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AN IDEALISTIC INTERPRETATION OF THE
EDUCATIVE PROCESS

Emily Julie Werner

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AN IDEALISTIC INTERPRETATION OF THE EDUCATIVE PROCESS.

Intro- duction.

Ours is an age of machinery. Hand production in the home has been supplanted by machine-like corporations and factories. The simplicity of farm life has been swallowed up in the complexity of time-saving mechanical devices designed to increase production and output. The personal touch of face-to-face interviews has largely been lost through the increasing use of the telephone and telegraph. Even home life has become more and more transformed into the "business of living", as families have been stored away in apartments as in so many filing-cases - each an isolated unit surrounded by so many other isolated units - all for the purpose of economizing space, time and energy, by being at the heart of the machinery of the great city. All this is evidence of the wonderful strides made by man in his ingenious use of natural resources and his increasing control of the forces of nature, and, if kept in its place, has within it great possibilities for future progress. But is it not also evidence of the fact that man himself is becoming so entangled in this machinery of his own making, that there is danger of his mistaking it for an end in itself instead of a means to an end; and that there is danger of his thereby losing his sensibility to the finer things in life? Has he perhaps created a Frankenstein?

Unquestionably, one of the manifestations of the extent to which machinery has gripped our day is the wave of materialism that is sweeping over the world. In business, in commerce, in society, and even in church are found evidences of the same trend, but nowhere are they stronger than in the realm of the sciences, especially in psychology and philosophy. It is only natural, then, that our education should reflect the same spirit. "Behavioristic psychology and pragmatism, instrumentalism, naturalism, and materialism in philosophy," runs a statement published by the Boston University, "are profoundly influencing the academic life of America today."¹ Emphasis is more and more being placed upon material values, while spiritual values are being ridiculed or ignored by many as too visionary for these practical, matter-of-fact, modern times of ours.

But, fortunately, all this is not going on unnoted or unchallenged. Voices are being raised in protest - the voices of those who refuse to let life be reduced to mere matter and force, not because they wish to delude themselves but because they are convinced that when life has been reduced to matter and force there is still a "plus" that has not been

¹ Boston University Bulletin
Vol. XIV.- #24- Aug. 15, 1925, p. 28.

taken into account. These are the idealists who, with Paul, are looking "not at the things which are seen but at the things which are not seen," deeming with him that "the things which are seen are temporal, but the things which are not seen are eternal." While this may sound impractical, is it not borne out by facts? As one of these idealists says: ¹

"Nobody should have to live long without finding out that behind everything we can lay our hands on is something else; and it is that 'something else' that does all the counting. The pen in your vest pocket hasn't the slightest significance in itself. The only meaning it can have for life it must acquire from the spirit which drives it. The point will run as smoothly to forge a check as to write a sermon, to give peace as to take it away. If there is one lesson that life has been trying to pound into us it is that a man is bound to come at the world on its spiritual side, or he may as well not come at it at all! It is fashioned for that kind of handling. The very theory of evolution seems to point to it. It is absurd to suppose that that process has meant nothing more than the survival of animals fittest to conquer enemies and to overrun the earth! 'On such a bare hypothesis', writes one of its great exponents, 'man himself is impossible to explain. No one really attempts to explain him except on the tacit supposition that nature was not satisfied with such an earth-over runner as the rabbit, or such an invincible conqueror as the influenza microbe.'"

These varying interpretations have a decided bearing on education. Whatever the attitude taken, whatever the philosophy of life accepted, be it essentially materialistic or idealistic, it follows inevitably that the educational philosophy held will be profoundly affected and will partake of the nature of the other. After all, one's educational philosophy is but a part of one's philosophy of life.

Leaving for the time being the question of materialism and its kindred systems of thought, we shall confine ourselves to the study of idealism and endeavor to find out what are the educational implications involved in this way of thinking. This we shall do in five steps:

- I. An Outline of the Educative Process.
- II. The Definition of Idealism.
- III. The Idealistic Interpretation of the Universe.
- IV. The Interpretation of this Process from the Idealistic Viewpoint.
- V. An Estimate of this Interpretation.

¹ The Rev. Paul E. Scherer, D.D., in a sermon on Religion and Life, printed in Trinity Progress for November 1925 (a monthly bulletin issued by the Evangelical Lutheran Church of the Holy Trinity, New York City).

I. AN OUTLINE OF THE EDUCATIVE PROCESS.

Since this process remains fundamentally unchanged and constitutes the tools available for any educator, whether idealist, materialist, or pragmatist, we shall confine ourselves here to a review of the facts involved, leaving the interpretation of these facts for our next step. Our investigation of the educative process will be centered upon the following phases:

- A. The Importance of the Educative Process.
- B. The Data of the Educative Process.
- C. The Laws of Procedure Governing the Educative Process.

A. The Importance of the Educative Process.

"Education in its broadest sense means just this: acquiring experiences that will serve to modify inherited adjustments."¹ The lower animals, and, to a great extent, the higher animals also, are fully equipped at birth to meet the exigencies of life. They are prepared by instinct to procure food, to find shelter and protection, to mate and rear their young. The completeness of this equipment varies inversely as the species advance in the scale: that is, those at the lowest end of the scale, such as the insects, are able to develop to the mature stage independent of parental aid, their reactions to various stimuli being fixed; those at the upper end of the scale, such as the anthropoid apes, are, to a certain extent dependent upon parental care and protection. In man this helplessness at birth reaches its climax and extends in gradually lessening degree over a long "period of infancy." Hand in hand with this helplessness, however, goes a corresponding degree of capacity for development and change. In the lower animal forms all is "instinctively" mechanical with no possibility of modification; in the higher forms a degree of plasticity in the organism allows for some modification; and in man this educability, this capacity to profit by individual experience, is practically unlimited. While a small percentage of animals might profit by education, - training, rather, is the proper word in this connection - in the case of man, alone, is education an absolute necessity.

The twentieth century infant comes into the world with about the same native equipment as that of the infant of primitive times, and if left alone at birth cannot possibly survive. The infant's native equipment is not equal to the task of getting food and shelter. More than that, if these necessities could somehow be provided, and a child were then left alone to mature independently, without any human intercourse, he would, regardless of his parentage, grow up as a savage. While still a mooted question among scientists, a great mass of evidence points to the non-transmission of acquired characteristics. The experiences of a parent do not to any noticeable extent affect the germ cell, which is the seat of trans-

¹ Wm. C. Bagley, - The Educative Process - p.3.

mission, and therefore, are not passed on to the offspring. In like manner, the experiences of the race, ever accumulating and broadening as they are, leave each succeeding generation of infants practically unchanged.

Yet, somehow, each generation does profit by the experiences of all preceding generations. Somehow, these products of experience are transmitted. By some short cut man begins where his forefathers left off and in turn makes his own contribution to the general store of knowledge. This general store is the social heredity of the race and the means by which it is preserved and handed down is education. Without it, progress would scarcely be possible, or, at any rate, would be painfully slow. With it, man's equipment far exceeds that of any animal, and adequately fits him for his struggle with his environment. "It is hardly too much to say," is Bagley's opinion¹, "that education is the largest word in the vocabulary of life, for it symbolizes all those forces that have raised man from the plane of the brute, all those characteristics that differentiate him from the speechless anthropoid, the Homo alalus, with which, not so very long ago, he was to be identified."

Since, therefore, without education, man could not survive in his present environment, and since, without it, he could not, even if he did manage to survive, make appreciable progress, the educative process is indispensable to the welfare of man.

B. The
Data of
the Edu-
cative
Process.

As the artist, in the process of painting, has his raw materials with which to work, - his canvas, his colors, and his brushes, - so the teacher, in the process of educating, has certain raw materials available for his task. In the latter case, however, they are far more complicated, for instead of being mere lifeless utensils, they comprise a living organism - the original nature of the child with its inherent "mechanics" and "dynamics;" an environment to be modified; a will to be taken into account; and, finally, a wide range of subjects from which to choose.

1. The
Original
Nature
of the
Child.
a. Phys-
ical
Struc-
ture or
"Mechan-
ics".

In the first place, then, the teacher has before him the child himself, with a nature both physical and psychic. An analysis of the "mechanics," or physical structure underlying all human behavior reveals that there are three types of mechanisms at work in every reaction made by the child: receiving organs, connecting organs, and reacting organs.

"Mind is informed of the conditions of the various parts of the body and the happenings in the external world by means of sensations."² Sensations originate in the excitation of the nerve-ends in the receiving organs, or sense organs, as

¹Op. Cit.,-p.22

²Bagley- Op.Cit.-p.66.

they are called. These sense organs are highly specialized, each being sensitive to a particular type of stimuli: those in the eye to light and color; those in the ear to sounds; those in the nose to odors; those in the tongue to tastes; and those in the skin to temperature and pressure. As one of these stimuli acts upon the respective sense organ adapted to it, a nerve impulse is initiated in the end of the nerve which is contained in that sense organ. This impulse is conducted through the nervous system until it reaches the proper responding mechanism where a response of some kind takes place. Sometimes the route is short and direct, as in a simple reflex act, and sometimes the route is round-about as in complicated acts involving reason. The whole is known as a "stimulus-response unit" (S→R).

These sense organs are minute and numerous, those in the skin - "pain spots", "touch spots", "cold spots", "warm spots" - running into the millions. Others, similar to these, are distributed in the linings of the internal organs of the body - the stomach, intestines, gullet, and other organs. "The really sensitive organs are very minute and, in appearance, fairly simple sensory cells. In them the stimulus arouses the nerve impulse which is conducted into the central nervous system, there to be redirected to the organs of response. The stimulation of the sense organs is the first of the series of events which makes possible active adjustment to the environment."¹

The second type of mechanism, consisting of the connecting organs, links the first type, the receiving organs, with the third type, the reacting organs. These connecting organs, or thread-like fibres called neurones, constitute the nervous system. They fall into three classes - the sensory neurones which are connected with the sense organs, the central, or inter-connecting neurones in the central nervous system, which comprises the brain, mid-brain, and spinal cord, and the motor neurones which are connected with the organs of response, as, for instance, the muscles of the arms and legs.

"Intellect, character, and skill have their physiological basis in the structure and activities of the neurones and accessory organs which compose the nervous system. The original nature of man in these respects depends on the original structure and activities of the neurones.

"The neurones are essentially threads of specialized protoplasm each connecting one part of the body with another. Like other elements of the body, they eat, excrete, grow and die; but their special functions in the animal's life are sensitivity, conductivity, and modifiability. Sensitivity means the capacity to be excited to action at one end by one or many agencies. Conductivity means the capacity to transmit

¹ A. I. Gates - Psychology for Students of Education - p.42.

the action thus excited, or some consequence of it, to the other end of the neurone. Modifiability means the capacity to change in accordance with use.

"They are arranged in an elaborate system of receptors, easily accessible to important influences within and without the body, effectors in intimate connection with organs for action, and connectors which lead from the receptors to the effectors. Each neurone of this total system has its special connections with the outside world, with the outer organs of the body, or with other neurones."¹

While differing in appearance and size, all neurones have these common elements - a cell body, a number of thread-like fibres at the receiving end, known as dendrites, a long thread-like fibre at the discharging end, called the axone, which "frays out" at the end into so-called end-brush. They are so arranged that the end-brush of the axone of one neurone is in close proximity to the dendrites of another. The place where they meet is called the synapse. Travelling from axone to dendrite the nerve impulse originated in a sense organ makes its way across various synapses until it reaches the reacting organ. The course this impulse takes is determined by the amount of resistance offered at the synapse. Exactly what takes place at the synapse, or what causes a high or low resistance is not as yet known, although it is generally conceded that the proximity of the neurone endings must have a direct bearing on it. Some of the paths of conduction are already established at birth, while countless others are made as the result of learning. Gates sums it up as follows: ²"The nerve impulses, because of conditions which must at present be described rather vaguely as differences in resistance at the synapses, do not become scattered and diffused throughout the whole central system, and, as a consequence, throughout the whole bodily equipment of reacting mechanisms. On the contrary, they take particular, limited courses and evoke responses by certain organs only. There are predetermined routes from particular sense organs; routes determined by conditions at the synaptic connections. Some of these routes are short; some are round-about; some are inherited just as bones and eye-color are inherited; some are acquired through experience as wrinkles and table manners are acquired."

