assessing them according to his values, and the resulting behavior should be consistent with his fundamental perceptions. In addition, it should be supportive of the belief that the existence of society involves tacit agreement among its members not to interfere with the efforts others are making to live satisfying lives. We suggest that whatever behavior one decides is appropriate must be such that, if it became acceptable behavior on a wide scale, it would be supportive of social living. Though this is an oversimplification of an ethical decision-making process, it does suggest that one has an obligation to support certain kinds of customs or laws, and he cannot ignore them simply because it is in his immediate interest to do so. Other kinds of customs or laws, however, may ethically be violated because they have little, if any, effect on the community. For instance, crimes involving injury to people or loss of property could not be condoned, while personal preferences, which may be socially unacceptable, such as victimless crimes, might be acceptable from an ethical point of view.

Though highly differentiated and accurate perceptions of the environment are crucial for self-fulfillment, one additional ability is also necessary. Self-fulfilled people are able to insulate themselves from the impact of certain traumatic events by allowing the intellectual powers to mediate between these events and the self. This ability to withdraw oneself from immediate contact with a troubling situation

and to cope with it intellectually instead of, or in addition to, emotionally, provides greater perspective than otherwise might be possible. With this perspective, the self-fulfilled person can understand the components of the situation, analyze them, and enter fully into the situation when he chooses to do so, whereas people who have not developed their mental powers to this degree may become totally involved in a situation, fail to see its components and, consequently, fail to make the best decisions.

Closely related to the ability to respond effectively to significant events in a detached manner is the ability to rehearse intellectually possible traumatic events prior to their occurrence. By coping with possible future events intellectually, an individual can familiarize himself as much as possible with the emotional impact of the event and explore in his mind possible responses. If and when the event actually occurs, his ability to cope with it effectively will be enhanced by his previous intellectual preparation. This is essential, for if an individual does not believe he is able to handle an experience, he will not be able to do so. Finally, decision making in a time of crisis is likely to be more effective because of previously considered responses which may even have become weak habits, thus requiring less conscious thought.

Bruno Bettelheim sees the intellectual understanding of possible events as a critical determinant of how successfully one will cope with his environment. While he was imprisoned by the Nazis, he saw fellow prisoners literally going berserk because of their inability to withstand the brutal treatment of their captors. Some preferred suicide to

continued dehumanization, and others cooperated with the Nazis. Most of the prisoners, though, allowed their psychological condition to deteriorate to a point where they were unable to function effectively. Bettelheim attributes his survival to his ability to view the events almost as an observer rather than as a participant. As a psychologist, he consciously abstracted himself from the immediacy of the prison camp experience by trying to understand the process of dehumanization used by his captors and its effects on the prisoners. He feels that he was sufficiently uninvolved to maintain his rationality and, in fact, his sanity. This experience led him to hypothesize ". . . that while an integrated personality and strong inner convictions, nourished by satisfying personal relations, are one's best protection against oppressive controls, another cardinal defense is the intellectual mastery of events as they happen" (emphasis ours) [3].

vi

Man can break the bonds that restrain his fulfillment, but not without pain and even agony. Man must develop a relationship to his culture and society that runs counter to the prevailing social and personal forces. The effects of culture are toward control, prediction of mass behavior, and conformity. Self-fulfillment, on the other hand, requires sustained determination and persistence to escape from or at least to modify the strong and pervasive forces that urge conformity, that limit perceptions, and that provide external direction for behaviors. Man cannot be taught to live a fulfilling life in the same way that he can be taught to perceive the environment according to the reality of his culture, because self-fulfillment is an intensely personal

experience which each person must create for himself. A fulfilling life is not achieved through the subtle mechanism of unconscious adaptation to environmental conditions, but through a conscious and continuous effort to restrain the personal and environmental forces tending toward safety, least effort, and conformity to social expectations. A fulfilling life must be reaffirmed again and again and decisions must be made based on a sophisticated understanding of the environment and of oneself.

While self-fulfilled people have unusual perceptual and intellectual powers, self-fulfillment itself involves more than just using these powers for effective decision making. It is a process, not a product--a way of perceiving one's existence that places one on a different experiential level than most people. The quality of the satisfying experiences is high precisely because the individual has based his decisions on accurate perceptions of himself and of his environment and has accurately selected choices that his perceptions and mental powers indicate are the most satisfying options open to him. Thus, the self-fulfilled person is consciously aware of his struggle to move beyond the level of acquiring basic necessities. He has created a meaning to his life, based on his knowledge of himself and of his environment, and all his efforts seek to actualize this meaning.

A self-fulfilled person is deeply aware of the human condition, which Bruno Bettelheim has described as ". . . man's inner ability to govern himself, . . . with a conscientious search for meaning despite the realization that, so far as we know, there is no purpose to one's life" [3]. The self-fulfilled person is able and willing to undertake

the most difficult responsibility of all: to create for himself a life based on a realistic and rational appraisal of himself and his environment and to make conscious decisions consistent with the meaning he has found.

PART II

CHAPTER V

THE SELF-FULFILLING CURRICULUM

i

The preceding chapters have presented a view of human development that sees man as having developed the ability to reach beyond a survival level of existence and to experience a style of living that is fully and deeply satisfying. However, man has also developed internal forces, which, along with natural and social forces, restrict this ultimate process of life. On balance, the tendencies toward safety, restraint, and conformity overpower the forces of growth, as evidenced by the relatively few people--even those whose physical needs are satisfied--who appear to live truly fulfilling lives. While most people merely adapt to the demands and expectations of the physical and social environment, we believe that the potential for self-fulfillment is within the reach of each person. Ultimately, the degree to which an individual will achieve self-fulfillment depends on him alone, for he must wage a continual struggle to overcome obstacles to his style of living. But, while the achievement of self-fulfillment is ultimately dependent upon the individual, another important factor is the opportunity and the encouragement to create perceptions, to develop the mental powers, and to learn the techniques conducive to effective decision making.

Two questions, to which we wish to address ourselves in Part II, are: "How can one encourage in others the development of perceptions, mental powers, and decision-making abilities that make possible a fulfilling style of life? and "What techniques can we successfully employ for this task?" It seems probable that, on an individual basis, people can be helped to develop the appropriate skills and attitudes necessary for a fulfilling style of life. But, is such instruction possible on a mass scale? A detailed answer to this question is beyond the scope of this work, but our study suggests that such instruction may not be possible. Even if this were true, however, it does not follow that no effort should be made to help others achieve fulfillment. Even though the interests of the social order are opposed to individual self-fulfillment, the social order must not be allowed, without opposition, to dictate the terms of life to its members, without regard for their unique personalities.

To discover appropriate techniques to help people move toward self-fulfillment requires, first, the understanding of the component forces and tendencies that both encourage and restrict such growth. A second requirement is the development of an environment in which effective decision making can be taught and learned; and a third, the creation of specific techniques to strengthen those forces and tendencies that urge one toward maximizing his satisfaction while minimizing those that urge restraint. Part II will concern itself with the second and third requirements.

The context for our discussion will be the public elementary and secondary schools, because they offer the logical arena for helping

young people on a large scale. Schools purport to try to help students live better lives, and the adoption of a curriculum aimed at self-fulfillment may reasonably be expected to approach this goal. A second reason that public schools have been chosen is that, by and large, they must improve the job they are doing of helping students perceive themselves as healthy, competent, independent, and intelligent people. While the structure and content of most schools teach some necessary skills and attitudes, these schools also encourage competition and conformity, which may result in negative self-perceptions.

