

## The Philosophy of the ANISA Model

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The purpose of philosophy is to disclose the nature of our experience and to make sense out of it by presenting evidence in support of basic premises from which logical thought proceeds. By revealing consistencies and inconsistencies in our experience it creates a coherence on which understanding depends. It provides perspective—a gradation of relevance—which orders experience and gives meaning to an otherwise overwhelming abundance of fragmentary details. A more specific function of philosophy is to stimulate the formulation of theory from which testable hypotheses may be deduced. As hypotheses are confirmed, theories from which they are derived become laws; and the body of knowledge expands.

Contemporary education lacks a philosophy broad enough in scope to unify the vast knowledge we have about human growth and development and produce a body of theory that would enable us to provide solutions to the difficult and complex problems facing education as a social institution. These problems are compounded by the rapidity of social change; the future spills into the present like a torrent. Adjustments to a new situation are scarcely begun before the situation changes, making the plans to deal with it obsolete. Trying to make adjustments under such conditions, in the absence of theory derived from a unifying philosophy, has brought us to a state of crisis. The profession is rent with internal conflict; diversity has degenerated into disunity. Vast resources are wasted. Several generations of students are caught in a system impotent to serve their educational needs in a complex, modern world.

The inadequacy of contemporary educational philosophy becomes apparent when we look for a set of assumptions about the nature of man. Because it has not defined the nature of man, education is in the untenable position of having to devote its energies to the development of curricula without any coherent ideas about the nature of the creature for whom they are intended. What is true about curricula is also true about teaching methods. Surely the nature of man has profound implications for both. To ignore those implications is to precipitate a crisis.

The philosophy of the ANISA Model deals with this crisis. It incorporates a view of man full enough and rich enough to account for and to illumine the concrete experience we have of our own growth and development as we interact with the environment. From the premises of this view, we are able to proceed logically to a body of theory about education which could be empirically tested over the next several decades. The philosophy we propose represents a significant departure from contemporary educational thought and practice. It is the result of a long search that combines insights from diverse disciplines into a coherent view of man—a view

which can account for the knowing and loving capacities of the human being and provide a conceptual framework that is realizable as a model for education. Since it is difficult to know where we are going unless we know where we have been, understanding the ANISA philosophy depends upon having an historical perspective on the development of the human sciences and their role in shaping education as we know it today.

WHEN PSYCHOLOGY WAS WEANED from philosophy and set out on its own to become an empirical science, there was every reason to believe that the fledgling discipline would provide a firm foundation for the development of educational theory and practice. This hope was never fully realized, largely because our psychological concepts have been based on views of man's nature which were primarily derived by analogy from the current doctrines of other disciplines, disciplines whose central interest was not in the nature of man. In fact, the history of psychology can be told as a series of conceptual borrowings from the dominant physical sciences. We find, for instance, Thomas Hobbes asserting that man seeks pleasure and avoids pain with the same necessity and compulsion that causes a stone to fall downwards. In the eighteenth and early nineteenth centuries men such as J. F. Herbart drew upon the concept of physical gravity in proposing that the motion of ideas was the basic principle of mental mechanics. James Mill followed the same form of theorizing whereas his son, John Stuart Mill, substituted the more advanced ideas of chemistry for the older mechanistic outlook of his father by propounding a theory of "mental chemistry" to replace mental mechanics.

Francis Galton, whose efforts in mental testing and statistics make him an immediate predecessor of modern American psychology, held a geologically inspired model of a stratified mind consisting of lower nutritional strata and higher strata of memory and reasoning. In this view, mental testing was akin to sinking shafts into the mind at critical points to ascertain the stage of development.