As has been indicated, stimulus-response units vary in complexity. The simplest is known as a reflex act, or act of the first level. It is inherent at birth and is practically unchangeable. It often involves only a sensory neurone, a central connection in the spinal cord, a motor neurone, and a muscle, although usually several organs of response are involved. Such reactions as the knee-jerk and winking fall under this head. Reactions of the second level, which are also unlearned

¹E. L. Thorndike: Educational Psychology - Vol I. p.209

²Op. Cit. p.50

but somewhat more complex and more readily changed, involve, in addition to first level reactions, more complicated connections located in the mid-brain and the cerebellum. Turning the head, shouting, and various emotions, such as anger and fear, belong in this class. Finally, there are acts of the third or brain level which depend upon the neural organization of the cortical area of the two cerebral hemispheres. All learned reactions, which are the result of the modification of the synaptic connections in the cortex, are in this group.

The third type of mechanism constituting the physical structure - the "mechanics" of human action - is the reacting mechanism. This consists of muscles, glands, and cortical neurones.

There are two kinds of muscles, the striped or skeletal, varying in size and found in all parts of the body - in the arms, the legs, the shoulders, the vocal organs, and others - and the smooth muscles, which are found mainly in the visceral organs, - the intestines, the diaphragm, the walls of the gullet, the stomach, and other internal organs.

The glands, it is becoming more and more evident, are of vital importance in human behavior, - in the matter of temperament and in the control of the emotions, as well as in physical functions such as digestion and assimilation. The duct glands, among which are the tear glands, the sweat and oil glands of the skin, and the salivary glands of the mouth, secrete either to the surface of the body or into some body cavity. The ductless or endocrine glands, on the other hand, secrete directly into the blood. Among these are the thyroid, the parathyroid, and the pituitary glands.

"Our knowledge of the functions of the glandular mechanisms," says Gates,¹ "is as yet very inadequate. They form a complex system. A change in the amount of secretion of one affects many or all of the others. . . . The whole complex of chemical reactions doubtless provides for many subtle adjustments, whose influences on human behavior we are just beginning to appreciate."

In addition to these tangible reactions in the form of movement and glandular secretion, are the intangible, yet important, reactions such as sensations, thoughts, and feelings. These are the reactions which take place in the cerebral cortex and constitute the mental states of the individual. While science is unable to explain the relation between the physical and the mental, the relation is unquestionable. Consciousness depends upon a physical basis, namely, the activity of the neurones in the cortex of the brain. There can be "no psychosis without neurosis." The partial destruction of the

¹Op. Cit. p.71.

cortex inevitably results in the partial loss of consciousness. When one area is injured or destroyed, the loss of visual sensation results, even though the eye and sensory nerves are intact. The injury of another area results in inability to detect sounds when the ear itself is uninjured. The removal of other areas destroys the ability to sense pain, pressure, temperature, taste. In the event of the injury or removal of a wide expanse of the cortex, the loss of memory, or of the ability to visualize may also result in spite of the unimpaired condition of the sense organs, the spinal cord, the muscles, and the glands. This proves, while it does not explain how or why, that nerve impulses flowing through the cortical neurones are essential factors in consciousness.

From the standpoint of education, the most important fact in the native equipment of man is the modifiability and retentiveness of the neurones upon which learning depends. The degree of modifiability, as well as the sensitivity of the neurones determines the extent of the capacity to learn. This is a matter of native endowment which varies in individuals. The development of the capacity to learn and retain is a gradual process. To a large extent, development depends upon favorable opportunities, but the limits of this development are predetermined by native endowment. So, also, but to a lesser extent, is the "natural bent" of the individual determined by the aptitudes with which he is endowed at birth. Hence the epigram, expressing but half the truth, "Poets are born and not made."

Such, then, are the "mechanics" upon which the work of the educator depends: receiving organs, which "pick up" impressions from the outside world or from some inner condition; connecting organs, which carry these impressions along to the proper "exchange"; and reacting organs, which make the response needed to adjust the individual to conditions revealed by these impressions, and are themselves modified through having made that response. And because this physical structure is the foundation of all activity, it is of vital importance in the educative process.

b. "Dynamics".

Having reviewed the "mechanics" of the child's original nature, we shall now proceed to a consideration of its "dynamics." These may be classified as the instincts and original tendencies and the emotions. Of necessity this can be but a brief survey of the outstanding facts. Volumes have been written upon these phases of human nature from differing points of view, setting forth conflicting opinions and theories. There is, however, a sphere of fairly general agreement and it is to this we shall confine ourselves.

(1) Instincts and Original Tendencies.

An instinct may be defined as "an inherited form of nervous organization." That is to say, the neural connections responsible for an instinctive reaction are formed before birth. Most instincts, however, are not present at birth, but develop gradually, some making their appearance a few days after birth, others somewhat later. The last to put in an appearance is the sex instinct. It is now generally conceded that instincts are, on the whole, stable and, in a more or less modified form, permanent. Their importance lies in their driving power, for practically all human conduct has one or more instincts at its roots. As Gates states it: "Stimuli, whether they arise in some external situation or in some inner condition of the body, arouse tendencies or drives to activity simply because original nature is what it is. A man wants to eat, to sleep, to be praised, to be looked at approvingly, or to add new items to his collection of stamps or pictures, fundamentally because he is naturally so organized. Instincts, then, provide a large number of the determining or dynamic forces in behavior. They account for forms of readiness to act, or in less technical terms, for many particular drives, motives, desires, inclinations, urges. To understand the instinctive equipment of man is to comprehend the direction in which activity is likely to run to perceive in some measure, what kinds of activity individuals are likely to seek and avoid."¹

The readiness to act which accompanies an instinct is a physiological state taking place in the neurones involved. As a result of this preparatory reaction of the neurones a psychic state is experienced in the form of an impulse or conscious wish to act. The whole organism is "set" toward a certain end or consummatory reaction.

Classification of instincts has been made along various lines with different criteria. The following one is taken from Gates²:

1. Instinctive responses to bodily or organic conditions: such as, eating, drinking, breathing, sleeping, voiding, getting cool when too warm, and getting warm when too cool.
2. Instinctive responses to objects or events in the environment: These include gross bodily activities - as, walking and climbing; manipulation; vocalization - laughing and weeping; avoiding reactions - dodging, shrinking, cowering; overcoming obstructions; mastery; fighting; submission - when mastery is out of the question; and collecting and hoarding.

¹Op. Cit. p. 124.

²Op. Cit. Chap. VII.

3. Instinctive responses to presence and activities of other human beings, sometimes called the social instincts: parental behavior, mating behavior, gregariousness, desire for social approval, and avoidance of scorn.

To these might be added these other instinctive tendencies: to be curious, to imitate, to be religious, and to find some states of affairs satisfying and others annoying. The first three need no explanation; the last, perhaps, does. This tendency is a familiar phenomenon in the case of animals, for the fondness of ducks for water, of dogs for human companionship, of mice for cheese, is proverbial. So human beings, too, have native likes and dislikes which in some instances are universal, and in others vary among individuals. Commenting upon this inborn tendency to prefer some things to others, William James says¹:

"Why does the hen, for example, submit herself to the tedium of incubating such a fearfully uninteresting set of objects as a nestful of eggs? Why do men always lie down, when they can, on soft beds rather than on hard floors? Why do they sit round the stove on a cold day? Why, in a room, do they place themselves, ninety-nine times out of a hundred, with their faces toward its middle rather than toward the wall? Nothing more can be said than that these are human ways and that every creature likes its own ways, and takes them as a matter of course. . . . it is not for the sake of their utility that they are followed, but because at the moment of following them we feel that it is the only appropriate and natural thing to do to the animal which obeys it, every impulse and every step of every instinct shines with its own sufficient light, and seems at the moment the only eternally right and proper thing to do. It is done for its own sake exclusively."

While we have no way of analyzing the conscious states of animals, we know that in human beings a satisfactory state of affairs is accompanied by a feeling of pleasantness and an unsatisfactory or annoying state of affairs, by a feeling of unpleasantness.

"The original basis of the wants which so truly do and should rule the world is the original satisfyingness of some states of affairs and annoyingness of others. Out of such original satisfiers and annoyers grow all desires and aversions; and in such are found the first guides of learning."²

There is, of course, in this classification of instincts, as in any other, a great deal of overlapping. Most instincts include a number of elements that are common to other instincts. And rarely, if ever, is a reaction the result of pure instinct. Human behavior is such a complex combination of native and acquired tendencies that it is usually difficult to distinguish them.

¹Quoted by Gates - Op. Cit. p. 150.

²E. L. Thorndike - Op. Cit. Vol. I, p. 123.

(2) Emotions.

We have mentioned the feelings of pleasantness and unpleasantness in connection with satisfaction and annoyance. These, strictly speaking, differ from the emotions which are also known as feelings, in general usage. Emotions are accompanied by a feeling of pleasantness or unpleasantness according to the circumstances arousing them. The same emotion may at one time be pleasant and at another time unpleasant.

As yet no adequate explanation, on a physical basis, has been found for the emotions. This, however, does not detract from their importance. There are, according to McDougall, seven different fundamental types of emotions: fear, disgust, wonder, anger, subjection (negative self-feeling), elation (positive self-feeling) and the tender emotions.¹ Violent emotions, especially anger and fear, are accompanied by inner disturbances which have a disastrous effect on the bodily functions and also on the general mental efficiency. Mild forms of the pleasurable emotions - mirth, joy in pleasant companionship, in music, or in conversation, tend to produce a general sense of comfortable well-being. It is this state which best fits the individual for the tasks of daily living. While arousing the emotions unduly is harmful, nevertheless, it is upon the successful appeal to the emotions that action largely depends. Dr. Horne, in his discussion of the importance of interest in education, (interest being "one of the many feelings of possible service to the teacher") says:²

"It is an open question whether the feelings are not the greatest motive powers in life. No idea which the feelings fail to welcome can abide in the home of the mind. . . . The educator who would instruct the intellect and fashion the will must also win the feelings."

We have, up to this point, touched upon the component parts of the native equipment of the child - the physical structure underlying and determining the mental capacities, the instincts and natural tendencies, and the emotions. Taken as a whole, this constitutes the heredity of the child and is a powerful influence in the shaping of his character. As such it is of fundamental importance as one of the data with which the teacher has to deal in the educative process.

2. An Environment to be Modified.

The second of these data, the environment, is likewise of the utmost importance, some writers claiming it to be of even more significance than heredity. The Standard Dictionary³ defines environment as "all the external circumstances of an organism." It can readily be seen that these fall naturally into two classes: the physical, such as climate, soil, air, light, heat, food, and so forth; and the social, based upon association, such as language, customs, conventions, moral standards, ideas, public opinion.

¹E.L.Thorndike, Op. Cit., p.154.

²Philosophy of Education, p. 192f.

³Funk and Wagnalls.

An organism containing within itself the capacity for development requires opportunity for this development to take place. It is the environment that provides this opportunity. "What a soul once born most needs is just opportunity. The grain of wheat has life in itself, but soil and sunshine, the dew and the rain are its opportune environment. So the soul has life in itself, but the home, the school, the church, and society, are its opportunities. The environment must invest the capital that heredity has bestowed; without investment, the capital cannot grow; without the capital, investment is impossible. In the home and the school parents and teachers provide those opportunities that inherited capacities must have for their realization."¹

The opportunities provided by the physical environment consist in natural resources that call out inherent qualities in man, as, for instance, the lure of the sea and its influence upon the ancient Phoenicians, the beauties of Greece and their effect upon the character of the Greeks, the Nile River and its challenge to engineering feats on the part of the old Egyptians; and in seeming disadvantages that by their very antagonism "make" the man who overcomes them and spur him on to progress. In some circumstances the physical environment, by making survival too easy, hinders development, as is instanced in the enervating effect of the climate in the tropics.

The social environment provides opportunity and incentive to achievement in the very fact of the presence of others. This stimulates competition and draws out talents which might otherwise have lain dormant. It provides opportunity for development - which may be desirable or undesirable - in setting up standards and models for imitation in the home, the community, the school, and the church. It stimulates development by providing cultural opportunities, not otherwise available for many, in its libraries, museums, and churches. Finally, it provides vast opportunities for development in the conservation of the heritage of past generations for the use of the present generation.

While heredity establishes the boundaries beyond which no development is possible, environment largely determines the direction which this development shall take. A wholesome environment can do much to overcome inherited weaknesses; so, vice versa, as has been demonstrated over and over again, can a bad environment do much to counteract and degrade an heredity that is potentially good. There is room, then, for the educator, who in dealing with this vital force, must utilize the good points and counteract, wherever possible, its bad points. The environment, like heredity, is a most important datum in the educative process, but unlike heredity, it is not absolutely fixed. It is susceptible to modification.

¹Dr. H.H.Horne, Idealism in Education, pp.67-68.