The suggestions that follow attempt to provide both general guidelines and specific suggestions for incorporating our view of human development into schools. This chapter will examine the structural aspects of a self-fulfilling curriculum--its philosophy, organization, and day-to-day procedure. Chapter VI will then discuss the classroom aspects--specific principles of instruction, staff requirements, and suggestions for teachers.

ii

Schools serve a unique purpose in those societies that have deemed it necessary to create them, and the nature of schooling is different from that of any other institution. Schools always try to make sure that children learn the appropriate perceptions of reality that the adults in control of the schools believe are necessary. There may also be some interest in improving society or in helping children actualize their potential.

The design of school programs and structures always incorporates the designers' views of human nature, and, though there are many different

concepts of what schools ought to do to and for the students, several features are common to all schools. All schools reflect a uniformity in their perceptions of human growth and development. Furthermore, schools are always controlled by adults who have the final word and who are regarded as responsible for the degree to which students learn. Activities take place in schools which have been prescribed indirectly by society and directly by teachers in order to meet the system's stated or unstated goals. A system of external rewards is always the consequence of behavior, and schools accept the notion that perceptions become more specific with a child's age.

Viewed within the framework of human growth that we discussed in the preceding chapters, this curriculum framework is logical and consistent. Using the concepts we have described, we can discuss the general purpose and function of schools.

Humans are the only animals that depend to an exceptional degree on their environment for appropriate information about effective ways to act. The problem of dependence on sensory data from the environment is compounded by the fact that man has chosen to form relationships with others for mutual cooperation. These two human characteristics require each person to develop a world view that is similar to that of others in his group. This would then facilitate mutual co-existence and cooperation. Schools are designed with this dual relationship in mind, though most important, from the point of view of society, is the inculcation of the acceptable myths of reality that have enabled the society to survive.

Since children are born physically weak and with highly undifferentiated perceptions, they are initially dependent on adults for

their every need. As they grow, they depend on adults for fewer and fewer needs, due to their increased physical strength and coordination, their increased perceptual fields, and their ability to use their mental powers more effectively.

The role that adults play in the course of this maturation is critical, for it is experiences that affect perceptions, which, in turn, facilitate the development of one's world view and of skills conducive to social living. Parents and other adults are instrumental in permitting and encouraging specific experiences that they feel are desirable, and they forbid others. In this way, the child creates increasingly sophisticated perceptions and develops socially useful habits. Of course, the child's parents may not have the interests of society in mind when they train him to behave in certain ways. They probably want him to acquire those habits that will make him a "decent" member of the family: the ability to cooperate, to obey, to share, to refrain from undue noise, to follow directions, to communicate his wishes, to care for himself, and so forth. Not surprisingly, these are also useful habits when the child enters the larger society.

Since the process of developing socially useful habits, as well as a more highly differentiated perceptual field, is a function of age as well as experience, it continues at least throughout childhood and often throughout adulthood. It is logical, then, to see school as a natural continuation of the educative process that had begun at home. The school room is a larger social group than the family, and the teacher is another adult, who designs and controls the experiences that take place at school. These experiences continue to be those that develop

independence in children along socially approved lines, and which seek to insure that the child's behavior will be predictable and conducive to the maintenance of the social order.

Children acquire the socially approved perceptions of their environment through the structure of formal education as well as through the process of specific school activities. The general procedure by which schools operate--the age or ability grouping, hierarchical organization, the order in which materials are presented, the system of rewards and punishments, and the expectation to conform to external requirements and judgments--all teach children attitudes about reality that are deemed important by adults. The specific activities, too, teach the nature of reality, as well as more highly differentiated perceptions.

Teachers generally acknowledge that learning occurs when experiences children have are meaningful to them; that is, when the experiences relate to previous meaningful experiences, so that meanings, in turn, can be attached to the new experiences. Teachers, realizing that classroom learning alone is often inadequate, try to relate classroom activities to the nonschool world. They may schedule field trips, show films, or invite speakers to address their classes. Or they may design more elaborate programs to bridge school and community life or to appeal specifically to student interests, such as sponsoring work-study opportunities in the community, individually designed programs, outdoor education, classes to teach student-requested subjects, like popular culture, and many others.

The role of the teachers has always been important in the educative process. Teachers represent the society at large and its

demands which students are not even expected to accept or understand. They are merely expected to conform uncritically to the wishes of the adults. To insure that conformity in schools takes places, teachers are given the power to set requirements and restrictions, to judge behavior, and to dispense rewards and punishments. Part of the reason teachers are given this power is, of course, to prepare students for the society at large, which also wields power over individuals. Teachers also have the power to insist that students engage in certain activities that are acceptable to the teachers; left on their own, students might choose other activities. Consciously or unconsciously, those who design schools realize that a tendency toward least effort exists, influencing both the goals and the means toward those goals. Teachers generally set the goals for their students--or approve of student-set goals, set certain minimum criteria--usually corresponding to the least effort that teachers are willing to accept.

iii

An examination of schools reveals two significant characteristics that we maintain exist in all schools: first, schooling seeks to inculcate in students the socially necessary myths of reality; and second, schools operate according to the innate tendencies and developmental characteristics of people, as perceived by those in charge. This latter point is important, for the degree to which the perceived nature of the learner is accurate in the designing of school programs probably represents the degree to which school can efficiently and effectively help him differentiate his perceptual field and to

improve upon decision-making skills. Unfortunately, the perceptions of human nature of those who operate the schools is, we believe, often inaccurate, giving rise to curricula and to teaching methods that are self-defeating, precisely because they are designed for people who do not exist. Two examples of very different classroom situations may illustrate this point.

The first example is of a hypothetical fifth grade classroom, whose teacher has acquired a traditional public school view of human nature and of the purpose of formal education. In his view, children--and perhaps people in general--need to be controlled, for "chaos" is the primary threat to ordered society. They also need to learn social skills like obedience, perseverance, goal-orientation, and frustration-tolerance, because life is demanding and following the rules and coping effectively with adversity are the paths to success. In addition, personal skills, such as mathematics, reading, and spelling must be learned, because these skills are needed for the future. In fact, the children's present lives are not particularly significant to those in charge of the school; what is important is preparing them for their future lives.

This view of school and of the role of the teacher leads to a curriculum and to teaching methods in which the adults have made all the major and most of the minor decisions about what is to be done when, where, and by whom. They have determined that in the fifth grade, students will learn or improve their skills in reading, writing, spelling, math, science, and social studies. Music, physical education, and art may be taught when time and resources permit such "frills."

The fifth grade teacher realizes that his students do not especially want to do the lessons he has designed for them, and he must induce them to do their lessons by rewarding those who do well and not rewarding--or even punishing--those who do badly. The children's behavior reinforces the teacher's belief that children are basically lazy and need to be rewarded or punished for their behavior.

Yet, the teacher may be reasonably successful in achieving his goals. Enough students learn what he wants them to learn to justify the teaching approach he is using. Even though many students do not like school, tests at year's end show that their skills have improved as much as they should in a year. After all, that is what is supposed to happen in a school.

In our view, the major fault with the traditional classroom is the disregard for the individual's perceptions of reality. All fifth graders are no more alike than are all teachers. Teaching perceptions that have meaning for the adults may have resulted in the children's parroting of those perceptions, but it is probable that, for only a few, did those perceptions make a meaningful contribution to their views of reality and hence, to their lives. For the rest, high test scores may have meant only that the students were good at intellectual gymnastics--tricks that they learned for the tests alone. Of course, criticizing the teacher on this score is a little unfair, for he never implied that the skills he was teaching would have immediate benefit for his students. He can be criticized, however, for his wholly inaccurate view that people can acquire views of reality that others have decided are important.

