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to the Philosophy of Education*  
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CHAPTER I  
EDUCATION AS A NECESSITY OF LIFE:

1. Renewal of Life by Transmission.

— The most notable distinction between living and inanimate things is that the former maintain themselves by renewal. A stone when struck resists. If its resistance is greater than the force of the blow struck, it remains outwardly unchanged. Otherwise, it is shattered into smaller bits. Never does the stone attempt to react in such a way that it may maintain itself against the blow, much less so as to render the blow a contributing factor to its own continued action. While the living thing may easily be crushed by superior force, it none the less tries to turn the energies which act upon it into means of its own further existence. If it cannot do so, it does not just split into smaller pieces (at least in the higher forms of life), but loses its identity as a living thing.

As long as it endures, it struggles to use surrounding energies in its own behalf. It uses light, air, moisture, and the material of soil. To say that it uses them is to say that it turns them into means of its own conservation. As long as it is growing, the energy it expends in thus turning the environment to account is more than compensated for by the return it gets: it grows. Understanding the word "control" in this sense, it may be said that a living being is one that subjugates and controls for its own continued activity the

energies that would otherwise use it up. Life is a self-renewing process through action upon the environment.

In all the higher forms this process cannot be kept up indefinitely. After a while they succumb; they die. The creature is not equal to the task of indefinite self-renewal. But continuity of the life process is not dependent upon the prolongation of the existence of any one individual. Reproduction of other forms of life goes on in continuous sequence. And though, as the geological record shows, not merely individuals but also species die out, the life process continues in increasingly complex forms. As some species die out, forms better adapted to utilize the obstacles against which they struggled in vain come into being. Continuity of life means continual readaptation of the environment to the needs of living organisms.

We have been speaking of life in its lowest terms -- as a physical thing. But we use the word "Life" to denote the whole range of experience, individual and racial. When we see a book called the *Life of Lincoln* we do not expect to find within its covers a treatise on physiology. We look for an account of social antecedents; a description of early surroundings, of the conditions and occupation of the family; of the chief episodes in the development of character; of signal struggles and achievements; of the individual's hopes, tastes, joys and sufferings. In precisely similar fashion we speak of the life of a savage tribe, of the Athenian people, of the American nation. "Life" covers customs, institutions, beliefs, victories and defeats, recreations and occupations.

We employ the word "experience" in the same pregnant sense. And to it, as well as to life in the bare physiological sense, the principle of continuity through renewal applies. With the renewal of physical existence goes, in the case of human beings, the recreation of beliefs, ideals, hopes, happiness, misery, and practices. The continuity of any experience, through renewing of the social group, is a literal fact. Education, in its broadest sense, is the means of this social continuity of life. Every one of the constituent elements of a social group, in a modern city as in a savage tribe, is born immature, helpless, without language, beliefs, ideas, or social standards. Each

individual, each unit who is the carrier of the life-experience of his group, in time passes away. Yet the life of the group goes on.

The primary ineluctable facts of the birth and death of each one of the constituent members in a social group determine the necessity of education. On one hand, there is the contrast between the immaturity of the new-born members of the group -- its future sole representatives -- and the maturity of the adult members who possess the knowledge and customs of the group. On the other hand, there is the necessity that these immature members be not merely physically preserved in adequate numbers, but that they be initiated into the interests, purposes, information, skill, and practices of the mature members: otherwise the group will cease its characteristic life. Even in a savage tribe, the achievements of adults are far beyond what the immature members would be capable of if left to themselves. With the growth of civilization, the gap between the original capacities of the immature and the standards and customs of the elders increases. Mere physical growing up, mere mastery of the bare necessities of subsistence will not suffice to reproduce the life of the group. Deliberate effort and the taking of thoughtful pains are required. Beings who are born not only unaware of, but quite indifferent to, the aims and habits of the social group have to be rendered cognizant of them and actively interested. Education, and education alone, spans the gap.

Society exists through a process of transmission quite as much as biological life. This transmission occurs by means of communication of habits of doing, thinking, and feeling from the older to the younger. Without this communication of ideals, hopes, expectations, standards, opinions, from those members of society who are passing out of the group life to those who are coming into it, social life could not survive. If the members who compose a society lived on continuously, they might educate the new-born members, but it would be a task directed by personal interest rather than social need. Now it is a work of necessity.

If a plague carried off the members of a society all at once, it is obvious that the group would be permanently done for. Yet the death of each of its constituent members is as certain as if an

epidemic took them all at once. But the graded difference in age, the fact that some are born as some die, makes possible through transmission of ideas and practices the constant reweaving of the social fabric. Yet this renewal is not automatic. Unless pains are taken to see that genuine and thorough transmission takes place, the most civilized group will relapse into barbarism and then into savagery. In fact, the human young are so immature that if they were left to themselves without the guidance and succor of others, they could not acquire the rudimentary abilities necessary for physical existence. The young of human beings compare so poorly in original efficiency with the young of many of the lower animals, that even the powers needed for physical sustentation have to be acquired under tuition. How much more, then, is this the case with respect to all the technological, artistic, scientific, and moral achievements of humanity!

## 2. Education and Communication.

-- So obvious, indeed, is the necessity of teaching and learning for the continued existence of a society that we may seem to be dwelling unduly on a truism. But justification is found in the fact that such emphasis is a means of getting us away from an unduly scholastic and formal notion of education. Schools are, indeed, one important method of the transmission which forms the dispositions of the immature; but it is only one means, and, compared with other agencies, a relatively superficial means. Only as we have grasped the necessity of more fundamental and persistent modes of tuition can we make sure of placing the scholastic methods in their true context.

Society not only continues to exist by transmission, by communication, but it may fairly be said to exist in transmission, in communication. There is more than a verbal tie between the words common, community, and communication. Men live in a community in virtue of the things which they have in common; and communication is the way in which they come to possess things in common. What they must have in common in order to form a community or society are aims, beliefs, aspirations, knowledge -- a common understanding -- like-mindedness as the sociologists say.

Such things cannot be passed physically from one to another, like bricks; they cannot be shared as persons would share a pie by dividing it into physical pieces. The communication which insures participation in a common understanding is one which secures similar emotional and intellectual dispositions -- like ways of responding to expectations and requirements.

Persons do not become a society by living in physical proximity, any more than a man ceases to be socially influenced by being so many feet or miles removed from others. A book or a letter may institute a more intimate association between human beings separated thousands of miles from each other than exists between dwellers under the same roof. Individuals do not even compose a social group because they all work for a common end. The parts of a machine work with a maximum of coöperativeness for a common result, but they do not form a community. If, however, they were all cognizant of the common end and all interested in it so that they regulated their specific activity in view of it, then they would form a community. But this would involve communication. Each would have to know what the other was about and would have to have some way of keeping the other informed as to his own purpose and progress. Consensus demands communication.

We are thus compelled to recognize that within even the most social group there are many relations which are not as yet social. A large number of human relationships in any social group are still upon the machine-like plane. Individuals use one another so as to get desired results, without reference to the emotional and intellectual disposition and consent of those used. Such uses express physical superiority, or superiority of position, skill, technical ability, and command of tools, mechanical or fiscal. So far as the relations of parent and child, teacher and pupil, employer and employee, governor and governed, remain upon this level, they form no true social group, no matter how closely their respective activities touch one another. Giving and taking of orders modifies action and results, but does not of itself effect a sharing of purposes, a communication of interests.

Not only is social life identical with communication, but all communication (and hence all genuine social life) is educative. To be a recipient of a communication is to have an enlarged and changed experience. One shares in what another has thought and felt and in so far, meagerly or amply, has his own attitude modified. Nor is the one who communicates left unaffected. Try the experiment of communicating, with fullness and accuracy, some experience to another, especially if it be somewhat complicated, and you will find your own attitude toward your experience changing; otherwise you resort to expletives and ejaculations. The experience has to be formulated in order to be communicated. To formulate requires getting outside of it, seeing it as another would see it, considering what points of contact it has with the life of another so that it may be got into such form that he can appreciate its meaning. Except in dealing with commonplaces and catch phrases one has to assimilate, imaginatively, something of another's experience in order to tell him intelligently of one's own experience. All communication is like art. It may fairly be said, therefore, that any social arrangement that remains vitally social, or vitally shared, is educative to those who participate in it. Only when it becomes cast in a mold and runs in a routine way does it lose its educative power.

In final account, then, not only does social life demand teaching and learning for its own permanence, but the very process of living together educates. It enlarges and enlightens experience; it stimulates and enriches imagination; it creates responsibility for accuracy and vividness of statement and thought. A man really living alone (alone mentally as well as physically) would have little or no occasion to reflect upon his past experience to extract its net meaning. The inequality of achievement between the mature and the immature not only necessitates teaching the young, but the necessity of this teaching gives an immense stimulus to reducing experience to that order and form which will render it most easily communicable and hence most usable.

### 3. The Place of Formal Education.

-- There is, accordingly, a marked difference between the education which every one gets from living with others, as long as

he really lives instead of just continuing to subsist, and the deliberate educating of the young. In the former case the education is incidental; it is natural and important, but it is not the express reason of the association. While it may be said, without exaggeration, that the measure of the worth of any social institution, economic, domestic, political, legal, religious, is its effect in enlarging and improving experience; yet this effect is not a part of its original motive, which is limited and more immediately practical. Religious associations began, for example, in the desire to secure the favor of overruling powers and to ward off evil influences; family life in the desire to gratify appetites and secure family perpetuity; systematic labor, for the most part, because of enslavement to others, etc. Only gradually was the by-product of the institution, its effect upon the quality and extent of conscious life, noted, and only more gradually still was this effect considered as a directive factor in the conduct of the institution. Even today, in our industrial life, apart from certain values of industriousness and thrift, the intellectual and emotional reaction of the forms of human association under which the world's work is carried on receives little attention as compared with physical output.

But in dealing with the young, the fact of association itself as an immediate human fact, gains in importance. While it is easy to ignore in our contact with them the effect of our acts upon their disposition, or to subordinate that educative effect to some external and tangible result, it is not so easy as in dealing with adults. The need of training is too evident; the pressure to accomplish a change in their attitude and habits is too urgent to leave these consequences wholly out of account. Since our chief business with them is to enable them to share in a common life we cannot help considering whether or no we are forming the powers which will secure this ability. If humanity has made some headway in realizing that the ultimate value of every institution is its distinctively human effect — its effect upon conscious experience — we may well believe that this lesson has been learned largely through dealings with the young.

We are thus led to distinguish, within the broad educational process which we have been so far considering, a more formal kind

of education — that of direct tuition or schooling. In undeveloped social groups, we find very little formal teaching and training. Savage groups mainly rely for instilling needed dispositions into the young upon the same sort of association which keeps adults loyal to their group. They have no special devices, material, or institutions for teaching save in connection with initiation ceremonies by which the youth are inducted into full social membership. For the most part, they depend upon children learning the customs of the adults, acquiring their emotional set and stock of ideas, by sharing in what the elders are doing. In part, this sharing is direct, taking part in the occupations of adults and thus serving an apprenticeship; in part, it is indirect, through the dramatic plays in which children reproduce the actions of grown-ups and thus learn to know what they are like. To savages it would seem preposterous to seek out a place where nothing but learning was going on in order that one might learn.

But as civilization advances, the gap between the capacities of the young and the concerns of adults widens. Learning by direct sharing in the pursuits of grown-ups becomes increasingly difficult except in the case of the less advanced occupations. Much of what adults do is so remote in space and in meaning that playful imitation is less and less adequate to reproduce its spirit. Ability to share effectively in adult activities thus depends upon a prior training given with this end in view. Intentional agencies — schools — and explicit material — studies — are devised. The task of teaching certain things is delegated to a special group of persons.

Without such formal education, it is not possible to transmit all the resources and achievements of a complex society. It also opens a way to a kind of experience which would not be accessible to the young, if they were left to pick up their training in informal association with others, since books and the symbols of knowledge are mastered.

But there are conspicuous dangers attendant upon the transition from indirect to formal education. Sharing in actual pursuit, whether directly or vicariously in play, is at least personal and vital. These qualities compensate, in some measure, for the narrowness of available opportunities. Formal instruction, on the contrary, easily

becomes remote and dead -- abstract and bookish, to use the ordinary words of depreciation. What accumulated knowledge exists in low grade societies is at least put into practice; it is transmuted into character; it exists with the depth of meaning that attaches to its coming within urgent daily interests.

But in an advanced culture much which has to be learned is stored in symbols. It is far from translation into familiar acts and objects. Such material is relatively technical and superficial. Taking the ordinary standard of reality as a measure, it is artificial. For this measure is connection with practical concerns. Such material exists in a world by itself, unassimilated to ordinary customs of thought and expression. There is the standing danger that the material of formal instruction will be merely the subject matter of the schools, isolated from the subject matter of life-experience. The permanent social interests are likely to be lost from view. Those which have not been carried over into the structure of social life, but which remain largely matters of technical information expressed in symbols, are made conspicuous in schools. Thus we reach the ordinary notion of education: the notion which ignores its social necessity and its identity with all human association that affects conscious life, and which identifies it with imparting information about remote matters and the conveying of learning through verbal signs: the acquisition of literacy.

Hence one of the weightiest problems with which the philosophy of education has to cope is the method of keeping a proper balance between the informal and the formal, the incidental and the intentional, modes of education. When the acquiring of information and of technical intellectual skill do not influence the formation of a social disposition, ordinary vital experience fails to gain in meaning, while schooling, in so far, creates only "sharps" in learning -- that is, egoistic specialists. To avoid a split between what men consciously know because they are aware of having learned it by a specific job of learning, and what they unconsciously know because they have absorbed it in the formation of their characters by intercourse with others, becomes an increasingly delicate task with every development of special schooling.

Summary.

-- It is the very nature of life to strive to continue in being. Since this continuance can be secured only by constant renewals, life is a self-renewing process. What nutrition and reproduction are to physiological life, education is to social life. This education consists primarily in transmission through communication. Communication is a process of sharing experience till it becomes a common possession. It modifies the disposition of both the parties who partake in it. That the ulterior significance of every mode of human association lies in the contribution which it makes to the improvement of the quality of experience is a fact most easily recognized in dealing with the immature. That is to say, while every social arrangement is educative in effect, the educative effect first becomes an important part of the purpose of the association in connection with the association of the older with the younger. As societies become more complex in structure and resources, the need of formal or intentional teaching and learning increases. As formal teaching and training grow in extent, there is the danger of creating an undesirable split between the experience gained in more direct associations and what is acquired in school. This danger was never greater than at the present time, on account of the rapid growth in the last few centuries of knowledge and technical modes of skill.

## CHAPTER II

### EDUCATION AS A SOCIAL FUNCTION:

#### 1. The Nature and Meaning of Environment.

— We have seen that a community or social group sustains itself means of the educational growth of the immature members of the group. By various agencies, unintentional and designed, a society transforms uninitiated and seemingly alien beings into robust trustees of its own resources and ideals. Education is thus a fostering, a nurturing, a cultivating, process. All of these words mean that it implies attention to the conditions of growth. We also speak of rearing, raising, bringing up — words which express the difference of level which education aims to cover. Etymologically, the word education means just a process of leading or bringing up. When we have the outcome of the process in mind, we speak of education as shaping, forming, molding activity — that is, a shaping into the standard form of social activity. In this chapter we are concerned with the general features of the way in which a social group brings up its immature members into its own social form.

Since what is required is a transformation of the quality of experience till it partakes in the interests, purposes, and ideas current in the social group, the problem is evidently not one of mere physical forming. Things can be physically transported in space; they may be bodily conveyed. Beliefs and aspirations cannot be physically extracted and inserted. How then are they communicated? Given the impossibility of direct contagion or literal inculcation, our problem is to discover the method by which the young assimilate the point of view of the old, or the older bring the young into like-mindedness with themselves.

The answer, in general formulation, is: By means of the action of the environment in calling out certain responses. The required beliefs cannot be hammered in; the needed attitudes cannot be plastered on. But the particular medium in which an individual exists leads him to see and feel one thing rather than another; it leads him to have certain plans in order that he may act successfully

with others; it strengthens some beliefs and weakens others as a condition of winning the approval of others. Thus it gradually produces in him a certain system of behavior, a certain disposition of action. The words "environment," "medium" denote something more than surroundings which encompass an individual. They denote the specific continuity of the surroundings with his own active tendencies. An inanimate being is, of course, continuous with its surroundings; but the environing circumstances do not, save metaphorically, constitute an environment. For the inorganic being is not concerned in the influences which affect it. On the other hand, some things which are remote in space and time from a living creature, especially a human creature, may form his environment even more truly than some of the things close to him. The things with which a man varies are his genuine environment. Thus the activities of the astronomer vary with the stars at which he gazes or about which he calculates. Of his immediate surroundings, his telescope is most intimately his environment. The environment of an antiquarian, as an antiquarian, consists of the remote epoch of human life with which he is concerned, and the relics, inscriptions, etc., by which he establishes connections with that period.

In brief, the environment consists of those conditions that promote or hinder, stimulate or inhibit, the characteristic activities of a living being. Water is the environment of a fish because it is necessary to the fish's activities — to its life. The north pole is a significant element in the environment of an arctic explorer, whether he succeeds in reaching it or not, because it defines his activities, makes them what they distinctively are. Just because life signifies not bare passive existence (supposing there is such a thing), but a way of acting, environment or medium signifies what enters into this activity as a sustaining or frustrating condition.

#### 2. The Social Environment.

— A being whose activities are associated with others has a social environment. What he does and what he can do depend upon the expectations, demands, approvals, and condemnations of others. A being connected with other beings cannot perform his own activities without taking the activities of others into account. For

they are the indispensable conditions of the realization of his tendencies. When he moves he stirs them and reciprocally. We might as well try to imagine a business man doing business, buying and selling, all by himself, as to conceive it possible to define the activities of an individual in terms of his isolated actions. The manufacturer moreover is as truly socially guided in his activities when he is laying plans in the privacy of his own counting house as when he is buying his raw material or selling his finished goods. Thinking and feeling that have to do with action in association with others is as much a social mode of behavior as is the most overt cooperative or hostile act.

What we have more especially to indicate is how the social medium nurtures its immature members. There is no great difficulty in seeing how it shapes the external habits of action. Even dogs and horses have their actions modified by association with human beings; they form different habits because human beings are concerned with what they do. Human beings control animals by controlling the natural stimuli which influence them; by creating a certain environment in other words. Food, bits and bridles, noises, vehicles, are used to direct the ways in which the natural or instinctive responses of horses occur. By operating steadily to call out certain acts, habits are formed which function with the same uniformity as the original stimuli. If a rat is put in a maze and finds food only by making a given number of turns in a given sequence, his activity is gradually modified till he habitually takes that course rather than another when he is hungry.

Human actions are modified in a like fashion. A burnt child dreads the fire; if a parent arranged conditions so that every time a child touched a certain toy he got burned, the child would learn to avoid that toy as automatically as he avoids touching fire. So far, however, we are dealing with what may be called training in distinction from educative teaching. The changes considered are in outer action rather than in mental and emotional dispositions of behavior. The distinction is not, however, a sharp one. The child might conceivably generate in time a violent antipathy, not only to that particular toy, but to the class of toys resembling it. The aversion might even persist after he had forgotten about the

original burns; later on he might even invent some reason to account for his seemingly irrational antipathy. In some cases, altering the external habit of action by changing the environment to affect the stimuli to action will also alter the mental disposition concerned in the action. Yet this does not always happen; a person trained to dodge a threatening blow, dodges automatically with no corresponding thought or emotion. We have to find, then, some differentia of training from education.

A clew may be found in the fact that the horse does not really share in the social use to which his action is put. Some one else uses the horse to secure a result which is advantageous by making it advantageous to the horse to perform the act -- he gets food, etc. But the horse, presumably, does not get any new interest. He remains interested in food, not in the service he is rendering. He is not a partner in a shared activity. Were he to become a copartner, he would, in engaging in the conjoint activity, have the same interest in its accomplishment which others have. He would share their ideas and emotions.

Now in many cases -- too many cases -- the activity of the immature human being is simply played upon to secure habits which are useful. He is trained like an animal rather than educated like a human being. His instincts remain attached to their original objects of pain or pleasure. But to get happiness or to avoid the pain of failure he has to act in a way agreeable to others. In other cases, he really shares or participates in the common activity. In this case, his original impulse is modified. He not merely acts in a way agreeing with the actions of others, but, in so acting, the same ideas and emotions are aroused in him that animate the others. A tribe, let us say, is warlike. The successes for which it strives, the achievements upon which it sets store, are connected with fighting and victory. The presence of this medium incites bellicose exhibitions in a boy, first in games, then in fact when he is strong enough. As he fights he wins approval and advancement; as he refrains, he is disliked, ridiculed, shut out from favorable recognition. It is not surprising that his original belligerent tendencies and emotions are strengthened at the expense of others, and that his ideas turn to things connected with war. Only in this

way can he become fully a recognized member of his group. Thus his mental habitudes are gradually assimilated to those of his group.

If we formulate the principle involved in this illustration, we shall perceive that the social medium neither implants certain desires and ideas directly, nor yet merely establishes certain purely muscular habits of action, like "instinctively" winking or dodging a blow. Setting up conditions which stimulate certain visible and tangible ways of acting is the first step. Making the individual a sharer or partner in the associated activity so that he feels its success as his success, its failure as his failure, is the completing step. As soon as he is possessed by the emotional attitude of the group, he will be alert to recognize the special ends at which it aims and the means employed to secure success. His beliefs and ideas, in other words, will take a form similar to those of others in the group. He will also achieve pretty much the same stock of knowledge since that knowledge is an ingredient of his habitual pursuits.

The importance of language in gaining knowledge is doubtless the chief cause of the common notion that knowledge may be passed directly from one to another. It almost seems as if all we have to do to convey an idea into the mind of another is to convey a sound into his ear. Thus imparting knowledge gets assimilated to a purely physical process. But learning from language will be found, when analyzed, to confirm the principle just laid down. It would probably be admitted with little hesitation that a child gets the idea of, say, a hat by using it as other persons do; by covering the head with it, giving it to others to wear, having it put on by others when going out, etc. But it may be asked how this principle of shared activity applies to getting through speech or reading the idea of, say, a Greek helmet, where no direct use of any kind enters in. What shared activity is there in learning from books about the discovery of America?