3. A
Will to
be taken
into Ac-
count.

To take the will into account and to treat it separately as one of the data of the educative process is to commit a grave error in the eyes of many modern educators and scientists, who feel that when heredity and environment have been taken into account as the forces making a man, all that is necessary has been said and done. And yet, they themselves must and do, often perhaps unconsciously, take account of the will in the sense in which the term is used here: not as a faculty in itself, but as the whole individuality in action. "By will," Dr. Horne explains,¹ "we mean the part the individual himself plays in his own making and in the making of society." It is in this sense that even those who would exclude it, can scarcely fail to recognize the will. Dr. Saleeby, for example, in Parenthood and Race-Culture² says, "Granted that the highest of all objects is the making of worthy human beings, it is quite evident that we must attend equally to the two factors which determine all human life - heredity and environment." He also, however, quotes Disraeli, 'Men are not the creatures of circumstances; circumstances are the creatures of men', and himself makes this statement: "We must look elsewhere than amongst the inherent and necessary factors of racial life for the causes which determine these tragedies (great national tragedies of history); and we shall be entitled to assume as conceivable the proposition that, notwithstanding the consistent fall of our predecessors, the causes are not inevitable, but, being external and environmental, may possibly be controlled: man being not only creature but creator also."

The following passage is taken from Gates³: "At this point, a very important distinction may be drawn between capacity and achievement; between growth and accomplishment. Children of the same age will, on the basis of endowment, possess different aptitudes. But aptitude does not insure achievement. What is done with one's capacity, whether it be high, medium, or low, depends on how persistently, how vigorously, and in what directions it is applied."

In other words, what is done with one's capacity depends upon the will of the individual. The choice is his: on the one hand, development of his inherited capacities through volitional effort, and, on the other hand, failure to realize his capacities through wilful neglect. Man himself, in conjunction with heredity and environment, plays an important part in molding his character - in becoming "all that nature intended him to be."

¹Idealism in Education, p. 96.

²pp.29, 149, 257, 258 - Quoted by Dr. Horne - Ibid. p. 7.

³Op. Cit. p.116.

4. A Wide Range of Subject Matter from which to Choose.

The fourth and last datum of the educative process is the subject matter to be taught. No detailed discussion of this phase need be undertaken here, however. Suffice it to say that there are various theories concerning the nature of knowledge. To some it has cultural value - they advocate knowledge for its own sake; to others it has instrumental value - they would use knowledge only as a means to an end; to still others some knowledge, at least, has disciplinary value - they would teach it for the formal training it provides. Because the accumulated knowledge of the race is so extensive, it is necessary that selection be made, whatever theory may be held. There are certain types of information which, in the process of civilization, have become essential for intelligent participation in society. Beyond these the selection must largely be determined by the natural aptitudes and the needs of the individual. "The knowledge that counts, the knowledge that is power, is not mere acquaintance with facts, but experience of facts in their relation to each other. True knowledge must consist of significant facts, facts that mean something to the individual and can be applied by him in some way advantageous to himself and to others."¹

To sum up the material with which the educator must work: There is, first of all, the original nature or heredity of the child; secondly, the environment, which constitutes the opportunity for the development of that heredity; then, the will of the child as he reacts to these two forces; and, finally, the accumulated knowledge of the race, from which selection is to be made. These are the data of the educative process. With such data, the question confronts us, how is the educator to proceed in his task of molding the child?

C. The Laws of Procedure Governing the Educative Process:

This brings us to our next step: the laws of procedure governing the educative process. These laws of procedure are, of course, dependent upon the nature of the learning process in the child. No longer is learning conceived as a passive process in which the child, like an empty vessel, is filled by the teacher with desirable information - desirable from the teacher's standpoint, that is. It is a recognized fact that no learning takes place without some reaction in the child. We shall therefore consider first the laws of learning, and then their application. According to Thorndike, there are three primary and five secondary laws of learning.

1. With Reference to the Child Himself

a. The Laws of Learning.

1) Primary Laws.

The primary laws are the Law of Readiness, the Law of Exercise, and the Law of Effect.

a) The Law of Readiness.

The Law of Readiness he states as follows: "When any conduction unit is in readiness to conduct for it to do so is satisfying. When any conduction unit is not in readiness to conduct, for it to conduct is annoying. When any conduction unit is in readiness to conduct for it not to do so is annoying."² A simple illustration of this is found in the matter

¹John Adams: The Evolution of Educational Theory, p. 188.

²Op. Cit. Vol. II, p. 1.

of eating. For a hungry man to eat is satisfying and to be kept from eating is annoying. On the other hand, for a man satiated with food to be forced to eat more is annoying. Exactly what neural changes take place to produce states of annoyance or satisfaction is unknown. Thorndike's explanation is based upon the action that takes place, not upon the conscious state involved: "By a satisfying state of affairs is meant roughly one which the animal does nothing to avoid, often doing such things as attain and preserve it. By an annoying state of affairs, is meant roughly one which the animal avoids or changes."¹ However in general, it may safely be said that, at least in respect to human beings, a "satisfying state of affairs" is equivalent to a feeling of pleasantness and an "annoying state of affairs" to a feeling of unpleasantness.

b) The
Law of
Exercise

(1) The
Law of
Use.

The Law of Exercise Thorndike divides into the Laws of Use and Disuse: "The Law of Use is: When a modifiable connection is made between a situation and a response, that connection's strength is, other things being equal, increased. By the strength of a connection is meant roughly the probability that the connection will be made when the situation recurs. Greater probability that a connection will be made means a greater probability for the same time, or an equal probability, but for a longer time."² For instance, the connection having been made between the situation 7 x 6 and the response 42, the strength of that connection has been increased. That is, the probability that the response 42 will be evoked by the situation 7 x 6 is greater. This may mean that the probability has been increased from sixty out of a hundred to eighty-five out of a hundred for the same length of time, say, for thirty days hence; or it may mean that the probability, sixty out of a hundred, has been extended to continue for fifty days hence instead of for thirty days hence.

(2) The
Law of
Disuse.

"The Law of Disuse is: When a modifiable connection is not made between a situation and a response during a length of time, that connection's strength is decreased. The explanations and qualifications stated in connection with the Law of Use apply here also."³

c) The
Law of
Effect

The Law of Effect Thorndike states in these words: "When a modifiable connection between a situation and a response is made and is accompanied or followed by a satisfying state of affairs, that connection's strength is increased: When made and accompanied or followed by an annoying state of affairs, its strength is decreased. The strengthening effect of satisfyingness (or the weakening effect of annoyingness) upon a bond varies with the closeness of the connection between it and the bond. This closeness or intimacy of association of the satis-

¹Op. Cit. Vol I, p.123.

²Ibid. Vol.I, p.2

³Ibid Vol.II, p.4.

ying (or annoying) state of affairs with the bond in question may be the result of nearness in time or of attentiveness to the situation, response and satisfying event in question. 'Strength' means the same here as in the Law of Use."¹ Countless illustrations of this law at work may be found both in human and animal behavior. A baby that is picked up and fondled when it cries soon learns to repeat the crying in order to have the satisfaction of the fondling. A child that burns his fingers when he touches a hot stove learns to inhibit the impulse to touch it. A rat that in the course of an experiment receives an electric shock each time it tries getting to some food through a certain pathway, gradually learns to avoid that route. In the first case the connection is strengthened; in the other two it is weakened.

2) Secondary Laws

The secondary laws of learning are designated by Thorndike as the Law of Multiple Response, the Law of the Learner's "Set" or Attitude, the Law of Partial Activity, the Law of Assimilation or Analogy, and the Law of Associative Shifting.

a) The Law of Multiple Response

The Law of Multiple Response is that to a certain external situation a number of varied responses may be made. From these numerous possibilities the child or animal makes selections until the response which produces a satisfying state of affairs is hit upon. "That is," says Thorndike², "the situation provokes, not one fixed response, but any one of several responses, the failure on the part of the one first made to produce a satisfying state of affairs being (in connection with the rest of the situation) the stimulus to one of the other responses, so that the animal does many things and does them over and over again until some one of them, or some external event, puts an end to the annoying state of affairs or brings the requisite satisfaction." The actions of chicks confined within a pen, of a turtle endeavoring to reach his nest from a given point A, of a hungry kitten attempting to get out of a box in order to reach the bit of fish left outside are cited as illustrations of this characteristic of learning.

b) The Law of the Learner's "Set" or Attitude

The Law of the Learner's "Set" or Attitude is that the response of the learner to an external situation is conditioned by his attitude or adjustment at the time. This is often called his "mind's set." A child when sleepy or ill will not respond in the same way to a new picture book as he will when wide awake and in good spirits. A hungry chicken will make more frantic efforts to reach food than will one that has just been fed. A boy in a toy store does not see the dolls which hold his sister's interest, but is intensely excited at the sight of an electric train or a mechanical toy which gets little more than a passing glance from her. So the mind's set determines what situations shall call for a response, and also what responses shall be satisfying.

¹Ibid. Vol. II, p.4

²Op. Cit. Vol.I, p.133

c) The
Law of
Partial
Activity

The Law of Partial Activity is expressed by Thorndike as follows: "....a part or element or aspect of a situation may be prepotent in causing response, and may have responses bound more or less exclusively to it regardless of some or all of its accompaniments."¹ It is only in rare instances that we respond to gross situations as such. In general, we are utterly indifferent to some elements of a situation, mildly aware of others, and intensely interested in others. These last, then, become the prepotent elements in the bond formed between the situation and the response made, and are very apt to evoke the same response when they occur later in connection with different elements - that is, in a different gross total situation. So we abstract "number" elements, colors, qualities, and other characteristics from their concomitant elements and respond to them in whatever situation they may be found.

d) The
Law of
Assimilation
or Analogy.

The Law of Assimilation or Analogy is that "to any situations, which have no special original or acquired response of their own, the response made will be that which by original or acquired nature is connected with some situation which they resemble."² Or, in other words, "To any new situation man responds as he would to some situation like it, or like some element of it."³ This is strikingly illustrated in the actions and responses of children in the presence of new objects. One child, for instance, upon seeing a lake for the first time, exclaimed, "Oh, see the big bath-tub!" Man, also, by original nature, responds to the difference in a situation. The response in such an instance may be a perplexed stare, a feeling of helplessness, saying "I don't know", and the like. "What's that?" is no uncommon expression among small children, nor do adults abandon it entirely. Thorndike summarizes his discussion of this tendency in these words:

"The action of any situation is the combined action of its elements. Whatever in it has been bound to certain responses acts, by the laws of habit, to produce the phenomena of assimilation or response by analogy. Its quality or feature of foreignness, bafflingness, true novelty, acts by instinct or habit to produce wonder, confessions of inability, and such questionings as have in the past brought satisfying results in similar cases. We might indeed say that these apparent exceptions to response by analogy really illustrate it, the new novelty being treated as was the old novelty like it."⁴

e) The
Law of
Associative
Shifting

The Law of Associative Shifting is that a response may be shifted "from one situation to another by gradually changing a situation without disturbing the response to it."⁵ That is, given a situation a b c d e to which a certain response has been attached, by a gradual process of addition and

¹Op. Cit. Vol.II,p.14

²Op. Cit. Vol.II,p.15

³Ibid. p.28.

⁴Op. Cit. Vol. II, p.30.

⁵Ibid. p. 16

elimination - say from a b c d e to a b c d e f to a b c f g to a b f g h to a f g h i to f g h i j - the same response may finally be shifted to a totally different situation with which it might otherwise never have been connected. A dog, taught at first to "beg" in response to a combination of various stimuli, such as the verbal command, an accompanying gesture, and a bit of tempting food, may gradually be taught to respond to the verbal command alone.

"Most important of all cases of this process," says Thorndike, "is the shifting of satisfyingness and annoyingness. The physiological mechanisms by which these potent determiners of behavior can win attachments utterly beyond, and even opposite to, those which original nature prescribes are obscure; but the fact itself is sure. Satisfyingness and annoyingness may, under the limiting condition noted above (namely, that at every step the response X was more satisfying in its consequences than balking or doing anything else that the person could do) be attached to any situation whatever. So, unhappily, man may come to be made wretched by simple out-door sports, children's merriment, spectacles of cheerful courage, or the daily panorama of sensory experience. So, to his very great gain, man may come to welcome productive labor, excellence for its own sake, consistency and verification in thought, or the symbols of welfare in men whose faces he can never see."¹

The fundamentals of human learning, then, are the three primary laws of readiness, exercise, and effect; and the five subsidiary principles of multiple response, the influence of the set or attitude in determining the response, the prepotence of certain elements or parts of a situation, the response to a new situation as to old situations like it, and the shifting of a response from one situation to another. These facts, Thorndike maintains, are all that is necessary to explain even the most complicated and advanced forms of human learning.

b. Their Application.

What, we now wish to know, is the application of these laws to the various phases of the educative process? This we shall proceed to consider with reference, first, to the formation of habits, secondly, to the solving of problems, and thirdly, to the development of ideals.