Our second illustration is based on the reaction to traditional teaching which has taken place in recent years. In response to the insensitivity of the adults to the uniqueness of each individual in teacher-dominated classrooms, parents, teachers, and at times, students have developed alternative learning environments. "Open classroom" or "free school" advocates perceive people as generally cooperative, striving toward a mature perspective of themselves and of life, and able to make effective decisions. The purpose of school, according to this view, is to allow growth to take place by providing the environment, the resources, and opportunity for students to do that which they determine--individually or collectively--is important to them. The teacher is rarely a purveyor of knowledge, for he realizes that his perceptions of reality are no better than those of his students--only different. He knows that each person must discover for himself his own version of truth, and he believes that this will occur naturally, by allowing children as much freedom as possible. He sees his role, therefore, as a counselor, a friend, a helper, or a "process person"--one whose job it is to help individuals clarify their thoughts and feelings. His task is to do what the children want or need him to do.

The curriculum in an open classroom is usually nonspecific. It is not a product-curriculum, describing the results to be achieved, but a process-curriculum, emphasizing decision making, problem solving, and planning. Inherent in an open classroom philosophy, however, is the implication that students will benefit--both immediately and in the future--from their learning activities. They may be happier, more independent, more creative, or simply freer. Students are encouraged

to do generally what they wish, as long as it does not interfere with another child's activity, for, as advocates of open classrooms believe, only the child knows what his "needs" are and how best to meet them. Thus, "socializing" is regarded as just as valid an activity as is reading or arithmetic, and no one is surprised when behavior takes place that appears shocking to those used to more traditional schools. Little time, compared to traditional schools, is spent in reading, writing, or doing math, because such activities may have little bearing on a child's present life as he perceives it. And, since he does not have to engage in these activities, he spends time on other activities that are more meaningful to him.

Like his traditional classroom counterpart, we feel that the open classroom teacher misjudges the nature of people. It is an oversimplification of the complex motivational forces within the human organism and directional forces within the environment to assert unconditionally that growth toward some ideal psychological and intellectual state is an innate tendency, one which will take place automatically--if only children do what they wish. Some people, to be sure, thrive in an open classroom. They learn to plan and to carry out activities of interest to them, which present sufficient challenge to further develop their views of reality and their social and intellectual skills. Other children, however, may find an open classroom overwhelming precisely because of the choices that are available. Unable or unwilling to make adequate decisions about their behavior that will contribute to growth, such students may choose familiar activities that provide the structure the open classroom appears to lack.

The second misjudgment that the supporters of open classrooms make is their belief that children are able to make effective decisions regarding their behavior and that they ought to be allowed to do so. The trouble with this belief is that it is generalized to include nearly all children. While some children do make decisions that lead to more accurate perceptions, for example, the percentage is small. Effective decision making is a function of complex mental faculties that are developed over a period of time and through experience. Children have had neither the time nor the experience to have developed faculties for effective decision making. And simply letting children choose their activities in school is no guarantee that they will develop these faculties. It is likely instead, that, because of the various internal and external forces, children may behave in ways that are unsatisfactory to them and they may lack the awareness of how to change their behavior.

Each of these systems of schooling achieves the immediate results it sets out to achieve. The traditional classroom emphasizes and achieves conformity to external demands and standards and the acquisition of traditional intellectual skills. In an open classroom, on the other hand, students do what they deem to be in their interest, with a minimum of adult interference. The important question that educators must ask is, "To what degree are the philosophy, curriculum, and teaching methods in schools compatible with the nature of the learner, with his necessity to respond effectively to environmental conditions, and with his personal goals?" The following section suggests a first step in answering this crucial question.

iv

The purpose and procedures of a self-fulfilling school curriculum are all directed toward helping students become self-fulfilled people. There is no "goal" in the sense of an end-point in a self-fulfilling curriculum; rather the goal is to establish an ongoing decision-making process that enables students to choose highly satisfying experiences. The curriculum, then, must first provide for students the opportunity to develop those skills and attitudes necessary for self-fulfillment. This requires time, but the forces discouraging self-fulfillment are strong and more than time is required. In addition to time, then, there must also be carefully planned and executed procedures to help people develop their perceptions, mental powers, and the ability and willingness to take control of their lives. The development of this decision-making ability requires both the intellectual understanding of the process and of the forces that affect it, along with sufficient practice making effective decisions, so that the process may become internalized and habitual. But the problems to be solved must be ones that encourage sufficient intellectual stimulation for growth to occur. John Dewey said that, "Unless a given experience leads out into a field previously unfamiliar no problems arise, while problems are the stimulus to thinking. . . . Growth depends upon the presence of difficulty to be overcome by the exercise of intelligence" [13].

A self-fulfilling curriculum must begin with the perceptions of reality of those involved, for that is the cornerstone on which rests

this entire view of human development. A cardinal rule that applies to all effective teaching situations is that learning always begins with the learner's perceptions of reality and proceeds to unknown, though related, areas. Learning usually occurs through the gradual development of increasingly specific perceptions. As basic as this rule is and as often as it is mentioned, much of the instruction in schools disregards it entirely. It is difficult, of course, to understand the world views of 30 or more students. But the major reason why this rule is ignored in teaching is that an easier alternative "works"; people can be trained to do both physical as well as intellectual feats. The fact that one "knows the material," as "proved" by a test, is absolutely no indication that it has any meaning at all for him or that it will affect his life in any way.

It is occasionally true that breaking the rule that learning always proceeds from the learner's perceptions of reality results in the creation of significant and meaningful perceptions. It is remotely possible that sometime during or after instilling in one's memory a series of related ideas that have no meaning to the individual, a situation will arise that will suddenly put these perceptions into meaningful context.

Students must be aided in differentiating their perceptual fields in ways that have meaning for them. However, to be efficient and effective, a teacher must monitor, as well as he can, the process by which the differentiation is taking place. There are many obstacles in the way of expanding perceptions of reality and the search for "truth" often requires assistance. A teacher can suggest short cuts, recommend better

procedures, or discourage probable dead-end investigations, all because of his highly differentiated perceptual field and teaching skills. Let us take, for example, a group of students who have chosen as a project an investigation of why people act the way they do. Unaided by someone who has a more complex view of behavior and of investigating procedures than they, the students might proceed in inefficient ways, if not in ways that may produce inaccurate results. Inefficiency alone is not necessarily undesirable, because students may learn a better process from their experience. However, they might not discover the inaccuracy because they had not yet developed effective tests for the accuracy of perceptions.

For instance, a group of students might conclude that behavior is largely a manifestation of race. Black people are "loud and aggressive" and white people are "soft-spoken and refined." A teacher who is aware of this impending conclusion may intervene and, through a series of questions, or by directing the investigators to other evidence that does not support their tentative conclusion, help his students to perceive their world in more realistic terms.

The above example touches on an important point with which a self-fulfilling curriculum must deal. Not only must perceptual fields become more specific, but also perceptions must become more accurate. The one without the other is useless, and developing accurate perceptions largely depends on learning what kinds of tests are appropriate for what kinds of perceptions. Acquiring the ability to identify and use appropriate tests runs counter to the principle of least effort, because effective testing takes more energy than minimal testing.

Moreover, effective testing of perceptions is so crucial for effective decision making that an effort must be made to develop appropriate teaching techniques.

To help students discover tests for perceptions of external origin is equivalent to helping them develop the perspective with which to view such perceptions in context, so that perceptions are seen in their appropriate relationship with other perceptions. The ability to minimize one's highly subjective view of certain forces or events is critical in developing objective criteria that may be applied uniformly to similar situations. For instance, let us suppose that one is studying the history or culture of an ethnic, religious, or cultural group with which he identifies strongly. It is easy for him to see the achievements and struggles of that group in very positive and personal terms. For him, their struggles have always been just and their achievements great and many. However, to view this group within the context of the world, to see the group in perspective, one must identify criteria--as unemotionally as possible--by which he will evaluate the group. These criteria do not remove the subjective element, of course, but only reduce it.