Another important example of the application of externally derived explanatory models to theorizing in the human sciences is the work of Sigmund Freud. In his case the model is not derived from a purely scientific analogy but is, nonetheless, an externally derived explanatory system. A dominant Freudian metaphor is based upon a military model of mental processes. Here, thought processes become tactical military simulations of the anticipated confrontation with reality. Blocked development is compared to the resistance of hostile enemy forces; repression, to retreat in the face of an attack; and psychotherapy, to the intervention of an ally in a civil war.<sup>1</sup>

A central and seemingly often unconscious assumption underlying this borrowing approach is that the methods of the natural sciences are adequate to the study of man and to a description of his more complex and distinctively human aspects. In characterizing the nature of those early basic assumptions of prerelativistic scientific philosophy, we are also characterizing the materialism of the modern age. This materialism rests on the acceptance of scientific understanding as centering around the increased knowability of the character of matter and the laws by which it

<sup>1.</sup> H. Nash, "Freud and Metaphor," Archives of General Psychiatry, 17 (1962), 25-29.

operates. Further, since matter could be reduced to discrete "billiard-ball-like" elements which behaved according to the immutable laws of nature, all that is real was seen as analyzable into its atomic components.

The most important implication of this materialistic thought for the developing human sciencies revolves around the issues of causality, unity, and determinism. These issues form an important part of the fabric of our "standard" interpretation of nature. In fact, they have become so commonplace that it is almost unquestioningly assumed that all events are explicable in terms of their immediately preceding events which are ultimately describable as laws of nature acting on particles. From this perspective one can only develop a view of the unity of nature in which everything must be the result of the same laws acting on the same particles with man being but a more complex form of organization of particles and laws.

Unity, however, viewed in this way is not congruent with what we know of the type of unity applicable to the process of man's evolution and the structuring of human societies. We therefore require a definition of unity which accounts for the diversity within its essence and explains the transcendent relation of man to the lower-order physical unity of atoms and molecules. Thus we come face-to-face with the age-old philosophical problem of determinism. How is man, who is a part of nature, produced by and subject to its laws, ever to be capable of independent action? Free will is an illusion in a world where every effect must have a necessary and sufficient physical cause. Yet, the very enterprise of producing any sort of scientific description of natural phenomena rests upon the assumption that man, at least, is a self-determining organism. Whitehead indicates that the main effect of such a radical inconsistency in the basis of modern science results in an enfeebling of our thought with superficial orderings and arbitrary starting points.2 Many of the problems created in the wake of this style of thought are interpretable under the general heading of reductionism, which is simply the uncritical acceptance of the understanding of mechanisms and processes that operate at lower levels of nature as explanations of higher-level phenomena. The assumption is that the explanation so produced leaves no remainder which is unexplained. This fallacious assumption is derived from the assimilationist doctrine that abstractions which illumine one aspect of reality also apply to all others. Scientific materialism of whatever variety mistakes the part for the whole by using abstractions (e.g., irreducible billiard-ball atoms) as if they were a concrete reality and then building a description of the concrete whole in terms of the abstraction from the part.

A prime example of reductionism is the development of Gestalt psychology. The Gestalt field, which was inspired by the discoveries of electromagnetic phenomena in the early twentieth century, was meant to replace the earlier atomistic-mechanistic views by interpreting mental processes in terms of physical fields in the brain. Actually, this did help to explain some mental phenomena simply because field concepts are more inclusive in their generality than the earlier atomistic notions they attempted to replace. However, the explanatory power of Gestalt psychology is still limited because its theory is derived from lower orders of existence. Our more

<sup>2.</sup> A. N. Whitehead, Science and the Modern World (New York: The Free Press, 1967), p. 76.

modern attempts to reduce the explanation of human phenomena to principles derived from the study of animals, as seen in the work of B. F. Skinner and the behavioral school of psychology, suffers from the same defect.

Efforts to capture the reality of human experience through the application of the methods of sociology and anthropology reflect a similar inadequacy. Still another popular form of reducing human behavior to manageable terms is the focusing on the chronological factors of child growth and development as the major determinants of personality. However, the attempt to lay all social problems upon the doorstep of improper childrearing does not provide a fully satisfactory answer because it fails to add useful insight into the means by which adults can be changed so that their childrearing practices can be changed.

A final form of reductionism which is very influential today is the attempt to explain all forms of experience at the level of neurophysiological processes. Such pervasive determinism has so disposed us to seek causal explanations that we have produced descriptions of human life which seem to leave almost no room for the kind of individual determination that can transcend the programming of genetic endowment, culture, and tradition. The attempt to reduce the complexity of mental life to the lowest possible levels of physical phenomena signalizes the alienation of man from nature.