Since language tends to become the chief instrument of learning about many things, let us see how it works. The baby begins of course with mere sounds, noises, and tones having no meaning, expressing, that is, no idea. Sounds are just one kind of stimulus to direct response, some having a soothing effect, others tending to

make one jump, and so on. The sound h-a-t would remain as meaningless as a sound in Choctaw, a seemingly inarticulate grunt, if it were not uttered in connection with an action which is participated in by a number of people. When the mother is taking the infant out of doors, she says "hat" as she puts something on the baby's head. Being taken out becomes an interest to the child; mother and child not only go out with each other physically, but both are concerned in the going out; they enjoy it in common. By conjunction with the other factors in activity the sound "hat" soon gets the same meaning for the child that it has for the parent; it becomes a sign of the activity into which it enters. The bare fact that language consists of sounds which are mutually intelligible is enough of itself to show that its meaning depends upon connection with a shared experience.

In short, the sound h-a-t gains meaning in precisely the same way that the thing "hat" gains it, by being used in a given way. And they acquire the same meaning with the child which they have with the adult because they are used in a common experience by both. The guarantee for the same manner of use is found in the fact that the thing and the sound are first employed in a joint activity, as a means of setting up an active connection between the child and a grownup. Similar ideas or meanings spring up because both persons are engaged as partners in an action where what each does depends upon and influences what the other does. If two savages were engaged in a joint hunt for game, and a certain signal meant "move to the right" to the one who uttered it, and "move to the left" to the one who heard it, they obviously could not successfully carry on their hunt together. Understanding one another means that objects, including sounds, have the same value for both with respect to carrying on a common pursuit.

After sounds have got meaning through connection with other things employed in a joint undertaking, they can be used in connection with other like sounds to develop new meanings, precisely as the things for which they stand are combined. Thus the words in which a child learns about, say, the Greek helmet originally got a meaning (or were understood) by use in an action having a common interest and end. They now arouse a new

meaning by inciting the one who hears or reads to rehearse imaginatively the activities in which the helmet has its use. For the time being, the one who understands the words "Greek helmet" becomes mentally a partner with those who used the helmet. He engages, through his imagination, in a shared activity. It is not easy to get the full meaning of words. Most persons probably stop with the idea that "helmet" denotes a queer kind of headgear a people called the Greeks once wore. We conclude, accordingly, that the use of language to convey and acquire ideas is an extension and refinement of the principle that things gain meaning by being used in a shared experience or joint action; in no sense does it contravene that principle. When words do not enter as factors into a shared situation, either overtly or imaginatively, they operate as pure physical stimuli, not as having a meaning or intellectual value. They set activity running in a given groove, but there is no accompanying conscious purpose or meaning. Thus, for example, the plus sign may be a stimulus to perform the act of writing one number under another and adding the numbers, but the person performing the act will operate much as an automaton would unless he realizes the meaning of what he does.

### 3. The Social Medium as Educative.

Our net result thus far is that social environment forms the mental and emotional disposition of behavior in individuals by engaging them in activities that arouse and strengthen certain impulses, that have certain purposes and entail certain consequences. A child growing up in a family of musicians will inevitably have whatever capacities he has in music stimulated, and, relatively, stimulated more than other impulses which might have been awakened in another environment. Save as he takes an interest in music and gains a certain competency in it, he is "out of it"; he is unable to share in the life of the group to which he belongs. Some kinds of participation in the life of those with whom the individual is connected are inevitable; with respect to them, the social environment exercises an educative or formative influence unconsciously and apart from any set purpose.

In savage and barbarian communities, such direct participation (constituting the indirect or incidental education of which we have spoken) furnishes almost the sole influence for rearing the young into the practices and beliefs of the group. Even in present-day societies, it furnishes the basic nurture of even the most insistently schooled youth. In accord with the interests and occupations of the group, certain things become objects of high esteem; others of aversion. Association does not create impulses or affection and dislike, but it furnishes the objects to which they attach themselves. The way our group or class does things tends to determine the proper objects of attention, and thus to prescribe the directions and limits of observation and memory. What is strange or foreign (that is to say outside the activities of the groups) tends to be morally forbidden and intellectually suspect. It seems almost incredible to us, for example, that things which we know very well could have escaped recognition in past ages. We incline to account for it by attributing congenital stupidity to our forerunners and by assuming superior native intelligence on our own part. But the explanation is that their modes of life did not call for attention to such facts, but held their minds riveted to other things. Just as the senses require sensible objects to stimulate them, so our powers of observation, recollection, and imagination do not work spontaneously, but are set in motion by the demands set up by current social occupations. The main texture of disposition is formed, independently of schooling, by such influences. What conscious, deliberate teaching can do is at most to free the capacities thus formed for fuller exercise, to purge them of some of their grossness, and to furnish objects which make their activity more productive of meaning.

While this "unconscious influence of the environment" is so subtle and pervasive that it affects every fiber of character and mind, it may be worth while to specify a few directions in which its effect is most marked. First, the habits of language. Fundamental modes of speech, the bulk of the vocabulary, are formed in the ordinary intercourse of life, carried on not as a set means of instruction but as a social necessity. The babe acquires, as we well say, the mother tongue. While speech habits thus contracted may be corrected or even displaced by conscious teaching, yet, in times of

excitement, intentionally acquired modes of speech often fall away, and individuals relapse into their really native tongue. Secondly, manners. Example is notoriously more potent than precept. Good manners come, as we say, from good breeding or rather are good breeding; and breeding is acquired by habitual action, in response to habitual stimuli, not by conveying information. Despite the never ending play of conscious correction and instruction, the surrounding atmosphere and spirit is in the end the chief agent in forming manners. And manners are but minor morals. Moreover, in major morals, conscious instruction is likely to be efficacious only in the degree in which it falls in with the general "walk and conversation" of those who constitute the child's social environment. Thirdly, good taste and æsthetic appreciation. If the eye is constantly greeted by harmonious objects, having elegance of form and color, a standard of taste naturally grows up. The effect of a tawdry, unarranged, and over-decorated environment works for the deterioration of taste, just as meager and barren surroundings starve out the desire for beauty. Against such odds, conscious teaching can hardly do more than convey second-hand information as to what others think. Such taste never becomes spontaneous and personally engrained, but remains a labored reminder of what those think to whom one has been taught to look up. To say that the deeper standards of judgments of value are framed by the situations into which a person habitually enters is not so much to mention a fourth point, as it is to point out a fusion of those already mentioned. We rarely recognize the extent in which our conscious estimates of what is worth while and what is not, are due to standards of which we are not conscious at all. But in general it may be said that the things which we take for granted without inquiry or reflection are just the things which determine our conscious thinking and decide our conclusions. And these habitudes which lie below the level of reflection are just those which have been formed in the constant give and take of relationship with others.

#### 4. The School as a Special Environment.

— The chief importance of this foregoing statement of the educative process which goes on willy-nilly is to lead us to note that the only way in which adults consciously control the kind of

education which the immature get is by controlling the environment in which they act, and hence think and feel. We never educate directly, but indirectly by means of the environment. Whether we permit chance environments to do the work, or whether we design environments for the purpose makes a great difference. And any environment is a chance environment so far as its educative influence is concerned unless it has been deliberately regulated with reference to its educative effect. An intelligent home differs from an unintelligent one chiefly in that the habits of life and intercourse which prevail are chosen, or at least colored, by the thought of their bearing upon the development of children. But schools remain, of course, the typical instance of environments framed with express reference to influencing the mental and moral disposition of their members.

Roughly speaking, they come into existence when social traditions are so complex that a considerable part of the social store is committed to writing and transmitted through written symbols. Written symbols are even more artificial or conventional than spoken; they cannot be picked up in accidental intercourse with others. In addition, the written form tends to select and record matters which are comparatively foreign to everyday life. The achievements accumulated from generation to generation are deposited in it even though some of them have fallen temporarily out of use. Consequently as soon as a community depends to any considerable extent upon what lies beyond its own territory and its own immediate generation, it must rely upon the set agency of schools to insure adequate transmission of all its resources. To take an obvious illustration: The life of the ancient Greeks and Romans has profoundly influenced our own, and yet the ways in which they affect us do not present themselves on the surface of our ordinary experiences. In similar fashion, peoples still existing, but remote in space, British, Germans, Italians, directly concern our own social affairs, but the nature of the interaction cannot be understood without explicit statement and attention. In precisely similar fashion, our daily associations cannot be trusted to make clear to the young the part played in our activities by remote physical energies,

and by invisible structures. Hence a special mode of social intercourse is instituted, the school, to care for such matters.

This mode of association has three functions sufficiently specific, as compared with ordinary associations of life, to be noted. First, a complex civilization is too complex to be assimilated in toto. It has to be broken up into portions, as it were, and assimilated piecemeal, in a gradual and graded way. The relationships of our present social life are so numerous and so interwoven that a child placed in the most favorable position could not readily share in many of the most important of them. Not sharing in them, their meaning would not be communicated to him, would not become a part of his own mental disposition. There would be no seeing the trees because of the forest. Business, politics, art, science, religion, would make all at once a clamor for attention; confusion would be the outcome. The first office of the social organ we call the school is to provide a simplified environment. It selects the features which are fairly fundamental and capable of being responded to by the young. Then it establishes a progressive order, using the factors first acquired as means of gaining insight into what is more complicated.

In the second place, it is the business of the school environment to eliminate, so far as possible, the unworthy features of the existing environment from influence upon mental habitudes. It establishes a purified medium of action. Selection aims not only at simplifying but at weeding out what is undesirable. Every society gets encumbered with what is trivial, with dead wood from the past, and with what is positively perverse. The school has the duty of omitting such things from the environment which it supplies, and thereby doing what it can to counteract their influence in the ordinary social environment. By selecting the best for its exclusive use, it strives to reënforce the power of this best. As a society becomes more enlightened, it realizes that it is responsible not to transmit and conserve the whole of its existing achievements, but only such as make for a better future society. The school is its chief agency for the accomplishment of this end.

In the third place, it is the office of the school environment to balance the various elements in the social environment, and to see

to it that each individual gets an opportunity to escape from the limitations of the social group in which he was born, and to come into living contact with a broader environment. Such words as "society" and "community" are likely to be misleading, for they have a tendency to make us think there is a single thing corresponding to the single word. As a matter of fact, a modern society is many societies more or less loosely connected. Each household with its immediate extension of friends makes a society; the village or street group of playmates is a community; each business group, each club, is another. Passing beyond these more intimate groups, there is in a country like our own a variety of races, religious affiliations, economic divisions. Inside the modern city, in spite of its nominal political unity, there are probably more communities, more differing customs, traditions, aspirations, and forms of government or control, than existed in an entire continent at an earlier epoch.

Each such group exercises a formative influence on the active dispositions of its members. A clique, a club, a gang, a Fagin's household of thieves, the prisoners in a jail, provide educative environments for those who enter into their collective or conjoint activities, as truly as a church, a labor union, a business partnership, or a political party. Each of them is a mode of associated or community life, quite as much as is a family, a town, or a state. There are also communities whose members have little or no direct contact with one another, like the guild of artists, the republic of letters, the members of the professional learned class scattered over the face of the earth. For they have aims in common, and the activity of each member is directly modified by knowledge of what others are doing.

In the olden times, the diversity of groups was largely a geographical matter. There were many societies, but each, within its own territory, was comparatively homogeneous. But with the development of commerce, transportation, intercommunication, and emigration, countries like the United States are composed of a combination of different groups with different traditional customs. It is this situation which has, perhaps more than any other one cause, forced the demand for an educational institution which shall provide something like a homogeneous and balanced environment

for the young. Only in this way can the centrifugal forces set up by juxtaposition of different groups within one and the same political unit be counteracted. The intermingling in the school of youth of different races, differing religions, and unlike customs creates for all a new and broader environment. Common subject matter accustoms all to a unity of outlook upon a broader horizon than is visible to the members of any group while it is isolated. The assimilative force of the American public school is eloquent testimony to the efficacy of the common and balanced appeal.

The school has the function also of coordinating within the disposition of each individual the diverse influences of the various social environments into which he enters. One code prevails in the family; another, on the street; a third, in the workshop or store; a fourth, in the religious association. As a person passes from one of the environments to another, he is subjected to antagonistic pulls, and is in danger of being split into a being having different standards of judgment and emotion for different occasions. This danger imposes upon the school a steadying and integrating office.

Summary.

The development within the young of the attitudes and dispositions necessary to the continuous and progressive life of a society cannot take place by direct conveyance of beliefs, emotions, and knowledge. It takes place through the intermediary of the environment. The environment consists of the sum total of conditions which are concerned in the execution of the activity characteristic of a living being. The social environment consists of all the activities of fellow beings that are bound up in the carrying on of the activities of any one of its members. It is truly educative in its effect in the degree in which an individual shares or participates in some conjoint activity. By doing his share in the associated activity, the individual appropriates the purpose which actuates it, becomes familiar with its methods and subject matters, acquires needed skill, and is saturated with its emotional spirit.

The deeper and more intimate educative formation of disposition comes, without conscious intent, as the young gradually partake of the activities of the various groups to which they may belong. As a

society becomes more complex, however, it is found necessary to provide a special social environment which shall especially look after nurturing the capacities of the immature. Three of the more important functions of this special environment are: simplifying and ordering the factors of the disposition it is wished to develop; purifying and idealizing the existing social customs; creating a wider and better balanced environment than that by which the young would be likely, if left to themselves, to be influenced.

### CHAPTER III

#### EDUCATION AS DIRECTION:

##### 1. The Environment as Directive.

— We now pass to one of the special forms which the general function of education assumes: namely, that of direction, control, or guidance. Of these three words, direction, control, and guidance, the last best conveys the idea of assisting through coöperation the natural capacities of the individuals guided; control conveys rather the notion of an energy brought to bear from without and meeting some resistance from the one controlled; direction is a more neutral term and suggests the fact that the active tendencies of those directed are led in a certain continuous course, instead of dispersing aimlessly. Direction expresses the basic function, which tends at one extreme to become a guiding assistance and at another, a regulation or ruling. But in any case, we must carefully avoid a meaning sometimes read into the term "control." It is sometimes assumed, explicitly or unconsciously, that an individual's tendencies are naturally purely individualistic or egoistic, and thus antisocial. Control then denotes the process by which he is brought to subordinate his natural impulses to public or common ends. Since, by conception, his own nature is quite alien to this process and opposes it rather than helps it, control has in this view a flavor of coercion or compulsion about it. Systems of government and theories of the state have been built upon this notion, and it has seriously affected educational ideas and practices. But there is no ground for any such view. Individuals are certainly interested, at times, in having their own way, and their own way may go contrary to the ways of others. But they are also interested, and chiefly interested upon the whole, in entering into the activities of others and taking part in conjoint and coöperative doings. Otherwise, no such thing as a community would be possible. And there would not even be any one interested in furnishing the policeman to keep a semblance of harmony unless he thought that thereby he could gain some personal advantage. Control, in truth, means only an emphatic form of direction of powers, and covers the regulation gained by an

individual through his own efforts quite as much as that brought about when others take the lead.

In general, every stimulus directs activity. It does not simply excite it or stir it up, but directs it toward an object. Put the other way around, a response is not just a re-action, a protest, as it were, against being disturbed; it is, as the word indicates, an answer. It meets the stimulus, and corresponds with it. There is an adaptation of the stimulus and response to each other. A light is the stimulus to the eye to see something, and the business of the eye is to see. If the eyes are open and there is light, seeing occurs; the stimulus is but a condition of the fulfillment of the proper function of the organ, not an outside interruption. To some extent, then, all direction or control is a guiding of activity to its own end; it is an assistance in doing fully what some organ is already tending to do.

This general statement needs, however, to be qualified in two respects. In the first place, except in the case of a small number of instincts, the stimuli to which an immature human being is subject are not sufficiently definite to call out, in the beginning, specific responses. There is always a great deal of superfluous energy aroused. This energy may be wasted, going aside from the point; it may also go against the successful performance of an act. It does harm by getting in the way. Compare the behavior of a beginner in riding a bicycle with that of the expert. There is little axis of direction in the energies put forth; they are largely dispersive and centrifugal. Direction involves a focusing and fixating of action in order that it may be truly a response, and this requires an elimination of unnecessary and confusing movements. In the second place, although no activity can be produced in which the person does not cooperate to some extent, yet a response may be of a kind which does not fit into the sequence and continuity of action. A person boxing may dodge a particular blow successfully, but in such a way as to expose himself the next instant to a still harder blow. Adequate control means that the successive acts are brought into a continuous order; each act not only meets its immediate stimulus but helps the acts which follow.

In short, direction is both simultaneous and successive. At a given time, it requires that, from all the tendencies that are partially called out, those be selected which center energy upon the point of need. Successively, it requires that each act be balanced with those which precede and come after, so that order of activity is achieved. Focusing and ordering are thus the two aspects of direction, one spatial, the other temporal. The first insures hitting the mark; the second keeps the balance required for further action. Obviously, it is not possible to separate them in practice as we have distinguished them in idea. Activity must be centered at a given time in such a way as to prepare for what comes next. The problem of the immediate response is complicated by one's having to be on the lookout for future occurrences.

Two conclusions emerge from these general statements. On the one hand, purely external direction is impossible. The environment can at most only supply stimuli to call out responses. These responses proceed from tendencies already possessed by the individual. Even when a person is frightened by threats into doing something, the threats work only because the person has an instinct of fear. If he has not, or if, though having it, it is under his own control, the threat has no more influence upon him than light has in causing a person to see who has no eyes. While the customs and rules of adults furnish stimuli which direct as well as evoke the activities of the young, the young, after all, participate in the direction which their actions finally take. In the strict sense, nothing can be forced upon them or into them. To overlook this fact means to distort and pervert human nature. To take into account the contribution made by the existing instincts and habits of those directed is to direct them economically and wisely. Speaking accurately, all direction is but re-direction; it shifts the activities already going on into another channel. Unless one is cognizant of the energies which are already in operation, one's attempts at direction will almost surely go amiss.

On the other hand, the control afforded by the customs and regulations of others may be short-sighted. It may accomplish its immediate effect, but at the expense of throwing the subsequent action of the person out of balance. A threat may, for example,

prevent a person from doing something to which he is naturally inclined by arousing fear of disagreeable consequences if he persists. But he may be left in the position which exposes him later on to influences which will lead him to do even worse things. His instincts of cunning and slyness may be aroused, so that things henceforth appeal to him on the side of evasion and trickery more than would otherwise have been the case. Those engaged in directing the actions of others are always in danger of overlooking the importance of the sequential development of those they direct.

## 2. Modes of Social Direction.

-- Adults are naturally most conscious of directing the conduct of others when they are immediately aiming so to do. As a rule, they have such an aim consciously when they find themselves resisted; when others are doing things they do not wish them to do. But the more permanent and influential modes of control are those which operate from moment to moment continuously without such deliberate intention on our part.

### 1.

When others are not doing what we would like them to or are threatening disobedience, we are most conscious of the need of controlling them and of the influences by which they are controlled. In such cases, our control becomes most direct, and at this point we are most likely to make the mistakes just spoken of. We are even likely to take the influence of superior force for control, forgetting that while we may lead a horse to water we cannot make him drink; and that while we can shut a man up in a penitentiary we cannot make him penitent. In all such cases of immediate action upon others, we need to discriminate between physical results and moral results. A person may be in such a condition that forcible feeding or enforced confinement is necessary for his own good. A child may have to be snatched with roughness away from a fire so that he shall not be burnt. But no improvement of disposition, no educative effect, need follow. A harsh and commanding tone may be effectual in keeping a child away from the fire, and the same desirable

physical effect will follow as if he had been snatched away. But there may be no more obedience of a moral sort in one case than in the other. A man can be prevented from breaking into other persons' houses by shutting him up, but shutting him up may not alter his disposition to commit burglary. When we confuse a physical with an educative result, we always lose the chance of enlisting the person's own participating disposition in getting the result desired, and thereby of developing within him an intrinsic and persisting direction in the right way.

In general, the occasion for the more conscious acts of control should be limited to acts which are so instinctive or impulsive that the one performing them has no means of foreseeing their outcome. If a person cannot foresee the consequences of his act, and is not capable of understanding what he is told about its outcome by those with more experience, it is impossible for him to guide his act intelligently. In such a state, every act is alike to him. Whatever moves him does move him, and that is all there is to it. In some cases, it is well to permit him to experiment, and to discover the consequences for himself in order that he may act intelligently next time under similar circumstances. But some courses of action are too discommoding and obnoxious to others to allow of this course being pursued. Direct disapproval is now resorted to. Shaming, ridicule, disfavor, rebuke, and punishment are used. Or contrary tendencies in the child are appealed to to divert him from his troublesome line of behavior. His sensitiveness to approbation, his hope of winning favor by an agreeable act, are made use of to induce action in another direction.

2.

These methods of control are so obvious (because so intentionally employed) that it would hardly be worth while to mention them if it were not that notice may now be taken, by way of contrast, of the other more important and permanent mode of control. This other method resides in the ways in which persons, with whom the immature being is associated, use things; the instrumentalities with which they accomplish their own ends. The very existence of the

social medium in which an individual lives, moves, and has his being is the standing effective agency of directing his activity.

This fact makes it necessary for us to examine in greater detail what is meant by the social environment. We are given to separating from each other the physical and social environments in which we live. The separation is responsible on one hand for an exaggeration of the moral importance of the more direct or personal modes of control of which we have been speaking; and on the other hand for an exaggeration, in current psychology and philosophy, of the intellectual possibilities of contact with a purely physical environment. There is not, in fact, any such thing as the direct influence of one human being on another apart from use of the physical environment as an intermediary. A smile, a frown, a rebuke, a word of warning or encouragement, all involve some physical change. Otherwise, the attitude of one would not get over to alter the attitude of another. Comparatively speaking, such modes of influence may be regarded as personal. The physical medium is reduced to a mere means of personal contact. In contrast with such direct modes of mutual influence, stand associations in common pursuits involving the use of things as means and as measures of results. Even if the mother never told her daughter to help her, or never rebuked her for not helping, the child would be subjected to direction in her activities by the mere fact that she was engaged, along with the parent, in the household life. Imitation, emulation, the need of working together, enforce control.