While tests for the accuracy of perceptions of external reality require seeing the perceptions dispassionately and in perspective, they also require the development of certain tools and the willingness to use them. Students should be able to judge the biases of various arguments or positions, to identify and to use appropriate resources when examining perceptions, and to determine the quality of the information dispensed by a given resource. To illustrate this latter point,

it is probably safe to assume that most children first learn about sex from their peers. While their information may be accurate, it is highly probable that it will not be. The child needs to learn to judge that his peers are not necessarily a reliable source for this information and that an adult or an appropriate book might give him better information.

Emphasis in a self-fulfilling curriculum must be placed on the individual's significant self-perceptions, because they constitute an important element in the decision-making process. A serious problem often arises when people are not aware of their self-perceptions and are called upon to make a decision that deeply affects them. Such decisions may be made without taking one's values or self-perceptions into account, and the result may be disastrous. The tragic result of such decisions can be seen in those who feel "trapped" by a job, a marriage, a school, a lifestyle, or similar situations.

A self-fulfilling curriculum will try to help students develop the ability to identify, test, and strengthen their self-perceptions through discussions, role playing, nonclassroom experiences, and other means. Helping students to develop a procedure for examining their self-perceptions early in life will prepare them for value-oriented decisions in the future by enabling them to incorporate consciously values into the decision-making process.

In addition, a self-fulfilling curriculum will try to help people develop positive self-perceptions and view themselves as healthy, productive, and worthy people. Helping one to change negative self-perceptions to positive ones is immensely difficult, for they are

fundamental to the individual's views of himself and of his world, and attempts to change them may be strongly resisted. However, negative self-perceptions are destructive both to the individual and to others. The behavior of a person with negative self-perceptions will reinforce his feelings of unworthiness, which cannot possibly be satisfying. He may strike out against others in an attempt to assert himself, gain attention, or react against those he may blame for his unhappiness. Those with negative self-perceptions as well as those with positive ones must have experiences in school that reinforce their feelings of self-worth or that help them create positive self-perceptions.

The final emphasis of a self-fulfilling curriculum as it affects internal perceptions is the inculcation of what we tern "the necessary myth"--a view of the condition of mankind that is necessary for self-fulfillment. This myth holds, simply, that man has the ability to create a meaning for his life and to direct his life in ways that can be truly satisfying to him. This myth flies in the face of much evidence regarding the human condition, one which leads most people to live their lives with fatalistic acceptance. This myth must be taught not because it <u>may</u> be "true," but because the <u>belief</u> that it is true may encourage one to <u>behave</u> as if it were true. The consequent behavior may, in turn, lead people to discover meaning to their lives, to seek truly satisfying experiences, and to rise above the condition in which most of humanity finds itself.

V

Developing appropriate internal perceptions is only part of the purpose of a self-fulfilling curriculum. Another aspect of the

is the development of perceptions about the environment. Although we maintain that the creation of a logical world view is an innate tendency, teachers can help students improve upon the logical relationships that they have created by helping them to see such relationships in more sophisticated terms. This will enable students to see more clearly the social forces and obstacles that influence their lives and provide greater choice within the social structure. Such differentiation of the perceptual field of reality must, of course, begin with the individual's world view and proceed to finer and finer details. The problems inherent in this teaching goal are considerable, for discovering an effective way to individualize instruction for a group of people is an extremely difficult task. Such instruction can and does occur in schools, on a limited basis and with limited goals, but to individualize instruction for an entire class with a goal as broad as increased differentiation of the perceptual fields is a constant challenge.

Teaching students to modify the prevailing social forces in ways that enhance satisfaction is fraught with problems, chief among which is the fact that public schools have been created and are maintained primarily to inculcate in young people the dominant view of reality. Conflicts may arise when some citizens realize that students are learning that the dominant social view is arbitrary, changes, and may not coincide with comfortable social beliefs about democracy, equality, and similar concepts. The teacher must help students to realize that along with the arbitrariness of rules and the hostility of the social forces to personal satisfaction, every group must have agreement among its members as to what constitutes reality and that fairly

unified perceptions of reality are essential for mutual co-existence. Students must also realize the responsibility each person has in maintaining the social order, while, at the same time, modifying its controlling effect on them. The teaching of such a sensitive and difficult subject cannot occur in a short time. It must be a carefully planned component of the entire public school curriculum, so that students have ample time to understand and apply such sophisticated social concepts.

Teachers of a self-fulfilling curriculum must also design techniques by which they can teach students to develop their mental powers. A highly differentiated perceptual field is useless without the ability to use one's intellect to see the complex relationships between perceptions or between perceptions and sensory data about the environment. Such intellectual powers will probably develop as perceptions increase in specificity, but the teacher should be aware that the increased differentiation of perceptions and the ability to use the specific information are two different elements of the growth process.

An important tool for coping effectively with otherwise overwhelming events is the ability to remove oneself from the emotional closeness of certain events and to view them from a distance that allows as many of the elements of which they are composed to be seen with perspective. Such perspective will, in turn, enable one to see alternative ways of handling the situations that may have escaped him initially because of their overpowering nature. One's actions then can be more deliberate, and probably more effective, since he has used his

intellect to analyze the situation, to arrive at appropriate responses based on his analysis, and to guide his actions.

A dramatic example of the way that this process can be taught and then used can be seen in the training and work of emergency medical service personnel. Their training involves a practical intellectual understanding of human physiology, the techniques to be used in emergency medical situations, and simulated emergency situations. The result of this training is that in a medical emergency, these people respond effectively. In the midst of noise, flashing lights, confusion, and perhaps darkness or inclement weather, they are able to analyze the situation quickly and administer the appropriate aid.

The ability to cope effectively with possible overwhelming situations depends, too, on one's belief that he is able to do so. This intangible component of the decision-making process may be seen as the catalyst that allows the other components to respond in a coordinated fashion. What probably makes emergency medical personnel effective in coping with medical emergencies that may be new to them is, in large part, the belief that they can do so. Doubts about one's ability have no place in a crisis.

Of course, most of the crises faced by people throughout their lives are far less dramatic--though no less critical--than medical emergencies. They may include life situations, occurring more-or-less regularly, which cause one emotional stress, thus making it difficult for him to gain sufficient perspective from which to make appropriate decisions. Such situations must be defined individually, for, what is a crisis to one person may be commonplace to another. Some crises may

occur suddenly and last a relatively short time--disasters, accidents, loss of a job, and so forth. Others may develop slowly and last a long time--a serious illness, physical changes, or social upheavals. All of these experiences can be incapacitating, and a self-fulfilling curriculum should help people fortify themselves against the impact of these occurrences.

vi

The structural design of any curriculum does much to determine whether its goals will be realized, for the structure of a complex process like education is a dynamic, multi-dimensional framework. It relates the purpose to the people involved and defines procedures for attaining that purpose. Every organization has such a structure, whether it is consciously designed or not. To fail to design carefully the structure may result in a school which develops a wholly different purpose, one whose structure is not as conducive to self-fulfillment as another might be.

Like the structure of most schools, that of a self-fulfilling school serves three purposes. First, it sets up a method for handling routine matters that otherwise might occupy an inordinate amount of time. Second, it clearly states the acceptable behavioral limits. These limits insure that a particular view of reality, procedures, and purpose will be maintained, for without these limits, alternative views, procedures, and purposes may evolve that may not contribute to growth. Certain limits may apply to students, others to faculty, and still others to both students and faculty. These limits must be seen not so

much as restricting desirable behavior, but as restricting undesirable behavior that may interfere with the goals of the school.