1) To the Formation of Habits

Man is sometimes described as "a bundle of habits". An analysis of all our daily acts reveals that this is true. Were it not so, there would be but little energy left for the accomplishment of the important things in life. Some of our unconscious responses, as we have already noted, are reflex acts which have never been learned and can be inhibited only with great effort, if at all. Most prominent among these are the wink and the knee-jerk. Other responses have become al-

¹Op. Cit. Vol. II, p.31

most as mechanical as the reflex acts, but differ from these in their initial stages. In the beginning these acts were, for the most part, conscious and required attention and much volitional repetition in order to become "fixed." Skating, swimming, and bicycle riding are good examples of motor responses which require an initial period of conscious control and effort until the various actions involved are mastered so that they may be relegated to the lower level. Here they act as habits, leaving the mind free for attention to other more important matters. Other habits, involving the conscious element to a certain extent even after having been habituated, are habits of dressing and eating and habits of speaking and writing. More complex than these are moral habits such as habits of cleanliness, of industry, and of honesty. These are habits of a higher level and are often formed only after a struggle, because they are, by nature, in direct conflict with some original tendency. On the whole, however, habits may be said to be formed in the service of instincts and to be, therefore, accompanied by a feeling of pleasantness. Proof of this is found in the annoyance generally accompanying any disturbance of our daily routine.

The importance of the formation of proper habits is self-evident. Says Bagley¹: "If habit, then, is nine tenths of life - as it certainly is - the formation of habits should bear a somewhat corresponding ratio to the total task of education. The school deals with the individual during the plastic period, and it is during this period that habits of all kinds must be formed if they are to be formed most economically and effectively." It is during this plastic period that the child must be equipped with habits that will properly adjust him to the circumstances of life. Not only that, but he must be prepared himself to form other right habits as the need for them in later life arises. For the school to attempt to equip him completely for every exigency would be to attempt the impossible.

The process of habit forming closely parallels the laws of learning, particularly the primary laws of readiness, exercise, and effect. Applied to the forming of habits, they resolve themselves into the following general rules of procedure: - The first step is often called focalization and is closely allied to the law of readiness. The formation of a specific habit is greatly facilitated if the child clearly understands just what is expected of him, and what he must strive for. His interest must be aroused so that he will bend his efforts toward that end. In other words, he must be prepared or put into a state of readiness to acquire the desired habit. This step involves also the importance of the mind-set in determining the response. It may involve, too, the law of partial activity - that is, the focalization of the attention upon certain important elements of a situation. Be the habit of whatever nature it may, - a motor habit such as learning to

¹The Educative Process, p. 122

write, or a moral habit such as telling the truth - once this first step of focalization has been achieved, the foundations for that habit have been laid.

Then must follow the second step, which consists of a period of exercising the desired response, a period of "attentive repetition" or drill, without which no act can become habitual. Mere learning - that is, ability to make the response correctly once - is not sufficient. For the habituation of the response, making the ability a permanent part of the nervous organization, so-called "over-learning" is essential. This can be achieved only through constant repetition. Investigation and experiment have proven that short drill periods at frequent intervals, which gradually increase in length, are more effective than long drill periods with long intervals between. Exercise alone, however, we know from our laws of learning, is not enough. An important factor in the exercise of the response is its effect. Unless the activity is accompanied by satisfyingness, the value of the exercise is greatly weakened. In some way - through the mere satisfyingness of the act itself, through interest and gratification at increased improvement, through approval expressed by another - in some way, the process of forming the habit must be made pleasurable.

The third important rule of procedure in habit formation is that no exceptions must be permitted to occur. Should an exception unwittingly occur, it must be accompanied by annoyance of some kind - punishment, deprivation, disapproval or whatever it might be. But the whole energy of the child should be directed toward the exercise of the desired act and the prevention of any exception. This is especially important in the breaking up of one habit and the substitution of another, more desirable, habit. The procedure in such a case may be summarized as follows: Attach an annoyer to the old habit which is to be broken. Focalize the attention upon the desirable response which is to be substituted and attach to this some satisfier. Strengthen the bonds involved in this desirable response by constant attentive repetition. Allow no exceptions to occur.

"One of the most important applications of this principle in education (i.e. allowing no exceptions in the habit forming process)," say Colvin and Bagley in Human Behavior¹, "is to undertake only a few habit building processes of the same sort at the same time. In spelling, for example, it is well to take up only two or three new words at a time, to focalize these adequately, and to keep recurring to them until they are thoroughly mastered. In correcting inadequate or ungrammatical habits of speech it is also essential to proceed systematically, one error at a time, keeping the correct form constantly before the pupils, and seeing to it that it is used in place of the incorrect form." The last statement here made

¹ p. 171

is of vital importance in the building of habits, namely, the advisability of stressing the correct form rather than laying emphasis on the incorrect form. Calling attention to the undesirable response tends to strengthen those bonds. For this reason it is wise to ignore errors as far as possible and to emphasize strongly the right response. Another point to be here remembered is the importance of forming right habits from the beginning.

Thorndike summarizes the laws of habit in this fashion: "The laws of connection forming or association or habit furnish education with two obvious general rules: - (1) Put together what should go together and keep apart what should not go together. (2) Reward desirable connections and make undesirable connections produce discomfort. Or, in combined form: Exercise and reward desirable connections, prevent or punish undesirable connections."¹ While he does not mention the importance of focalization or of not permitting any exceptions, they are practically included in the above statements.

It can readily be seen that both the heredity of the child and his reaction to it, or, in other words, his will, are involved in habit formation. Instinctive tendencies are responsible for a large percentage of the habits that are formed. On the other hand, some habits must be formed to counteract instincts that are anti-social. While instincts can never be said to be abolished entirely, they can nevertheless be modified to such an extent that they become sublimated and seldom, if ever, function as drives to action. The task of education is to replace lower impulses and desires with those of higher degree; to substitute remote ends for immediate ends without diminishing motivation. This can be done only by means of the active cooperation of the child himself. He must direct his own efforts to the overcoming of those innate desires that are opposed to the welfare of society. It is only as the child wills to persist in a task, even in the face of the discouraging "plateau", until it becomes habitual, and only as he wills not to let exceptions occur, that the desired result will be attained.

Bagley discusses the volitional phase of human conduct as follows:

"The capacity for work is the capacity for sustained effort. It means concentration, organization, and permanency of purpose. The intense desire for activity is not in itself sufficient. Children and savages possess this in great abundance. Not activity alone, but sustained and directed activity has been the keynote of human progress. Individually it expresses itself in unremitting effort toward the attainment of a far-off goal. Psychologically it means the subordination of inherited impulses to remote ends. In popular language, it is

¹Op. Cit. Vol. II, p.20

the expression of 'will power' or 'self-control.' The man with a 'strong will' is the man who can subordinate 'lower' to 'higher' motives; and lower and higher are genetically correlated with the immediate and the remote, with instinct and reason.

"'Active attention' and 'will' may, therefore, for our purposes, be looked upon as synonymous terms. Volitional effort is a struggle against desire - generally speaking, a struggle against instinct, against an impulse of a lower order. It has, however, a positive significance. The natural tendency may sometimes be to react in the primitive, instinctive fashion, and this tendency must frequently be inhibited or controlled; but perhaps it is oftener the case that the desire for inaction must be overcome.

"An act of will is a condition of attention in which the struggle against the lower tendencies or impulses is especially strenuous. In ordinary life, the social or moral (i.e. artificial or civilized) conduct becomes ingrained as habit - becomes 'second nature' But always the tendency to follow the lines of least effort - either to react in the natural or inherited fashion or to remain inert - is at least latent. When this tendency becomes so strong as to demand a conscious struggle between apperceptive systems,* we have the volitional consciousness."¹

Even Thorndike, who does not himself include the will in his discussion of the learning process and, on the one occasion when he does use it, encloses it in quotation marks, quotes the following passage in his excerpts from Bryan and Harter's study of the improvement in telegraphic sending and receiving:²

"One conclusion seems to stand out from all these facts more clearly than anything else, namely, that in learning to interpret the telegraphic language it is intense effort which educates. This seems to be true throughout the whole length of the curve. Every step in advance seems to cost as much as the former. Indeed, each new step seems to cost more than the former. Inquiry at the telegraph schools and among operators indicates that between sixty and seventy-five per cent of those who begin the study of telegraphy become discouraged upon the plateau of the curve just below the main-line rate. As a rule, ordinary operators will not make the painful effort necessary to become experts. Facts of an analogous character will be recalled from other fields.

¹Op. Cit. p. 102ff.

²Op. Cit. Vol. II- p. 90

*The term "apperceptive system" Bagley defines as "a group of tendencies that determine the meaning or significance that is read into any given complex of sense impressions." p. 94.

The physiological, psychological, and pedagogical implications of this conclusion are manifestly important. If in our educational methods in the past, we have often made the pace that kills, there is possible danger on the other hand that we shall make school work all play, and so eliminate the intense effort which is necessary for progress."

To sum up at this point our discussion of habit formation, we have found that the process is greatly facilitated by focalizing the attention upon the response desired; is made effective through constant drill that is accompanied by satisfaction; and is furthered by the avoidance of any exceptions. In all of these the will of the learner is of vital importance. No external compulsion can compare in effectiveness with the "inner urge" and desire to accomplish a certain end. Colvin and Bagley discuss this phase of habit¹—formation under the importance of initiative or motivation¹:

"If one is imbued with a strong desire to master the new habit, it is clear that one will focalize it more carefully, repeat it more attentively, and avoid exceptions more zealously than if there is no particular interest in its formation, - hence the importance of insuring in the pupil a strong motive for thoroughly mastering the new adjustment."

"In any case, it is essential to stimulate the 'will to do', and the teacher who can successfully attain this end is pretty certain to accomplish good results in the habit studies."

2) To the
Solving
of
Problems

The next step in the consideration of the application of the laws of learning is their application to the solving of problems.

"The solution of problems," James declares, "is the most characteristic and peculiar sort of voluntary thinking. Where the end thought of is some outward deed or gain, the solution is largely composed of the actual motor processes, walking, speaking, writing, etc., which lead up to it. Where the end is in the first instance only ideal, as in laying out a place (plan?) of operations, the steps are purely imaginary. In both of these cases the discovery of the means may form a new part of end, namely, which we intensely desire before we have attained it, but of the nature of which, even whilst most strongly craving it, we have no distinct imagination whatever. Such an end is a problem

"From the guessing of newspaper enigmas to the plotting of the policy of an empire there is no other process than this. We trust to the laws of cerebral nature to present us spontaneously with the appropriate idea."²

¹Op. Cit. pp.172,174.

²Quoted by Thorndike, Op. Cit. Vol. II, p. 52.

A problem arises when the response to a situation is delayed. That delay is occasioned by the fact that the response does not suggest itself immediately and must, therefore, be sought before the final consummation of the desired end takes place. In this process of searching for the means necessary to achieve that end, - in other words, in the search for the solution of the problem, we shall find that the principles of learning are again active. It is in the presence of problems, and only then, that real thinking takes place. The solving of problems thus constitutes what is generally known as reasoning.

Dewey has analyzed this process into his famous "five steps":

The FIRST STEP is simply awareness of the problem. There must, in other words, be a felt difficulty. It is here that the Law of Readiness operates. This recognition of the fact that there is a problem and that the consummatory act must therefore be suspended tends to put the child into the proper attitude or state of readiness to undertake its solution. Not only must the problem be realized at the outset, but it must be held clearly in mind throughout the entire process.

The SECOND STEP is the location and clear definition of the problem. That is, the problem must be analyzed. Here the Law of Partial Activity applies, as attention is focussed upon one element of the situation after another, the important factors being selected and made the prepotent elements of the situation. The Law of Set or Attitude is important here in determining which are the significant factors in the situation.

The THIRD STEP is the suggesting of possible solutions. Here the Law of Analogy operates, past experience with similar situations being brought to bear upon the problem at hand. This suggests one or more possible lines of action.

The FOURTH STEP consists in elaborating and developing the suggestions just made, usually by the process of reasoning. Action is still suspended while the facts available are reviewed and the most promising course of action selected by a process of selection and elimination. Here again, much depends upon the mind-set, that is, upon the outcome desired. Partial Activity and Multiple Response are also involved.

The FIFTH STEP is one of actual experimentation, in which the suggestion selected as most promising is tried out. If it works - or, in other words, is satisfactory - it is accepted: the problem is solved and normal activity is again resumed. If, on the other hand, this solution fails to work - that is, it fails to provide satisfaction - it is rejected and another is tried out. This is continued until the satisfactory solution of the problem is found. At this point, the Law of

Multiple Response combined with the Law of Affect is in operation. The Law of Exercise, too, is involved, for where the desired response has been made and is accompanied by satisfaction, the bond between the situation and that response has been strengthened and is more likely to be made the next time that or a similar problem arises.