If the mother hands the child something needed, the latter must reach the thing in order to get it. Where there is giving there must be taking. The way the child handles the thing after it is got, the use to which it is put, is surely influenced by the fact that the child has watched the mother. When the child sees the parent looking for something, it is as natural for it also to look for the object and to give it over when it finds it, as it was, under other circumstances, to receive it. Multiply such an instance by the thousand details of daily intercourse, and one has a picture of the most permanent and enduring method of giving direction to the activities of the young.

In saying this, we are only repeating what was said previously about participating in a joint activity as the chief way of forming disposition. We have explicitly added, however, the recognition of the part played in the joint activity by the use of things. The philosophy of learning has been unduly dominated by a false psychology. It is frequently stated that a person learns by merely having the qualities of things impressed upon his mind through the gateway of the senses. Having received a store of sensory impressions, association or some power of mental synthesis is supposed to combine them into ideas -- into things with a meaning. An object, stone, orange, tree, chair, is supposed to convey different impressions of color, shape, size, hardness, smell, taste, etc., which aggregated together constitute the characteristic meaning of each thing. But as matter of fact, it is the characteristic use to which the thing is put, because of its specific qualities, which supplies the meaning with which it is identified. A chair is a thing which is put to one use; a table, a thing which is employed for another purpose; an orange is a thing which costs so much, which is grown in warm climes, which is eaten, and when eaten has an agreeable odor and refreshing taste, etc.

The difference between an adjustment to a physical stimulus and a mental act is that the latter involves response to a thing in its meaning; the former does not. A noise may make me jump without my mind being implicated. When I hear a noise and run and get water and put out a blaze, I respond intelligently; the sound meant fire, and fire meant need of being extinguished. I bump into a stone, and kick it to one side purely physically. I put it to one side for fear some one will stumble upon it, intelligently; I respond to a meaning which the thing has. I am startled by a thunderclap whether I recognize it or not -- more likely, if I do not recognize it. But if I say, either out loud or to myself, that is thunder, I respond to the disturbance as a meaning. My behavior has a mental quality. When things have a meaning for us, we mean (intend, propose) what we do: when they do not, we act blindly, unconsciously, unintelligently.

In both kinds of responsive adjustment, our activities are directed or controlled. But in the merely blind response, direction is also blind. There may be training, but there is no education. Repeated

responses to recurrent stimuli may fix a habit of acting in a certain way. All of us have many habits of whose import we are quite unaware, since they were formed without our knowing what we were about. Consequently they possess us, rather than we them. They move us; they control us. Unless we become aware of what they accomplish, and pass judgment upon the worth of the result, we do not control them. A child might be made to bow every time he met a certain person by pressure on his neck muscles, and bowing would finally become automatic. It would not, however, be an act of recognition or deference on his part, till he did it with a certain end in view -- as having a certain meaning. And not till he knew what he was about and performed the act for the sake of its meaning could he be said to be "brought up" or educated to act in a certain way. To have an idea of a thing is thus not just to get certain sensations from it. It is to be able to respond to the thing in view of its place in an inclusive scheme of action; it is to foresee the drift and probable consequence of the action of the thing upon us and of our action upon it.

To have the same ideas about things which others have, to be like-minded with them, and thus to be really members of a social group, is therefore to attach the same meanings to things and to acts which others attach. Otherwise, there is no common understanding, and no community life. But in a shared activity, each person refers what he is doing to what the other is doing and vice-versa. That is, the activity of each is placed in the same inclusive situation. To pull at a rope at which others happen to be pulling is not a shared or conjoint activity, unless the pulling is done with knowledge that others are pulling and for the sake of either helping or hindering what they are doing. A pin may pass in the course of its manufacture through the hands of many persons. But each may do his part without knowledge of what others do or without any reference to what they do; each may operate simply for the sake of a separate result -- his own pay. There is, in this case, no common consequence to which the several acts are referred, and hence no genuine intercourse or association, in spite of juxtaposition, and in spite of the fact that their respective doings contribute to a single outcome. But if each views the consequences of his own acts as

having a bearing upon what others are doing and takes into account the consequences of their behavior upon himself, then there is a common mind; a common intent in behavior. There is an understanding set up between the different contributors; and this common understanding controls the action of each.

Suppose that conditions were so arranged that one person automatically caught a ball and then threw it to another person who caught and automatically returned it; and that each so acted without knowing where the ball came from or went to. Clearly, such action would be without point or meaning. It might be physically controlled, but it would not be socially directed. But suppose that each becomes aware of what the other is doing, and becomes interested in the other's action and thereby interested in what he is doing himself as connected with the action of the other. The behavior of each would then be intelligent; and socially intelligent and guided. Take one more example of a less imaginary kind. An infant is hungry, and cries while food is prepared in his presence. If he does not connect his own state with what others are doing, nor what they are doing with his own satisfaction, he simply reacts with increasing impatience to his own increasing discomfort. He is physically controlled by his own organic state. But when he makes a back and forth reference, his whole attitude changes. He takes an interest, as we say; he takes note and watches what others are doing. He no longer reacts just to his own hunger, but behaves in the light of what others are doing for its prospective satisfaction. In that way, he also no longer just gives way to hunger without knowing it, but he notes, or recognizes, or identifies his own state. It becomes an object for him. His attitude toward it becomes in some degree intelligent. And in such noting of the meaning of the actions of others and of his own state, he is socially directed.

It will be recalled that our main proposition had two sides. One of them has now been dealt with: namely, that physical things do not influence mind (or form ideas and beliefs) except as they are implicated in action for prospective consequences. The other point is persons modify one another's dispositions only through the special use they make of physical conditions. Consider first the case of so-called expressive movements to which others are sensitive;

blushing, smiling, frowning, clenching of fists, natural gestures of all kinds. In themselves, these are not expressive. They are organic parts of a person's attitude. One does not blush to show modesty or embarrassment to others, but because the capillary circulation alters in response to stimuli. But others use the blush, or a slightly perceptible tightening of the muscles of a person with whom they are associated, as a sign of the state in which that person finds himself, and as an indication of what course to pursue. The frown signifies an imminent rebuke for which one must prepare, or an uncertainty and hesitation which one must, if possible, remove by saying or doing something to restore confidence.

A man at some distance is waving his arms wildly. One has only to preserve an attitude of detached indifference, and the motions of the other person will be on the level of any remote physical change which we happen to note. If we have no concern or interest, the waving of the arms is as meaningless to us as the gyrations of the arms of a windmill. But if interest is aroused, we begin to participate. We refer his action to something we are doing ourselves or that we should do. We have to judge the meaning of his act in order to decide what to do. Is he beckoning for help? Is he warning us of an explosion to be set off, against which we should guard ourselves? In one case, his action means to run toward him; in the other case, to run away. In any case, it is the change he effects in the physical environment which is a sign to us of how we should conduct ourselves. Our action is socially controlled because we endeavor to refer what we are to do to the same situation in which he is acting.

Language is, as we have already seen (*Ante*, p. 18) a case of this joint reference of our own action and that of another to a common situation. Hence its unrivaled significance as a means of social direction. But language would not be this efficacious instrument were it not that it takes place upon a background of coarser and more tangible use of physical means to accomplish results. A child sees persons with whom he lives using chairs, hats, tables, spades, saws, plows, horses, money in certain ways. If he has any share at all in what they are doing, he is led thereby to use things in the same way, or to use other things in a way which will fit in. If a chair

is drawn up to a table, it is a sign that he is to sit in it; if a person extends his right hand, he is to extend his; and so on in a never ending stream of detail. The prevailing habits of using the products of human art and the raw materials of nature constitute by all odds the deepest and most pervasive mode of social control. When children go to school, they already have "minds" -- they have knowledge and dispositions of judgment which may be appealed to through the use of language. But these "minds" are the organized habits of intelligent response which they have previously required by putting things to use in connection with the way other persons use things. The control is inescapable; it saturates disposition.

The net outcome of the discussion is that the fundamental means of control is not personal but intellectual. It is not "moral" in the sense that a person is moved by direct personal appeal from others, important as is this method at critical junctures. It consists in the habits of understanding, which are set up in using objects in correspondence with others, whether by way of coöperation and assistance or rivalry and competition. Mind as a concrete thing is precisely the power to understand things in terms of the use made of them; a socialized mind is the power to understand them in terms of the use to which they are turned in joint or shared situations. And mind in this sense is the method of social control.

### 3. Imitation and Social Psychology.

-- We have already noted the defects of a psychology of learning which places the individual mind naked, as it were, in contact with physical objects, and which believes that knowledge, ideas, and beliefs accrue from their interaction. Only comparatively recently has the predominating influence of association with fellow beings in the formation of mental and moral disposition been perceived. Even now it is usually treated as a kind of adjunct to an alleged method of learning by direct contact with things, and as merely supplementing knowledge of the physical world with knowledge of persons. The purport of our discussion is that such a view makes an absurd and impossible separation between persons and things. Interaction with things may form habits of external adjustment. But it leads to activity having a meaning and conscious intent only when things

are used to produce a result. And the only way one person can modify the mind of another is by using physical conditions, crude or artificial, so as to evoke some answering activity from him. Such are our two main conclusions. It is desirable to amplify and enforce them by placing them in contrast with the theory which uses a psychology of supposed direct relationships of human beings to one another as an adjunct to the psychology of the supposed direct relation of an individual to physical objects. In substance, this so-called social psychology has been built upon the notion of imitation. Consequently, we shall discuss the nature and rôle of imitation in the formation of mental disposition.

According to this theory, social control of individuals rests upon the instinctive tendency of individuals to imitate or copy the actions of others. The latter serve as models. The imitative instinct is so strong that the young devote themselves to conforming to the patterns set by others and reproducing them in their own scheme of behavior. According to our theory, what is here called imitation is a misleading name for partaking with others in a use of things which leads to consequences of common interest.

The basic error in the current notion of imitation is that it puts the cart before the horse. It takes an effect for the cause of the effect. There can be no doubt that individuals in forming a social group are like-minded; they understand one another. They tend to act with the same controlling ideas, beliefs, and intentions, given similar circumstances. Looked at from without, they might be said to be engaged in "imitating" one another. In the sense that they are doing much the same sort of thing in much the same sort of way, this would be true enough. But "imitation" throws no light upon why they so act; it repeats the fact as an explanation of itself. It is an explanation of the same order as the famous saying that opium puts men to sleep because of its dormitive power.

Objective likeness of acts and the mental satisfaction found in being in conformity with others are baptized by the name imitation. This social fact is then taken for a psychological force, which produced the likeness. A considerable portion of what is called imitation is simply the fact that persons being alike in structure

respond in the same way to like stimuli. Quite independently of imitation, men on being insulted get angry and attack the insulter. This statement may be met by citing the undoubted fact that response to an insult takes place in different ways in groups having different customs. In one group, it may be met by recourse to fisticuffs, in another by a challenge to a duel, in a third by an exhibition of contemptuous disregard. This happens, so it is said, because the model set for imitation is different. But there is no need to appeal to imitation. The mere fact that customs are different means that the actual stimuli to behavior are different. Conscious instruction plays a part; prior approvals and disapprovals have a large influence. Still more effective is the fact that unless an individual acts in the way current in his group, he is literally out of it. He can associate with others on intimate and equal terms only by behaving in the way in which they behave. The pressure that comes from the fact that one is let into the group action by acting in one way and shut out by acting in another way is unremitting. What is called the effect of imitation is mainly the product of conscious instruction and of the selective influence exercised by the unconscious confirmations and ratifications of those with whom one associates.

Suppose that some one rolls a ball to a child; he catches it and rolls it back, and the game goes on. Here the stimulus is not just the sight of the ball, or the sight of the other rolling it. It is the situation -- the game which is playing. The response is not merely rolling the ball back; it is rolling it back so that the other one may catch and return it, -- that the game may continue. The "pattern" or model is not the action of the other person. The whole situation requires that each should adapt his action in view of what the other person has done and is to do. Imitation may come in but its role is subordinate. The child has an interest on his own account; he wants to keep it going. He may then note how the other person catches and holds the ball in order to improve his own acts. He imitates the means of doing, not the end or thing to be done. And he imitates the means because he wishes, on his own behalf, as part of his own initiative, to take an effective part in the game. One has only to consider how completely the child is dependent from his earliest

days for successful execution of his purposes upon fitting his acts into those of others to see what a premium is put upon behaving as others behave, and of developing an understanding of them in order that he may so behave. The pressure for likemindedness in action from this source is so great that it is quite superfluous to appeal to imitation.

As matter of fact, imitation of ends, as distinct from imitation of means which help to reach ends, is a superficial and transitory affair which leaves little effect upon disposition. Idiots are especially apt at this kind of imitation; it affects outward acts but not the meaning of their performance. When we find children engaging in this sort of mimicry, instead of encouraging them (as we would do if it were an important means of social control) we are more likely to rebuke them as apes, monkeys, parrots, or copy cats. Imitation of means of accomplishment is, on the other hand, an intelligent act. It involves close observation, and judicious selection of what will enable one to do better something which he already is trying to do. Used for a purpose, the imitative instinct may, like any other instinct, become a factor in the development of effective action.

This excursus should, accordingly, have the effect of reënforcing the conclusion that genuine social control means the formation of a certain mental disposition; a way of understanding objects, events, and acts which enables one to participate effectively in associated activities. Only the friction engendered by meeting resistance from others leads to the view that it takes place by forcing a line of action contrary to natural inclinations. Only failure to take account of the situations in which persons are mutually concerned ( or interested in acting responsively to one another) leads to treating imitation as the chief agent in promoting social control.

#### 4. Some Applications to Education.

-- Why does a savage group perpetuate savagery, and a civilized group civilization? Doubtless the first answer to occur to mind is because savages are savages; being of low-grade intelligence and perhaps defective moral sense. But careful study has made it doubtful whether their native capacities are appreciably inferior to those of civilized man. It has made it certain that native differences

are not sufficient to account for the difference in culture. In a sense the mind of savage peoples is an effect, rather than a cause, of their backward institutions. Their social activities are such as to restrict their objects of attention and interest, and hence to limit the stimuli to mental development. Even as regards the objects that come within the scope of attention, primitive social customs tend to arrest observation and imagination upon qualities which do not fructify in the mind. Lack of control of natural forces means that a scant number of natural objects enter into associated behavior. Only a small number of natural resources are utilized and they are not worked for what they are worth. The advance of civilization means that a larger number of natural forces and objects have been transformed into instrumentalities of action, into means for securing ends. We start not so much with superior capacities as with superior stimuli for evocation and direction of our capacities. The savage deals largely with crude stimuli; we have weighted stimuli.

Prior human efforts have made over natural conditions. As they originally existed they were indifferent to human endeavors. Every domesticated plant and animal, every tool, every utensil, every appliance, every manufactured article, every æsthetic decoration, every work of art means a transformation of conditions once hostile or indifferent to characteristic human activities into friendly and favoring conditions. Because the activities of children today are controlled by these selected and charged stimuli, children are able to traverse in a short lifetime what the race has needed slow, tortured ages to attain. The dice have been loaded by all the successes which have preceded.

Stimuli conducive to economical and effective response, such as our system of roads and means of transportation, our ready command of heat, light, and electricity, our ready-made machines and apparatus for every purpose, do not, by themselves or in their aggregate, constitute a civilization. But the uses to which they are put are civilization, and without the things the uses would be impossible. Time otherwise necessarily devoted to wresting a livelihood from a grudging environment and securing a precarious protection against its inclemencies is freed. A body of knowledge is

transmitted, the legitimacy of which is guaranteed by the fact that the physical equipment in which it is incarnated leads to results that square with the other facts of nature. Thus these appliances of art supply a protection, perhaps our chief protection, against a recrudescence of these superstitious beliefs, those fanciful myths and infertile imaginings about nature in which so much of the best intellectual power of the past has been spent. If we add one other factor, namely, that such appliances be not only used, but used in the interests of a truly shared or associated life, then the appliances become the positive resources of civilization. If Greece, with a scant tithe of our material resources, achieved a worthy and noble intellectual and artistic career, it is because Greece operated for social ends such resources as it had.

But whatever the situation, whether one of barbarism or civilization, whether one of stunted control of physical forces, or of partial enslavement to a mechanism not yet made tributary to a shared experience, things as they enter into action furnish the educative conditions of daily life and direct the formation of mental and moral disposition.

Intentional education signifies, as we have already seen, a specially selected environment, the selection being made on the basis of materials and method specifically promoting growth in the desired direction. Since language represents the physical conditions that have been subjected to the maximum transformation in the interests of social life -- physical things which have lost their original quality in becoming social tools -- it is appropriate that language should play a large part compared with other appliances. By it we are led to share vicariously in past human experience, thus widening and enriching the experience of the present. We are enabled, symbolically and imaginatively, to anticipate situations. In countless ways, language condenses meanings that record social outcomes and presage social outlooks. So significant is it of a liberal share in what is worth while in life that unlettered and uneducated have become almost synonymous.

The emphasis in school upon this particular tool has, however, its dangers -- dangers which are not theoretical but exhibited in

practice. Why is it, in spite of the fact that teaching by pouring in, learning by a passive absorption, are universally condemned, that they are still so entrenched in practice? That education is not an affair of "telling" and being told, but an active and constructive process, is a principle almost as generally violated in practice as conceded in theory. Is not this deplorable situation due to the fact that the doctrine is itself merely told? It is preached; it is lectured; it is written about. But its enactment into practice requires that the school environment be equipped with agencies for doing, with tools and physical materials, to an extent rarely attained. It requires that methods of instruction and administration be modified to allow and to secure direct and continuous occupations with things. Not that the use of language as an educational resource should lessen; but that its use should be more vital and fruitful by having its normal connection with shared activities. "These things ought ye to have done, and not to have left the others undone." And for the school "these things" mean equipment with the instrumentalities of cooperative or joint activity.

For when the schools depart from the educational conditions effective in the out-of-school environment, they necessarily substitute a bookish, a pseudo-intellectual spirit for a social spirit. Children doubtless go to school to learn, but it has yet to be proved that learning occurs most adequately when it is made a separate conscious business. When treating it as a business of this sort tends to preclude the social sense which comes from sharing in an activity of common concern and value, the effort at isolated intellectual learning contradicts its own aim. We may secure motor activity and sensory excitation by keeping an individual by himself, but we cannot thereby get him to understand the meaning which things have in the life of which he is a part. We may secure technical specialized ability in algebra, Latin, or botany, but not the kind of intelligence which directs ability to useful ends. Only by engaging in a joint activity, where one person's use of material and tools is consciously referred to the use other persons are making of their capacities and appliances, is a social direction of disposition attained.

Summary.

-- The natural or native impulses of the young do not agree with the life-customs of the group into which they are born. Consequently they have to be directed or guided. This control is not the same thing as physical compulsion; it consists in centering the impulses acting at any one time upon some specific end and in introducing an order of continuity into the sequence of acts. The action of others is always influenced by deciding what stimuli shall call out their actions. But in some cases as in commands, prohibitions, approvals, and disapprovals, the stimuli proceed from persons with a direct view to influencing action. Since in such cases we are most conscious of controlling the action of others, we are likely to exaggerate the importance of this sort of control at the expense of a more permanent and effective method. The basic control resides in the nature of the situations in which the young take part. In social situations the young have to refer their way of acting to what others are doing and make it fit in. This directs their action to a common result, and gives an understanding common to the participants. For all mean the same thing, even when performing different acts. This common understanding of the means and ends of action is the essence of social control. It is indirect, or emotional and intellectual, not direct or personal. Moreover it is intrinsic to the disposition of the person, not external and coercive. To achieve this internal control through identity of interest and understanding is the business of education. While books and conversation can do much, these agencies are usually relied upon too exclusively. Schools require for their full efficiency more opportunity for conjoint activities in which those instructed take part, so that they may acquire a social sense of their own powers and of the materials and appliances used.

## CHAPTER IV

### EDUCATION AS GROWTH:

#### 1. The Conditions of Growth.

— In directing the activities of the young, society determines its own future in determining that of the young. Since the young at a given time will at some later date compose the society of that period, the latter's nature will largely turn upon the direction children's activities were given at an earlier period. This cumulative movement of action toward a later result is what is meant by growth.

The primary condition of growth is immaturity. This may seem to be a mere truism — saying that a being can develop only in some point in which he is undeveloped. But the prefix "im" of the word immaturity means something positive, not a mere void or lack. It is noteworthy that the terms "capacity" and "potentiality" have a double meaning, one sense being negative, the other positive. Capacity may denote mere receptivity, like the capacity of a quart measure. We may mean by potentiality a merely dormant or quiescent state — a capacity to become something different under external influences. But we also mean by capacity an ability, a power; and by potentiality potency, force. Now when we say that immaturity means the possibility of growth, we are not referring to absence of powers which may exist at a later time; we express a force positively present — the ability to develop.

Our tendency to take immaturity as mere lack, and growth as something which fills up the gap between the immature and the mature is due to regarding childhood comparatively, instead of intrinsically. We treat it simply as a privation because we are measuring it by adulthood as a fixed standard. This fixes attention upon what the child has not, and will not have till he becomes a man. This comparative standpoint is legitimate enough for some purposes, but if we make it final, the question arises whether we are not guilty of an overweening presumption. Children, if they could express themselves articulately and sincerely, would tell a different

tale; and there is excellent adult authority for the conviction that for certain moral and intellectual purposes adults must become as little children.

The seriousness of the assumption of the negative quality of the possibilities of immaturity is apparent when we reflect that it sets up as an ideal and standard a static end. The fulfillment of growing is taken to mean an accomplished growth: that is to say, an Ungrowth, something which is no longer growing. The futility of the assumption is seen in the fact that every adult resents the imputation of having no further possibilities of growth; and so far as he finds that they are closed to him mourns the fact as evidence of loss, instead of falling back on the achieved as adequate manifestation of power. Why an unequal measure for child and man?