The third purpose of the structure of a self-fulfilling school is to establish procedures for orderly change. These will clearly define the participation of the various segments of the population that might be affected by the proposed change. Depending on the perceptions of those who control the school, and on the proposed change, this might include students, teachers, administrators, parents, and others.

The brief outline of a school structure described here is meant only to suggest a possible format for educational organization. Obviously it is not the only possible way a self-fulfilling curriculum might be implemented. The basic principle is that reality is primarily an individual creation, and the precise way that a school with a self-fulfilling curriculum operates depends upon the individuals affected by it. A self-fulfilling school in a middle-class university community would operate very differently from a school in an inner-city ghetto, though both strive to help children become self-fulfilled. The adults and children involved would design their respective schools consistent with their perceptions of reality, which would likely result in marked differences between these two schools.

We view a self-fulfilling school as a laboratory in which people learn to make effective decisions regarding their lives. It is a place for individuals to learn to respond effectively to situations they are likely to encounter by participating in activities designed to increase the breadth and depth of their understanding of themselves and of their

environment. In order to learn what actions result in what degrees of satisfaction, students must be free to experiment with various responses to real or hypothetical events and to observe the results of their actions.

In keeping with the laboratory concept of a self-fulfilling school, such experimentation will be carefully supervised by teachers who will make decisions that they feel are likely to promote personal growth in students. For instance, a group of students may decide to discover the effects of doing whatever they want to do for a period of time--say, for several weeks. For such an experiment in freedom to contribute significantly to the perceptions that the students have of themselves and of the responses in such a situation, certain guidelines or controls are probably necessary. The teacher may insist on some evaluative procedures to enable his students to maximize the educative value of the experience. Students might be required to keep journals during the experiment and to record their thoughts and feelings about their experience. There may also be intensive, well-planned discussions following the experiment to stimulate still greater perceptual differentiation.

The comparison of a self-fulfilling school with a laboratory is not meant to imply that its atmosphere is sterile or dull. A self-fulfilling school is an active, enjoyable place for children, because they are engaged in activities that have considerable meaning for them. While fun, joy, and happiness are not the immediate goals of a self-fulfilling school, they may well be the immediate results. Students from elementary years on know that their school has a purpose, which is

related to immediate and future satisfying feelings. The consistency of this purpose from class to class and from year to year provides a sense of security, a sense of meaning, and a perceptible goal loosely unifying all the school experiences children will have. This unifying purpose contrasts markedly with many elementary and secondary schools where the purposes are so diffuse as to be imperceptible to students and teachers alike.

Though we will suggest classroom activities in the next chapter, we take the pragmatic position that if a classroom activity or a structural component helps students become self-fulfilled, that is generally sufficient evidence and justification for its continuation. Thus, the goal of self-fulfillment is far more important than the process toward that goal, but it must be remembered that the goal of self-fulfillment is itself a process. If those in charge of schools are serious about maintaining a self-fulfilling curriculum, the nature of self-fulfillment may well curb some of the possible abuses inherent in educational pragmatism.

The operating structure of a self-fulfilling school has developed consciously through careful thought about the purpose of the school. It represents a structure not unlike that of the larger social order of which it is a part. The existence of a clearly defined, consciously created structure itself contributes to students' understanding of organizations by enabling them to see the school's interrelated organizational components. Students may come to understand that, like the larger society, their school has rules that are essentially arbitrary rather than "natural laws" and that rules are usually necessary for an organization which has a purpose.

CHAPTER VI

BACK TO BASICS

i

A self-fulfilling curriculum strives to teach basic skills and attitudes which have been all but ignored in most public schools. These basic skills have traditionally been only superficially and tangentially a part of the total curriculum, giving way to such nonbasics as reading, writing, arithmetic, and other "frills," that, for a great many students, have little or nothing to do with their lives. The curricula of most schools fail to distinguish between what is important and what is not. Traditionally, public schools have tried to get students to internalize the world views of adults. To accomplish this job, teachers have designed courses of study--often in elaborate detail--which, to them, had meaning. But how often do the "wrong" children seem to enroll in that grade or class, who show little interest in what their teachers have designed? To criticize the adults in this case is a little unfair, for they are only doing what adults have historically done: to instill their perceptions of reality in the children. The adults can be criticized, however, on the basis of their belief that academic skills and social acculturation alone are adequate curriculum goals.

The real criticism of a traditional curriculum and the reason we are proposing an alternative is that the traditional curriculum

denies the individuality of each child's unique world view, which is and always will be different from those of his classmates. To account for this difference, while remaining cognizant both of the requirements of social living and of the nature of people, we are suggesting a self-fulfilling curriculum whose chief difference from the traditional subject-oriented curriculum is that it is perception oriented. The goals of a self-fulfilling curriculum are to facilitate growth toward self-fulfillment by helping students to develop more highly differentiated perceptions of themselves and their environment, to develop more fully their mental powers, and to acquire certain perceptions of mankind, all of which will, in turn, facilitate effective decision making.

It is by no means an easy task to regard 30 students as 30 individuals with 30 different world views, and teaching 30 students in a self-fulfilling school is indeed a challenge. The traditional approach to teaching must be modified, at times drastically, both to account for the realization that one is teaching 30 individuals and to accept that one's job is to teach perceptions and processes rather than just subjects and academic skills. Helping students develop the skills and attitudes necessary for self-fulfillment requires a combination of teacher direction to assure that students are approaching a self-fulfilling decision-making process within the reality of the social structure, as well as student choice so that the experiences they are having are meaningful to them. It is always a difficult task to determine just what this combination should be to maximize learning, and it changes from student to student and from situation to situation.

Each teacher must arrive at a workable balance that makes sense from his point of view to allow as much choice as possible for students while realizing the goals that he has set. We believe that the teacher must assume ultimate control in his classroom for four reasons. First, it is he in whom society has vested the power and responsibility for teaching children socially accepted perceptions and skills. Even if one cannot accept his society's controlling structure, he cannot ignore the role society has prescribed to teachers. Second, a teacher has had more experiences than his students, giving him more specific perceptions within a more fully developed world view. Thus he has greater perspective with which to view the lives of his students, enabling him to help his students develop greater perspective in turn and more complete and complex world views. Third, he has the training to help students further differentiate their own world views, to develop their mental powers, and to improve upon their decision-making processes. Fourth, the teacher needs the decision-making power to insist that students engage in certain activities when he determines they should do so, because the process of growth toward self-fulfillment is difficult and may be avoided by some people because of its difficulty. Of course, this power must be used judiciously, for it can easily be misused. The decisions teachers make that affect their students are based not on the inevitability that a certain classroom activity will result in certain growth, but on the probability that it will.

Teachers in a self-fulfilling school realize that content goals are not as important as they are in traditional schools and that the types of perceptions that he wants his students to create must be

created by each of them according to their unique world views. Therefore, he tries to give his students as many decision-making opportunities as he feels is possible.

There is no "ideal" teacher for a self-fulfilling school. A wide variety of personalities can successfully teach in a self-fulfilling school, and schools should try to employ people who represent different points of view, both because they represent different types of people that students will encounter outside of school and because a variety of people on the staff will provide a variety of adult models for students and people with whom they can interact. The only necessary characteristics they should share are beliefs in the existence of an ultimate existential state such as self-fulfillment and a belief that the school can and should help students grow toward that state. This common ground may facilitate communication among the staff which, in turn, may facilitate more efficient decision making in the school. Conflicts will always occur, but to the degree that they are not basic philosophical positions representing different ways of viewing the world, they can be resolved with relative ease.