The Law of Exercise, moreover, is of vital importance in problem solving as a whole, just as it is in habit formation. Skill in solving problems, as any other skill, comes only as the result of exercise. Gates says of this: "Given an abundance of information, the task of improving the ability to solve problems is much like the task of improving other abilities such as reading, spelling, writing, or the use of oral English. First of all, there must be an abundance of practice. We learn to think by thinking. But just as in typewriting a learner left to himself is likely to improve slowly, to develop many ineffective devices, and to fail to acquire many elements of effective technique, so in reasoning best results are obtained by practice under guidance. The teacher may assist appreciably by suggesting good practices and detecting several rather common forms of ineffective technique."¹

The importance of the will of the child in the forming of habits has been brought out. The same applies in the solving of problems, for, without persistent effort - particularly as problems become more complex and the delay between the initial recognition of the problem and the consummatory reaction is increased, without persistent effort during the intervening stages, successful solution is impossible. A child who has not been trained to keep at a task in spite of fluctuating interest and external distractions will not only fail to keep the problem clearly in mind, but will become discouraged and give up if the solution is not immediately found.

As a matter of course, since the improvement of habits of thinking is of vital importance in education, the solving of problems must play a large role in the educative process. The group activity of the school room offers large opportunities for the development of this skill. One of the distinctive features of modern educational theory is the emphasis laid upon this very thing, as, for instance, in the Project Method. Here the children are confronted with some problem that is of vital interest to them, that arises, indeed, out of some life situation, and are then set to work at its solution. In the course of "carrying this to a successful completion in its natural setting" they find themselves of necessity branching out into various sidelines - learning how to spell certain words, how to keep accounts, how to read intelligently, and whatever else they may need to know in order to complete the problem - and so acquire the information which is required in the curriculum. While it is hardly probable that this method will ever be found adequate in itself, in spite of the claims of its enthusiastic supporters, there is no doubt that it can be made a valuable

¹Op.cit. p. 338.

part of school work. Both in selecting projects suitable for the children, for they must neither be too difficult - so that they produce only annoyance and discouragement at continued failure - nor too easy, so that their solution fails to exercise the full powers of the children and therefore fails to give satisfaction; and in the actual working out of the solution, in both of these phases of the Project Method, the supervision and guidance of the teacher are most important.

In the solving of problems, then, the laws of learning are operative. The child must see the problem, that is, must be made ready to attack and solve it; must keep the problem in mind in order that no irrelevant facts be permitted to intrude; must learn to focus attention upon various significant elements in the situation; and must compare the situation with his previous experiences and determine his actions accordingly. Throughout the entire process he will be influenced by the effect accompanying the various responses he makes; those which are annoying will be dropped out and those which are satisfying will be repeated and so strengthened through exercise.

3) To
the De-
velop-
ment of
Ideals.

The development of ideals constitutes the third step in our consideration of the application of the laws of learning. Of ideals Bagley says: "It would probably be difficult to overestimate the importance of ideals in civilized life. They are the dominant forces in all the great movements of history. Races and nations are distinguished from one another by their ideals far more than by their inherent physical and mental peculiarities. In spite of the elements that foreign nations have contributed and are contributing to the American people, our nation is distinctly individual because it has individual ideals.

.....
"Nor is the operation of ideals less evident in individual development. The impetus which family pride may give to individual effort is illustrated in such strains as the Adamsses of Massachusetts, the Breckenridges of Kentucky, the Harrisons of Indiana, and others too numerous to mention. The very fact that one's forebears have accomplished things and attained to high places among their fellows may form a most effective spur to the present generation."¹

Before proceeding any further, we must have clearly in mind just what we mean by an ideal. In Human Behavior it is defined as "an idea surcharged with feeling, and thus made an effective end or goal of conduct."² The intellectual element is, of course, present in the development of an ideal, but of far more importance is the emotional element. Without the latter, ideals lack that impelling force which results in conduct.

¹ The Educative Process, p. 219f.

² p. 163

There are various types of ideals, ranging from lower to higher. Bagley classifies them as "high or low according as they are (a) concrete or abstract; (b) selfish or social; (c) formed with reference to immediate or remote ends."¹ With high ideals as an ultimate goal, the process of their development must be a gradual one, beginning with those on the lower level and proceeding step by step to those on the higher level. The educator who would develop the highest ideals must be willing to take the children at their own level and gradually lead them onward and upward.

The following quotation, touching upon this point, is taken from Colvin and Bagley:-

"It is through this pushing forward of the instinct - this delayed gratification - that the first steps are taken away from primary passive attention, and the first step is made toward active attention and the conquest of immediate desire. But education must not content itself with conquests that reach no further than this. It must start with these, but it must soon get beyond them. Other ideas, unconnected with instincts, must be endowed with feeling and thus given strength to overcome immediate tendencies. The boy must come in time to work steadfastly at a given problem or a given task, even if a primitive desire is not to be gratified either immediately or in the future. In other words, the most effective ideal that man has ever conceived is the one that is farthest removed from the primitive sanctions. It is the ideal of Duty, and the individual who does not form an effective ideal of Duty in his early life will find it hard to adjust himself satisfactorily to a world that gives its richest rewards only to those who are able to hold themselves in leash through the storm and stress of struggle and temptation. It is only when a man works from motives of duty that one can depend upon him without question."²

The development of ideals is closely related to the question of "formal discipline," which has been the centre of so much controversy in recent years. It is not necessary, however, for us to enter into any detailed account of the pros and cons of this doctrine. A statement of the conclusions generally accepted today will suffice: That a certain transference takes place is not denied. The amount and extent of this transfer, however, is conceded to be determined by what Thorndike calls the "identical elements" in two functions. Improvement in ability to add and subtract, for instance, will result in corresponding ability to do bookkeeping in so far as addition and subtraction constitute a part of the latter. Aim, method, and content are the three identical elements listed by Thorndike, while Bagley adds ideals as the fourth.

¹Op. Cit.- p.223

²Op. Cit.- p.161f.

Adams sums up his discussion of formal training as follows: - "The balance of expert opinion is now so solidly against the dogma of formal training that as an educational force it must be regarded as moribund. It cannot be denied that within certain narrow limits determined by the distribution of common elements, there is transference of power from the study of one subject to the study of another. But the transference is so small as to make it practically negligible for educational purposes. The educator will find it to his advantage to restrict himself to direct training in every case."¹

To apply these conclusions to the question of ideals, we find, then, that specific training in the practice of specific ideals is, wherever possible advisable, but that a certain transfer is possible if the ideal itself is held before the children. Practicing neatness in arithmetic will not insure neatness in dress unless the ideal of neatness as such is abstracted and stressed. Once this has been successfully accomplished there will be a certain amount of "carrying over" into other situations. In other words, the focussing of consciousness upon the ideal is essential to the building up of ideals. The development of an ideal, therefore, depends largely upon the ability to perceive that ideal element - that is, the ideal itself, apart from its concomitant elements - in various situations. Herein are involved, once more, the Law of Readiness and the Law of Partial Activity. Hand in hand with this analysis of the situation and abstraction of the ideal element must go the experience of carrying over the ideal into conduct by putting it to actual practise. This means, in short, that the Law of Exercise must be applied. Again the Law of Effect comes into play, for unless this action is made satisfying, the desired bonds will not be strengthened to the point of functioning habitually.

"Ideals become effective impulses to action", says Gates, "when the idea is clearly perceived and followed by action with a satisfying effect."² This he repeats and elaborates: "But ideas become effective ideals only when they have led promptly to action that is accompanied or followed by satisfying effects. When this occurs frequently, the idea becomes an impulse to action, the individual is ready to act, and, as elsewhere, for him then to act is satisfying, for him not to act or to act differently is annoying."³ These, in brief, the laws of learning being what they are, are the conditions which must be met and the methods which must be followed in the development of ideals.

Our discussion of the laws of procedure governing the educative process has up to this point been confined to the child himself, including his original nature and his will, and has covered the laws of learning and their application to the formation of habits, the solving of problems, and the de-

¹The Evolution of Educational Theory, p.222

²Op. Cit. p. 320

³Ibid. p. 322.

velopment of ideals. We must now consider the laws of procedure governing the educative process with reference to the environment.

2. With
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The greatest value of environment, we have found, lies in its providing opportunity for the development of capacity. The school, of course, is only one phase of the child's environment, for the home and the community play a large part in his life. "The school", Bagley declares, "is only an institution for providing environments, for regulating environments, and for turning environmental forces to a definite and conscious end."¹ By providing certain definite environments to which the child reacts, the school gives him experiences which are valuable in his present life and will prove serviceable in his later life also. The regulation and selection of these environments depends, of course, upon the aim of the educative process, which will be discussed later.

Dr. Horne, in his Idealism in Education, suggests several rules of procedure with reference to the environment. "The problem of handling environment aright in the making of greater men and women is simple in theory but difficult in practice," he says. "The problem is to equip the environment of the young aright. You must put into the environment what you want in the child."² Then he goes on to suggest how this may best be done.

The first suggestion is to utilize many stimuli. This tends to stimulate growth and to bring out the inherited capacities of the child. Occasionally, the resources of a given environment having been exhausted, it is advisable to change the environment. "Perhaps at some unexpected moment some unanticipated stimulus out of the many the changing environment yields will discover to the soul its real bent; meanwhile all the other temporary interests will have enlarged the powers of appreciation; the many stimuli will have helped the soul become what its inherited nature allows."³

The second suggestion is to associate with nature, because of the influence of the physical environment upon man. Such contact is essential for the complete development of character through the counterbalancing of the trend toward artificiality so manifest in modern living. In rural schools the advantages and profit of farming and life in the country must be stressed and the people "educated for the country, instead of, as hitherto, for the town." In city schools parks, playgrounds, and school gardens, supplemented by occasional outings to the country, must be used as the medium for this desired association with the out-of-doors.

The third suggestion is to associate with the best persons. Here the influence of the social environment upon man enters in. "Persons, after all, are the clearest revelations of the meanings of existence. These meanings are many,

¹op. Cit., p.36.

²p. 82

³p. 84-85.

according to the way in which life is taken. The best persons help us to take life in the right way."¹ Not only great persons of our own day but the great persons of literature, history, and religion should be brought to influence the lives which are in the process of being molded. The extent of their influence, however, Dr. Horne points out, is limited by the responsiveness and capacity for greatness in the individual.

The fourth suggestion is to emphasize the cooperative rather than the competitive methods of teaching. As in Nature survival is determined by the outcome of competition, so in our industrial system today success largely depends upon the ability to eliminate the weaker competitors. Even in our schools competition, emulation, and rivalry were the methods used. Competition does serve a purpose and must not be discarded entirely, but it must somehow be permeated and linked with a spirit of cooperation. Competition alone tends to develop selfishness and individuality; cooperation tends to develop unselfishness and sociality. "The schools can help by training pupils in the methods of cooperation. The next generation can solve the problems of the social democracy somewhat easier if this generation trains the young to work with each other instead of against each other. . . . The school should be a miniature cooperative society, typifying the coming ideal human society."²

The two suggestions remaining deal rather with the aim of the educative process with respect to the environment and will therefore be taken up under that topic. Summing up the methods of procedure in dealing with the environment we find that right-handling of the environment involves the utilization of many stimuli, the opportunity for association with Nature, the association with the best persons and the stressing of cooperative rather than competitive methods of teaching.

3. With
Refer-
ence to
the Sub-
ject
Matter.

This brings us to the last topic under the laws of procedure governing the educative process, namely, with reference to the subject matter. We have already noted, in our discussion of subject matter as one of the data of the educative process, that mere acquaintance with facts is not enough. There must be an understanding of facts in their relation to each other. This consequently necessitates a change in the conception of the curriculum. It can no longer be regarded as a fixed body of information to be handed out and drilled upon in logical order. Instead, it must be approached psychologically from the standpoint of the child, his interests and his background of experience determining the order of presentation of the new material. And wherever possible, the way must be prepared: the child must be put into a state of readiness to approach the new subject matter so that, instead of being a matter of external pressure and coercion, it will have intrinsic value for him.

¹ p. 86

² pp. 87-88.

This can naturally be accomplished more easily in the so-called social sciences, in the natural sciences, and in literature. History and geography, for instance, can no longer be treated separately nor taught by assigning a number of pages in a text book. They must be closely correlated and viewed from the human standpoint, geography as the study of the earth as the home of man and history as the record of the experiences of various races in those surroundings. Spelling, reading, and arithmetic must necessarily retain much of the mechanical, but even they can be motivated and their acquisition made desirable in the eyes of the children.