AT IMPORTANT MILESTONES in the development of our scientific thought, in the work of men such as Galileo, Descartes, and Kant, the stamp of philosophical approval was placed on each new scientific development that was simultaneously creating and filling the gap between man and nature. As the development has progressed, we have become more accustomed to the idea that scientific knowledge can only come from laboratory experiments where special conditions and constraints are imposed upon the subject. We do not run into serious trouble with this approach until we come to the study of man and are confronted with the curious situation of imposing our own conceptual forms upon ourselves. In other words, with the advent of modern human sciences we have come full circle—the looking glass of scientific inquiry has indeed become a mirror in which we see the image of our own conceptualizations reflected upon ourselves. In the past technical man observed nature through the glass and asked "How?"; today modern man in his increasing awareness of the reflection of his own image is inclined to ask "Why?" This is a critical question for us because the efforts to create modern science have also watered the seeds of alienation that were sown in the soil of the seventeenth-century view of the universe, richly composted by the discarded doctrines of the scholastics.

This condition of alienation is primarily an outgrowth of the world view which prevailed during the formative age of psychology. It was the era of the unquestioned supremacy of Newtonian physics, and it naturally assumed that the methods of the physical sciences could and should be applied to the study of the mind, even if the phenomena were of a different order. As a result, the entire development of the human sciences has been overshadowed by a scientific metaphysic which has exerted a continual bias toward the search for the same type of invariant and deterministic laws which characterize the physical sciences. It has been all too easy to translate the belief in physical atoms and laws into a corresponding faith that their psychological

equivalents could be found in elementary sensations and conditioned responses.

Under the influence of materialistic science the dominant impulse has been to seek a scientific understanding of the reality of man by examining levels of reality which are essentially behind him (or below, if you prefer)—that is to say, levels which are included within but not descriptive of the reality of man. The lowest levels, of course, are not characterized by life. Examining such levels can only lead to an understanding of lifeless things which achieve nothing, rely on nothing, and therefore never make a mistake. Yet, as Michael Polanyi has pointed out, the very idea of life involves the achievement of something—and making mistakes in the process.3 How can processes that achieve something be described in terms of processes which do not incorporate achievement? Polanyi's answer to this logical impossibility is that "a principle not present in the inanimate must come into operation when it gives birth to living things." 4 In other words, a higher level of being can come into existence only as the result of a process which is not manifest at a lower level. In this view, the comprehensive understanding of any being is dependent upon understanding the operating principles which apply to its level of patterned functioning and cannot be achieved through principles which apply to inferior levels.

Whitehead identified four major aggregations of patterned activities hierarchically arranged, each with a specific pattern of expression.<sup>5</sup> The first level is the nonliving which functions according to the laws of nature with a total suppression of individual self-expression. The next is the vegetable level in which life is superimposed upon inorganic nature. Viewed differently, the latent potentiality in lifeless matter can be seen as awakened into realization in the vegetable by the operation of a higher-order principle. In the animal level of existence the lower levels are incorporated into that of a unified and self-directed organism. Finally, the human level incorporates them all and adds the ability to respond to the influx of ideals which shape its purposes and mold its actions.

Here we can discern the beginnings of a possible reconciliation between the world as given in experience and the world as known in science. The hierarchical view suggests a type of scientific unity which focuses on the importance of patterned action. It is a unity of process and purpose rather than a unity of kind. Furthermore, it is a view which not only admits but requires diversity as a necessary element in the structure of reality and one which places man and his potentialities at the pinnacle of an evolutionary process which is seeking its meaning through man's transcendent actualization of these potentialities. Thus, it is the spiritual and not the material nature of man which is the central determinant in the future course of evolution, and the meaning of man is to be sought in that transcendent generality which is the essence of his being rather than in the operation of laws whose powers have been expressed primarily in lower-order categories of existence.

It is a bold assertion indeed that we need a new cosmology, one which suggests that the transition from mechanism to organism, from immutable laws to hierarchi-

<sup>3.</sup> Michael Polanyi, The Tacit Dimension (New York: Doubleday, 1966), pp. 29-52.

<sup>4.</sup> Ibid., p. 44.

<sup>5.</sup> A. N. Whitehead, Modes of Thought (New York: The Free Press, 1968), pp. 20-30.

cal processes, is indispensable to the advent of a new era in man's awareness of the nature of the reality underlying his existence and a corresponding new era in education. This is the cosmology upon which the ANISA model is founded.