The teaching style appropriate for a self-fulfilling curriculum is the teaching style with which each teacher feels most comfortable. The teacher who has developed a big-brother or -sister relationship with the students may provide certain support and encouragement for some students that a teacher who represents a father- or mother-figure may provide for others.

A self-fulfilling school can conceivably accommodate both open as well as traditional styles of teaching and remain consistent with

self-fulfillment as the ultimate goal. Some students and teachers find that the informal, discussion-oriented, moderately democratic approach to learning is successful in terms of students acquiring or further differentiating perceptions of reality, while other students and teachers may prefer a teacher-directed classroom to achieve the same goal.

ii

Every school activity has three distinct parts, a description of which tells a great deal about the purpose of the school. These three components are (a) the topic or subject, (b) the process for reaching the goal, and (c) the goal. In traditional schools, all three are carefully prescribed, with primary emphasis placed on the goal. The topic may be history, the process reading a text book and listening to a lecture, and the goal describing the causes of the Civil War. In an open school or classroom, the emphasis is on the process, and the topic or goal may be generally defined or not defined at all.

We are suggesting that learning activities in a self-fulfilling school be designed with specific purposes in mind that relate to the curriculum goals described in the last chapter. Seeing school activities as incorporating three distinct--though related--components provides a method for conceptualizing and developing specific classroom activities. The purpose of the activity would determine which of the components was emphasized and how it was designed. Thus, there are three general types of instructional organization for a self-fulfilling school with the following advantages over traditional instructional organization: first, they allow considerable student choice; second, various

instructional activities can be designed to help students acquire specific skills or perceptions; third, the teacher can individualize instruction by designing different learning activities for different students; and fourth, students may have difficulty comparing their progress with others in the class, thereby reducing competition.

The first type of instructional organization that a teacher might use is the assignment of a general topic of study. This, as well as the other types of instructional organization, might occur in a self-contained primary classroom for part of the school day, or it might be a regularly scheduled subject in a secondary school. This instructional design neither prescribes the process nor the goal for the topic of study. Those choices are left to the students who, either individually or collectively, with or without approval of the teacher, determine how to proceed.

The goal for this teaching procedure is for students to examine the ways that they approach the topic of study and to examine their conclusions. Different problems require a different use of one's mental powers to create the investigatory procedure and to reach conclusions based on the evidence, and the use to which the mental powers are put is the focus of this method of inquiry. For example, the topic of the class may be to investigate the social structure of their school or community and to formulate a conclusion based on their evidence. The teacher might suggest various investigative procedures and approaches students might take, trying carefully not to influence their decisions. He might suggest that students interview important members of the structure, use questionnaires, or review others' research. Or the

teacher might point out other aspects of such an investigation--philosophical or political theories or personal or cultural biases that may enter into the conclusion.

To maximize the potential for developing the mental powers through this method of teaching, the teacher needs to include regular procedures for enabling students to reflect upon the process of investigation that they are using, including the shortcomings of each approach, such as biases, that may be incorporated in their study. These evaluative techniques may include administering a questionnaire, requiring students to keep "process" journals, or holding periodic discussions, or a combination of these and other techniques.

A second method of instructional organiation is to provide guidelines for the experience, but to select neither the topic nor the proposed goals. Such a method would apply to the teaching of specific processes, such as the scientific method, problem-solving, and other types of decision-making skills. The emphasis of such a method is twofold: to teach processes that have been found by others to result in meaningful solutions and to help each student adapt these processes to his own life.

For example, a teacher might assign his class the task of analyzing, according to specific guidelines provided by him, an object, concept, event, or other applicable topic. The intent of this assignment is to allow students to investigate that which interests each of them and to reach a goal that each student has identified as valuable. This instructional method may help students develop a specific mental

power, test perceptions, and form more differentiated perceptions of a portion of their world views.

The guidelines that the teacher might assign could take a variety of forms. It appears reasonable that the teacher might approve of each student's project to see that it is one which offers both sufficient intellectual challenge to qualify as an appropriate instructional aid and to see that its scope is not so broad or its structure so difficult that the student is likely to experience failure. The teacher might also ask the students to speculate as to the possible conclusions of the topic, which would encourage them to view their projects less subjectively. The ability to see a situation or experience with perspective, even when all the elements are not yet known, is a useful tool that can often be applied to decision making.

Since the purpose of this type of instructional organization is to teach a decision-making and investigative process, the teacher will watch closely the progress his students are making to help them adapt the process to their lives. Step-by-step outlines of the procedure might be given students, which they would be encouraged to modify according to the projects they had chosen and to their individual cognitive styles. Discussions or written descriptions of the method of inquiry might also be used to help people focus attention on their investigatory processes.

The third type of instructional organization emphasizes the goals to be reached and leaves both the topic and procedures to students. Such goals might include learning a basic academic skill, understanding the electoral process, music appreciation, and many others. Whatever

choice of goals the teacher selected would be those that, after careful thought, he felt would be likely to help students acquire fuller understanding of themselves and/or their environment. The teacher would help students examine the individual or group choices of the topics and procedures for meeting the teacher's goals, so that they became more aware of the reasons for their choices and develop better decision-making skills.

Suppose that the teacher had decided that it was important for his students to acquire an historical perspective so that they see themselves living at a certain moment in history and that other moments have occurred in which people lived quite differently. Moreover, the teacher may want the students to realize that the present is related to the past, and the future is related to both the past and the present. The teacher might ask his students to determine what they can find out about people who lived long ago or about people who might live in the future. They might suggest field trips, speakers, films, or other sources of information, and plan, as best they could, their "history lesson."

Thus, we see that the purpose and methods of instruction in classrooms taught according to a self-fulfilling curriculum are different from those in traditional classrooms, although the essential structure may be similar. The emphasis in a self-fulfilling classroom is always on basic skills such as mental powers and decision making, and on perceptions of the ways individuals view their world.

iii

Based on our study of human development, we can postulate five principles of instruction which affect teaching and learning. Most teachers are aware of these principles, though the degree to which the principles are considered in the design of school activities varies. Throughout our discussion, the term "instruction" refers to the purpose of a self-fulfilling curriculum.

1. Instruction is easier to the degree that the students and the teacher have similar perceptual fields of reality. Every teacher, by dint of his role and his greater maturity, uses the power he has to create a teaching and learning environment that is compatible with his perceptions of himself and of his environment. No alternative is possible, for nobody behaves in ways that are meaningless to him. By the same token, each student adapts to or changes the learning environment in ways that have meaning for him, and nothing else is possible. The greater the similarity between what the teacher and each student perceives as the purpose of school, the subject taught, and their respective roles, the more likely is each student to accept the design the teacher has chosen for the class or to modify it along lines acceptable to the teacher. The teacher's design is also more likely to affect each student in ways that the student perceives as meaningful.

2. Instruction is easier to the degree that students possess undifferentiated perceptual fields. As one's perceptual field becomes more highly developed and his undifferentiated perceptions become more specific, his world view takes shape. These specific perceptions provide

information which results in correspondingly specific behaviors that are consistent with his world view. Thus, patterns of perceiving and of behaving are acquired that are difficult to change, both because they may have become habitual responses to one's environment and because such behavior may take less effort than nonhabitual behavior.

Students possessing highly differentiated perceptual fields are likely to bring to a class as many views of the subject as there are students. While this may offer a rich opportunity for the teacher and students to explore the variety of perceptions, it may also present a challenge to the teacher. He must design his lessons to account for the variety of meanings his students have created for the subject--a far more difficult task than if his students possessed undifferentiated perceptions of the subject. If this were the case, every student would have the same lack of sophistication about the subject. By necessity, they must look to the teacher for help in creating their perceptions of the subject.