Again the importance of the activity of the child must be stressed. "We learn to do by doing" is as true as it ever was. Nor must Thorndike's amendment of this adage be neglected: We learn to do by doing only when that doing is satisfying. External rewards or "sugar-coating" must be avoided except as a last resort, the activity of itself being worthwhile to the child. However, this does not do away with the necessity of acquiring some information even when the process is distasteful. In such an instance, the will of the child must be set to the accomplishing of the task; and usually, in spite of the initial effort required, it will be found that the task in itself becomes interesting and its successful completion satisfying.

The methods of dealing with subject matter, in short, involve as far as possible the identification of the subject matter with the interests and experience of the child and the stimulation of the child to activity in order that the material dealt with may become assimilated as a part of his own experience and life.

We have now completed our review of the educative process as such, having considered its importance, its data, and the laws of procedure governing it. Before proceeding to its interpretation from the idealistic standpoint it will be necessary to define idealism as such and to consider the idealistic interpretation of the universe.

II. THE DEFINITION OF IDEALISM.

Josiah Royce, in his Lectures on Modern Idealism says¹: "A philosophy is inevitably the expression of a mental attitude which one assumes toward life and toward the universe." And idealism, according to Baldwin², is the term used for "any theory which maintains the universe to be throughout the work or embodiment of reason or mind." That is the mental attitude assumed by idealists toward life. To them³ "there is but one vast meaning running through all the facts of existence like the mind through the body. Mental facts are both facts and meanings,

¹ p. 241.

² Dictionary of Philosophy

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Dr. H. H. Horne, Idealism in Education, p. 149.

while physical facts also have their mental meanings. As all Nature fills one space and all events one time, so all existence is one unity 'whose body Nature is and God the Soul.'"

Bertrand Russell, himself not an idealist, devotes a chapter to a discussion of idealism in his book, The Problems of Philosophy¹ and defines it in the following terms:

"The word 'idealism' is used by different philosophers in somewhat different senses. We shall understand by it the doctrine that whatever exists, or at any rate whatever can be known to exist, must be in some sense mental."² In the development of the chapter he discusses the views of Bishop Berkeley, one of the pioneers in idealism, as follows: ". . . . our sense data (according to Berkeley) cannot be supposed to have an existence independent of us, but must be, in part at least, "in" the mind, in the sense that their existence would not continue if there were no seeing or hearing or touching or smelling or tasting. Hence he concluded that nothing can ever be known except what is in some mind, and that whatever is known without being in my mind must be in some other mind."³ Berkeley, Russell tells us, expounded this theory by applying it concretely to a tree, as an example: "Its being, he (Berkeley) says, consists in being perceived; in the Latin of the schoolmasters its 'esse' is 'percipi'". He fully admits that the tree must continue to exist even when we shut our eyes or when no human being is near it. But this continued existence, he says, is due to the fact that God continues to perceive it; the 'real' tree, which corresponds to what we called the physical objects, consists of ideas in the mind of God, ideas more or less like those we have when we see the tree, but differing in the fact that they are permanent in God's mind so long as the tree continues to exist. All our perceptions, according to him, consist in a partial participation in God's perceptions, and it is because of this participation that different people see more or less the same tree. Thus apart from minds and their ideas there is nothing in the world, nor is it possible that anything else should ever be known, since whatever is known is necessarily an idea."⁴

This quotation helps us to understand what the "subjective idealism" of Berkeley, as it is called, really was. Of course there are other forms of idealism, such as Hegel's "objective idealism". With these forms we are not now concerned, except to say that Russell mistakenly seems to believe that the refutation of Bishop Berkeley is the refutation of idealism.

To summarize briefly, idealism is that view of the facts of life which, reading between the lines, so to speak, sees in those facts a hidden meaning. In the light of this

¹Chapter IV

²p. 58

³p. 60f.

⁴p. 61f.

meaning, though it may at times be but vaguely discerned, the facts themselves are revealed as woven together in a unified, orderly fashion according to a design whose pattern originated in and is being evolved by the Reason or Mind back of it all.

III. THE IDEALISTIC INTERPRETATION OF THE UNIVERSE.

The very definition of idealism involves, as we have seen, its interpretation of the universe. "By the absolute reality", says Josiah Royce¹, "we can only mean either that which is present to an absolutely organized experience inclusive of all possible experience, or that which would be presented as the content of such an experience if there were one." And again, carrying forward his argument, he says²:

"The very watchword, then of our whole doctrine is this: All knowledge is of something experienced. For this means that nothing actually exists save what is somewhere experienced. If this be true, then the total limitation, the determination, the fragmentariness, the ignorance, the error, - yes (as forms or cases of ignorance and error), the evil, the pain, the horror, the longing, the travail, the faith, the devotion, the endless flight from its own worthlessness, - that constitutes the very essence of the world of finite experience, is, as a positive reality, somewhere so experienced in its wholeness that this entire constitution of the finite appears as a world beyond which, in its whole constitution, nothing exists or can exist. But, for such an experience, this constitution of the finite is a fact determined from an absolute point of view, and every finite incompleteness appears as a part of a whole in whose wholeness the fragments find their true place, the ideas their realization, the seeking its fulfilment, and our whole life its truth, and so its eternal rest, - that peace which transcends the storms of its agony and its restlessness. For this agony and restlessness are the very embodiment of an incomplete experience of a finite ignorance.

"Do you ask then: Where in our human world does God get revealed? - what manifests his glory? I answer: Our ignorance, our fallibility, our imperfection, our experience of longing, of strife, of pain, of error, - yes, of whatever, as finite, declares that its truth lies in its limitation, and so lies beyond itself. These things, wherein we taste the bitterness of our finitude, are what they are because they mean more than they contain, imply what is beyond them, refuse to exist by themselves, and, at the very moment of confessing their own fragmentary falsity, assure us of the reality of that fulfilment which is the life of God.

¹The Conception of God - p. 31

²Ibid. pp.46-48.

"The conception of God thus reached offers itself to you, not as destroying, but as fulfilling, the large collection of slowly evolving notions that have appeared in the course of history in connection with the name of God."

Preceding this discussion, Dr. Royce selects the attribute of Omniscience as a preliminary definition of God, claiming that this attribute involves other attributes. This he defends as follows¹:

"This is what I mean by saying that the definition of God by means of the attribute of Omniscience would involve far more than the phrase 'mere omniscience' at first easily suggests. As a fact, in order to have the attribute of Omniscience, a being would necessarily be conceived as essentially world-possessing, - as the source and principle of the universe of truth, - not merely as an external observer of a world of foreign truth. As such, he would be conceived as omnipotent and also in possession of just such experience as ideally ought to be; in other words, as good and perfect."

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The universe then, according to the idealistic interpretation, is "the creation of a Will that seeks an intelligible good," and as such, it is a rational unit. In other words, behind all phenomena there is Personality, self-conscious, self-existing, infinite, moral. Underneath all the flux and change of life is the changeless, omnipotent God who created the universe, not as a finished mechanism, wound up and then left to itself, but as an ever-developing and progressing organism in and through which He continues to work out His purposes. The whole world process is related to God, for it is "God's doing as well as His making." The universe is unfinished and imperfect, but all is working toward ultimate perfection. All is in process of becoming what it is intended to be through the gradually increasing identification of the will of man with the will of God. And as the cosmos in the process of organic evolution fulfilled itself in man, so, in the process of spiritual evolution, man will fulfill himself in God.

"Our conception," says Dr. Horne², "is neither a transcendent dualism, nor an immanent pantheism, but an idealistic theism. God is the self-conscious unity of all reality. Within His life falls the life of nature and of man. We are the content of His consciousness, and not we alone, but all that which is, whether the heavens above, or the earth beneath, or the waters under the earth, - all that we know is a part of the infinite fullness of the content of His consciousness."

In the writings of John Muir, for instance, one finds a striking illustration of the idealist's customary attitude toward the universe. To him nothing in the "Godful" out-of-doors is without its deeper meaning.

¹Ibid. p. 13

²Philosophy of Education, p. 269.

"No Sierra landscape," he says on one occasion¹, . . . holds anything truly dead or dull, or any trace of what in manufactories is called rubbish or waste; everything is perfect, clean, and pure and full of divine lessons. This quick inevitable interest attaching to everything seems marvelous until the hand of God becomes visible; then it seems reasonable that what interests Him may well interest us. When we try to pick out anything by itself, we find it hitched to everything else in the universe. One fancies a heart like our own must be beating in every crystal and cell, and we feel like stopping to speak to the plants and animals as friendly fellow-mountaineers."

What can we say of this? Is it all merely a pretty fancy or is there justification for such an interpretation? Such justification can perhaps best be found by approaching negatively the assumptions of idealism. First there is the conclusion that the universe is rational. Any philosophy which denies the rationality of the universe denies in the same breath the validity of that very conclusion, for it must have been reached by a process of reasoning, and can be confirmed only by the same process. Such a philosophy, then, as some one has put it, throws down the ladder by which it climbed. Not only that, but such an hypothesis lays upon its defenders the burden of explaining how the rational - how mind - ever came to exist in a universe inherently irrational.

Secondly, there is the idealistic belief in a personal First Cause - in the Supreme Mind back of the universe. Science, as such, is not interested in the First Cause, but simply in the factors involved in any process, in the concomitant antecedents, so-called "causes", of an event. Because it stops there, scientific explanation of a physical event is never complete. It explains its constitution but does not account for its origin. And this is as it should be, for the latter does not fall within its scope. Philosophy, however, is different. Therefore, any philosophy which stops, with science, short of explaining the origin of physical phenomena, in so far fails in its task and leaves us with another unsolved problem on our hands. It is as though, having taken apart a Ford car and demonstrated the interrelation of its parts, we should claim - without any reference to the mind of Henry Ford - to have accounted absolutely for the finished product. Such a claim would hardly be recognized even by an extreme materialist.

Finally, there is the assumption that the universe is "in process", all things working together, in cooperation with the Creator, toward an ultimate goal. In any mechanistic theory of the universe there is no place for evolution. In a mechanical scheme every factor must be present at the very beginning. Progress and change are out of the question. This

¹My First Summer in the Sierra, p. 211.

is directly contradictory to the scientific findings in the sphere of cosmic evolution. The facts revealed in the evolutionary process indicate not only change, but progress toward a harmonious, beautiful arrangement. The world seems to be so constituted that, in the long run, only good things can succeed. Witness, for example, the statement made by naturalists that there are no deformed wild animals to be found.

These considerations, while not exhaustive nor unassailable, constitute some of the reasons for the persistent existence of idealism as a philosophy of life.

IV. THE IDEALISTIC INTERPRETATION OF THE EDUCATIVE PROCESS.

Now that we have viewed the educative process, as such, and have orientated ourselves with regard to idealism, we are ready to proceed to the heart of our whole discussion, namely, the idealistic interpretation of the educative process. Three important factors in education will form the basis for our consideration: the child, the teacher, and the aim underlying the process.

A. Interpretation of the Child.

What, in the first place, is the idealistic interpretation of the child? How do idealists interpret the wonderful mechanism which constitutes the physical equipment of the child, with its highly complicated neural organization and its psychic as well as its physical reactions? This is a crucial issue today upon which widely contrasting views are expressed. One might say, indeed, that this interpretation determines largely one's whole philosophy of life.

To the behavioristic psychologists the human organism is only a machine in which the psychic is but the manifestation of some physical reaction. The child is nothing but "an aggregate of S-R bonds" or something to that effect. "Consciousness", "mind", "soul", "personality", the "self" - all these are ruled out as mystifying misnomers for the simple results of neural action; "conditioned reflexes", "reaction patterns", "adjustments", and similar terms are used to replace them. Mechanical psychology "denies that conscious states have the least influence on behavior, because the nervous system, with its physical and chemical laws, accounts completely and absolutely for all the conduct of man. Consciousness cannot then be antecedent to human behavior, as was once generally supposed by orthodox psychologists, for the reason that physiological functions determine behavior. A rigid mechanism is thus claimed to be the foundation of human life. Modification of conduct by reflection is rendered impossible because behavior is completely explained by the interplay of inherited tendencies and acquired habits in the physiological mechanism."¹

¹Boston University Bulletin, Vol. XIV, No. 24. Bentley: The Mechanistic and Personalistic Psychological Contributions to the Field of Religious Education, p. 8.

This view of the child is far from satisfactory to the idealists. While they accept the findings and conclusions of modern psychology on the physical organism of man and are ready to acknowledge their indebtedness to these psychologists for their painstaking efforts in research, they hold that such an interpretation falls short of accounting for the child as a whole. The organization of the neurones and the forming of S-R bonds, though acceptable as an explanation of the physical processes which parallel and are in some way closely linked with the psychic processes, are not adequate as the full and only explanation of these psychic processes. The two - the physical and the psychic - vitally interrelated as they are, are not identical, nor are they merely a matter of cause and effect. Mind is more than the "sum total of mental states".