Taken absolutely, instead of comparatively, immaturity designates a positive force or ability, — the power to grow. We do not have to draw out or educe positive activities from a child, as some educational doctrines would have it. Where there is life, there are already eager and impassioned activities. Growth is not something done to them; it is something they do. The positive and constructive aspect of possibility gives the key to understanding the two chief traits of immaturity, dependence and plasticity. (1) It sounds absurd to hear dependence spoken of as something positive, still more absurd as a power. Yet if helplessness were all there were in dependence, no development could ever take place. A merely impotent being has to be carried, forever, by others. The fact that dependence is accompanied by growth in ability, not by an ever increasing lapse into parasitism, suggests that it is already something constructive. Being merely sheltered by others would not promote growth. For (2) it would only build a wall around impotence. With reference to the physical world, the child is helpless. He lacks at birth and for a long time thereafter power to make his way physically, to make his own living. If he had to do that by himself, he would hardly survive an hour. On this side his helplessness is almost complete. The young of the brutes are immeasurably his superiors. He is physically weak and not able to

turn the strength which he possesses to coping with the physical environment.

1.

The thoroughgoing character of this helplessness suggests, however, some compensating power. The relative ability of the young of brute animals to adapt themselves fairly well to physical conditions from an early period suggests the fact that their life is not intimately bound up with the life of those about them. They are compelled, so to speak, to have physical gifts because they are lacking in social gifts. Human infants, on the other hand, can get along with physical incapacity just because of their social capacity. We sometimes talk and think as if they simply happened to be physically in a social environment; as if social forces exclusively existed in the adults who take care of them, they being passive recipients. If it were said that children are themselves marvelously endowed with power to enlist the coöperative attention of others, this would be thought to be a backhanded way of saying that others are marvelously attentive to the needs of children. But observation shows that children are gifted with an equipment of the first order for social intercourse. Few grown-up persons retain all of the flexible and sensitive ability of children to vibrate sympathetically with the attitudes and doings of those about them. Inattention to physical things (going with incapacity to control them) is accompanied by a corresponding intensification of interest and attention as to the doings of people. The native mechanism of the child and his impulses all tend to facile social responsiveness. The statement that children, before adolescence, are egotistically self-centered, even if it were true, would not contradict the truth of this statement. It would simply indicate that their social responsiveness is employed on their own behalf, not that it does not exist. But the statement is not true as matter of fact. The facts which are cited in support of the alleged pure egoism of children really show the intensity and directness with which they go to their mark. If the ends which form the mark seem narrow and selfish to adults, it is only because adults (by means of a similar engrossment in their day) have mastered these ends, which have consequently ceased to interest them. Most of the remainder of children's alleged native

egoism is simply an egoism which runs counter to an adult's egoism. To a grown-up person who is too absorbed in his own affairs to take an interest in children's affairs, children doubtless seem unreasonably engrossed in their own affairs.

From a social standpoint, dependence denotes a power rather than a weakness; it involves interdependence. There is always a danger that increased personal independence will decrease the social capacity of an individual. In making him more self-reliant, it may make him more self-sufficient; it may lead to aloofness and indifference. It often makes an individual so insensitive in his relations to others as to develop an illusion of being really able to stand and act alone -- an unnamed form of insanity which is responsible for a large part of the remediable suffering of the world.

2.

The specific adaptability of an immature creature for growth constitutes his plasticity. This is something quite different from the plasticity of putty or wax. It is not a capacity to take on change of form in accord with external pressure. It lies near the pliable elasticity by which some persons take on the color of their surroundings while retaining their own bent. But it is something deeper than this. It is essentially the ability to learn from experience; the power to retain from one experience something which is of avail in coping with the difficulties of a later situation. This means power to modify actions on the basis of the results of prior experiences, the power to develop dispositions. Without it, the acquisition of habits is impossible.

It is a familiar fact that the young of the higher animals, and especially the human young, have to learn to utilize their instinctive reactions. The human being is born with a greater number of instinctive tendencies than other animals. But the instincts of the lower animals perfect themselves for appropriate action at an early period after birth, while most of those of the human infant are of little account just as they stand. An original specialized power of adjustment secures immediate efficiency, but, like a railway ticket, it is good for one route only. A being who, in order to use his eyes, ears, hands, and legs, has to experiment in making varied

combinations of their reactions, achieves a control that is flexible and varied. A chick, for example, pecks accurately at a bit of food in a few hours after hatching. This means that definite coordinations of activities of the eyes in seeing and of the body and head in striking are perfected in a few trials. An infant requires about six months to be able to gauge with approximate accuracy the action in reaching which will coordinate with his visual activities; to be able, that is, to tell whether he can reach a seen object and just how to execute the reaching. As a result, the chick is limited by the relative perfection of its original endowment. The infant has the advantage of the multitude of instinctive tentative reactions and of the experiences that accompany them, even though he is at a temporary disadvantage because they cross one another. In learning an action, instead of having it given ready-made, one of necessity learns to vary its factors, to make varied combinations of them, according to change of circumstances. A possibility of continuing progress is opened up by the fact that in learning one act, methods are developed good for use in other situations. Still more important is the fact that the human being acquires a habit of learning. He learns to learn.

The importance for human life of the two facts of dependence and variable control has been summed up in the doctrine of the significance of prolonged infancy. <sup>1</sup> This prolongation is significant from the standpoint of the adult members of the group as well as from that of the young. The presence of dependent and learning beings is a stimulus to nurture and affection. The need for constant continued care was probably a chief means in transforming temporary cohabitations into permanent unions. It certainly was a chief influence in forming habits of affectionate and sympathetic watchfulness; that constructive interest in the well-being of others which is essential to associated life. Intellectually, this moral development meant the introduction of many new objects of attention; it stimulated foresight and planning for the future. Thus there is a reciprocal influence. Increasing complexity of social life requires a longer period of infancy in which to acquire the needed powers; this prolongation of dependence means prolongation of

plasticity, or power of acquiring variable and novel modes of control. Hence it provides a further push to social progress.

## 2. Habits as Expressions of Growth.

— We have already noted that plasticity is the capacity to retain and carry over from prior experience factors which modify subsequent activities. This signifies the capacity to acquire habits, or develop definite dispositions. We have now to consider the salient features of habits. In the first place, a habit is a form of executive skill, of efficiency in doing. A habit means an ability to use natural conditions as means to ends. It is an active control of the environment through control of the organs of action. We are perhaps apt to emphasize the control of the body at the expense of control of the environment. We think of walking, talking, playing the piano, the specialized skills characteristic of the etcher, the surgeon, the bridge-builder, as if they were simply ease, deftness, and accuracy on the part of the organism. They are that, of course; but the measure of the value of these qualities lies in the economical and effective control of the environment which they secure. To be able to walk is to have certain properties of nature at our disposal — and so with all other habits.

Education is not infrequently defined as consisting in the acquisition of those habits that effect an adjustment of an individual and his environment. The definition expresses an essential phase of growth. But it is essential that adjustment be understood in its active sense of control of means for achieving ends. If we think of a habit simply as a change wrought in the organism, ignoring the fact that this change consists in ability to effect subsequent changes in the environment, we shall be led to think of "adjustment" as a conformity to environment as wax conforms to the seal which impresses it. The environment is thought of as something fixed, providing in its fixity the end and standard of changes taking place in the organism; adjustment is just fitting ourselves to this fixity of external conditions. <sup>2</sup> Habit as habituation is indeed something relatively passive; we get used to our surroundings — to our clothing, our shoes, and gloves; to the atmosphere as long as it is fairly equable; to our daily associates, etc. Conformity to the

environment, a change wrought in the organism without reference to ability to modify surroundings, is a marked trait of such habituations. Aside from the fact that we are not entitled to carry over the traits of such adjustments (which might well be called accommodations, to mark them off from active adjustments) into habits of active use of our surroundings, two features of habituations are worth notice. In the first place, we get used to things by first using them.

Consider getting used to a strange city. At first, there is excessive stimulation and excessive and ill-adapted response. Gradually certain stimuli are selected because of their relevancy, and others are degraded. We can say either that we do not respond to them any longer, or more truly that we have effected a persistent response to them — an equilibrium of adjustment. This means, in the second place, that this enduring adjustment supplies the background upon which are made specific adjustments, as occasion arises. We are never interested in changing the whole environment; there is much that we take for granted and accept just as it already is. Upon this background our activities focus at certain points in an endeavor to introduce needed changes. Habituation is thus our adjustment to an environment which at the time we are not concerned with modifying, and which supplies a leverage to our active habits.

Adaptation, in fine, is quite as much adaptation of the environment to our own activities as of our activities to the environment. A savage tribe manages to live on a desert plain. It adapts itself. But its adaptation involves a maximum of accepting, tolerating, putting up with things as they are, a maximum of passive acquiescence, and a minimum of active control, of subjection to use. A civilized people enters upon the scene. It also adapts itself. It introduces irrigation; it searches the world for plants and animals that will flourish under such conditions; it improves, by careful selection, those which are growing there. As a consequence, the wilderness blossoms as a rose. The savage is merely habituated; the civilized man has habits which transform the environment.

The significance of habit is not exhausted, however, in its executive and motor phase. It means formation of intellectual and emotional disposition as well as an increase in ease, economy, and efficiency of action. Any habit marks an inclination — an active preference and choice for the conditions involved in its exercise. A habit does not wait, Micawber-like, for a stimulus to turn up so that it may get busy; it actively seeks for occasions to pass into full operation. If its expression is unduly blocked, inclination shows itself in uneasiness and intense craving. A habit also marks an intellectual disposition. Where there is a habit, there is acquaintance with the materials and equipment to which action is applied. There is a definite way of understanding the situations in which the habit operates. Modes of thought, of observation and reflection, enter as forms of skill and of desire into the habits that make a man an engineer, an architect, a physician, or a merchant. In unskilled forms of labor, the intellectual factors are at minimum precisely because the habits involved are not of a high grade. But there are habits of judging and reasoning as truly as of handling a tool, painting a picture, or conducting an experiment.

Such statements are, however, understatements. The habits of mind involved in habits of the eye and hand supply the latter with their significance. Above all, the intellectual element in a habit fixes the relation of the habit to varied and elastic use, and hence to continued growth. We speak of fixed habits. Well, the phrase may mean powers so well established that their possessor always has them as resources when needed. But the phrase is also used to mean ruts, routine ways, with loss of freshness, open-mindedness, and originality. Fixity of habit may mean that something has a fixed hold upon us, instead of our having a free hold upon things. This fact explains two points in a common notion about habits: their identification with mechanical and external modes of action to the neglect of mental and moral attitudes, and the tendency to give them a bad meaning, an identification with "bad habits." Many a person would feel surprised to have his aptitude in his chosen profession called a habit, and would naturally think of his use of tobacco, liquor, or profane language as typical of the meaning of

habit. A habit is to him something which has a hold on him, something not easily thrown off even though judgment condemn it.

Habits reduce themselves to routine ways of acting, or degenerate into ways of action to which we are enslaved just in the degree in which intelligence is disconnected from them. Routine habits are unthinking habits: "bad" habits are habits so severed from reason that they are opposed to the conclusions of conscious deliberation and decision. As we have seen, the acquiring of habits is due to an original plasticity of our natures: to our ability to vary responses till we find an appropriate and efficient way of acting. Routine habits, and habits that possess us instead of our possessing them, are habits which put an end to plasticity. They mark the close of power to vary. There can be no doubt of the tendency of organic plasticity, of the physiological basis, to lessen with growing years. The instinctively mobile and eagerly varying action of childhood, the love of new stimuli and new developments, too easily passes into a "settling down," which means aversion to change and a resting on past achievements. Only an environment which secures the full use of intelligence in the process of forming habits can counteract this tendency. Of course, the same hardening of the organic conditions affects the physiological structures which are involved in thinking. But this fact only indicates the need of persistent care to see to it that the function of intelligence is invoked to its maximum possibility. The short-sighted method which falls back on mechanical routine and repetition to secure external efficiency of habit, motor skill without accompanying thought, marks a deliberate closing in of surroundings upon growth.

### 3. The Educational Bearings of the Conception of Development.

-- We have had so far but little to say in this chapter about education. We have been occupied with the conditions and implications of growth. If our conclusions are justified, they carry with them, however, definite educational consequences. When it is said that education is development, everything depends upon how development is conceived. Our net conclusion is that life is development, and that developing, growing, is life. Translated into

its educational equivalents, that means (i) that the educational process has no end beyond itself; it is its own end; and that (ii) the educational process is one of continual reorganizing, reconstructing, transforming.

#### 1.

Development when it is interpreted in comparative terms, that is, with respect to the special traits of child and adult life, means the direction of power into special channels: the formation of habits involving executive skill, definiteness of interest, and specific objects of observation and thought. But the comparative view is not final. The child has specific powers; to ignore that fact is to stunt or distort the organs upon which his growth depends. The adult uses his powers to transform his environment, thereby occasioning new stimuli which redirect his powers and keep them developing. Ignoring this fact means arrested development, a passive accommodation. Normal child and normal adult alike, in other words, are engaged in growing. The difference between them is not the difference between growth and no growth, but between the modes of growth appropriate to different conditions. With respect to the development of powers devoted to coping with specific scientific and economic problems we may say the child should be growing in manhood. With respect to sympathetic curiosity, unbiased responsiveness, and openness of mind, we may say that the adult should be growing in childlikeness. One statement is as true as the other.

Three ideas which have been criticized, namely, the merely privative nature of immaturity, static adjustment to a fixed environment, and rigidity of habit, are all connected with a false idea of growth or development, -- that it is a movement toward a fixed goal. Growth is regarded as having an end, instead of being an end. The educational counterparts of the three fallacious ideas are first, failure to take account of the instinctive or native powers of the young; secondly, failure to develop initiative in coping with novel situations; thirdly, an undue emphasis upon drill and other devices which secure automatic skill at the expense of personal

perception. In all cases, the adult environment is accepted as a standard for the child. He is to be brought up to it.

Natural instincts are either disregarded or treated as nuisances -- as obnoxious traits to be suppressed, or at all events to be brought into conformity with external standards. Since conformity is the aim, what is distinctively individual in a young person is brushed aside, or regarded as a source of mischief or anarchy. Conformity is made equivalent to uniformity. Consequently, there are induced lack of interest in the novel, aversion to progress, and dread of the uncertain and the unknown. Since the end of growth is outside of and beyond the process of growing, external agents have to be resorted to to induce movement toward it. Whenever a method of education is stigmatized as mechanical, we may be sure that external pressure is brought to bear to reach an external end.

2.

Since in reality there is nothing to which growth is relative save more growth, there is nothing to which education is subordinate save more education. It is a commonplace to say that education should not cease when one leaves school. The point of this commonplace is that the purpose of school education is to insure the continuance of education by organizing the powers that insure growth. The inclination to learn from life itself and to make the conditions of life such that all will learn in the process of living is the finest product of schooling.

When we abandon the attempt to define immaturity by means of fixed comparison with adult accomplishments, we are compelled to give up thinking of it as denoting lack of desired traits. Abandoning this notion, we are also forced to surrender our habit of thinking of instruction as a method of supplying this lack by pouring knowledge into a mental and moral hole which awaits filling. Since life means growth, a living creature lives as truly and positively at one stage as at another, with the same intrinsic fullness and the same absolute claims. Hence education means the enterprise of supplying the conditions which insure growth, or adequacy of life, irrespective of age. We first look with impatience upon immaturity, regarding it as something to be got over as rapidly as possible.

Then the adult formed by such educative methods looks back with impatient regret upon childhood and youth as a scene of lost opportunities and wasted powers. This ironical situation will endure till it is recognized that living has its own intrinsic quality and that the business of education is with that quality.

Realization that life is growth protects us from that so-called idealizing of childhood which in effect is nothing but lazy indulgence. Life is not to be identified with every superficial act and interest. Even though it is not always easy to tell whether what appears to be mere surface fooling is a sign of some nascent as yet untrained power, we must remember that manifestations are not to be accepted as ends in themselves. They are signs of possible growth. They are to be turned into means of development, of carrying power forward, not indulged or cultivated for their own sake. Excessive attention to surface phenomena (even in the way of rebuke as well as of encouragement) may lead to their fixation and thus to arrested development. What impulses are moving toward, not what they have been, is the important thing for parent and teacher. The true principle of respect for immaturity cannot be better put than in the words of Emerson: "Respect the child. Be not too much his parent. Trespass not on his solitude. But I hear the outcry which replies to this suggestion: Would you verily throw up the reins of public and private discipline; would you leave the young child to the mad career of his own passions and whimsies, and call this anarchy a respect for the child's nature? I answer, -- Respect the child, respect him to the end, but also respect yourself.... The two points in a boy's training are, to keep his nature [sic] and train off all but that; to keep his nature [sic], but stop off his uproar, fooling, and horseplay; keep his nature and arm it with knowledge in the very direction in which it points." And as Emerson goes on to show this reverence for childhood and youth instead of opening up an easy and easy-going path to the instructors, "involves at once, immense claims on the time, the thought, on the life of the teacher. It requires time, use, insight, event, all the great lessons and assistances of God; and only to think of using it implies character and profoundness."

Summary.

-- Power to grow depends upon need for others and plasticity. Both of these conditions are at their height in childhood and youth. Plasticity or the power to learn from experience means the formation of habits. Habits give control over the environment, power to utilize it for human purposes. Habits take the form both of habituation, or a general and persistent balance of organic activities with the surroundings, and of active capacities to readjust activity to meet new conditions. The former furnishes the background of growth; the latter constitute growing. Active habits involve thought, invention, and initiative in applying capacities to new aims. They are opposed to routine which marks an arrest of growth. Since growth is the characteristic of life, education is all one with growing; it has no end beyond itself. The criterion of the value of school education is the extent in which it creates a desire for continued growth and supplies means for making the desire effective in fact.

#### Footnotes

[1] Intimations of its significance are found in a number of writers, but John Fiske, in his *Excursions of an Evolutionist*, is accredited with its first systematic exposition.

[2] This conception is, of course, a logical correlate of the conceptions of the external relation of stimulus and response, considered in the last chapter, and of the negative conceptions of immaturity and plasticity noted in this chapter.

## CHAPTER V PREPARATION, UNFOLDING, AND FORMAL DISCIPLINE:

### 1. Education as Preparation.

-- We have laid it down that the educative process is a continuous process of growth, having as its aim at every stage an added capacity of growth. This conception contrasts sharply with other ideas which have influenced practice. By making the contrast explicit, the meaning of the conception will be brought more clearly to light. The first contrast is with the idea that education is a process of preparation or getting ready. What is to be prepared for is, of course, the responsibilities and privileges of adult life. Children are not regarded as social members in full and regular standing. They are looked upon as candidates; they are placed on the waiting list. The conception is only carried a little farther when the life of adults is considered as not having meaning on its own account, but as a preparatory probation for "another life." The idea is but another form of the notion of the negative and privative character of growth already criticized; hence we shall not repeat the criticisms, but pass on to the evil consequences which flow from putting education on this basis.

In the first place, it involves loss of impetus. Motive power is not utilized. Children proverbially live in the present; that is not only a fact not to be evaded, but it is an excellence. The future just as future lacks urgency and body. To get ready for something, one knows not what nor why, is to throw away the leverage that exists, and to seek for motive power in a vague chance. Under such circumstances, there is, in the second place, a premium put on shilly-shallying and procrastination. The future prepared for is a long way off; plenty of time will intervene before it becomes a present. Why be in a hurry about getting ready for it? The temptation to postpone is much increased because the present offers so many wonderful opportunities and proffers such invitations to adventure. Naturally attention and energy go to them; education

accrues naturally as an outcome, but a lesser education than if the full stress of effort had been put upon making conditions as educative as possible. A third undesirable result is the substitution of a conventional average standard of expectation and requirement for a standard which concerns the specific powers of the individual under instruction. For a severe and definite judgment based upon the strong and weak points of the individual is substituted a vague and wavering opinion concerning what youth may be expected, upon the average, to become in some more or less remote future; say, at the end of the year, when promotions are to take place, or by the time they are ready to go to college or to enter upon what, in contrast with the probationary stage, is regarded as the serious business of life. It is impossible to overestimate the loss which results from the deflection of attention from the strategic point to a comparatively unproductive point. It fails most just where it thinks it is succeeding -- in getting a preparation for the future.

Finally, the principle of preparation makes necessary recourse on a large scale to the use of adventitious motives of pleasure and pain. The future having no stimulating and directing power when severed from the possibilities of the present, something must be hitched on to it to make it work. Promises of reward and threats of pain are employed. Healthy work, done for present reasons and as a factor in living, is largely unconscious. The stimulus resides in the situation with which one is actually confronted. But when this situation is ignored, pupils have to be told that if they do not follow the prescribed course penalties will accrue; while if they do, they may expect, some time in the future, rewards for their present sacrifices. Everybody knows how largely systems of punishment have had to be resorted to by educational systems which neglect present possibilities in behalf of preparation for a future. Then, in disgust with the harshness and impotency of this method, the pendulum swings to the opposite extreme, and the dose of information required against some later day is sugar-coated, so that pupils may be fooled into taking something which they do not care for.

It is not of course a question whether education should prepare for the future. If education is growth, it must progressively realize

present possibilities, and thus make individuals better fitted to cope with later requirements. Growing is not something which is completed in odd moments; it is a continuous leading into the future. If the environment, in school and out, supplies conditions which utilize adequately the present capacities of the immature, the future which grows out of the present is surely taken care of. The mistake is not in attaching importance to preparation for future need, but in making it the mainspring of present effort. Because the need of preparation for a continually developing life is great, it is imperative that every energy should be bent to making the present experience as rich and significant as possible. Then as the present merges insensibly into the future, the future is taken care of.