As we have seen, at the base of the problems of education is a need to eliminate the philosophical distortions which afflict the human sciences. These distortions make organization of information impossible and are the basic reason education has been unable to draw upon its "mother disciplines" in the human sciences in the same way medicine, for example, has fruitfully applied the basic principles of the physical and biological sciences. In education little success has been achieved in explaining how all of the research findings and analyses fit together to make an adequate picture of man. There is no way to make them fit so long as the spiritual reality underlying man's flesh-and-blood existence remains excluded in the persistent search to understand his material being.

ANISA makes of education an adventure in the growth of the human spirit and seeks to create a new ethos that reflects the organic and spiritual wholeness of man. The intent of ANISA is therefore to move from our present limits of understanding to a more complete picture of the potentialities of man and the conditions which foster his development. The failures of the last hundred years' efforts at giving a scientific description and reaching a scientific understanding of man have convinced us of the limitations of the scientific materialist philosophy. We have therefore adopted a philosophy of organism which can illumine those features of our existence which are characteristically human, such as consciousness, will, purpose, creativity, and the capacities to know and to love.

The first and most obvious implication of adopting such a philosophy is that the goal here sought does not lie within the borders of any existing discipline. The task of forming a more complete picture of the potentialities of man thus involves an attempt to further our understanding by recognizing that newer scientific ideas can grow out of and be made harmonious with their predecessors by including them in a larger explanatory context. From this point of view, the task is not only to criticize and disregard ideas and theories of the past but also to explain and include.

One of the clearest examples of scientific progress seen in this light is the development of modern celestial mechanics. In the early seventeenth century popular opinion held that the earth stood still and that the heavens moved. Galileo, however, asserted that it was the sun which remained stationary and that the earth moved around it. His apparent heresy was subsequently given explicit shape and theoretical elegance by Newton in the formulation of a set of laws which applied to earthly and heavenly bodies alike. Newton's more encompassing view stood until Einstein, with his relativistic mechanics, asserted that everything moves and that it is simply a choice of one's vantage point which determines the "correct" view.

No one has ever suggested that it was a change in the character of the heavens which prompted these new theories. Rather, it was the same reality which had been more successfully described by models which sprang from a more inclusive, hence more general, grasp of the problem. This example simply demonstrates that the formulation of theories requires the imposition of limits upon the phenomena to be described in order to abstract them into a special explanatory context. Abstractions

may thus omit part of the truth. They are nonetheless useful to the extent that the omissions do not vitiate the conclusions drawn from them.

In the same way, the assumptions which underlie the development of the ANISA model and the basic concepts of releasing human potential through attainment of learning competence are not necessarily asserted to be an exhaustive set of ideas. They are viewed as the most basic terms upon which to build a theory useful to pedagogy that can now be formulated. They are basic in the logical sense of being more fundamental terms which, even though they themselves are abstractions from the larger reality of man's existence, still contain the seeds of those very qualities we are ultimately seeking as the flower of the process of education here proposed.

The philosophy of organism sheds light on that larger reality of man's existence by distinguishing him from a mere mechanism; for man, at the highest level of creation, represents a unity of all existence in that he incorporates the diverse qualities of lower-order mechanistic phenomena while transcending them all. His transcendence depends upon his ability to know and to love and to organize these capacities in terms of purpose or aim. Thought and feeling expressed in action under the direction of purpose reflect a nonmechanistic principle which characterizes the process of his becoming—process being the reality of man which education can no longer afford to ignore and the reality which is the central concern of ANISA.6 The unity of all existence represented in man is dynamic; it is experienced as a consciousness in which the stored accumulations of past experiences are brought to bear upon immediate circumstances in anticipation of the future—an anticipation felt in the immediate present as purpose fused with hope and aspiration. Man is thus a conscious creature capable of creating his future out of his past by virtue of the decisions he makes in the immediate present. The quality of those decisions determines the rate by which his potentialities are translated into actuality. It is that process of translating potentiality into actuality which the philosophy underlying the ANISA model illumines. Learning, very broadly defined, is the essential dynamic of that process and gaining conscious control over the process is what is meant by learning competence. It is for that reason that we define learning competence as the key factor in the release of human potential at an optimum rate. Such competence depends on learning, for how to learn is in itself something that has to be learned; yet it is never taught directly in traditional schools. The focal concern of the ANISA model is the provision of experiences for young children which enable them to become competent learners—effective transformers of their own potentialities into actualities.