3. Instruction is easier to the degree that the reality of the classroom experience corresponds to the students' perceptual fields of reality. Every classroom manifests a certain reality determined largely, though not exclusively, by the adults in charge. They have determined the purpose of the class, the roles of the participants, the acceptable behavior, and the enforcement procedures to maintain the structure. Incorporated into the classroom procedures are assumptions about the nature of the learner, the purpose of school, the structure of knowledge, and many other views. However, the students, too, partially create the reality of the class, only more subtly and indirectly than

teachers. Students bring to the school their own views of learning, teachers, subject matter, and so on. If students perceive as valid or true the assumptions on which the instruction is based, no conflict exists because the classroom procedure will be seen as appropriate by the students. For instance, if a student comes from a home where his parents maintain strict discipline and insist that he conform quickly and thoroughly to their demands, he may feel more comfortable in a teacher-directed classroom than in one where students have considerable choice of activities. A strict classroom, like his home, will allow him to know precisely what the adults expect of him. Thus, the reality of the classroom experience corresponds to his own view of reality.

4. Instruction is easier to the degree that it accounts for the internal forces. The internal forces consist of the forces and tendencies that we discussed in Chapter III, which, along with the perceptual field of reality, provide the motivation for behavior. We are specifically interested here in the life-force, the tendency toward consistency, and the tendency toward least effort. We have accounted for the mental powers in the discussion of other principles of instruction.

The life-force is that internal drive that urges the organism to seek satisfying experiences that are primarily, though not exclusively, necessary for survival. This force manifests itself in a tendency to explore, to discover, and to become increasingly competent in coping with the environment. In children, this force generates a high level of exploratory behavior, which gradually decreases as the child matures.

Teachers need to recognize that children are naturally active and curious, and often their high energy will provide motivation for experiences contributing to growth. Whenever possible, teachers must account for this energy level by allowing students to explore their environment and to discover meanings to their worlds, or by designing learning activities that are action-oriented. It must be borne in mind, however, that not all such behavior leads to increasingly effective decision-making skills or even to the most satisfaction for the child. The teacher must use careful judgment to determine the possible effect of any behavior on the child's growth toward self-fulfillment.

All people engage in behavior that has meaning for them, for behavior is a function of perceptions of one's world, which the individual sees as logical. His behavior, then, all has a purpose, because it is related to his consistent world view. The reason we recommend that students have considerable choice in a self-fulfilling school is that only with such choice is the child likely to engage in activities that have importance to him. Even if he engages unwillingly in activities the teacher has selected, his behavior will still have meaning to him. However, in this case, the meaning he attaches to an experience may be entirely different from the meaning that the teacher hoped the child would acquire. For instance, if two children are each assigned a book to read, one may find the assignment thoroughly satisfying, while the other may hate the experience. Teachers should take into account individual interests of children as best they can and incorporate these interests into activities likely to promote growth.

A self-fulfilling curriculum, while designed with students' growth as the dominant purpose, does not pretend to hold such appeal throughout the school day to be irresistible to students. They may well have other immediate plans than to participate in various activities which they may have chosen earlier or to which they may have been assigned. Part of the difference between a teacher's goal for his students and a student's goals for himself may be due to the difference between what constitutes a meaningful activity to the teacher and to the student. But part of the difference may also be due to the tendency toward least effort. Many learning activities in a self-fulfilling school may be initially difficult for students and hence avoided. However, the very process of growth often requires one to overcome challenges which may help him develop certain skills and attitudes. A teacher must use great care when deciding that an activity will facilitate growth toward self-fulfillment, for such power can be abused. However, such decisions are usually necessary. Not only do some experiences contribute to growth that students might not choose, but also students should learn that they can overcome the tendency toward least effort if they desire to do so. Activities may be designed that encourage students to make increasingly effortful choices. They may be encouraged to identify and to work toward goals which they perceive both desirable for them and ones that they would not have chosen otherwise. Later, the students discuss whether or not they were able to achieve their goals, how they felt about their achievement or lack of it, and what goal they would like to select for the next time.

5. Instruction is easier to the degree that it recognizes the developmental process of the perceptual field. In Chapter II, we described seven factors that affect the formation of the perceptual field:

1. The meanings associated with habits can become part of the perceptual field.
2. The meanings associated with personal experiences can become part of the perceptual field.
3. Meaning that is developed through the intellectual process alone can be incorporated into the perceptual field.
4. The direction of perceptual field development is toward consistency and order.
5. All perceptions in the perceptual field are related in an internally logical way, and a change in one can change others.
6. The more directly a perception affects one's views of himself, the stronger will it be and the more vigorously will it be defended.
7. The perceptual field tends to become increasingly differentiated over time.

An important component of a self-fulfilling curriculum is helping students develop more complex perceptual fields. While such growth occurs naturally, because of factors we discussed in Chapter II, an optimum learning environment will facilitate more rapid and more complex perceptual development in the same way that an intellectually stimulating environment promotes cognitive development.

Teachers need to be aware of the process by which perceptual fields develop, so that they can design learning activities consistent with that development. Such activities will then have greater likelihood of accomplishing their goals of helping students create new perceptions or of differentiating their perceptual fields.

iv

Each of the five principles of instruction is consistent with the view of human development we have presented in this work. While neither teaching method nor objective, each principle describes a relationship between the student and the classroom that suggests an optimum condition for instruction. They are general organizational conditions that will maximize learning.

The three learning activities discussed below only suggest types of activities that are likely to contribute to the goals of a self-fulfilling curriculum. They combine student choice and involvement--essential ingredients for meaningful learning within the context of the purpose we have described.

1. Language development and use. Throughout our study, we have stressed the importance of perceptual development and especially of conscious awareness of one's perceptions. The primary tool for bringing specific perceptions to the conscious mind is language. One simply must have accurate language for a perception, if he is going to consider it on a rational level. The more complex one's language ability is, the greater will this ability be.

While schools traditionally have emphasized language usage to a large extent, students have often been passive participants in the process--listening to others, or reading books and writing assignments that may have little interest for them. Students need to develop a richness of language so that they can understand complexities of thoughts and feelings, express these to others, and understand others' thoughts and feelings in turn.

To encourage language use in areas that relate to each student's perceptual field, assignments may be given that have sufficient flexibility or open-endedness to relate to many different world views. Students may be asked to write stories, to discuss topics of teacher or student selection, to present plays, to give debates, to keep journals or diaries. Such exercises may not achieve the desired result, however, unless students choose more complex uses of language than those with which they may be familiar. Habits of language use develop, and, unless old habits are improved or new ones acquired, perceptual growth may not take place as quickly as it might otherwise. This, of course, presents a dilemma for the teacher who realizes the importance of student interest in what is being studied but who is also aware that interest is not always synonymous with optimum learning.

Language use also fosters the development of one's ability to view situations from a position which minimizes his subjectivity. Activities designed to encourage such perspective might include defending positions with which one does not agree--requiring him to see a situation, problem, or belief from another point of view--studying a foreign language, reading foreign literature in translation, or discovering other cultures' views of reality.

2. Simulation games, role playing, individual and group projects, field trips and field study. Implicit in the purpose of a self-fulfilling curriculum is personal growth toward a more realistic and more accurate understanding of oneself and of one's environment. While most schools try to teach students about their world so that they will be able to make effective decisions, often this teaching is done entirely within a classroom, requiring, by necessity, highly artificial situations. This degree of artificiality may make the classroom learning experience largely unrelated both to the students' lives and to the reality of the environment.

However, there is much that schools can do to facilitate more highly differentiated and accurate perceptions about the environment. The chief features of such a program are that there be sufficient variation to appeal to as many students as possible, that the classroom learning experience approximate the real world as best it can, and that opportunities be taken to apply what has been learned in actual situations outside of the school.