## 2. Education as Unfolding.

-- There is a conception of education which professes to be based upon the idea of development. But it takes back with one hand what it proffers with the other. Development is conceived not as continuous growing, but as the unfolding of latent powers toward a definite goal. The goal is conceived of as completion, -perfection. Life at any stage short of attainment of this goal is merely an unfolding toward it. Logically the doctrine is only a variant of the preparation theory. Practically the two differ in that the adherents of the latter make much of the practical and professional duties for which one is preparing, while the developmental doctrine speaks of the ideal and spiritual qualities of the principle which is unfolding.

The conception that growth and progress are just approximations to a final unchanging goal is the last infirmity of the mind in its transition from a static to a dynamic understanding of life. It simulates the style of the latter. It pays the tribute of speaking much of development, process, progress. But all of these operations are conceived to be merely transitional; they lack meaning on their own account. They possess significance only as movements toward something away from what is now going on. Since growth is just a movement toward a completed being, the final ideal is immobile. An abstract and indefinite future is in control with all which that connotes in depreciation of present power and opportunity.

Since the goal of perfection, the standard of development, is very far away, it is so beyond us that, strictly speaking, it is unattainable. Consequently, in order to be available for present guidance it must be translated into something which stands for it. Otherwise we should be compelled to regard any and every manifestation of the child as an unfolding from within, and hence sacred. Unless we set up some definite criterion representing the ideal end by which to judge whether a given attitude or act is approximating or moving away, our sole alternative is to withdraw all influences of the environment lest they interfere with proper development. Since that is not practicable, a working substitute is set up. Usually, of course, this is some idea which an adult would like to have a child acquire. Consequently, by "suggestive questioning" or some other pedagogical device, the teacher proceeds to "draw out" from the pupil what is desired. If what is desired is obtained, that is evidence that the child is unfolding properly. But as the pupil generally has no initiative of his own in this direction, the result is a random groping after what is wanted, and the formation of habits of dependence upon the cues furnished by others. Just because such methods simulate a true principle and claim to have its sanction they may do more harm than would outright "telling," where, at least, it remains with the child how much will stick.

Within the sphere of philosophic thought there have been two typical attempts to provide a working representative of the absolute goal. Both start from the conception of a whole -- an absolute -- which is "immanent" in human life. The perfect or complete ideal is not a mere ideal; it is operative here and now. But it is present only implicitly, "potentially," or in an enfolded condition. What is termed development is the gradual making explicit and outward of what is thus wrapped up. Froebel and Hegel, the authors of the two philosophic schemes referred to, have different ideas of the path by which the progressive realization of manifestation of the complete principle is effected. According to Hegel, it is worked out through a series of historical institutions which embody the different factors in the Absolute. According to Froebel, the actuating force is the presentation of symbols, largely mathematical, corresponding to the essential traits of the Absolute. When these are presented to the

child, the Whole, or perfection, sleeping within him, is awakened. A single example may indicate the method. Every one familiar with the kindergarten is acquainted with the circle in which the children gather. It is not enough that the circle is a convenient way of grouping the children. It must be used "because it is a symbol of the collective life of mankind in general."

Froebel's recognition of the significance of the native capacities of children, his loving attention to them, and his influence in inducing others to study them, represent perhaps the most effective single force in modern educational theory in effecting widespread acknowledgment of the idea of growth. But his formulation of the notion of development and his organization of devices for promoting it were badly hampered by the fact that he conceived development to be the unfolding of a ready-made latent principle. He failed to see that growing is growth, developing is development, and consequently placed the emphasis upon the completed product. Thus he set up a goal which meant the arrest of growth, and a criterion which is not applicable to immediate guidance of powers, save through translation into abstract and symbolic formulae.

A remote goal of complete unfoldedness is, in technical philosophic language, transcendental. That is, it is something apart from direct experience and perception. So far as experience is concerned, it is empty; it represents a vague sentimental aspiration rather than anything which can be intelligently grasped and stated. This vagueness must be compensated for by some a priori formula. Froebel made the connection between the concrete facts of experience and the transcendental ideal of development by regarding the former as symbols of the latter. To regard known things as symbols, according to some arbitrary a priori formula -- and every a priori conception must be arbitrary -- is an invitation to romantic fancy to seize upon any analogies which appeal to it and treat them as laws. After the scheme of symbolism has been settled upon, some definite technique must be invented by which the inner meaning of the sensible symbols used may be brought home to children. Adults being the formulators of the symbolism are naturally the authors and controllers of the technique. The result was that Froebel's love of abstract symbolism often got the better of

his sympathetic insight; and there was substituted for development as arbitrary and externally imposed a scheme of dictation as the history of instruction has ever seen.

With Hegel the necessity of finding some working concrete counterpart of the inaccessible Absolute took an institutional, rather than symbolic, form. His philosophy, like Froebel's, marks in one direction an indispensable contribution to a valid conception of the process of life. The weaknesses of an abstract individualistic philosophy were evident to him; he saw the impossibility of making a clean sweep of historical institutions, of treating them as despotisms begot in artifice and nurtured in fraud. In his philosophy of history and society culminated the efforts of a whole series of German writers -- Lessing, Herder, Kant, Schiller, Goethe -- to appreciate the nurturing influence of the great collective institutional products of humanity. For those who learned the lesson of this movement, it was henceforth impossible to conceive of institutions or of culture as artificial. It destroyed completely -- in idea, not in fact -- the psychology that regarded "mind" as a ready-made possession of a naked individual by showing the significance of "objective mind" -- language, government, art, religion -- in the formation of individual minds. But since Hegel was haunted by the conception of an absolute goal, he was obliged to arrange institutions as they concretely exist, on a stepladder of ascending approximations. Each in its time and place is absolutely necessary, because a stage in the self-realizing process of the absolute mind. Taken as such a step or stage, its existence is proof of its complete rationality, for it is an integral element in the total, which is Reason. Against institutions as they are, individuals have no spiritual rights; personal development, and nurture, consist in obedient assimilation of the spirit of existing institutions. Conformity, not transformation, is the essence of education. Institutions change as history shows; but their change, the rise and fall of states, is the work of the "world-spirit." Individuals, save the great "heroes" who are the chosen organs of the world-spirit, have no share or lot in it. In the later nineteenth century, this type of idealism was amalgamated with the doctrine of biological evolution. "Evolution" was a force working itself out to its own end. As against it, or as compared with

it, the conscious ideas and preference of individuals are impotent. Or, rather, they are but the means by which it works itself out. Social progress is an "organic growth," not an experimental selection. Reason is all powerful, but only Absolute Reason has any power.

The recognition (or rediscovery, for the idea was familiar to the Greeks) that great historic institutions are active factors in the intellectual nurture of mind was a great contribution to educational philosophy. It indicated a genuine advance beyond Rousseau, who had marred his assertion that education must be a natural development and not something forced or grafted upon individuals from without, by the notion that social conditions are not natural. But in its notion of a complete and all-inclusive end of development, the Hegelian theory swallowed up concrete individualities, though magnifying The Individual in the abstract. Some of Hegel's followers sought to reconcile the claims of the Whole and of individuality by the conception of society as an organic whole, or organism. That social organization is presupposed in the adequate exercise of individual capacity is not to be doubted. But the social organism, interpreted after the relation of the organs of the body to each other and to the whole body, means that each individual has a certain limited place and function, requiring to be supplemented by the place and functions of the other organs. As one portion of the bodily tissue is differentiated so that it can be the hand and the hand only, another, the eye, and so on, all taken together making the organism, so one individual is supposed to be differentiated for the exercise of the mechanical operations of society, another for those of a statesman, another for those of a scholar, and so on. The notion of "organism" is thus used to give a philosophic sanction to class distinctions in social organization -- a notion which in its educational application again means external dictation instead of growth.

### 3. Education as Training of Faculties.

-- A theory which has had great vogue and which came into existence before the notion of growth had much influence is known as the theory of "formal discipline." It has in view a correct ideal;

one outcome of education should be the creation of specific powers of accomplishment. A trained person is one who can do the chief things which it is important for him to do better than he could without training: "better" signifying greater ease, efficiency, economy, promptness, etc. That this is an outcome of education was indicated in what was said about habits as the product of educative development. But the theory in question takes, as it were, a short cut; it regards some powers (to be presently named) as the direct and conscious aims of instruction, and not simply as the results of growth. There is a definite number of powers to be trained, as one might enumerate the kinds of strokes which a golfer has to master. Consequently education should get directly at the business of training them. But this implies that they are already there in some untrained form; otherwise their creation would have to be an indirect product of other activities and agencies. Being there already in some crude form, all that remains is to exercise them in constant and graded repetitions, and they will inevitably be refined and perfected. In the phrase "formal discipline" as applied to this conception, "discipline" refers both to the outcome of trained power and to the method of training through repeated exercise.

The forms of powers in question are such things as the faculties of perceiving, retaining, recalling, associating, attending, willing, feeling, imagining, thinking, etc., which are then shaped by exercise upon material presented. In its classic form, this theory was expressed by Locke. On the one hand, the outer world presents the material or content of knowledge through passively received sensations. On the other hand, the mind has certain ready powers, attention, observation, retention, comparison, abstraction, compounding, etc. Knowledge results if the mind discriminates and combines things as they are united and divided in nature itself. But the important thing for education is the exercise or practice of the faculties of the mind till they become thoroughly established habitudes. The analogy constantly employed is that of a billiard player or gymnast, who by repeated use of certain muscles in a uniform way at last secures automatic skill. Even the faculty of thinking was to be formed into a trained habit by repeated exercises

in making and combining simple distinctions, for which, Locke thought, mathematics affords unrivaled opportunity.

Locke's statements fitted well into the dualism of his day. It seemed to do justice to both mind and matter, the individual and the world. One of the two supplied the matter of knowledge and the object upon which mind should work. The other supplied definite mental powers, which were few in number and which might be trained by specific exercises. The scheme appeared to give due weight to the subject matter of knowledge, and yet it insisted that the end of education is not the bare reception and storage of information, but the formation of personal powers of attention, memory, observation, abstraction, and generalization. It was realistic in its emphatic assertion that all material whatever is received from without; it was idealistic in that final stress fell upon the formation of intellectual powers. It was objective and impersonal in its assertion that the individual cannot possess or generate any true ideas on his own account; it was individualistic in placing the end of education in the perfecting of certain faculties possessed at the outset by the individual. This kind of distribution of values expressed with nicety the state of opinion in the generations following upon Locke. It became, without explicit reference to Locke, a common-place of educational theory and of psychology. Practically, it seemed to provide the educator with definite, instead of vague, tasks. It made the elaboration of a technique of instruction relatively easy. All that was necessary was to provide for sufficient practice of each of the powers. This practice consists in repeated acts of attending, observing, memorizing, etc. By grading the difficulty of the acts, making each set of repetitions somewhat more difficult than the set which preceded it, a complete scheme of instruction is evolved.

There are various ways, equally conclusive, of criticizing this conception, in both its alleged foundations and in its educational application. (1) Perhaps the most direct mode of attack consists in pointing out that the supposed original faculties of observation, recollection, willing, thinking, etc., are purely mythological. There are no such ready-made powers waiting to be exercised and thereby trained. There are, indeed, a great number of original native

tendencies, instinctive modes of action, based on the original connections of neurones in the central nervous system. There are impulsive tendencies of the eyes to follow and fixate light; of the neck muscles to turn toward light and sound; of the hands to reach and grasp; and turn and twist and thump; of the vocal apparatus to make sounds; of the mouth to spew out unpleasant substances; to gag and to curl the lip, and so on in almost indefinite number. But these tendencies (a) instead of being a small number sharply marked off from one another, are of an indefinite variety, interweaving with one another in all kinds of subtle ways. (b) Instead of being latent intellectual powers, requiring only exercise for their perfecting, they are tendencies to respond in certain ways to changes in the environment so as to bring about other changes. Something in the throat makes one cough; the tendency is to eject the obnoxious particle and thus modify the subsequent stimulus. The hand touches a hot thing; it is impulsively, wholly unintellectually, snatched away. But the withdrawal alters the stimuli operating, and tends to make them more consonant with the needs of the organism. It is by such specific changes of organic activities in response to specific changes in the medium that that control of the environment of which we have spoken (see ante, p. 29) is effected. Now all of our first seeings and hearings and touchings and smellings and tastings are of this kind. In any legitimate sense of the words mental or intellectual or cognitive, they are lacking in these qualities, and no amount of repetitious exercise could bestow any intellectual properties of observation, judgment, or intentional action (volition) upon them.

(2) Consequently the training of our original impulsive activities is not a refinement and perfecting achieved by "exercise" as one might strengthen a muscle by practice. It consists rather (a) in selecting from the diffused responses which are evoked at a given time those which are especially adapted to the utilization of the stimulus. That is to say, among the reactions of the body in general and the hand in particular which instinctively occur upon stimulation of the eye by light, all except those which are specifically adapted to reaching, grasping, and manipulating the object effectively are gradually eliminated -- or else no training

occurs. As we have already noted, the primary reactions, with a very few exceptions are too diffused and general to be practically of much use in the case of the human infant. Hence the identity of training with selective response. (Compare p. 30.) (b) Equally important is the specific coördination of different factors of response which takes place. There is not merely a selection of the hand reactions which effect grasping, but of the particular visual stimuli which call out just these reactions and no others, and an establishment of connection between the two. But the coordinating does not stop here. Characteristic temperature reactions may take place when the object is grasped. These will also be brought in; later, the temperature reaction may be connected directly with the optical stimulus, the hand reaction being suppressed -- as a bright flame, independent of close contact, may steer one away. Or the child in handling the object pounds with it, or crumples it, and a sound issues. The ear response is then brought into the system of response. If a certain sound (the conventional name) is made by others and accompanies the activity, response of both ear and the vocal apparatus connected with auditory stimulation will also become an associated factor in the complex response. 4

(3) The more specialized the adjustment of response and stimulus to each other (for, taking the sequence of activities into account, the stimuli are adapted to reactions as well as reactions to stimuli) the more rigid and the less generally available is the training secured. In equivalent language, less intellectual or educative quality attaches to the training. The usual way of stating this fact is that the more specialized the reaction, the less is the skill acquired in practicing and perfecting it transferable to other modes of behavior. According to the orthodox theory of formal discipline, a pupil in studying his spelling lesson acquires, besides ability to spell those particular words, an increase of power of observation, attention, and recollection which may be employed whenever these powers are needed. As matter of fact, the more he confines himself to noticing and fixating the forms of words, irrespective of connection with other things (such as the meaning of the words, the context in which they are habitually used, the derivation and classification of the verbal form, etc.) the less likely is he to acquire an ability which

can be used for anything except the mere noting of verbal visual forms. He may not even be increasing his ability to make accurate distinctions among geometrical forms, to say nothing of ability to observe in general. He is merely selecting the stimuli supplied by the forms of the letters and the motor reactions of oral or written reproduction. The scope of coördination (to use our prior terminology) is extremely limited. The connections which are employed in other observations and recollections (or reproductions) are deliberately eliminated when the pupil is exercised merely upon forms of letters and words. Having been excluded, they cannot be restored when needed. The ability secured to observe and to recall verbal forms is not available for perceiving and recalling other things. In the ordinary phraseology, it is not transferable. But the wider the context -- that is to say, the more varied the stimuli and responses coordinated -- the more the ability acquired is available for the effective performance of other acts; not, strictly speaking, because there is any "transfer," but because the wide range of factors employed in the specific act is equivalent to a broad range of activity, to a flexible, instead of to a narrow and rigid, coördination.

(4) Going to the root of the matter, the fundamental fallacy of the theory is its dualism; that is to say, its separation of activities and capacities from subject matter. There is no such thing as an ability to see or hear or remember in general; there is only the ability to see or hear or remember something. To talk about training a power, mental or physical, in general, apart from the subject matter involved in its exercise, is nonsense. Exercise may react upon circulation, breathing, and nutrition so as to develop vigor or strength, but this reservoir is available for specific ends only by use in connection with the material means which accomplish them. Vigor will enable a man to play tennis or golf or to sail a boat better than he would if he were weak. But only by employing ball and racket, ball and club, sail and tiller, in definite ways does he become expert in any one of them; and expertness in one secures expertness in another only so far as it is either a sign of aptitude for fine muscular coördinations or as the same kind of coördination is involved in all of them. Moreover, the difference between the

training of ability to spell which comes from taking visual forms in a narrow context and one which takes them in connection with the activities required to grasp meaning, such as context, affiliations of descent, etc., may be compared to the difference between exercises in the gymnasium with pulley weights to "develop" certain muscles, and a game or sport. The former is uniform and mechanical; it is rigidly specialized. The latter is varied from moment to moment; no two acts are quite alike; novel emergencies have to be met; the coördinations forming have to be kept flexible and elastic. Consequently, the training is much more "general"; that is to say, it covers a wider territory and includes more factors. Exactly the same thing holds of special and general education of the mind.

A monotonously uniform exercise may by practice give great skill in one special act; but the skill is limited to that act, be it bookkeeping or calculations in logarithms or experiments in hydrocarbons. One may be an authority in a particular field and yet of more than usually poor judgment in matters not closely allied, unless the training in the special field has been of a kind to ramify into the subject matter of the other fields.

(5) Consequently, such powers as observation, recollection, judgment, æsthetic taste, represent organized results of the occupation of native active tendencies with certain subject matters. A man does not observe closely and fully by pressing a button for the observing faculty to get to work (in other words by "willing" to observe); but if he has something to do which can be accomplished successfully only through intensive and extensive use of eye and hand, he naturally observes. Observation is an outcome, a consequence, of the interaction of sense organ and subject matter. It will vary, accordingly, with the subject matter employed.

It is consequently futile to set up even the ulterior development of faculties of observation, memory, etc., unless we have first determined what sort of subject matter we wish the pupil to become expert in observing and recalling and for what purpose. And it is only repeating in another form what has already been said, to declare that the criterion here must be social. We want the person to note and recall and judge those things which make him an

effective competent member of the group in which he is associated with others. Otherwise we might as well set the pupil to observing carefully cracks on the wall and set him to memorizing meaningless lists of words in an unknown tongue -- which is about what we do in fact when we give way to the doctrine of formal discipline. If the observing habits of a botanist or chemist or engineer are better habits than those which are thus formed, it is because they deal with subject matter which is more significant in life.

In concluding this portion of the discussion, we note that the distinction between special and general education has nothing to do with the transferability of function or power. In the literal sense, any transfer is miraculous and impossible. But some activities are broad; they involve a coordination of many factors. Their development demands continuous alternation and readjustment. As conditions change, certain factors are subordinated, and others which had been of minor importance come to the front. There is constant redistribution of the focus of the action, as is seen in the illustration of a game as over against pulling a fixed weight by a series of uniform motions. Thus there is practice in prompt making of new combinations with the focus of activity shifted to meet change in subject matter. Wherever an activity is broad in scope (that is, involves the coordinating of a large variety of sub-activities), and is constantly and unexpectedly obliged to change direction in its progressive development, general education is bound to result. For this is what "general" means; broad and flexible. In practice, education meets these conditions, and hence is general, in the degree in which it takes account of social relationships. A person may become expert in technical philosophy, or philology, or mathematics or engineering or financiering, and be inept and ill-advised in his action and judgment outside of his specialty. If however his concern with these technical subject matters has been connected with human activities having social breadth, the range of active responses called into play and flexibly integrated is much wider. Isolation of subject matter from a social context is the chief obstruction in current practice to securing a general training of mind. Literature, art, religion, when thus dissociated, are just as

narrowing as the technical things which the professional upholders of general education strenuously oppose.

Summary.

-- The conception that the result of the educative process is capacity for further education stands in contrast with some other ideas which have profoundly influenced practice. The first contrasting conception considered is that of preparing or getting ready for some future duty or privilege. Specific evil effects were pointed out which result from the fact that this aim diverts attention of both teacher and taught from the only point to which it may be fruitfully directed -- namely, taking advantage of the needs and possibilities of the immediate present. Consequently it defeats its own professed purpose. The notion that education is an unfolding from within appears to have more likeness to the conception of growth which has been set forth. But as worked out in the theories of Froebel and Hegel, it involves ignoring the interaction of present organic tendencies with the present environment, just as much as the notion of preparation. Some implicit whole is regarded as given ready-made and the significance of growth is merely transitory; it is not an end in itself, but simply a means of making explicit what is already implicit. Since that which is not explicit cannot be made definite use of, something has to be found to represent it. According to Froebel, the mystic symbolic value of certain objects and acts (largely mathematical) stand for the Absolute Whole which is in process of unfolding. According to Hegel, existing institutions are its effective actual representatives. Emphasis upon symbols and institutions tends to divert perception from the direct growth of experience in richness of meaning. Another influential but defective theory is that which conceives that mind has, at birth, certain mental faculties or powers, such as perceiving, remembering, willing, judging, generalizing, attending, etc., and that education is the training of these faculties through repeated exercise. This theory treats subject matter as comparatively external and indifferent, its value residing simply in the fact that it may occasion exercise of the general powers. Criticism was directed upon this separation of the alleged powers from one another and from the material upon which they act. The

outcome of the theory in practice was shown to be an undue emphasis upon the training of narrow specialized modes of skill at the expense of initiative, inventiveness, and readaptability -- qualities which depend upon the broad and consecutive interaction of specific activities with one another.

#### Footnotes

[3] As matter of fact, the interconnection is so great, there are so many paths of construction, that every stimulus brings about some change in all of the organs of response. We are accustomed however to ignore most of these modifications of the total organic activity, concentrating upon that one which is most specifically adapted to the most urgent stimulus of the moment.

[4] This statement should be compared with what was said earlier about the sequential ordering of responses (p. 25). It is merely a more explicit statement of the way in which that consecutive arrangement occurs.

## CHAPTER VI

### EDUCATION AS CONSERVATIVE AND PROGRESSIVE:

#### 1. Education as Formation.

-- We now come to a type of theory which denies the existence of faculties and emphasizes the unique role of subject matter in the development of mental and moral disposition. according to it, education is neither a process of unfolding from within nor is it a training of faculties resident in mind itself. It is rather the formation of mind by setting up certain associations or connections of content by means of a subject matter presented from without. Education proceeds by instruction taken in a strictly literal sense, a building into the mind from without. That education is formative of mind is not questioned; it is the conception already propounded. But formation here has a technical meaning dependent upon the idea of something operating from without.