A translation of this philosophy first into theory and then into educational practice would bring a revolution in education by itself, but the picture is more striking than that. If the process of translating potentiality into actuality is managed in accordance with pedagogical principles derived from the view of man as a spiritual being, the actualization of potentiality is accompanied by a further creation or extension of potentiality. It is such capacity to create potentiality that enables man continually to move beyond himself. It constitutes another basic feature of his transcendent nature.

<sup>6.</sup> In *Process and Reality* (New York: Macmillan, 1960), A. N. Whitehead expands this thesis into a fully developed cosmology.

Furthermore, his almost unlimited capacity to store information about his experience, his ability to form an infinite number of sentences to elaborate on those experiences and communicate their meaning to others—the indwellingness of his past surfacing into consciousness as he negotiates the immediate present—make him immanent. Thus, man is both immanent and transcendent. The fusion of immanence and transcendence makes him conscious and places him in a position to shape his own destiny, to differentiate his knowing and loving capacities into an infinity of potentialities which are integrated in action as he shapes his future. Man, the highest pinnacle of creation, thus reflects an ongoing progressive unity in the diversity of all existence.

IT IS THE PURSUIT of a comprehension of the relationships among all aspects of our experiences that brings us meaning. We are creatures which require meaning in order to continue the process of creating higher levels of organization or unity within ourselves—a process synonymous with the release of potential. That we can love and be loved, know and know that we know; that we can consciously move beyond ourselves into the future on the basis of what we decide to do at any given moment, thereby making the most out of our past as we push into that future (which makes us both immanent and transcendent); that we are able to have a sense of purpose which brings meaning and directs unlimited creative powers in making decisions and carrying them out—all of these are meant by the phrase the spiritual nature of man.

This understanding of man and his potentialities removes the obviously "factual" and the "material" from the center of our view of the cosmos and replaces them with the sensitive reaction of the experiencing and self-actualizing subject himself as the ultimate determinant of the "grain" or "texture" of reality. A reality which is so constructed reflects a recognition that man's desire to find meaning and purpose in experience comes from deep within his being and is an expression of that same upward thrust which in past ages was responsible for mere survival of the species and is, today, urging him onward to new attainments far removed from mere physical survival.

Any educational system that hopes to facilitate the release of human potential has the prime responsibility of recognizing that meaning in life. Therefore relevance in education is associated not only with the highest intellectual achievements of mankind but also with his most profound emotional and spiritual insights; for within the individual occurs the interaction of the breadth of his thought with the depths of his being—his ability to know and his ability to love—that reflects a higher-order purpose, establishes the relationships among things, and creates a meaning in experience.

Since mankind at large has asserted the meaning of experience in its art as well as its science, educators, in their concern for the whole individual, must recognize that both our art and our science share the common obligation to open our minds, to refine our emotions, to protect our sense of beauty, and to heighten our ability to create it.

The two main assumptions upon which the development of the ANISA model rests—the unity of mankind and the spiritual nature of man—are not only directly

related to the character of the hierarchical process model which ANISA represents. They are required by it. They are required in the sense that a scientific view of education must express both the being and the becoming of man. Being and becoming require each other. Together they constitute a complete picture of man; individually they are abstractions which can only be evaluated by examining one of them in reference to the other.

In our view, the unity of mankind is determined by man's true station as the most highly evolved creature in the world we experience; and the spiritual nature of man is an expression of the operation of a higher-order principle as yet transcendent in relation to man's present condition, a principle which consciousness compels us to accept on faith.

Thus, mankind's collective evolution into a future, better described in spiritual terms rather than in material ones, requires of education the ability to impart to each individual child the knowledge that it is his nature to be within the world and yet to transcend it; that of all creation, man is the vehicle of the evolution of the universe and the highest expression of the unity in all existence. That evolution and that expression constitute the process of his becoming.

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