The idealists believe that the only satisfactory interpretation of all the factors entering into the composition of a human being is one which proceeds from the Self back of the behavior of the individual - the "self-conscious, self-directive, self-communicative ego." The child is a "potential person;" his personality is in process of becoming whatever his capacity will allow it to become. Consciousness is real because in consciousness all experience is unified; consciousness is also "purposive and creative." "The Self then, as a potential personality, is beyond the forms of neural energy and biological categories, and not a physical process or a thing. It is a self-directing force which makes man a creative being, qualified to use the mechanism of intelligence by the persuasion of ideals and values which make growth of intellect and morals possible."¹

Having familiarized ourselves with the idealistic interpretation of the universe, we know that the idealists trace the origin of man back to the Creator of all things - to God. So, too, we know that they point to God as the final goal of man's becoming. In Christ they see typified this union between the human and the divine. He is personality in its highest sense. We have seen, also, that idealism leaves room for the will of man to cooperate with God or to hinder and delay the fruition of His plans. The child, therefore, plays a decisive part in his own becoming - or, in other words, in the process of self-realization. Of necessity, for were it not so the rationality of the universe could scarcely be maintained, this process is only begun in the span of earthly life and needs for its fullest activity nothing less than eternity.

To summarize: The child, according to the idealistic interpretation is a growing personality whose origin and continued existence are in God; whose own will partially determines the outcome of his development; whose life on earth is but the forerunner of a life continued hereafter.

¹All quotations in this paragraph are taken from Bentley's article in the Boston University Bulletin- Op. Cit.- pp.8-9.

"Man's development is an infinite process", Dr. Horne says; "he is embarked on an unending voyage; he has matriculated in the University of the Universe, whence there is no graduation. The essence of eternity never gets itself fully expressed in the temporal order; time never completely includes the eternal meaning. Eternity possesses what time increasingly suggests. The true self of man he presses on to attain; his present incomplete growing self is but the intimation of what he really is. As the most philosophic of the poets of the last century has said: -

'Man partly is, and wholly hopes to be.'¹

B. Interpretation of the Teacher's Function.

What, in the second place, from the standpoint of idealism, is the interpretation of the teacher's function in the educative process? Here again we find a difference of opinion. In the philosophy of John Dewey and his many followers, the teacher is only of secondary importance, the experiences in which the child participates being of primary concern. The main function of the teacher, then, is to "set the stage", so to speak, for the activity of the child; to provide and manipulate situations so that the desired experiences will result. The personality of the teacher is, of course, practically negligible in view of such a conception.

Idealists, on the other hand, while again conceding that this view is inherently right so far as it goes, namely, that it is the teacher's task to see to it that the child learns through certain definite experiences, insist that this view does not go far enough. Above and beyond this manipulation of situations is the necessity of inspiring and instilling high ideals through the medium of a forceful and contagious personality.

Again quoting from The Philosophy of Education by Dr. Horne: "But since a person is more revealing and so more imitable to the forming mind than a material model, it is in the realm of personality and its influence that the principle of imitation has its highest educational service. Both the great common sense of mankind and the expert educational opinion have put central emphasis on the personality of those who teach the young. Emerson wrote to his daughter in college, 'It matters little what your studies are, it all lies on who your teacher is.'²

Adams holds the same view: "Unfortunately, the power of imitation is so great that the educator cannot divest himself of the responsibility involved in the mere process of living in contact with his educands. He is a model whether he will or no. He cannot shirk the responsibilities of the position in which he is placed, and in honour must walk circumspectly, however much he may resent the difficult and invidious part that is thrust upon him."³

¹The Philosophy of Education - p. 281

²Op. Cit.- p. 184

³The Evolution of Educational Theory - p. 36.

Granting, in short, the importance of the activities of the child and of the teacher's function in respect to these, idealists, nevertheless insist that the personality of the teacher is of the utmost importance in order that he may inspire to high ideals the child who comes into contact with him. As Adams puts it, education is "bi-polar", involving reaction between two personalities, the child at one end and the teacher at the other.

C. Interpretation of the Aim of the Educative Process.

What, finally, is the idealistic interpretation of the aim of the educative process? This can perhaps best be answered by applying the question to the four data of the educative process: What is the aim of the educative process as regards the heredity (i.e. the original nature) of the child, as regards the environment of the child, as regards the will of the child, and as regards the subject matter to be presented to the child?

1. As Regards the Heredity of the Child.

First, then, we wish to know what the idealists consider the aim of the educative process in so far as the heredity of the child is concerned. The original nature of the child, - that is, the sum total of the physical, mental, and moral characteristics transmitted from parent to child at birth, - determines, as we know, the bounds of all possible development. In this respect, heredity rigidly limits the educative process, for no teacher can extend the limit of inherited capacity. What education can do, however, is to provide opportunity for the fullest development of that capacity along socially desirable lines, and in so doing to build character.

But, it may be argued, since it is generally conceded that acquired characteristics are not, on the whole, transmissible, the work of education must be repeated with each generation without making any permanent improvement in the race. However, there is a way in which this may be accomplished. Just as in the process of evolution improvement was achieved through natural selection, and is still being made both among plants and animals by artificial selection, so improvement in the human race can be secured through the same process.

As Dr. Horne says: "The practical difficulty of improving the human stock in this way in a free society is that men and women have the liberty of marital choice. But as the animal shows us natural selection of parentage, as the stock farm shows us artificial selection of parentage, may we not look to education in home and school so to form the judgment of growing young men and women that society shall show us the rational, though individual, selection of parentage?"¹

By wise instruction in matters of sex and their importance, by careful attention to the maintenance of health, by the upbuilding of high standards and ideals, and by sympathetic guidance in the choice of life partners the influence

¹Idealism in Education - p. 36.

of heredity can be controlled, and a better heritage assured the coming generation. Individuals must be gradually enlightened and aroused so that a strong public opinion will be formed which will, in turn, exert its influence upon individuals. Ignorance must be abolished by the dissemination of right principles. "The only rule, a very general one, that can be given at present", Dr. Horne quotes C. B. Davenport as saying, "is that a person should select as consort one who is strong in those desirable qualities in which he is weak, but may be weak, where he is strong."¹

So much for those fit to mate and rear children. Regret it as we may, we cannot disregard the fact that there are others who are not fit to become parents because of innate physical, mental, or moral defects which would be handed down to their offspring and would start them in life hopelessly handicapped. For the protection of society and the improvement of the race these persons must be isolated in celibate groups.

This, then, is the task of education and this must be a vital part of its aim: To utilize to the fullest the capacity provided by heredity and eventually to increase this capacity for the betterment of the race by awakening society to the importance of "reducing the multiplication of the unfit and increasing the multiplication of the fit."²

2. As regards the Environment of the Child.

In the second place, we wish to know what idealists consider the aim of the educative process in so far as the environment of the child is concerned. We have already noted the vital part the environment - and we mean here the social environment more than the physical - plays in the shaping of character: a good environment may do much to counteract a bad heredity, and vice versa. While the business of life largely consists in adjustment to one's environment, education may not stop there. "Our duty to environment is to follow it in so far as it is right and to rise above it and seek in patient tolerance to change it when it is wrong", is Dr. Horne's opinion.³

The last two suggestions he gives for the control of the environment, which we omitted in our discussion of the laws of procedure governing the educative process, have a direct bearing upon this. The first of these suggestions is that the educator, if he would live up to his calling, must be willing to initiate a needed social reform though he stand alone. This has been the method of social reform through the ages, history records. Men of vision and courage, linked with initiative and practical ability have blazed the trails; so have great movements been born. Confucius, Buddha, Socrates, Christ, Mohammed have so left their impress that the reforms they championed have taken their names. Our own day has not lacked fearless leaders: Jane Addams, Jacob Riis, Roosevelt.

¹Ibid.-p.38.

²Dr. Horne: Idealism in Education, p. 55.

³Ibid.-p.81.

"... the public conscience is awakened; the purpose of social existence is being realized, viz., the establishment of a moral order among men. It is incumbent upon every individual to cultivate morality in his own garden, however small it may be, that the environment which moulds man into its own likeness may be improved."¹

The second suggestion is to make the school an ideal physical and social environment. The location of the school, the architecture of the building, the appearance of the school grounds, as well as the ventilation, furnishings and decorations of the class-rooms should all be of the highest type." The school should be the most attractive place in town, the democratic unifying agent of the community, the centre for social gatherings and improvement societies."² The social environment of the school is largely in the hands of the teachers who should not only reflect the standards of the community, but should raise them. "The atmosphere of a school is constituted by its general personnel; it is the most pervasive of all the school forces; it is something that a visitor quickly feels, something that constantly shapes the lives of pupils. This atmosphere should be sane, wholesome, idealistic, in which money shrinks from end to means, in which spiritual values are the end of living, in which fictitious social distinctions have no place, in which the single standard of morality is taught and practiced, in which the adolescent instinct of chivalry is truly directed, in which vital economy, the truest economy of all, preserves from destructive personal habits, in which the virtue of thrift and financial independence is inculcated, in which interests of the deeper and truer sort exclude all forms of low and vulgar amusement, in which the preservation of the body undefiled by disease or impurity is second only to the zealous guarding of white souls, in which all together, children, young men, and maidens become what future members of society ought to be."³

Education must, of course, depend largely upon the school as its sphere of influence - and yet, "how hardly shall the school improve upon the standards of the home! In the home both heredity and environment centre; it all but makes the man."⁴ Nevertheless, some influence may be exerted upon the home, directly through the establishment of vital contacts between parents and teachers, in which a spirit of cooperation will be fostered and the parents themselves will receive helpful instruction and guidance; and indirectly, through the permanent impression made by the school environment upon the children who will carry over the ideals and standards there acquired and will themselves strive to make over their own home environments.

But this is not all: No school, however fine it may be, is fully meeting its responsibilities unless its influence extends also to the community at large. In matters political,

¹Op. Cit.- p.89

³Op. Cit.- p.90

²Op. Cit.- p. 89

⁴Dr. Horne: Ibid.-p.78.

social, aesthetic, and moral the school should be a dynamic force, analyzing the needs of the community, stimulating widespread interest, arousing a spirit of cooperation, and pointing the way to a satisfactory solution of these problems by sympathetic, tactful leadership.

To improve the environment of the child by putting into it the best possible influences - in the school, in the home, and in the community, - and so to provide every opportunity for the development of inherited capacities and direct this development along right lines, this constitutes the aim of the educative process with respect to the environment.

3. As Regards the Will of the Child.

In the third place, we wish to know what idealists consider the aim of the educative process as far as the will of the child is concerned. Again we must stress the fact that the will is not regarded here as a separate entity but refers to the attentive aspect of consciousness and is always linked with ideas and feelings. Both heredity and environment, we have seen, depend ultimately upon the will, viz., upon the use to which they are put, for their share in the building of character. "It is by will that we realize capacities, that we neglect capacities, that we choose to be or not to be what our inherent potentialities allow."¹

And so the idealists, while interpreting the universe in terms of the underlying purposes of its Creator, nevertheless take into account that man has a share in his own making, as we noted in our consideration of their interpretation of the child. As John Oxenham puts it in his repudiation of Omar Khayyam's philosophy of life:-

"No Pieces we in any Fateful Game,
Nor free to shift on Destiny the blame;
Each soul doth tend its own immortal flame,
Fans it to Heaven, or smothers it in shame."

The forming of the right will, because of its importance in the ultimate results of character building, must play a large part in the educative process. In this, the formation of habits, the ability to solve problems, and the development of high ideals all contribute. Children must be taught, in all of these, to put forth effort. And they must, to an ever increasing extent, be given opportunity to make choices for themselves. Ethical instruction without its application in conduct is of little value.

Idealists hold, therefore, that education must aim to develop good wills. The good will is both right and efficient, according to Dr. Horne's definition: "right in its motivation and efficient in its exercise."² For the will to be right in its motivation it must be in harmony with the will of God; for it to be efficient in exercise it must act in cooperation with

¹Dr. Horne- Idealism in Education, p. 120

²Idealism in Education- p. 140.

God in the increasing fulfillment of the destiny of the individual according to the purpose of God.

The building of a will in harmony with the divine will - a good will in the truest sense - is according to the idealistic interpretation, a vital part of the aim of the educative process.

4. As Regards the Subject Matter to be Presented to the Child.

Finally, we wish to know what idealists consider the aim of the educative process with respect to the subject matter to be presented to the child. That varying opinions on this subject are prevalent we have already noted. The view of knowledge which is uppermost in modern educational theory and in the general practice of our educational institutions is that knowledge is of value only in so far as it can be put to practical use, that is, knowledge is a means only.