Herbart is the best historical representative of this type of theory. He denies absolutely the existence of innate faculties. The mind is simply endowed with the power of producing various qualities in reaction to the various realities which act upon it. These qualitatively different reactions are called presentations (Vorstellungen). Every presentation once called into being persists; it may be driven below the "threshold" of consciousness by new and stronger presentations, produced by the reaction of the soul to new material, but its activity continues by its own inherent momentum, below the surface of consciousness. What are termed faculties -- attention, memory, thinking, perception, even the sentiments, are arrangements, associations, and complications, formed by the interaction of these submerged presentations with one another and with new presentations. Perception, for example, is the complication of presentations which result from the rise of old presentations to greet and combine with new ones; memory is the evoking of an old presentation above the threshold of consciousness by getting entangled with another presentation, etc. Pleasure is the result of

reënforcement among the independent activities of presentations; pain of their pulling different ways, etc.

The concrete character of mind consists, then, wholly of the various arrangements formed by the various presentations in their different qualities. The "furniture" of the mind is the mind. Mind is wholly a matter of "contents." The educational implications of this doctrine are threefold. ( 1 ) This or that kind of mind is formed by the use of objects which evoke this or that kind of reaction and which produce this or that arrangement among the reactions called out. The formation of mind is wholly a matter of the presentation of the proper educational materials. (2) Since the earlier presentations constitute the "apperceiving organs" which control the assimilation of new presentations, their character is all important. The effect of new presentations is to reënforce groupings previously formed. The business of the educator is, first, to select the proper material in order to fix the nature of the original reactions, and, secondly, to arrange the sequence of subsequent presentations on the basis of the store of ideas secured by prior transactions. The control is from behind, from the past, instead of, as in the unfolding conception, in the ultimate goal. (3) Certain formal steps of all method in teaching may be laid down. Presentation of new subject matter is obviously the central thing, but since knowing consists in the way in which this interacts with the contents already submerged below consciousness, the first thing is the step of "preparation," — that is, calling into special activity and getting above the floor of consciousness those older presentations which are to assimilate the new one. Then after the presentation, follow the processes of interaction of new and old; then comes the application of the newly formed content to the performance of some task. Everything must go through this course; consequently there is a perfectly uniform method in instruction in all subjects for all pupils of all ages.

Herbart's great service lay in taking the work of teaching out of the region of routine and accident. He brought it into the sphere of conscious method; it became a conscious business with a definite aim and procedure, instead of being a compound of casual inspiration and subservience to tradition. Moreover, everything in teaching and discipline could be specified, instead of our having to

be content with vague and more or less mystic generalities about ultimate ideals and speculative spiritual symbols. He abolished the notion of ready-made faculties, which might be trained by exercise upon any sort of material, and made attention to concrete subject matter, to the content, all-important. Herbart undoubtedly has had a greater influence in bringing to the front questions connected with the material of study than any other educational philosopher. He stated problems of method from the standpoint of their connection with subject matter: method having to do with the manner and sequence of presenting new subject matter to insure its proper interaction with old.

The fundamental theoretical defect of this view lies in ignoring the existence in a living being of active and specific functions which are developed in the redirection and combination which occur as they are occupied with their environment. The theory represents the Schoolmaster come to his own. This fact expresses at once its strength and its weakness. The conception that the mind consists of what has been taught, and that the importance of what has been taught consists in its availability for further teaching, reflects the pedagogue's view of life. The philosophy is eloquent about the duty of the teacher in instructing pupils; it is almost silent regarding his privilege of learning. It emphasizes the influence of intellectual environment upon the mind; it slurs over the fact that the environment involves a personal sharing in common experiences. It exaggerates beyond reason the possibilities of consciously formulated and used methods, and underestimates the role of vital, unconscious, attitudes. It insists upon the old, the past, and passes lightly over the operation of the genuinely novel and unforeseeable. It takes, in brief, everything educational into account save its essence, — vital energy seeking opportunity for effective exercise. All education forms character, mental and moral, but formation consists in the selection and coördination of native activities so that they may utilize the subject matter of the social environment. Moreover, the formation is not only a formation of native activities, but it takes place through them. It is a process of reconstruction, reorganization.

2. Education as Recapitulation and Retrospection.

-- A peculiar combination of the ideas of development and formation from without has given rise to the recapitulation theory of education, biological and cultural. The individual develops, but his proper development consists in repeating in orderly stages the past evolution of animal life and human history. The former recapitulation occurs physiologically; the latter should be made to occur by means of education. The alleged biological truth that the individual in his growth from the simple embryo to maturity repeats the history of the evolution of animal life in the progress of forms from the simplest to the most complex ( or expressed technically, that ontogenesis parallels phylogenesis ) does not concern us, save as it is supposed to afford scientific foundation for cultural recapitulation of the past. Cultural recapitulation says, first, that children at a certain age are in the mental and moral condition of savagery; their instincts are vagrant and predatory because their ancestors at one time lived such a life. Consequently (so it is concluded) the proper subject matter of their education at this time is the material -- especially the literary material of myths, folk-tale, and song -- produced by humanity in the analogous stage. Then the child passes on to something corresponding, say, to the pastoral stage, and so on till at the time when he is ready to take part in contemporary life, he arrives at the present epoch of culture.

In this detailed and consistent form, the theory, outside of a small school in Germany (followers of Herbart for the most part), has had little currency. But the idea which underlies it is that education is essentially retrospective; that it looks primarily to the past and especially to the literary products of the past, and that mind is adequately formed in the degree in which it is patterned upon the spiritual heritage of the past. This idea has had such immense influence upon higher instruction especially, that it is worth examination in its extreme formulation.

In the first place, its biological basis is fallacious. Embryonic growth of the human infant preserves, without doubt, some of the traits of lower forms of life. But in no respect is it a strict traversing of past stages. If there were any strict "law" of repetition, evolutionary development would clearly not have taken place. Each new generation would simply have repeated its predecessors'

existence. Development, in short, has taken place by the entrance of shortcuts and alterations in the prior scheme of growth. And this suggests that the aim of education is to facilitate such short-circuited growth. The great advantage of immaturity, educationally speaking, is that it enables us to emancipate the young from the need of dwelling in an outgrown past. The business of education is rather to liberate the young from reviving and retraversing the past than to lead them to a recapitulation of it. The social environment of the young is constituted by the presence and action of the habits of thinking and feeling of civilized men. To ignore the directive influence of this present environment upon the young is simply to abdicate the educational function. A biologist has said: "The history of development in different animals . . . offers to us . . . a series of ingenious, determined, varied but more or less unsuccessful efforts to escape from the necessity of recapitulating, and to substitute for the ancestral method a more direct method." Surely it would be foolish if education did not deliberately attempt to facilitate similar efforts in conscious experience so that they become increasingly successful.

The two factors of truth in the conception may easily be disentangled from association with the false context which perverts them. On the biological side we have simply the fact that any infant starts with precisely the assortment of impulsive activities with which he does start, they being blind, and many of them conflicting with one another, casual, sporadic, and unadapted to their immediate environment. The other point is that it is a part of wisdom to utilize the products of past history so far as they are of help for the future. Since they represent the results of prior experience, their value for future experience may, of course, be indefinitely great. Literatures produced in the past are, so far as men are now in possession and use of them, a part of the present environment of individuals; but there is an enormous difference between availing ourselves of them as present resources and taking them as standards and patterns in their retrospective character.

( 1 ) The distortion of the first point usually comes about through misuse of the idea of heredity. It is assumed that heredity means that past life has somehow predetermined the main traits of an

individual, and that they are so fixed that little serious change can be introduced into them. Thus taken, the influence of heredity is opposed to that of the environment, and the efficacy of the latter belittled. But for educational purposes heredity means neither more nor less than the original endowment of an individual. Education must take the being as he is; that a particular individual has just such and such an equipment of native activities is a basic fact. That they were produced in such and such a way, or that they are derived from one's ancestry, is not especially important for the educator, however it may be with the biologist, as compared with the fact that they now exist. Suppose one had to advise or direct a person regarding his inheritance of property. The fallacy of assuming that the fact it is an inheritance, predetermines its future use, is obvious. The advisor is concerned with making the best use of what is there - putting it at work under the most favorable conditions. Obviously he cannot utilize what is not there; neither can the educator. In this sense, heredity is a limit of education. Recognition of this fact prevents the waste of energy and the irritation that ensue from the too prevalent habit of trying to make by instruction something out of an individual which he is not naturally fitted to become. But the doctrine does not determine what use shall be made of the capacities which exist. And, except in the case of the imbecile, these original capacities are much more varied and potential, even in the case of the more stupid, than we as yet know properly how to utilize. Consequently, while a careful study of the native aptitudes and deficiencies of an individual is always a preliminary necessity, the subsequent and important step is to furnish an environment which will adequately function whatever activities are present.

The relation of heredity and environment is well expressed in the case of language. If a being had no vocal organs from which issue articulate sounds, if he had no auditory or other sense-receptors and no connections between the two sets of apparatus, it would be a sheer waste of time to try to teach him to converse. He is born short in that respect, and education must accept the limitation. But if he has this native equipment, its possession in no way guarantees that he will ever talk any language or what language he will talk. The environment in which his activities occur and by which they are

carried into execution settles these things. If he lived in a dumb unsocial environment where men refused to talk to one another and used only that minimum of gestures without which they could not get along, vocal language would be as unachieved by him as if he had no vocal organs. If the sounds which he makes occur in a medium of persons speaking the Chinese language, the activities which make like sounds will be selected and coordinated. This illustration may be applied to the entire range of the educability of any individual. It places the heritage from the past in its right connection with the demands and opportunities of the present.

(2) The theory that the proper subject matter of instruction is found in the culture-products of past ages (either in general, or more specifically in the particular literatures which were produced in the culture epoch which is supposed to correspond with the stage of development of those taught) affords another instance of that divorce between the process and product of growth which has been criticized. To keep the process alive, to keep it alive in ways which make it easier to keep it alive in the future, is the function of educational subject matter. But an individual can live only in the present. The present is not just something which comes after the past; much less something produced by it. It is what life is in leaving the past behind it. The study of past products will not help us understand the present, because the present is not due to the products, but to the life of which they were the products. A knowledge of the past and its heritage is of great significance when it enters into the present, but not otherwise. And the mistake of making the records and remains of the past the main material of education is that it cuts the vital connection of present and past, and tends to make the past a rival of the present and the present a more or less futile imitation of the past. Under such circumstances, culture becomes an ornament and solace; a refuge and an asylum. Men escape from the crudities of the present to live in its imagined refinements, instead of using what the past offers as an agency for ripening these crudities.

The present, in short, generates the problems which lead us to search the past for suggestion, and which supplies meaning to what we find when we search. The past is the past precisely because it

does not include what is characteristic in the present. The moving present includes the past on condition that it uses the past to direct its own movement. The past is a great resource for the imagination; it adds a new dimension to life, but on condition that it be seen as the past of the present, and not as another and disconnected world. The principle which makes little of the present act of living and operation of growing, the only thing always present, naturally looks to the past because the future goal which it sets up is remote and empty. But having turned its back upon the present, it has no way of returning to it laden with the spoils of the past. A mind that is adequately sensitive to the needs and occasions of the present actuality will have the liveliest of motives for interest in the background of the present, and will never have to hunt for a way back because it will never have lost connection.

### 3. Education as Reconstruction.

-- In its contrast with the ideas both of unfolding of latent powers from within, and of the formation from without, whether by physical nature or by the cultural products of the past, the ideal of growth results in the conception that education is a constant reorganizing or reconstructing of experience. It has all the time an immediate end, and so far as activity is educative, it reaches that end -- the direct transformation of the quality of experience. Infancy, youth, adult life, -- all stand on the same educative level in the sense that what is really learned at any and every stage of experience constitutes the value of that experience, and in the sense that it is the chief business of life at every point to make living thus contribute to an enrichment of its own perceptible meaning.

We thus reach a technical definition of education: It is that reconstruction or reorganization of experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience. (1) The increment of meaning corresponds to the increased perception of the connections and continuities of the activities in which we are engaged. The activity begins in an impulsive form; that is, it is blind. It does not know what it is about; that is to say, what are its interactions with other activities. An activity which brings education or instruction with it

makes one aware of some of the connections which had been imperceptible. To recur to our simple example, a child who reaches for a bright light gets burned. Henceforth he knows that a certain act of touching in connection with a certain act of vision (and vice-versa) means heat and pain; or, a certain light means a source of heat. The acts by which a scientific man in his laboratory learns more about flame differ no whit in principle. By doing certain things, he makes perceptible certain connections of heat with other things, which had been previously ignored. Thus his acts in relation to these things get more meaning; he knows better what he is doing or "is about" when he has to do with them; he can intend consequences instead of just letting them happen -- all synonymous ways of saying the same thing. At the same stroke, the flame has gained in meaning; all that is known about combustion, oxidation, about light and temperature, may become an intrinsic part of its intellectual content.

(2) The other side of an educative experience is an added power of subsequent direction or control. To say that one knows what he is about, or can intend certain consequences, is to say, of course, that he can better anticipate what is going to happen; that he can, therefore, get ready or prepare in advance so as to secure beneficial consequences and avert undesirable ones. A genuinely educative experience, then, one in which instruction is conveyed and ability increased, is contradistinguished from a routine activity on one hand, and a capricious activity on the other. (a) In the latter one "does not care what happens"; one just lets himself go and avoids connecting the consequences of one's act (the evidences of its connections with other things) with the act. It is customary to frown upon such aimless random activity, treating it as willful mischief or carelessness or lawlessness. But there is a tendency to seek the cause of such aimless activities in the youth's own disposition, isolated from everything else. But in fact such activity is explosive, and due to maladjustment with surroundings. Individuals act capriciously whenever they act under external dictation, or from being told, without having a purpose of their own or perceiving the bearing of the deed upon other acts. One may learn by doing something which he does not understand; even in the most

intelligent action, we do much which we do not mean, because the largest portion of the connections of the act we consciously intend are not perceived or anticipated. But we learn only because after the act is performed we note results which we had not noted before. But much work in school consists in setting up rules by which pupils are to act of such a sort that even after pupils have acted, they are not led to see the connection between the result -- say the answer -- and the method pursued. So far as they are concerned, the whole thing is a trick and a kind of miracle. Such action is essentially capricious, and leads to capricious habits. (b) Routine action, action which is automatic, may increase skill to do a particular thing. In so far, it might be said to have an educative effect. But it does not lead to new perceptions of bearings and connections; it limits rather than widens the meaning-horizon. And since the environment changes and our way of acting has to be modified in order successfully to keep a balanced connection with things, an isolated uniform way of acting becomes disastrous at some critical moment. The vaunted "skill" turns out gross ineptitude.

The essential contrast of the idea of education as continuous reconstruction with the other one-sided conceptions which have been criticized in this and the previous chapter is that it identifies the end (the result) and the process. This is verbally self-contradictory, but only verbally. It means that experience as an active process occupies time and that its later period completes its earlier portion; it brings to light connections involved, but hitherto unperceived. The later outcome thus reveals the meaning of the earlier, while the experience as a whole establishes a bent or disposition toward the things possessing this meaning. Every such continuous experience or activity is educative, and all education resides in having such experiences.

It remains only to point out (what will receive more ample attention later) that the reconstruction of experience may be social as well as personal. For purposes of simplification we have spoken in the earlier chapters somewhat as if the education of the immature which fills them with the spirit of the social group to which they belong, were a sort of catching up of the child with the aptitudes and resources of the adult group. In static societies, societies which

make the maintenance of established custom their measure of value, this conception applies in the main. But not in progressive communities. They endeavor to shape the experiences of the young so that instead of reproducing current habits, better habits shall be formed, and thus the future adult society be an improvement on their own. Men have long had some intimation of the extent to which education may be consciously used to eliminate obvious social evils through starting the young on paths which shall not produce these ills, and some idea of the extent in which education may be made an instrument of realizing the better hopes of men. But we are doubtless far from realizing the potential efficacy of education as a constructive agency of improving society, from realizing that it represents not only a development of children and youth but also of the future society of which they will be the constituents.

Summary.

-- Education may be conceived either retrospectively or prospectively. That is to say, it may be treated as process of accommodating the future to the past, or as an utilization of the past for a resource in a developing future. The former finds its standards and patterns in what has gone before. The mind may be regarded as a group of contents resulting from having certain things presented. In this case, the earlier presentations constitute the material to which the later are to be assimilated. Emphasis upon the value of the early experiences of immature beings is most important, especially because of the tendency to regard them as of little account. But these experiences do not consist of externally presented material, but of interaction of native activities with the environment which progressively modifies both the activities and the environment. The defect of the Herbartian theory of formation through presentations consists in slighting this constant interaction and change.

The same principle of criticism applies to theories which find the primary subject matter of study in the cultural products -- especially the literary products -- of man's history. Isolated from their connection with the present environment in which individuals have to act, they become a kind of rival and distracting

environment. Their value lies in their use to increase the meaning of the things with which we have actively to do at the present time. The idea of education advanced in these chapters is formally summed up in the idea of continuous reconstruction of experience, an idea which is marked off from education as preparation for a remote future, as unfolding, as external formation, and as recapitulation of the past.

## CHAPTER VII

### THE DEMOCRATIC CONCEPTION IN EDUCATION:

For the most part, save incidentally, we have hitherto been concerned with education as it may exist in any social group. We have now to make explicit the differences in the spirit, material, and method of education as it operates in different types of community life. To say that education is a social function, securing direction and development in the immature through their participation in the life of the group to which they belong, is to say in effect that education will vary with the quality of life which prevails in a group. Particularly is it true that a society which not only changes but-which has the ideal of such change as will improve it, will have different standards and methods of education from one which aims simply at the perpetuation of its own customs. To make the general ideas set forth applicable to our own educational practice, it is, therefore, necessary to come to closer quarters with the nature of present social life.

#### 1. The Implications of Human Association.

— Society is one word, but many things. Men associate together in all kinds of ways and for all kinds of purposes. One man is concerned in a multitude of diverse groups, in which his associates may be quite different. It often seems as if they had nothing in common except that they are modes of associated life. Within every larger social organization there are numerous minor groups: not only political subdivisions, but industrial, scientific, religious, associations. There are political parties with differing aims, social sets, cliques, gangs, corporations, partnerships, groups bound closely together by ties of blood, and so on in endless variety. In many modern states and in some ancient, there is great diversity of populations, of varying languages, religions, moral codes, and traditions. From this standpoint, many a minor political unit, one of our large cities, for example, is a congeries of loosely associated societies, rather than an inclusive and permeating community of action and thought. (See Ante, p. 24.)

The terms society, community, are thus ambiguous. They have both a eulogistic or normative sense, and a descriptive sense; a meaning *de jure* and a meaning *de facto*. In social philosophy, the former connotation is almost always uppermost. Society is conceived as one by its very nature. The qualities which accompany this unity, praiseworthy community of purpose and welfare, loyalty to public ends, mutuality of sympathy, are emphasized. But when we look at the facts which the term denotes instead of confining our attention to its intrinsic connotation, we find not unity, but a plurality of societies, good and bad. Men banded together in a criminal conspiracy, business aggregations that prey upon the public while serving it, political machines held together by the interest of plunder, are included. If it is said that such organizations are not societies because they do not meet the ideal requirements of the notion of society, the answer, in part, is that the conception of society is then made so "ideal" as to be of no use, having no reference to facts; and in part, that each of these organizations, no matter how opposed to the interests of other groups, has something of the praiseworthy qualities of "Society" which hold it together. There is honor among thieves, and a band of robbers has a common interest as respects its members. Gangs are marked by fraternal feeling, and narrow cliques by intense loyalty to their own codes. Family life may be marked by exclusiveness, suspicion, and jealousy as to those without, and yet be a model of amity and mutual aid within. Any education given by a group tends to socialize its members, but the quality and value of the socialization depends upon the habits and aims of the group.

Hence, once more, the need of a measure for the worth of any given mode of social life. In seeking this measure, we have to avoid two extremes. We cannot set up, out of our heads, something we regard as an ideal society. We must base our conception upon societies which actually exist, in order to have any assurance that our ideal is a practicable one. But, as we have just seen, the ideal cannot simply repeat the traits which are actually found. The problem is to extract the desirable traits of forms of community life which actually exist, and employ them to criticize undesirable features and suggest improvement. Now in any social group

whatever, even in a gang of thieves, we find some interest held in common, and we find a certain amount of interaction and coöperative intercourse with other groups. From these two traits we derive our standard. How numerous and varied are the interests which are consciously shared? How full and free is the interplay with other forms of association? If we apply these considerations to, say, a criminal band, we find that the ties which consciously hold the members together are few in number, reducible almost to a common interest in plunder; and that they are of such a nature as to isolate the group from other groups with respect to give and take of the values of life. Hence, the education such a society gives is partial and distorted. If we take, on the other hand, the kind of family life which illustrates the standard, we find that there are material, intellectual, æsthetic interests in which all participate and that the progress of one member has worth for the experience of other members -- it is readily communicable -- and that the family is not an isolated whole, but enters intimately into relationships with business groups, with schools, with all the agencies of culture, as well as with other similar groups, and that it plays a due part in the political organization and in return receives support from it. In short, there are many interests consciously communicated and shared; and there are varied and free points of contact with other modes of association.

I. Let us apply the first element in this criterion to a despotically governed state. It is not true there is no common interest in such an organization between governed and governors. The authorities in command must make some appeal to the native activities of the subjects, must call some of their powers into play. Talleyrand said that a government could do everything with bayonets except sit on them. This cynical declaration is at least a recognition that the bond of union is not merely one of coercive force. It may be said, however, that the activities appealed to are themselves unworthy and degrading -- that such a government calls into functioning activity simply capacity for fear. In a way, this statement is true. But it overlooks the fact that fear need not be an undesirable factor in experience. Caution, circumspection, prudence, desire to foresee future events so as to avert what is harmful, these desirable traits

are as much a product of calling the impulse of fear into play as is cowardice and abject submission. The real difficulty is that the appeal to fear is isolated. In evoking dread and hope of specific tangible reward — say comfort and ease — many other capacities are left untouched. Or rather, they are affected, but in such a way as to pervert them. Instead of operating on their own account they are reduced to mere servants of attaining pleasure and avoiding pain.