It is not enough for a classroom learning experience to imitate the real world, for, if the intent is to help students create perceptions of the real world that have meaning to them, learning experiences must be designed with the student in mind. This may require a simplification of the actual forces at work, so that students can grasp the principal elements. As they become increasingly sophisticated about these external events, more and more details may be incorporated into the classroom experience.

Simulation games, role playing, and individual and group projects offer opportunities for students to engage in activities likely to be of interest to them and that may approximate the real world. While the situations are never identical, of course, the decisions that such activities require, the feelings experienced and expressed by the participants, and the roles developed in the course of the activity often approximate similar situations that may be encountered outside of the school. Not only will students perceive the elements inherent in the problem or situation, which may aid them later when they encounter a similar situation, but also such experiences may help them develop the ability to detach themselves and to view a situation in which they are involved with less subjectivity. The more one rehearses a possible scenario that he may encounter later intellectually and/or physically and incorporates in that rehearsal an accurate description of the events and their sequence, the better able he may be to cope with the situation if it arises. Previous rehearsing may have created weak habits that will require less conscious thought.

But laboratory learning, no matter how carefully designed, is still artificial. To help students acquire perceptions of and to understand their relationship to the environment, schools must engage students in authentic experiences outside of the classroom. Field trips, while a poor substitute for daily contact with the nonschool environment, are at least better than strictly classroom learning. A better experience, however, would be field study or work/study arrangements, enabling students to experience first-hand, aspects of their environment that classroom learning cannot provide.

3. Value clarification and interpersonal communication skills. The abilities to understand one's significant self-perceptions or values and to interact effectively with others are described together because they both involve deeply personal views of oneself. Furthermore, their expression often coincides, lending itself to the teaching of them simultaneously. School must help people understand their internal forces and their self-perceptions, because, together with the environment, they determine behavior. A person making decisions with only a shallow awareness of his values and goals is like a ship with a faulty compass: his direction is unclear. He cannot be sure that the achievement of goals he has established will satisfy him, because he is not aware of those deep perceptions within him that he is seeking to satisfy.

People experience much of their satisfaction through interaction with others and have developed elaborate cultures for just this reason. Helping students improve upon interpersonal communication skills does not necessarily have to be programmed into activities specifically designed to meet these objectives. Such learning may occur, and it is probably preferable that it does, while people are engaged in other activities. Thus, the teacher can encourage students to focus attention on values and the communication process while they are engaged in projects or activities. Asking students why certain choices they made are more satisfying than others, showing concern about and discussing feelings and emotions, or incorporating into an activity an interpersonal communication component may help create greater awareness of values and communication processes. Many activities have been

designed to increase interpersonal communication, from role playing to videotaping discussions to empathy training exercises. All of these, and others, help focus attention on improving the process of interaction so that increasing satisfaction may occur.

iv

A self-fulfilling curriculum has been designed with attention paid to the nature of the human organism, the nature of the environment, and to an ultimate decision-making process that leads to a truly satisfying life.

Schools must recognize that the basic character of man is that of a creator of myths about his life and his world. These myths have been responsible for his survival and continue to make possible decision making necessary for his existence. The world views he has created are his only contacts with the natural and social environments which are so complex that they can be understood only through abstraction and simplification. The degree to which this abstraction and simplification is accurate facilitates the accurate prediction of events and the results of one's actions on himself.

While world views develop naturally, probably according to a lawful process, they do not necessarily develop to their fullest without specific assistance, any more than a child will necessarily grow to be a healthy adult without thought paid to his diet. Teachers must design activities consistent with the process of perceptual field development--activities that lead students to more specific and accurate perceptions of themselves and of their environment. However, special

difficulty arises in teaching a group of students because meaning can only be an individual discovery, based on previous meanings each has created. Thus, a self-fulfilling curriculum recognizes the need to allow maximum student choice within a structure that has as its purpose the goals we described in Chapter V. Maximum student choice in such an environment is most likely to enable students to adapt classroom experiences to their unique views of their world.

The development of the perceptual field alone, however, does not automatically create effective decision making, for both the mental powers and the desire to make such decisions are necessary components. These components are strengthened through experience, and through activities specifically designed to accomplish this goal.

Another factor affecting perceptual field development and behavior is the internal forces that generate the conflicting tendencies toward growth, on the one hand, and safety, on the other. The tendency toward least effort, while necessary for survival in many situations, also may prevent growth. Teachers traditionally have indicated their awareness of this tendency by designing classroom activities in which the students must accomplish at least the minimum goal that the teacher has set in order for rewards or other benefits to accrue to them. As long as the purpose of the class is external to the immediate wishes of the students, as the purpose of a self-fulfilling curriculum may be, the setting of such a minimum goal is probably necessary.

A self-fulfilling curriculum recognizes that the environment--both natural and social--is fixed from the point of view of each person at the moment he acts. There is nothing an individual can do to change

the immediate effect of the environment on him, though, in the long run, the environment can and does change in response to his efforts. Both the natural and the social environments are also hostile to one's desire to live a fulfilling life. Nature acts impartially on all forms of life, presenting forces and obstacles that man must overcome. The social environment has evolved to facilitate group living, which has become essential for satisfying life. Yet, the purpose of the social environment is always to protect the social order from threats. Society achieves this protective purpose by enforcing certain views of reality which, in turn, minimize the likelihood of socially disruptive behaviors.

Since the environment is both immovable and hostile from the individual's point of view at the moment he acts, each person must discover ways that he can minimize the effect of the environment on himself. This exceedingly difficult task for the individual presents a corresponding challenge to teachers, who must help students come to terms with their environment. They must help them acquire specific and accurate perceptions concerning the structural aspects of their social order so that they become aware of the variety of choices available. Freedom, then, is one's ability to reduce the effects of restrictive structures on himself through a deep understanding of the ways that they affect him. This, in turn, leads to greater options among which he can choose to maximize his satisfaction.

While the development of the perceptual field and of the mental powers alone would improve decision making, a final emphasis of a self-fulfilling curriculum must be the inculcation of a belief that holds that each person can reduce the restraints over his life--both internal

and external--and assume control. Such responsibility for one's own existence is not easy to take, for the forces against him are pervasive. Choosing self-fulfillment does not only mean wanting to direct one's own life; it also means continually striving to acquire and improve upon those skills necessary for truly effective decision making. The cost in terms of effort, sacrifice, and even agony is high, but the result, if successful, is worth the pain. It is the ecstasy of knowing that one is in command of his life, choosing his own direction, and accountable to himself alone.

APPENDIX

THE COMMON DENOMINATORS OF CULTURE

APPENDIX

THE COMMON DENOMINATORS OF CULTURE [51, p. 380]

age-grading
athletic sports
bodily adornment
calendar
cleanliness training
community organization
cooking
cooperative labor
cosmology
courtship
dancing
decorative art
divination
division of labor
dream interpretation
education
eschatology
ethics
ethnobotany (plant lore)
etiquette
faith healing
family
feasting
fire making
folklore
food taboos
funeral rites
games
gestures
gift-giving
government
greetings
hair styles
hospitality
housing
hygiene
incest taboos
inheritance rules
joking
kin-groups
kinship nomenclature
language
law
luck superstitions
magic
marriage
mealtimes
medicine
modesty concerning natural functions
mourning
music
mythology
numerals
obstetrics
penal sanctions
personal names
population policy
postnatal care
pregnancy usages
property rights
propitiation of supernatural being
puberty customs
religious ritual
residency rules
sexual restrictions
soul concepts
surgery
tool making

status differentiation visiting weaning

trade

weather control

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