Idealists, of course, make no attempt to deny that most knowledge is an instrument, its value determined by its contribution toward a certain definite end. But they maintain that, after all, some knowledge has cultural value in itself. One person may study astronomy for the sake of the mental training held to accrue from its study; another may study it in order to have the advantage of its aid in navigation; while a third person may study it just to know the stars in their courses. The third is the idealistic attitude which might be applied to any other knowledge acquired for its own sake. According to the functional view of knowledge, the function of concepts is to enable us to control experience; according to the idealistic view they have the added function of enabling us rightly to apprehend things as they exist even when we cannot control them.

From the standpoint of the idealist that knowledge is of most worth in the educative process which is richest in ideas that have a direct bearing on conduct. Subjects dealing with social problems offer the greatest returns in this respect. History, which, in addition to facts, shows us the failures and successes of the past and stimulates us to emulate the best examples; and literature, which appeals to the emotions and the imagination, both closely related to the will, and reveals human nature in ideal form in its greatest characters: these two subjects are perhaps most profitable in the development of ideals.

In short, according to the idealistic interpretation, the aim of the educative process with respect to the subject matter to be presented to the child is to bring the child into contact with those subjects which will enable him best to adjust himself to his environment, but in addition to that, to lead him into fields of knowledge that will enrich his personality and expand his spiritual growth.

After analyzing the idealistic interpretation of the educative process with respect to the interpretation of the child, the interpretation of the teacher's function and the interpretation of the aim of the process, it may be well to attempt to sum this up in an interpretation of the process as a whole. Idealists regard education as more than the formal education which is limited to the school. It is, in fact, a cosmic process, begun long before man himself took a conscious part in his own development. And even now human education is but a part of cosmic education. The educative process, in its largest sense, is an eternal process by which man, made in the image of God - therefore, transcending in his nature his own physical organism - and destined to immortality, is aided and guided in his conscious effort to adjust himself to his environment and to become what, in the divine plan of life, he is meant to be.

V. AN ESTIMATE OF THIS INTERPRETATION.

Truly this is an ennobling conception of education, which, to say the least, is daring! Education a part of the cosmic process; the educator a co-worker with the great Educator; the educand himself a participant in shaping his own end; could a greater interpretation be conceived? Yet we must not let ourselves be carried away by the enormity of the conception. We must face it squarely and weigh it carefully before we can draw our conclusion. We shall therefore consider first its weak points and then its strong points.

A. Its Weak Points.

The first weakness of this interpretation of the educative process lies in the very heights to which it scales. The assumptions underlying this conception, - and we have viewed the significant ones - the rationality of the universe, its inherent "rightness", and the organic unity of all things: these are assumptions which cannot be corroborated by empirical observation. Our experience of the universe, both as to space and time, is necessarily limited. How then can its rationality ever be proved? As for the inherent "rightness" of things: this brings us face to face with the ever-recurring problem of evil. How can the actual evidences of so much distress and wrong-doing be reconciled with the goodness of God and the inherent rightness of the universe as His handiwork? Finally, not being able to view the universe as a whole, how can we know that it is an organic unity, especially when there appears to be so much contradiction?

What shall we say of these difficulties? That they constitute serious problems which have baffled philosophers of all ages cannot be denied. Nor can we attempt satisfactorily to answer them in a brief survey when others have failed after a life-time of study. However, there is something to be said for these conceptions, even while the impossibility of proof and the presence of serious difficulties are frankly acknowledged.

We have already considered the question of the rationality of the universe and have pointed out the fact that this assumption is absolutely essential if our own reasoning is to be of any avail.

Now what of the necessity of reconciling the belief in the inherent "rightness" of things with facts as they are, - with evil and with suffering? Perhaps the first step is to distinguish between the possibility of evil and the actuality of it. Having created a moral universe in which other wills are free to act, God cannot step in to prevent evil. In order for the universe to be moral the possibility of evil must exist; in order for man to be free - a being with a will and not a mere machine - his choice must be decisive. We may safely say, too, that conditions as they exist in the world today are far different from what they would be had man's will always harmonized with the will of God. The fact of progress as recorded in history and of the slow, gradual victory of man over evil is another evidence of the ultimate triumph of the good. The final answer to this question is to be found in the redemptive act of Christ: God emptying Himself, taking upon Himself the form of man, becoming obedient unto death, suffering the cross that man might have life. As true man Jesus represented the race; as a voluntary act His death was a sacrifice, not a martyrdom; as the act of the Son of God it was all-sufficient - sufficient for all men, for all time. So He freed men from the bondage of sin and made possible their reconciliation with God. "The death thus ceases to be an incident in the petty and distressful history of a small people," says Principal Fairbairn. "It assumes a universal significance, is taken into the purpose of God, and becomes the means for the realization of the divine ends."¹ "The one term ('the Son of man') denotes a person who stands related to collective mankind; the other term denotes those, to whom He is related as the 'multitude', the 'many', not as opposed to the few, but as distinguished from 'the One.' The One has the distinction of the unique: He stands alone, and does what He alone can do. Of the 'many' no one 'can by any means redeem his brother nor give to God a ransom for him'; but 'the One' can do what is impossible to all or any of the 'many'. His preëminence, therefore, is the secret of His worth; He does what is possible to no other, for He transcends all others, and His personality equals as it were the personality of collective man. Hence He is able to 'give Himself a ransom for many.'²

As for the organic unity of the universe in the face of apparent discord, we can only say that this is closely linked to the problem of evil and that, since the universe is still in the process of becoming, a criticism of it at any stage of its development is hardly reasonable. An unfinished painting cannot be expected to meet the requirements of a critic for a finished masterpiece. The artist must be given time to work out his plan. May we not consider the universe the as-yet-unfinished work of the Master Artist, confident that when He has finished that work it will be seen to be good?

The second weakness of the idealistic interpretation of the educative process lies in the interpretation of the child. In the first place the interrelation between the physical and

¹The Philosophy of the Christian Religion, p. 409.

²Ibid. - p.411.

the psychical processes, between the brain and the mind, are not clearly understood, nor can any scientifically correct evidence be given that the mind does exist, not apart from, but in and above the neural organization of the brain. Personality, like the rationality of the universe, cannot be proved by empirical observation. In the second place, the conception of the child as an organism whose development is self-directed from within - (a conception which has led educators to liken the child to a plant whose ultimate development is inherent in the seed), makes the place of the educator a questionable one. Is he not superfluous if this be true?

Let us consider the first difficulty - that of vindicating the position that the physical and the mental are not identical. While admitting that this cannot be done concretely or objectively, idealists maintain that subjective experience confirms this view. Introspection reveals a consciousness of self which unifies all experiences. It is the self which sets up comparisons between experiences, and in the light of the meaning these experiences have, controls other experiences. Says William C. Bower in his discussion of the nature of experience:

"But personality is more than a bare continuum of experience. At the centre of this continuum is a self that gives organization and continuity to experience. It reaches out toward its world in an effort to adapt the resources of that world to its needs. That is to say, its activity is directed towards ends that it seeks to realize. These needs are set by the needs and desires of the self, and are concerned with its survival or well-being. It is this telic nature of the self that gives experience its movement, direction, and drive. Certain types of experience bring the self satisfaction while others bring it annoyance or pain. Those experiences are satisfying that lead toward and are consummated in the realization of desired ends. Those experiences are annoying that delay or frustrate experience in its movement toward desired ends."¹

Another argument in favor of the idealistic viewpoint lies in the comparatively slight difference between the animal and the human brain over against the impassable chasm between animals and human beings.

"How to relate the transcendent fact of the individual mind to our undoubted germinal beginnings is entirely unmanageable by the empirical method", Dr. Louis M. Sweet admits in his discussion of the relationship of mind and brain.² the development of the human brain as a thinking organ is transformative and creative in a sense which cannot be applied to any other process in this world. The brain is not an intellec-

¹The Curriculum of Religious Education, p. 72f.

²To Christ through Evolution, p. 247.

tualized organ to begin with. It has to be intellectualized. It has to be actually transformed by the molding power of the being using it and by the actual process of using it. . . . This truth, which cannot be gainsaid, for it is supported by facts, that brain intellection is the creation of personality by individual action and is not a congenital gift or development possession, proves the transcendence of the personal over the physical and determines our approach to the whole problem."¹

Let us now consider the second difficulty in the idealistic interpretation of the child: the fact that there is a possibility that there is no room for education in such a conception. Adams points out the fact that the "Plant Metaphor", like most analogies, is not entirely satisfactory because the human organism, after all, far transcends any plant organism. "We are accordingly entitled to a better argument than a mere analogy", he says. "The problem is how to find a place for the educator between a developing nature with a determination towards good, and a world that is by hypothesis good, inasmuch as 'Everything has come forth from the divine, from God, and through the divine, through God alone, is it conditioned.'"² He then goes on to point out that education is more than a purely subjective process in which the educand alone is involved. "The innéisme of the self has to be recognized but it is of a purely generic character. It may be directed in this way or that." The idealistic viewpoint confirms this, of course, in the place it allots to the will of the child in the ultimate development of character.

While recognizing the above weak points in the position of the idealists, and while making no claim to having met all the difficulties satisfactorily, we nevertheless feel that these weaknesses are not entirely indefensible.

B. Its
Strong
Points.

More than this, there are several strong points in the idealistic interpretation of the educative process. These we shall now proceed to consider.

The first point of strength lies, as did one of its weak points, in its interpretation of the child as an individual self, dependent to a certain extent upon natural forces, yet having within himself the power to determine the use to which these shall be put. Any other conception, which makes the child a mere machine determined by the forces of heredity and environment alone and reacting in a predetermined way to definite situations leaves little room for education in character building. Such a conception also crowds out spiritual values and ideals.

"If human conduct is 'socially conditioned' as some pragmatists assert; if self-organization is completely ignored,

¹Op. Cit. p. 248

²The Evolution of Educational Theory, p. 290.

we must either eliminate the God-consciousness from our thinking and become out and out pragmatists, or reconstruct morality without theism and become agnostics without apology," says Dr. Bentley. "Such a philosophy would deny creative awakening, which is the supreme service of education, and lead to a naturalism at once absolute and hopeless. Ideals, purposive control, spiritual values would vanish. Positivism would be all in all."¹

Much of human behavior is mechanical, we readily admit, but surely human experience at its best is more than mere mechanism! History attests to the dynamic force of these very values which would thus be crowded out. More than that, if man is reduced to a machine, then evolution is meaningless. But if man is the culmination of a system that traces its origin back to Personality and Intelligence then in man the spiritual and the physical universe come together. He is the one creature who is of the natural order and yet transcends it. From this point of view then, idealism is by far the most satisfactory interpretation.

Another point of strength in the idealistic position is its conception of life as a process of growth toward certain definite goals. Pragmatists deny the existence of absolute values and make the object of growth "more growth." Yet even they have decided opinions as to the direction this growth must take and really set up goals without recognizing them as such. Idealists, on the other hand, we have seen, affirm that there is continuous change and progress but that this progress is ever toward the Absolute - or God. While our conception of God is a growing one, God Himself is changeless, they maintain.

Dr. Bentley holds this view: "Despite our training in modern scientific psychology, many of us still accept the view that the changes in phenomena are governed by moral law; that the world is something more than change or chance; that there is some purpose, some final cause, some end in things. We assert, therefore, that there is a belief in the Right which we experience in our own Spirit rather than in Nature. And, moreover, we cannot find any theory based on utility that has, so far, accounted for the moral and religious consciousness. God, for us, represents causality, and creates in us the demand for human perfection and felicity connected with the belief in the Right. . . . We are compelled therefore to postulate a Supreme Being in which there is a fixed order of purpose and law, guiding human destiny."²

God is, then, according to the idealistic interpretation, the external ideal of perfection which is the standard for human and social life. And herein lies their strength. Any system which eliminates an ultimate goal must of necessity be

¹Boston University Bulletin, Op.Cit. - p.21

²Op. Cit. - p.5f.

unstable, the victim of chance whims and idle fancies. But when "human life is related to a superhuman and eternal reality" it acquires dignity and worth, as well as poise and power.

"But we all, with open face beholding as in a glass the glory of the Lord, are changed into the same image from glory to glory, even as by the Spirit of the Lord."

Con-
clusion.

Because it takes into consideration all the factors entering into human experience, the spiritual as well as the material; because it sets upon human life the highest value possible, reading it in terms of the divine life; and because it gives the most satisfactory explanation of the true function of education, as a part of the unfolding of the divine purpose in the universe; for these reasons we maintain that the idealistic interpretation of the educative process is not only defensible, but acceptable.

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