This is equivalent to saying that there is no extensive number of common interests; there is no free play back and forth among the members of the social group. Stimulation and response are exceedingly one-sided. In order to have a large number of values in common, all the members of the group must have an equable opportunity to receive and to take from others. There must be a large variety of shared undertakings and experiences. Otherwise, the influences which educate some into masters, educate others into slaves. And the experience of each party loses in meaning, when the free interchange of varying modes of life-experience is arrested. A separation into a privileged and a subject-class prevents social endosmosis. The evils thereby affecting the superior class are less material and less perceptible, but equally real. Their culture tends to be sterile, to be turned back to feed on itself; their art becomes a showy display and artificial; their wealth luxurious; their knowledge overspecialized; their manners fastidious rather than humane.

Lack of the free and equitable intercourse which springs from a variety of shared interests makes intellectual stimulation unbalanced. Diversity of stimulation means novelty, and novelty means challenge to thought. The more activity is restricted to a few definite lines — as it is when there are rigid class lines preventing adequate interplay of experiences — the more action tends to become routine on the part of the class at a disadvantage, and capricious, aimless, and explosive on the part of the class having the materially fortunate position. Plato defined a slave as one who accepts from another the purposes which control his conduct. This condition obtains even where there is no slavery in the legal sense. It is found wherever men are engaged in activity which is socially serviceable, but whose service they do not understand and have no personal interest in. Much is said about scientific management of

work. It is a narrow view which restricts the science which secures efficiency of operation to movements of the muscles. The chief opportunity for science is the discovery of the relations of a man to his work — including his relations to others who take part — which will enlist his intelligent interest in what he is doing. Efficiency in production often demands division of labor. But it is reduced to a mechanical routine unless workers see the technical, intellectual, and social relationships involved in what they do, and engage in their work because of the motivation furnished by such perceptions. The tendency to reduce such things as efficiency of activity and scientific management to purely technical externals is evidence of the one-sided stimulation of thought given to those in control of industry — those who supply its aims. Because of their lack of all-round and well-balanced social interest, there is not sufficient stimulus for attention to the human factors and relationships in industry. Intelligence is narrowed to the factors concerned with technical production and marketing of goods. No doubt, a very acute and intense intelligence in these narrow lines can be developed, but the failure to take into account the significant social factors means none the less an absence of mind, and a corresponding distortion of emotional life.

II. This illustration (whose point is to be extended to all associations lacking reciprocity of interest) brings us to our second point. The isolation and exclusiveness of a gang or clique brings its antisocial spirit into relief. But this same spirit is found wherever one group has interests "of its own" which shut it out from full interaction with other groups, so that its prevailing purpose is the protection of what it has got, instead of reorganization and progress through wider relationships. It marks nations in their isolation from one another; families which seclude their domestic concerns as if they had no connection with a larger life; schools when separated from the interest of home and community; the divisions of rich and poor; learned and unlearned. The essential point is that isolation makes for rigidity and formal institutionalizing of life, for static and selfish ideals within the group. That savage tribes regard aliens and enemies as synonymous is not accidental. It springs from the fact that they have identified their experience with rigid adherence to

their past customs. On such a basis it is wholly logical to fear intercourse with others, for such contact might dissolve custom. It would certainly occasion reconstruction. It is a commonplace that an alert and expanding mental life depends upon an enlarging range of contact with the physical environment. But the principle applies even more significantly to the field where we are apt to ignore it -- the sphere of social contacts.

Every expansive era in the history of mankind has coincided with the operation of factors which have tended to eliminate distance between peoples and classes previously hemmed off from one another. Even the alleged benefits of war, so far as more than alleged, spring from the fact that conflict of peoples at least enforces intercourse between them and thus accidentally enables them to learn from one another, and thereby to expand their horizons. Travel, economic and commercial tendencies, have at present gone far to break down external barriers; to bring peoples and classes into closer and more perceptible connection with one another. It remains for the most part to secure the intellectual and emotional significance of this physical annihilation of space.

## 2. The Democratic Ideal.

-- The two elements in our criterion both point to democracy. The first signifies not only more numerous and more varied points of shared common interest, but greater reliance upon the recognition of mutual interests as a factor in social control. The second means not only freer interaction between social groups ( once isolated so far as intention could keep up a separation ) but change in social habit -- its continuous readjustment through meeting the new situations produced by varied intercourse. And these two traits are precisely what characterize the democratically constituted society.

Upon the educational side, we note first that the realization of a form of social life in which interests are mutually interpenetrating, and where progress, or readjustment, is an important consideration, makes a democratic community more interested than other communities have cause to be in deliberate and systematic education. The devotion of democracy to education is a familiar fact.

The superficial explanation is that a government resting upon popular suffrage cannot be successful unless those who elect and who obey their governors are educated. Since a democratic society repudiates the principle of external authority, it must find a substitute in voluntary disposition and interest; these can be created only by education. But there is a deeper explanation. A democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience. The extension in space of the number of individuals who participate in an interest so that each has to refer his own action to that of others, and to consider the action of others to give point and direction to his own, is equivalent to the breaking down of those barriers of class, race, and national territory which kept men from perceiving the full import of their activity. These more numerous and more varied points of contact denote a greater diversity of stimuli to which an individual has to respond; they consequently put a premium on variation in his action. They secure a liberation of powers which remain suppressed as long as the incitations to action are partial, as they must be in a group which in its exclusiveness shuts out many interests.

The widening of the area of shared concerns, and the liberation of a greater diversity of personal capacities which characterize a democracy, are not of course the product of deliberation and conscious effort. On the contrary, they were caused by the development of modes of manufacture and commerce, travel, migration, and intercommunication which flowed from the command of science over natural energy. But after greater individualization on one hand, and a broader community of interest on the other have come into existence, it is a matter of deliberate effort to sustain and extend them. Obviously a society to which stratification into separate classes would be fatal, must see to it that intellectual opportunities are accessible to all on equable and easy terms. A society marked off into classes need be specially attentive only to the education of its ruling elements. A society which is mobile, which is full of channels for the distribution of a change occurring anywhere, must see to it that its members are educated to personal initiative and adaptability. Otherwise, they will be

overwhelmed by the changes in which they are caught and whose significance or connections they do not perceive. The result will be a confusion in which a few will appropriate to themselves the results of the blind and externally directed activities of others.

### 3. The Platonic Educational Philosophy.

-- Subsequent chapters will be devoted to making explicit the implications of the democratic ideas in education. In the remaining portions of this chapter, we shall consider the educational theories which have been evolved in three epochs when the social import of education was especially conspicuous. The first one to be considered is that of Plato. No one could better express than did he the fact that a society is stably organized when each individual is doing that for which he has aptitude by nature in such a way as to be useful to others (or to contribute to the whole to which he belongs); and that it is the business of education to discover these aptitudes and progressively to train them for social use. Much which has been said so far is borrowed from what Plato first consciously taught the world. But conditions which he could not intellectually control led him to restrict these ideas in their application. He never got any conception of the indefinite plurality of activities which may characterize an individual and a social group, and consequently limited his view to a limited number of classes of capacities and of social arrangements.

Plato's starting point is that the organization of society depends ultimately upon knowledge of the end of existence. If we do not know its end, we shall be at the mercy of accident and caprice. Unless we know the end, the good, we shall have no criterion for rationally deciding what the possibilities are which should be promoted, nor how social arrangements are to be ordered. We shall have no conception of the proper limits and distribution of activities -- what he called justice -- as a trait of both individual and social organization. But how is the knowledge of the final and permanent good to be achieved? In dealing with this question we come upon the seemingly insuperable obstacle that such knowledge is not possible save in a just and harmonious social order. Everywhere else the mind is distracted and misled by false valuations and false

perspectives. A disorganized and factional society sets up a number of different models and standards. Under such conditions it is impossible for the individual to attain consistency of mind. Only a complete whole is fully self-consistent. A society which rests upon the supremacy of some factor over another irrespective of its rational or proportionate claims, inevitably leads thought astray. It puts a premium on certain things and slurs over others, and creates a mind whose seeming unity is forced and distorted. Education proceeds ultimately from the patterns furnished by institutions, customs, and laws. Only in a just state will these be such as to give the right education; and only those who have rightly trained minds will be able to recognize the end, and ordering principle of things. We seem to be caught in a hopeless circle. However, Plato suggested a way out. A few men, philosophers or lovers of wisdom -- or truth -- may by study learn at least in outline the proper patterns of true existence. If a powerful ruler should form a state after these patterns, then its regulations could be preserved. An education could be given which would sift individuals, discovering what they were good for, and supplying a method of assigning each to the work in life for which his nature fits him. Each doing his own part, and never transgressing, the order and unity of the whole would be maintained.

It would be impossible to find in any scheme of philosophic thought a more adequate recognition on one hand of the educational significance of social arrangements and, on the other, of the dependence of those arrangements upon the means used to educate the young. It would be impossible to find a deeper sense of the function of education in discovering and developing personal capacities, and training them so that they would connect with the activities of others. Yet the society in which the theory was propounded was so undemocratic that Plato could not work out a solution for the problem whose terms he clearly saw.

While he affirmed with emphasis that the place of the individual in society should not be determined by birth or wealth or any conventional status, but by his own nature as discovered in the process of education, he had no perception of the uniqueness of individuals. For him they fall by nature into classes, and into a very

small number of classes at that. Consequently the testing and sifting function of education only shows to which one of three classes an individual belongs. There being no recognition that each individual constitutes his own class, there could be no recognition of the infinite diversity of active tendencies and combinations of tendencies of which an individual is capable. There were only three types of faculties or powers in the individual's constitution. Hence education would soon reach a static limit in each class, for only diversity makes change and progress.

In some individuals, appetites naturally dominate; they are assigned to the laboring and trading class, which expresses and supplies human wants. Others reveal, upon education, that over and above appetites, they have a generous, outgoing, assertively courageous disposition. They become the citizen-subjects of the state; its defenders in war; its internal guardians in peace. But their limit is fixed by their lack of reason, which is a capacity to grasp the universal. Those who possess this are capable of the highest kind of education, and become in time the legislators of the state -- for laws are the universals which control the particulars of experience. Thus it is not true that in intent, Plato subordinated the individual to the social whole. But it is true that lacking the perception of the uniqueness of every individual, his incommensurability with others, and consequently not recognizing that a society might change and yet be stable, his doctrine of limited powers and classes came in net effect to the idea of the subordination of individuality.

We cannot better Plato's conviction that an individual is happy and society well organized when each individual engages in those activities for which he has a natural equipment, nor his conviction that it is the primary office of education to discover this equipment to its possessor and train him for its effective use. But progress in knowledge has made us aware of the superficiality of Plato's lumping of individuals and their original powers into a few sharply marked-off classes; it has taught us that original capacities are indefinitely numerous and variable. It is but the other side of this fact to say that in the degree in which society has become democratic, social organization means utilization of the specific and variable qualities of individuals, not stratification by classes.

Although his educational philosophy was revolutionary, it was none the less in bondage to static ideals. He thought that change or alteration was evidence of lawless flux; that true reality was unchangeable. Hence while he would radically change the existing state of society, his aim was to construct a state in which change would subsequently have no place. The final end of life is fixed; given a state framed with this end in view, not even minor details are to be altered. Though they might not be inherently important, yet if permitted they would inure the minds of men to the idea of change, and hence be dissolving and anarchic. The breakdown of his philosophy is made apparent in the fact that he could not trust to gradual improvements in education to bring about a better society which should then improve education, and so on indefinitely. Correct education could not come into existence until an ideal state existed, and after that education would be devoted simply to its conservation. For the existence of this state he was obliged to trust to some happy accident by which philosophic wisdom should happen to coincide with possession of ruling power in the state.

#### 4. The "Individualistic" Ideal of the Eighteenth Century.

-- In the eighteenth-century philosophy we find ourselves in a very different circle of ideas. "Nature" still means something antithetical to existing social organization; Plato exercised a great influence upon Rousseau. But the voice of nature now speaks for the diversity of individual talent and for the need of free development of individuality in all its variety. Education in accord with nature furnishes the goal and the method of instruction and discipline. Moreover, the native or original endowment was conceived, in extreme cases, as nonsocial or even as antisocial. Social arrangements were thought of as mere external expedients by which these nonsocial individuals might secure a greater amount of private happiness for themselves.

Nevertheless, these statements convey only an inadequate idea of the true significance of the movement. In reality its chief interest was in progress and in social progress. The seeming antisocial philosophy was a somewhat transparent mask for an impetus toward a wider and freer society -- toward cosmopolitanism. The

positive ideal was humanity. In membership in humanity, as distinct from a state, man's capacities would be liberated; while in existing political organizations his powers were hampered and distorted to meet the requirements and selfish interests of the rulers of the state. The doctrine of extreme individualism was but the counterpart, the obverse, of ideals of the indefinite perfectibility of man and of a social organization having a scope as wide as humanity. The emancipated individual was to become the organ and agent of a comprehensive and progressive society.

The heralds of this gospel were acutely conscious of the evils of the social estate in which they found themselves. They attributed these evils to the limitations imposed upon the free powers of man. Such limitation was both distorting and corrupting. Their impassioned devotion to emancipation of life from external restrictions which operated to the exclusive advantage of the class to whom a past feudal system consigned power, found intellectual formulation in a worship of nature. To give "nature" full swing was to replace an artificial, corrupt, and inequitable social order by a new and better kingdom of humanity. Unrestrained faith in Nature as both a model and a working power was strengthened by the advances of natural science. Inquiry freed from prejudice and artificial restraints of church and state had revealed that the world is a scene of law. The Newtonian solar system, which expressed the reign of natural law, was a scene of wonderful harmony, where every force balanced with every other. Natural law would accomplish the same result in human relations, if men would only get rid of the artificial man-imposed coercive restrictions.

Education in accord with nature was thought to be the first step in insuring this more social society. It was plainly seen that economic and political limitations were ultimately dependent upon limitations of thought and feeling. The first step in freeing men from external chains was to emancipate them from the internal chains of false beliefs and ideals. What was called social life, existing institutions, were too false and corrupt to be intrusted with this work. How could it be expected to undertake it when the undertaking meant its own destruction? "Nature" must then be the power to which the enterprise was to be left. Even the extreme

sensationalistic theory of knowledge which was current derived itself from this conception. To insist that mind is originally passive and empty was one way of glorifying the possibilities of education. If the mind was a wax tablet to be written upon by objects, there were no limits to the possibility of education by means of the natural environment. And since the natural world of objects is a scene of harmonious "truth," this education would infallibly produce minds filled with the truth.

##### 5. Education as National and as Social.

-- As soon as the first enthusiasm for freedom waned, the weakness of the theory upon the constructive side became obvious. Merely to leave everything to nature was, after all, but to negate the very idea of education; it was to trust to the accidents of circumstance. Not only was some method required but also some positive organ, some administrative agency for carrying on the process of instruction. The "complete and harmonious development of all powers," having as its social counterpart an enlightened and progressive humanity, required definite organization for its realization. Private individuals here and there could proclaim the gospel; they could not execute the work. A Pestalozzi could try experiments and exhort philanthropically inclined persons having wealth and power to follow his example. But even Pestalozzi saw that any effective pursuit of the new educational ideal required the support of the state. The realization of the new education destined to produce a new society was, after all, dependent upon the activities of existing states. The movement for the democratic idea inevitably became a movement for publicly conducted and administered schools.

So far as Europe was concerned, the historic situation identified the movement for a state-supported education with the nationalistic movement in political life -- a fact of incalculable significance for subsequent movements. Under the influence of German thought in particular, education became a civic function and the civic function was identified with the realization of the ideal of the national state. The "state" was substituted for humanity; cosmopolitanism gave way to nationalism. To form the citizen, not the "man," became the

aim of education. 5 The historic situation to which reference is made is the after-effects of the Napoleonic conquests, especially in Germany. The German states felt (and subsequent events demonstrate the correctness of the belief) that systematic attention to education was the best means of recovering and maintaining their political integrity and power. Externally they were weak and divided. Under the leadership of Prussian statesmen they made this condition a stimulus to the development of an extensive and thoroughly grounded system of public education.

This change in practice necessarily brought about a change in theory. The individualistic theory receded into the background. The state furnished not only the instrumentalities of public education but also its goal. When the actual practice was such that the school system, from the elementary grades through the university faculties, supplied the patriotic citizen and soldier and the future state official and administrator and furnished the means for military, industrial, and political defense and expansion, it was impossible for theory not to emphasize the aim of social efficiency. And with the immense importance attached to the nationalistic state, surrounded by other competing and more or less hostile states, it was equally impossible to interpret social efficiency in terms of a vague cosmopolitan humanitarianism. Since the maintenance of a particular national sovereignty required subordination of individuals to the superior interests of the state both in military defense and in struggles for international supremacy in commerce, social efficiency was understood to imply a like subordination. The educational process was taken to be one of disciplinary training rather than of personal development. Since, however, the ideal of culture as complete development of personality persisted, educational philosophy attempted a reconciliation of the two ideas. The reconciliation took the form of the conception of the "organic" character of the state. The individual in his isolation is nothing; only in and through an absorption of the aims and meaning of organized institutions does he attain true personality. What appears to be his subordination to political authority and the demand for sacrifice of himself to the commands of his superiors is in reality but making his own the objective reason manifested in the state -- the

only way in which he can become truly rational. The notion of development which we have seen to be characteristic of institutional idealism (as in the Hegelian philosophy) was just such a deliberate effort to combine the two ideas of complete realization of personality and thoroughgoing "disciplinary" subordination to existing institutions.

The extent of the transformation of educational philosophy which occurred in Germany in the generation occupied by the struggle against Napoleon for national independence, may be gathered from Kant, who well expresses the earlier individual-cosmopolitan ideal. In his treatise on *Pedagogics*, consisting of lectures given in the later years of the eighteenth century, he defines education as the process by which man becomes man. Mankind begins its history submerged in nature -- not as Man who is a creature of reason, while nature furnishes only instinct and appetite. Nature offers simply the germs which education is to develop and perfect. The peculiarity of truly human life is that man has to create himself by his own voluntary efforts; he has to make himself a truly moral, rational, and free being. This creative effort is carried on by the educational activities of slow generations. Its acceleration depends upon men consciously striving to educate their successors not for the existing state of affairs but so as to make possible a future better humanity. But there is the great difficulty. Each generation is inclined to educate its young so as to get along in the present world instead of with a view to the proper end of education: the promotion of the best possible realization of humanity as humanity. Parents educate their children so that they may get on; princes educate their subjects as instruments of their own purposes.

Who, then, shall conduct education so that humanity may improve? We must depend upon the efforts of enlightened men in their private capacity. "All culture begins with private men and spreads outward from them. Simply through the efforts of persons of enlarged inclinations, who are capable of grasping the ideal of a future better condition, is the gradual approximation of human nature to its end possible.... Rulers are simply interested in such training as will make their subjects better tools for their own intentions." Even the subsidy by rulers of privately conducted

schools must be carefully safeguarded. For the rulers' interest in the welfare of their own nation instead of in what is best for humanity, will make them, if they give money for the schools, wish to draw their plans. We have in this view an express statement of the points characteristic of the eighteenth century individualistic cosmopolitanism. The full development of private personality is identified with the aims of humanity as a whole and with the idea of progress. In addition we have an explicit fear of the hampering influence of a state-conducted and state-regulated education upon the attainment of these ideas. But in less than two decades after this time, Kant's philosophic successors, Fichte and Hegel, elaborated the idea that the chief function of the state is educational; that in particular the regeneration of Germany is to be accomplished by an education carried on in the interests of the state, and that the private individual is of necessity an egoistic, irrational being, enslaved to his appetites and to circumstances unless he submits voluntarily to the educative discipline of state institutions and laws. In this spirit, Germany was the first country to undertake a public, universal, and compulsory system of education extending from the primary school through the university, and to submit to jealous state regulation and supervision all private educational enterprises.

Two results should stand out from this brief historical survey. The first is that such terms as the individual and the social conceptions of education are quite meaningless taken at large, or apart from their context. Plato had the ideal of an education which should equate individual realization and social coherency and stability. His situation forced his ideal into the notion of a society organized in stratified classes, losing the individual in the class. The eighteenth century educational philosophy was highly individualistic in form, but this form was inspired by a noble and generous social ideal: that of a society organized to include humanity, and providing for the indefinite perfectibility of mankind. The idealistic philosophy of Germany in the early nineteenth century endeavored again to equate the ideals of a free and complete development of cultured personality with social discipline and political subordination. It made the national state an intermediary between the realization of private personality on one side and of

humanity on the other. Consequently, it is equally possible to state its animating principle with equal truth either in the classic terms of "harmonious development of all the powers of personality" or in the more recent terminology of "social efficiency." All this reënforces the statement which opens this chapter: The conception of education as a social process and function has no definite meaning until we define the kind of society we have in mind.

These considerations pave the way for our second conclusion. One of the fundamental problems of education in and for a democratic society is set by the conflict of a nationalistic and a wider social aim. The earlier cosmopolitan and "humanitarian" conception suffered both from vagueness and from lack of definite organs of execution and agencies of administration. In Europe, in the Continental states particularly, the new idea of the importance of education for human welfare and progress was captured by national interests and harnessed to do a work whose social aim was definitely narrow and exclusive. The social aim of education and its national aim were identified, and the result was a marked obscuring of the meaning of a social aim.

This confusion corresponds to the existing situation of human intercourse. On the one hand, science, commerce, and art transcend national boundaries. They are largely international in quality and method. They involve interdependencies and coöperation among the peoples inhabiting different countries. At the same time, the idea of national sovereignty has never been as accentuated in politics as it is at the present time. Each nation lives in a state of suppressed hostility and incipient war with its neighbors. Each is supposed to be the supreme judge of its own interests, and it is assumed as matter of course that each has interests which are exclusively its own. To question this is to question the very idea of national sovereignty which is assumed to be basic to political practice and political science. This contradiction (for it is nothing less) between the wider sphere of associated and mutually helpful social life and the narrower sphere of exclusive and hence potentially hostile pursuits and purposes, exacts of educational theory a clearer conception of the meaning of "social" as a function and test of education than has yet been attained.

Is it possible for an educational system to be conducted by a national state and yet the full social ends of the educative process not be restricted, constrained, and corrupted? Internally, the question has to face the tendencies, due to present economic conditions, which split society into classes some of which are made merely tools for the higher culture of others. Externally, the question is concerned with the reconciliation of national loyalty, of patriotism, with superior devotion to the things which unite men in common ends, irrespective of national political boundaries. Neither phase of the problem can be worked out by merely negative means. It is not enough to see to it that education is not actively used as an instrument to make easier the exploitation of one class by another. School facilities must be secured of such amplitude and efficiency as will in fact and not simply in name discount the effects of economic inequalities, and secure to all the wards of the nation equality of equipment for their future careers. Accomplishment of this end demands not only adequate administrative provision of school facilities, and such supplementation of family resources as will enable youth to take advantage of them, but also such modification of traditional ideals of culture, traditional subjects of study and traditional methods of teaching and discipline as will retain all the youth under educational influences until they are equipped to be masters of their own economic and social careers. The ideal may seem remote of execution, but the democratic ideal of education is a farcical yet tragic delusion except as the ideal more and more dominates our public system of education.

The same principle has application on the side of the considerations which concern the relations of one nation to another. It is not enough to teach the horrors of war and to avoid everything which would stimulate international jealousy and animosity. The emphasis must be put upon whatever binds people together in coöperative human pursuits and results, apart from geographical limitations. The secondary and provisional character of national sovereignty in respect to the fuller, freer, and more fruitful association and intercourse of all human beings with one another must be instilled as a working disposition of mind. If these applications seem to be remote from a consideration of the

philosophy of education, the impression shows that the meaning of the idea of education previously developed has not been adequately grasped. This conclusion is bound up with the very idea of education as a freeing of individual capacity in a progressive growth directed to social aims. Otherwise a democratic criterion of education can only be inconsistently applied.

Summary.

-- Since education is a social process, and there are many kinds of societies, a criterion for educational criticism and construction implies a particular social ideal. The two points selected by which to measure the worth of a form of social life are the extent in which the interests of a group are shared by all its members, and the fullness and freedom with which it interacts with other groups. An undesirable society, in other words, is one which internally and externally sets up barriers to free intercourse and communication of experience. A society which makes provision for participation in its good of all its members on equal terms and which secures flexible readjustment of its institutions through interaction of the different forms of associated life is in so far democratic. Such a society must have a type of education which gives individuals a personal interest in social relationships and control, and the habits of mind which secure social changes without introducing disorder.

Three typical historic philosophies of education were considered from this point of view. The Platonic was found to have an ideal formally quite similar to that stated, but which was compromised in its working out by making a class rather than an individual the social unit. The so-called individualism of the eighteenth-century enlightenment was found to involve the notion of a society as broad as humanity, of whose progress the individual was to be the organ. But it lacked any agency for securing the development of its ideal as was evidenced in its falling back upon Nature. The institutional idealistic philosophies of the nineteenth century supplied this lack by making the national state the agency, but in so doing narrowed the conception of the social aim to those who were members of the same political unit, and reintroduced the idea of the subordination of the individual to the institution.

## Footnotes

[5] There is a much neglected strain in Rousseau tending intellectually in this direction. He opposed the existing state of affairs on the ground that it formed neither the citizen nor the man. Under existing conditions, he preferred to try for the latter rather than for the former. But there are many sayings of his which point to the formation of the citizen as ideally the higher, and which indicate that his own endeavor, as embodied in the *Emile*, was simply the best makeshift the corruption of the times permitted him to sketch.

## CHAPTER VIII AIMS IN EDUCATION:

### 1. The Nature of an Aim.

-- The account of education given in our earlier chapters virtually anticipated the results reached in a discussion of the purport of education in a democratic community. For it assumed that the aim of education is to enable individuals to continue their education -- or that the object and reward of learning is continued capacity for growth. Now this idea cannot be applied to all the members of a society except where intercourse of man with man is mutual, and except where there is adequate provision for the reconstruction of social habits and institutions by means of wide stimulation arising from equitably distributed interests. And this means a democratic society. In our search for aims in education, we are not concerned, therefore, with finding an end outside of the educative process to which education is subordinate. Our whole conception forbids. We are rather concerned with the contrast which exists when aims belong within the process in which they operate and when they are set up from without. And the latter state of affairs must obtain when social relationships are not equitably balanced. For in that case, some portions of the whole social group will find their aims determined by an external dictation; their aims will not arise from the free growth of their own experience, and their nominal aims will be means to more ulterior ends of others rather than truly their own.

Our first question is to define the nature of an aim so far as it falls within an activity, instead of being furnished from without. We approach the definition by a contrast of mere results with ends. Any exhibition of energy has results. The wind blows about the sands of the desert; the position of the grains is changed. Here is a result, an effect, but not an end. For there is nothing in the outcome which completes or fulfills what went before it. There is mere spatial redistribution. One state of affairs is just as good as any other. Consequently there is no basis upon which to select an earlier state

of affairs as a beginning, a later as an end, and to consider what intervenes as a process of transformation and realization.

Consider for example the activities of bees in contrast with the changes in the sands when the wind blows them about. The results of the bees' actions may be called ends not because they are designed or consciously intended, but because they are true terminations or completions of what has preceded. When the bees gather pollen and make wax and build cells, each step prepares the way for the next. When cells are built, the queen lays eggs in them; when eggs are laid, they are sealed and bees brood them and keep them at a temperature required to hatch them. When they are hatched, bees feed the young till they can take care of themselves. Now we are so familiar with such facts, that we are apt to dismiss them on the ground that life and instinct are a kind of miraculous thing anyway. Thus we fail to note what the essential characteristic of the event is; namely, the significance of the temporal place and order of each element; the way each prior event leads into its successor while the successor takes up what is furnished and utilizes it for some other stage, until we arrive at the end, which, as it were, summarizes and finishes off the process.

Since aims relate always to results, the first thing to look to when it is a question of aims, is whether the work assigned possesses intrinsic continuity. Or is it a mere serial aggregate of acts, first doing one thing and then another? To talk about an educational aim when approximately each act of a pupil is dictated by the teacher, when the only order in the sequence of his acts is that which comes from the assignment of lessons and the giving of directions by another, is to talk nonsense. It is equally fatal to an aim to permit capricious or discontinuous action in the name of spontaneous self-expression. An aim implies an orderly and ordered activity, one in which the order consists in the progressive completing of a process. Given an activity having a time span and cumulative growth within the time succession, an aim means foresight in advance of the end or possible termination. If bees anticipated the consequences of their activity, if they perceived their end in imaginative foresight, they would have the primary element in an aim. Hence it is nonsense to talk about the aim of education -- or any other undertaking -- where

conditions do not permit of foresight of results, and do not stimulate a person to look ahead to see what the outcome of a given activity is to be.

In the next place the aim as a foreseen end gives direction to the activity; it is not an idle view of a mere spectator, but influences the steps taken to reach the end. The foresight functions in three ways. In the first place, it involves careful observation of the given conditions to see what are the means available for reaching the end, and to discover the hindrances in the way. In the second place, it suggests the proper order or sequence in the use of means. It facilitates an economical selection and arrangement. In the third place, it makes choice of alternatives possible. If we can predict the outcome of acting this way or that, we can then compare the value of the two courses of action; we can pass judgment upon their relative desirability. If we know that stagnant water breeds mosquitoes and that they are likely to carry disease, we can, disliking that anticipated result, take steps to avert it. Since we do not anticipate results as mere intellectual onlookers, but as persons concerned in the outcome, we are partakers in the process which produces the result. We intervene to bring about this result or that.

Of course these three points are closely connected with one another. We can definitely foresee results only as we make careful scrutiny of present conditions, and the importance of the outcome supplies the motive for observations. The more adequate our observations, the more varied is the scene of conditions and obstructions that presents itself, and the more numerous are the alternatives between which choice may be made. In turn, the more numerous the recognized possibilities of the situation, or alternatives of action, the more meaning does the chosen activity possess, and the more flexibly controllable is it. Where only a single outcome has been thought of, the mind has nothing else to think of; the meaning attaching to the act is limited. One only steams ahead toward the mark. Sometimes such a narrow course may be effective. But if unexpected difficulties offer themselves, one has not as many resources at command as if he had chosen the same line of action after a broader survey of the possibilities of the field. He cannot make needed readjustments readily.

The net conclusion is that acting with an aim is all one with acting intelligently. To foresee a terminus of an act is to have a basis upon which to observe, to select, and to order objects and our own capacities. To do these things means to have a mind -- for mind is precisely intentional purposeful activity controlled by perception of facts and their relationships to one another. To have a mind to do a thing is to foresee a future possibility; it is to have a plan for its accomplishment; it is to note the means which make the plan capable of execution and the obstructions in the way, -- or, if it is really a mind to do the thing and not a vague aspiration -- it is to have a plan which takes account of resources and difficulties. Mind is capacity to refer present conditions to future results, and future consequences to present conditions. And these traits are just what is meant by having an aim or a purpose. A man is stupid or blind or unintelligent -- lacking in mind -- just in the degree in which in any activity he does not know what he is about, namely, the probable consequences of his acts. A man is imperfectly intelligent when he contents himself with looser guesses about the outcome than is needful, just taking a chance with his luck, or when he forms plans apart from study of the actual conditions, including his own capacities. Such relative absence of mind means to make our feelings the measure of what is to happen. To be intelligent we must "stop, look, listen" in making the plan of an activity.

To identify acting with an aim and intelligent activity is enough to show its value -- its function in experience. We are only too given to making an entity out of the abstract noun "consciousness." We forget that it comes from the adjective "conscious." To be conscious is to be aware of what we are about; conscious signifies the deliberate, observant, planning traits of activity. Consciousness is nothing which we have which gazes idly on the scene around one or which has impressions made upon it by physical things; it is a name for the purposeful quality of an activity, for the fact that it is directed by an aim. Put the other way about, to have an aim is to act with meaning, not like an automatic machine; it is to mean to do something and to perceive the meaning of things in the light of that intent.

## 2. The Criteria of Good Aims.

-- We may apply the results of our discussion to a consideration of the criteria involved in a correct establishing of aims. (1) The aim set up must be an outgrowth of existing conditions. It must be based upon a consideration of what is already going on; upon the resources and difficulties of the situation. Theories about the proper end of our activities -- educational and moral theories -- often violate this principle. They assume ends lying outside our activities; ends foreign to the concrete makeup of the situation; ends which issue from some outside source. Then the problem is to bring our activities to bear upon the realization of these externally supplied ends. They are something for which we ought to act. In any case such "aims" limit intelligence; they are not the expression of mind in foresight, observation, and choice of the better among alternative possibilities. They limit intelligence because, given ready-made, they must be imposed by some authority external to intelligence, leaving to the latter nothing but a mechanical choice of means.

(2) We have spoken as if aims could be completely formed prior to the attempt to realize them. This impression must now be qualified. The aim as it first emerges is a mere tentative sketch. The act of striving to realize it tests its worth. If it suffices to direct activity successfully, nothing more is required, since its whole function is to set a mark in advance; and at times a mere hint may suffice. But usually -- at least in complicated situations -- acting upon it brings to light conditions which had been overlooked. This calls for revision of the original aim; it has to be added to and subtracted from. An aim must, then, be flexible; it must be capable of alteration to meet circumstances. An end established externally to the process of action is always rigid. Being inserted or imposed from without, it is not supposed to have a working relationship to the concrete conditions of the situation. What happens in the course of action neither confirms, refutes, nor alters it. Such an end can only be insisted upon. The failure that results from its lack of adaptation is attributed simply to the perverseness of conditions, not to the fact that the end is not reasonable under the circumstances. The value of a legitimate aim, on the contrary, lies in the fact that we can use it to change conditions. It is a method for dealing with conditions so as to effect desirable alterations in them.

A farmer who should passively accept things just as he finds them would make as great a mistake as he who framed his plans in complete disregard of what soil, climate, etc., permit. One of the evils of an abstract or remote external aim in education is that its very inapplicability in practice is likely to react into a haphazard snatching at immediate conditions. A good aim surveys the present state of experience of pupils, and forming a tentative plan of treatment, keeps the plan constantly in view and yet modifies it as conditions develop. The aim, in short, is experimental, and hence constantly growing as it is tested in action.

(3) The aim must always represent a freeing of activities. The term end in view is suggestive, for it puts before the mind the termination or conclusion of some process. The only way in which we can define an activity is by putting before ourselves the objects in which it terminates — as one's aim in shooting is the target. But we must remember that the object is only a mark or sign by which the mind specifies the activity one desires to carry out. Strictly speaking, not the target but hitting the target is the end in view; one takes aim by means of the target, but also by the sight on the gun. The different objects which are thought of are means of directing the activity. Thus one aims at, say, a rabbit; what he wants is to shoot straight: a certain kind of activity. Or, if it is the rabbit he wants, it is not rabbit apart from his activity, but as a factor in activity; he wants to eat the rabbit, or to show it as evidence of his marksmanship — he wants to do something with it. The doing with the thing, not the thing in isolation, is his end. The object is but a phase of the active end, — continuing the activity successfully. This is what is meant by the phrase, used above, "freeing activity."

In contrast with fulfilling some process in order that activity may go on, stands the static character of an end which is imposed from without the activity. It is always conceived of as fixed; it is something to be attained and possessed. When one has such a notion, activity is a mere unavoidable means to something else; it is not significant or important on its own account. As compared with the end it is but a necessary evil; something which must be gone through before one can reach the object which is alone worth while. In other words, the external idea of the aim leads to a separation of

means from end, while an end which grows up within an activity as plan for its direction is always both ends and means, the distinction being only one of convenience. Every means is a temporary end until we have attained it. Every end becomes a means of carrying activity further as soon as it is achieved. We call it end when it marks off the future direction of the activity in which we are engaged; means when it marks off the present direction. Every divorce of end from means diminishes by that much the significance of the activity and tends to reduce it to a drudgery from which one would escape if he could. A farmer has to use plants and animals to carry on his farming activities. It certainly makes a great difference to his life whether he is fond of them, or whether he regards them merely as means which he has to employ to get something else in which alone he is interested. In the former case, his entire course of activity is significant; each phase of it has its own value. He has the experience of realizing his end at every stage; the postponed aim, or end in view, being merely a sight ahead by which to keep his activity going fully and freely. For if he does not look ahead, he is more likely to find himself blocked. The aim is as definitely a means of action as is any other portion of an activity.

### 3. Applications in Education.

— There is nothing peculiar about educational aims. They are just like aims in any directed occupation. The educator, like the farmer, has certain things to do, certain resources with which to do, and certain obstacles with which to contend. The conditions with which the farmer deals, whether as obstacles or resources, have their own structure and operation independently of any purpose of his. Seeds sprout, rain falls, the sun shines, insects devour, blight comes, the seasons change. His aim is simply to utilize these various conditions; to make his activities and their energies work together, instead of against one another. It would be absurd if the farmer set up a purpose of farming, without any reference to these conditions of soil, climate, characteristic of plant growth, etc. His purpose is simply a foresight of the consequences of his energies connected with those of the things about him, a foresight used to direct his movements from day to day. Foresight of possible consequences leads to more careful and extensive observation of the nature and

performances of the things he had to do with, and to laying out a plan — that is, of a certain order in the acts to be performed.

It is the same with the educator, whether parent or teacher. It is as absurd for the latter to set up his "own" aims as the proper objects of the growth of the children as it would be for the farmer to set up an ideal of farming irrespective of conditions. Aims mean acceptance of responsibility for the observations, anticipations, and arrangements required in carrying on a function — whether farming or educating. Any aim is of value so far as it assists observation, choice, and planning in carrying on activity from moment to moment and hour to hour; if it gets in the way of the individual's own common sense ( as it will surely do if imposed from without or accepted on authority ) it does harm.

And it is well to remind ourselves that education as such has no aims. Only persons, parents, and teachers, etc., have aims, not an abstract idea like education. And consequently their purposes are indefinitely varied, differing with different children, changing as children grow and with the growth of experience on the part of the one who teaches. Even the most valid aims which can be put in words will, as words, do more harm than good unless one recognizes that they are not aims, but rather suggestions to educators as to how to observe, how to look ahead, and how to choose in liberating and directing the energies of the concrete situations in which they find themselves. As a recent writer has said: "To lead this boy to read Scott's novels instead of old Sleuth's stories; to teach this girl to sew; to root out the habit of bullying from John's make-up; to prepare this class to study medicine, — these are samples of the millions of aims we have actually before us in the concrete work of education."

Bearing these qualifications in mind, we shall proceed to state some of the characteristics found in all good educational aims. (1) An educational aim must be founded upon the intrinsic activities and needs (including original instincts and acquired habits) of the given individual to be educated. The tendency of such an aim as preparation is, as we have seen, to omit existing powers, and find the aim in some remote accomplishment or responsibility. In

general, there is a disposition to take considerations which are dear to the hearts of adults and set them up as ends irrespective of the capacities of those educated. There is also an inclination to propound aims which are so uniform as to neglect the specific powers and requirements of an individual, forgetting that all learning is something which happens to an individual at a given time and place. The larger range of perception of the adult is of great value in observing the abilities and weaknesses of the young, in deciding what they may amount to. Thus the artistic capacities of the adult exhibit what certain tendencies of the child are capable of; if we did not have the adult achievements we should be without assurance as to the significance of the drawing, reproducing, modeling, coloring activities of childhood. So if it were not for adult language, we should not be able to see the import of the babbling impulses of infancy. But it is one thing to use adult accomplishments as a context in which to place and survey the doings of childhood and youth; it is quite another to set them up as a fixed aim without regard to the concrete activities of those educated.

(2) An aim must be capable of translation into a method of cooperating with the activities of those undergoing instruction. It must suggest the kind of environment needed to liberate and to organize their capacities. Unless it lends itself to the construction of specific procedures, and unless these procedures test, correct, and amplify the aim, the latter is worthless. Instead of helping the specific task of teaching, it prevents the use of ordinary judgment in observing and sizing up the situation. It operates to exclude recognition of everything except what squares up with the fixed end in view. Every rigid aim just because it is rigidly given seems to render it unnecessary to give careful attention to concrete conditions. Since it must apply anyhow, what is the use of noting details which do not count?

The vice of externally imposed ends has deep roots. Teachers receive them from superior authorities; these authorities accept them from what is current in the community. The teachers impose them upon children. As a first consequence, the intelligence of the teacher is not free; it is confined to receiving the aims laid down

from above. Too rarely is the individual teacher so free from the dictation of authoritative supervisor, textbook on methods, prescribed course of study, etc., that he can let his mind come to close quarters with the pupil's mind and the subject matter. This distrust of the teacher's experience is then reflected in lack of confidence in the responses of pupils. The latter receive their aims through a double or treble external imposition, and are constantly confused by the conflict between the aims which are natural to their own experience at the time and those in which they are taught to acquiesce. Until the democratic criterion of the intrinsic significance of every growing experience is recognized, we shall be intellectually confused by the demand for adaptation to external aims.

(3) Educators have to be on their guard against ends that are alleged to be general and ultimate. Every activity, however specific, is, of course, general in its ramified connections, for it leads out indefinitely into other things. So far as a general idea makes us more alive to these connections, it cannot be too general. But "general" also means "abstract," or detached from all specific context. And such abstractness means remoteness, and throws us back, once more, upon teaching and learning as mere means of getting ready for an end disconnected from the means. That education is literally and all the time its own reward means that no alleged study or discipline is educative unless it is worth while in its own immediate having. A truly general aim broadens the outlook; it stimulates one to take more consequences (connections) into account. This means a wider and more flexible observation of means. The more interacting forces, for example, the farmer takes into account, the more varied will be his immediate resources. He will see a greater number of possible starting places, and a greater number of ways of getting at what he wants to do. The fuller one's conception of possible future achievements, the less his present activity is tied down to a small number of alternatives. If one knew enough, one could start almost anywhere and sustain his activities continuously and fruitfully.

Understanding then the term general or comprehensive aim simply in the sense of a broad survey of the field of present activities, we shall take up some of the larger ends which have

currency in the educational theories of the day, and consider what light they throw upon the immediate concrete and diversified aims which are always the educator's real concern. We premise (as indeed immediately follows from what has been said) that there is no need of making a choice among them or regarding them as competitors. When we come to act in a tangible way we have to select or choose a particular act at a particular time, but any number of comprehensive ends may exist without competition, since they mean simply different ways of looking at the same scene. One cannot climb a number of different mountains simultaneously, but the views had when different mountains are ascended supplement one another: they do not set up incompatible, competing worlds. Or, putting the matter in a slightly different way, one statement of an end may suggest certain questions and observations, and another statement another set of questions, calling for other observations. Then the more general ends we have, the better. One statement will emphasize what another slurs over. What a plurality of hypotheses does for the scientific investigator, a plurality of stated aims may do for the instructor.

Summary.

— An aim denotes the result of any natural process brought to consciousness and made a factor in determining present observation and choice of ways of acting. It signifies that an activity has become intelligent. Specifically it means foresight of the alternative consequences attendant upon acting in a given situation in different ways, and the use of what is anticipated to direct observation and experiment. A true aim is thus opposed at every point to an aim which is imposed upon a process of action from without. The latter is fixed and rigid; it is not a stimulus to intelligence in the given situation, but is an externally dictated order to do such and such things. Instead of connecting directly with present activities, it is remote, divorced from the means by which it is to be reached. Instead of suggesting a freer and better balanced activity, it is a limit set to activity. In education, the currency of these externally imposed aims is responsible for the emphasis put upon the notion of preparation for a remote future and for rendering the work of both teacher and pupil mechanical and slavish.